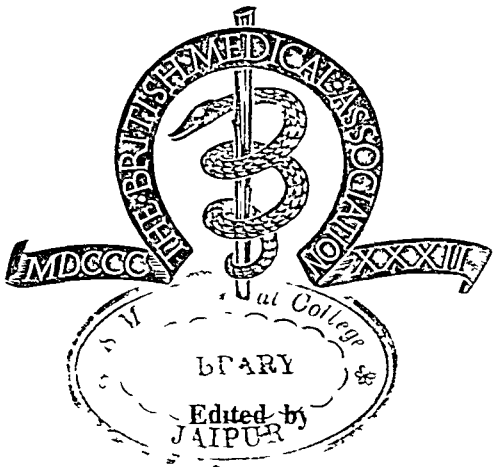
BRITISH MEDICAL JOURNAL

THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION



Royal College of Physicians
LIBRARY
JAIPUR

NORMAN GERALD HORNER, M D

Assisted by

HUGH CLEGG, M B , M R C P

VOLUME II 1938

JULY TO DECEMBER

LONDON

Published at the Office of The British Medical Association, Tavistock Square, W C 1, and Printed by Eyre & Spottiswoode, Ltd , East Harding Street, E C 4

KEY TO DATES AND PAGES

THE following table, giving a key to the dates of issue and the page numbers of the BRITISH MEDICAL JOURNAL and SUPPLEMENT in the second volume for 1938, may prove convenient to readers in search of a reference

Serial No	Date of Issue	Journal Pages	Supplement Pages
4043	July 2	1 – 52	1 – 20
4044	,, 9	53 – 106	21 – 40
4045	,, 16	107 – 162	41 – 52
4046	,, 23	163 – 208	53 – 88
4047	,, 30	209 – 272	89 – 116
4048	Aug 6	273 – 330	117 – 128
4049	13	331 – 386	129 – 140
4050	20	387 – 436	141 – 160
4051	,, 27	437 – 480	161 – 172
4052	Sept 3	481 – 554	173 – 184
4053	,, 10	555 – 604	185 – 196
4054	,, 17	605 – 644	197 – 208
4055	,, 24	645 – 690	209 – 220
4056	Oct 1	691 – 728	221 – 232
4057	8	729 – 772	233 – 244
4058	15	773 – 820	245 – 256
4059	22	821 – 874	257 – 268
4060	29	875 – 928	269 – 288
4061	Nov 5	929 – 976	289 – 300
4062	12	977 – 1028	301 – 312
4063	19	1029 – 1070	313 – 328
4064	26	1071 – 1126	329 – 340
4065	Dec 3	1127 – 1188	341 – 356
4066	10	1189 – 1244	357 – 372
4067	17	1245 – 1296	373 – 384
4068	24	1297 – 1350	385 – 396
4069	31	1351 – 1402	397 – 408

INDEX TO VOLUME II FOR 1938

READERS in search of a particular subject will find it useful to bear in mind that the references are in several cases distributed under two or more separate headings—for example Brain and Cerebral Heart and Cardiac Liver and Hepatic Renal and Kidney Cancer and Carcinoma Child and Infant Goitre and Thyroid Subjects dealt with under various main headings in the JOURNAL have been set out in alphabetical order under their respective headings—for example Annotations Correspondence Leading Articles Obituary Reviews etc Original Articles are indicated by the letter (O)

A

Abbott Francis Charles obituary notice of 982
—— W N Sequelæ of war gas poisoning 907
Abdominal diseases of review of book on 1 (O)
Abel Horace Marshall obituary notice of 141
—— John Jacob death of 15
Abortion change of procuring trial of Mr Alex Bourn 9 109—Leading articles on 153 —— Correspondence on 204 15 375 427—Legal viewpoint 56
—— and the law 109 204 315 375 427 480 644
—— criminal and medical screen conflict of duties 1210
—— discussion on ill effects of operation 173
——
——
——
(P N Dawbarn and Percy William) 770 (O)—Correspondence on 474
ABRAHAM J Johnston Air raid precautions 91
Abscess B odi and its differential diagnosis (James F Brailsford) 119 (O)
—— peritonsillar-quinsy 41 154 684
Academie de Médecine Election of—Creation of medical profession of British Empire 105—Prize for competition 906—Pepto tonic tartrate of iron and lung cancer 107
Academy of Medicine New York president of 64
—— —— Louis Election of
ACADEMY ROYAL OF MEDICINE IN IRELAND
Section of Pathology—Laboratory diagnosis of glandular fever 110
Section of Surgery—Clinical and experimental pathology
Accident rate fatal in coal mines in 1937
—— radiotherapy of 625
ADAM C *Diseases of the Heart and Disorders of Cerebral Function* rev 1145
—— James Atrophic thrombi —Alcoholic treatment of a thrombus 19
ADAM A Wilfrid Pyelotomy flushing no glycosuria
ADAMSON P O Blood platelet 1280
Addison's disease discussion on recent developments in treatment of 1330
Adelheim Roman death of 1509
Adler Alfred and psychological medicine review of book on 894
Adolescence disorders of 969
Adoption of Children Bill 1346
Adrenalin treatment of asthma 709 941 967 1112 1115 1170 139
—— in angina pectoris 141
Advertisement service in 584 905
Africa health of research survey of a continent 1099
—— East malarial endemicity in 1505
—— South Syphilis in 500—Health of Rand mines 761—Correspondence on 1174—Proceedings of Medical Congress 802—Malnutrition in 80—Orthopaedic service in 1156
—— West Incidence of tuberculosis in Gold Coast 583—Care of lunatics in Nigeria 900—Communication and development of Colonies 92—Vital statistics of non native officials publishing 1160
Agriculture and health (leading article) 170—Correspondence on 1705
Air RAID PRECAUTIONS
Case of Major Stuart Blackman 382
Casualties (leading article) 749—Evacuation of
101
862 915 960 1016
1283
and treatment of
(H Hamilton) 458
—— defence and Col E F Harris on 980
—— poisoning Sequelæ of 907—Protection against 915
Gas respirator supply of 157
Hospital accommodation for casualties 719
—— services in air raid 1505
Hospitals London and air raid 1307
—— mental and 154
Medical service in air raid 1
Lambeth and division on 150
Questions in Parliament 760 1000 1158
Services of Dr J H Hebb 161
Underground car parks for London 1018
See also War—National Defence
Aitken Robert Steven on appointed Regius Professor of Medicine in University of Aberdeen 913
ALBRICO B Two cases of air transfusion 830
Albuminuria final case of term 604
Alcohol injection in inoperable malignant growth of jaw and tongue (Wilfred Harris) 971 (O)
—— and mental disorder 847
ALEXANDER Electrical Injuries 710
—— J B Medical evidence at inquest 1305
Alvarez G N obituary notice of 41
Alver Ellice M awarded Leslie Dana Gold Medal 1347
Aluminium carbohydrates and 150
ALLAN F C Lichen lenthemin 1051
ALLEN Clifford Psychotherapy in organic disease 370
—— F Thumbprint for nurse on 1209
—— Frank Worthington (and Carl L SCHMIDT) *Fundamentals of Electrocardiography and Experimental Research* rev 959
Allergy and immunity in ocular tuberculosis 625 760
—— tannic in and allergic diathesis (A M Kennedy and D A Williams) 1701 (O)
ALLPORT Gordon W *Personality: A Psychological Interpretation* rev 1205
Alopecia treatment of 501
Ambulance in trunk roads Improvement of 905
AMEUILLE F Suicide by tubercle bacilli 455
Amoebic carbarsone in 905
Anaemia aplastic with complete recovery (T H Boon) 1041 (O)—Correspondence on 1205
—— and gastro-intestinal tract (Jan T M Vaughan) 507 (O)—Correspondence on 559
—— nutritional macrocytic in Macedonians 914
—— pernicious anti pernicious principle some experiment with urine (Edouard Jequier and C P M Apsey) 904 (O)—Correspondence on 1117 1205
—— —— and psychoses 1167
—— tropical macrocytic 1052
Anaemia haemolytic of childhood (J G Parsons) 501
Anaesthesia basal 244
—— carbohydrate metabolism in (F P Macintosh and C L G Pratt) 310 603 (O)
—— helium in (W Stanley Sykes and Reginald C Lawrence) 445 (O)
—— review of books on 1251
—— spinal 544
—— spinal blood pressure after 44
Anaesthetic aspects of history of (A J Clark) 544 1029 (O)
—— basal hypersensitivity to (B P Hill) 1109 (O)
—— diplomas in 950
—— electrical ignition of (H W Swann) 504
Analgesia review of book on 407
Anal pruritus pharmacological actions of 951
Anaesthesia gas and air Apparatus for 976—In midwifery 1402
—— review of books on 1201
Anaesthesias admission to by midwives 157
Anatomy acad mic versus clinical 764
—— review of books on 1206 1207 1401 1505
—— terminology 903
ANDERSON C G *Introduction to Electrocardiography and Clinical Chemistry* rev 1209
—— D H Dietary fat absorption in childhood 932
ANDERSON D M (and J H DIXON) Acute bulbar paralysis 1077 (O)—Correspondence on 1251
—— E W Further observations on benadryl 1040 (O)
—— J Lorrett Green tools a 743
—— R Mammary cancer and menopause 1275
—— T (W P SYNDERAS and J L PEVSNER) sulphanilamido-chrysoidine sulphanilamide and benzylsulphanilamide in streptococcal infections 849 (O)
—— W A H Kidney and agriculture 1330
ANDREW C H Immunity in influenza 1113
Andrew E Collinwood obituary notice of 981
—— M C A pirin poisoning 1019
Aneurysm of common iliac carotid (J Nuttall Haworth) 660
Angina of effort cure of by hot air douche 1115
—— pectoris (P Hallerdal Dixon) 891—Correspondence on 1251
—— pectoris rotation of adrenalin in 415
Angiography paper and discussion on 1141
Anhidrotic streaks-elephantoid dystrophica 999
Anthropometric anthropography importance of 880
Animal Health Problems review of 633
Animals experimentation on in 1905 459
—— wild a carrier of resevoir of disease 807
Ankle traction exhibition at (W B P Monteith) 1030
Annales de Médecine Omnibus rationnelle et de spécialités 974
—— de Médecine et de Chirurgie articles by Nanta et Vogt in 1
—— de la Société Belge de Chirurgie et Journal de Chirurgie table of volume 644
Annals of Medical History vol 10 No 3 291 No 4 1049—No 5 1200
ANSAN W Collins Sulphanilamide treatment of gonorrhoea 91
Annandale Thomas Centenary of birth of 1049
ANSAY D Psychotherapy in organic disease 1070

Annotations

Abortion Inter departmental Committee on 209
Acetonuria radiotherapy of 1205
Advertisement service in 584
Amoebiasis carbarsone in 905
Anaemia tropical macrocytic 1005
Anal pruritus pharmacological actions of 951
Angina pectoris role of adrenaline in 415
Antiviral weakness-elephantoid dystrophica 999
Animal experiments on in 1905 459
Antigen and antibodies chemical aspects of 1205
Bacilli tuberculi destruction of in putrid 415
—— caries of 1005
Blood changes in experimental tuberculosis 1205
—— transfusion sequelæ of 884
Bone marrow post mortem changes in 1005
British Medical Journal 1005
Calcium and foetus 1155
Cancer of alimentary tract comparative study of 899
—— of cervix radiotherapy of 1005
—— cures testing in laboratory 1205
—— early diagnosis of 1154
—— inflammation care in 1205
—— Prausnitz-Kustner reaction 1205
—— statistics 1315
Cancers identical in identical twins 1155
Carcinogenic hydrocarbon 1155
Cerebral circulation vasomotor control of 1205
Chorea in Finland 1413
Circulation time estimation 1004
Clavicle excision of 1205
Corpus luteum 1154
Council Medical Research 1155
Cushing Harvey Williams 1205
Cysticercosis 1205
Death certificate on caesarean 1154
Dermatitis eczematous 1109
Diphtheria immunity diagnosis of 1155

Annotations (*continued*)
Diphtheria prophylaxis duration of immunity after 752
Disinfectant testing of 1151
Dosening experimental 1000
Drug trade United Kingdom and 951
Educational Number 1938 460
Electrocardiographic changes due to smoking 187
Emetics in anuring 1750
Encephalitis post vaccinal 76
Examination purposes of 1468
Eye injuries industrial prevention of 27
Fat absorption defective in childhood 902
Fever scarlet immunization against 80
—— typhoid epidemiological diagnosis of 1211
Foreign bodies swallowed 628
Fund Royal Medical Benevolent 777 844
Geneva sanity at 843
Gonorrhoea chemotherapy in 209
Grenz rays 1037
Harrison Col F J and gas defence 209
Heart preservation of 629
—— in relation to its blood supply 78
—— standstill symptoms of 132
—— studies on coronary occlusion 902
House small exhibition 843
Hutchinson Robert testimonial to 936
Hygiene rural 78
Indexes half yearly 188
Industrial health research 998
Institute Pasteur 1888–1938 1037
Insurance for medical profession 579
Jaundice and arthritis 411
—— catarrhal 581
Key to Current Medical Literature 28
Laboratory National Physical view day at 27
Laryngotracheobronchitis acute 670
Leucocytes transfusion of 1095
Liver surgery of 1151
Lunatic care of in Nigeria 900
Lung physiology and collapse therapy 898
Lymphadenoma Cordon test for 1153
Malaria new anti malarial drug 900
—— treatment of 777 790
Marburg virus 1119
Medical Directory 1938 1151
—— *Register* untraceable practitioners 703
Medicine teaching of 113
Meningitis gonococcal 659
Methylene chloride industrial poison 459
Milk and nutrition 426
Mortality urban trend of 1092
Mycetoma treatment of 77
Nephritis acute and streptococcus 1266
Nutrition panel 1376
Oculogyric crisis in infancy 1374
Opium production limitation of 414—Convention on 716
Orbit in memory of 1001
Painting by doctors 844
Peckham health experiment 121
Penal law reform of 1141
Peritoneoscopy 714
Perforation and sunburn 1034
Physical training reflective 1420
Pituitary growth hormone 1377
Pneumonitis 1141
Pneumothorax extrapleural 1050
Poliomyelitis immunization against 121
—— prevention of 1150
Polyneuritis acute infective 1151
Potential sources virus of 850
Practitioner elsewhere 1041
Progressive experimental interruption of 980
—— toxicity 1150
Prize Arthur Keetman bequest 1150
Profession 1214
Protein intravenous exhibition death in 1151
Psychiatry 1151
Public health trial 1321
Pulmonary from Dental 1150
Pulse from Arteries 711
Pulse from 1150
Pyelitis in 1150
Quinine by 1150
Radium 1150
Rectum 1150
Research 1150
Respiratory 1150
Rheumatism 1150
Rickets 1150
Rubber 1150
Salicylates 1150
Salvarsan 1150
Scarlet fever 1150
Sea 1150
Serum 1150
Shock 1150
Skin 1150
Smallpox 1150
Spleen 1150
Sterilization 1150
Streptococcus 1150
Surgery 1150
Syphilis 1150
Tetanus 1150
Thyroid 1150
Tuberculosis 1150
Typhoid 1150
Ulcer 1150
Urine 1150
Vaccine 1150
Vitamin 1150
Water 1150
X-ray 1150
Yellow fever 1150
Zinc 1150

Antagonistic diseases 472
Anthropology review of book on 180
Antigens and antibodies chemical aspects of 186
Antimony review of book on 126
Antiphlogistine note on 480
Antommarchi Francesco (1789–1838) 22
Anxiety infantile 300
—— states (T A I [illegible] n 301
—— —— prognosis (O)—1014
Correspondence 1063 1115
Aorta pathology of chronic valvular disease of 1332
Aplona apple preparation 21
Apoplexy treatment of by infiltration of stellate ganglion with novocain (W Arthur Mackey and Laurence D W Scott) 1 (O)—Correspondence on 93
Appendicitis acute drainage of pelvic abscess in (F L Coulson) 789—Correspondence on 917 1014 1296
—— —— treatment of (G Grey Turner) 691 (O)—Discussion on 259
—— and heavy meat diet 162
Appendix primary intussusception of (John Corcoran) 1145
APPIANO A Pernicious anaemia and psychose 1166
APPLETON Arthur B (W J HAMILTON and I C C CHAPPLEOFF) *Surface and Radiological Anatomy for Students and General Practitioners* rev 706
Appropriation Bill 321
APSEY G R M (and Edouard JÉQUIER) Anti pernicious principle some experiments with urine 934 (O)—Correspondence on 1113 1226
Argles Lieut Col Robert London obituary notice of 477
ARMSTRONG A Cameron Snapping jaw 1222
—— J Development of hospital system 366
ARMSTRONG JONES Sir Robert Tuberculosis death rate in mental hospitals 84
Art modern for hospital 604
Arteriosclerosis biology of (leading article) 1317
Artery central retinal spasm of (W Dunlop Hamilton) 992
—— external iliac traumatic rupture (complete) of amputation recovery (H C Linker) 219
Arthritis review of book on 572
—— rheumatoid (Wilfrid Edgecombe) 87 (O)—Discussion on 304
—— —— (atrophic) effect of spontaneous jaundice on (Philip S Hench) 394 (O)—Annotation on 411—Correspondence on 472 596 639
—— —— gold treatment of 967
—— —— orthopaedics in (Norman Capener) 91 (O)—Discussion on 94—Correspondence on 9[illegible]
Artificial limbs in congenital deformities of le[illegible] (Reginald Broomhead) 1311 (O)
—— —— review of book on 1088
Ascites operative treatment of 1
ASH W M Air raid precautions 1016
ASHCROFT D W Haemorrhage following tonsillectomy 1079 (O)—Correspondence on 1[illegible]
ASHTON Sylvia Treatment of pruritus ani 873
Aspirin poisoning 106
—— recovery after 1,500 grains of 986
Association Automobile *Road Book of Scotland* 20
—— British for Advancement of Science Centenary Session 411—Annual meeting Cambridge 466
—— —— Health Resorts *Official Handbook* 72—Annual meeting 110
—— —— Hospitals Contributory Schemes Annual conference 1171
—— —— for Labour Legislation *Report on Nutrition* 1[illegible]

ASSOCIATION BRITISH MEDICAL
Aims work and constitution of 994
Annual Meeting Aberdeen (1939) Aberdeen to-day 1[illegible]0
—— —— Ilfracombe (1938) Leading articles on 1[illegible]—President's address 16 18—*Journal of Ilfracombe* 186
BMA House extension of 11[illegible]
Central Emergency Committee Deputation to Ministry of Health re Co-ordination of Defence 1040

ASSOCIATION BRITISH MEDICAL BRANCHES AND DIVISIONS
Leeds Division—Anaemia and gastro intestinal tract 97
Glasgow Hunterian Society—Survey of psoriatic erythema and its treatment 9[illegible]
Leicester and Oakham Branch—Common foot affections 9
Southern Counties Provincial Meeting—Irregular pulse for students 1[illegible]
Yorkshire Branch—Juvenile locomotor ataxia 10[illegible]

ASSOCIATION BRITISH MEDICAL PROCEEDINGS OF SECTIONS
Exhibition of films and radiographs 369
Diseases of Children—Summary 248 [illegible]—Report 560 729 929
Medical Sociology—Summary 293 [illegible]
Medicine—Summary 248 301 361—Report 209 437 773
Neurology and Psychological Medicine—Summary 241 242 306—Report 605 875 1215 1247 1251
Obstetrics and Gynaecology—Summary 240 303 313 363—Report 331 335 337, 340 [illegible] 604
Ophthalmology—Summary 313 368—Report 608 740
Orthopaedics and Fractures—Summary 242 304 364—Report 387 391 1245 1247 1251
Oto rhino laryngology—Summary, 247—Report 167 447 606
Pathology Bacteriology, and Immunology—Summary 245 307—Report 730 827
Pharmacology Therapeutics and Anaesthetics—Summary 241 310—Report 695 1029 1199
Physical Medicine and Physical Education—Summary 304 366—Report 273 387 91
Physiology and Biochemistry—Summary 245 311—Report 440 565
Public Health and Hygiene—Summary 30[illegible] 565—Report 551 335 337 340
Radiology—Summary 243 308—Report 211 1034 1037
Surgery—Summary 239 302 362—Report 691 1071 1127
Tuberculosis—Summary 247 312—Report 216 1205
See also Supplement

Association British Orthopaedic Annual meeting 1221
—— —— of Radiologists Brodie's abscess and its differential diagnosis 119—Fellows passed 1244
—— Canadian Medical *Handbook on Cancer* 1364
—— of Clinical Pathologists Summer meeting 85
—— d'Enseignement Medical des Hôpitaux de Paris Medical lectures 1589
—— Far Eastern of Tropical Medicine Congress 1328
—— French Medical bequest to 434
—— Glasgow Postgraduate Medical Programme 914
—— Grenfell of Great Britain and Ireland Christmas cards 928
—— Hearing Aid Manufacturers formation of 1329
—— of Industrial Medical Officers Meeting 1107
—— International balneological founded in Budapest 330
—— —— Hospital Meeting of United Kingdom Council 1145
—— Irish Medical Schools and Graduates Annual autumn meeting 1276
—— King Edward VII Welsh National Memorial new headquarters 761 11[illegible]
—— Lausanne Medical Graduates Meeting 1241
—— Mental After Care aims and activities of 150
—— National for Prevention of Tuberculosis 24th annual conference 83
—— —— Veterinary Medical of Great Britain Annual congress 603
—— Northern Counties for Blind Annual report 796
—— Royal Medico Psychological 97th annual meeting 143
—— —— Sanitary of Scotland Annual congress 1011
—— St Andrew's Ambulance Annual meeting 147
—— of Scientific Workers Teaching of medicine 413
—— of Special Hospitals Foundation 146—Election of officers 146
—— Surgical Instrument Manufacturers Dinner 96
ASTEN W Development of hospital system 366
Asthma adrenaline treatment of 709 921 927 966 1112 1178 1279 1393
—— menstrual and vasomotor rhinorrhoea (A S Hoseason) 703 (O)—Correspondence on 81
—— milk and 1094
—— and moulds (E M Frankel) 68 (O)
ASTON C S Toxic infective jaundice 9
ASTOR Viscount (and B Seebohm ROWNTREE) *British Agriculture Principles of Future Policy* 1208
Asylum Royal Blind Edinburgh Opening of extension 1330
Atelectasis pulmonary cyclopropane and 1279
Athlete injuries to review of book on 42
ATKINS W R C Daylight in relation to climate and health 960 (O)—Discussion on 311
Atmosphere pollution of Survey of 194—Pamphlet on 890
AUGUSTINE Donald L (and others) *Parasitology With Special Reference to Man and Domesticated Animals* rev 1037

AUSTRALIA
Advisory Council on Nutrition Report 1
Changes in aboriginal bones 1163
National insurance in (leading article) 2 409
Poliomyelitis in Victoria 721
Q fever in Queensland 272
Royal Australasian College of Physicians 1215
Society Ophthalmological formed 229 844
Vegetables unpeeled sleep on 1209

Au trin Refuse e doctors and dentists 47 70 1oo 2o6—A l tance to medical students from 07—Jewi h doctors deprived of permit to practi e 786
AMMACHER Friedrich *All meine Pharmakologie* 947
AYMARD J I Inf ctions of hands and finge rs 1230
AYRE Philip Cyclopropane and pulmonary atel ctasis 1270

B

BACHRACH A L. *Science and Nutrition* 80
Bacteriophage r view of book on 221
—— treatment in outbreak of in titutional dysenter (David Hale) 698 (O)
Baldon Francis Joseph obituary notice of 46
BAILLIE Sir James Training in psychology 14—Retirement of 701
BAILLY J (and P PERLINCER) *La Maladie d'Aujeszky* 1314
BALFOUR H Ivor Purpura from sedormid 426
BALL Sir Cuthbert Radiology in diagnosis of urinary infections 1..
BALLENGER, William Lincoln and Howard Charles *Diseases of Nose Throat and Ear Medical and Surgical* 7th ed rev 1046
Bandage in prison nursery 23
BANERJEE P K Treatment of carbuncles 3..
BANKS, C Diphtheria and protection of tuberculous contacts 81
—— H Stanley Sulphanilamide for meningococcal Perim n 1000
BANYAI Andrew L. Radiological study of movements in collapsed lung 2..
Bar medical men called to 10.. 1241
BARBAGALLO C Pathological organism in internal bone marrow 1000
BARBER, G O Acute anterior poliomyelitis—four simultaneous cases in school 113 (O)
BARBORKA Clifford J *Treatment by Diet* 3rd ed rev 623
BARCROFT Sir Joseph *Brain and its Environment* rev 180
Bardswell Noel Dean of obituary notice of 1234 1293
BARFORD J L Medical evidence at inquest 47..
Barling Arthur Stanley obituary notice of 4..
—— Seymour Cancer of breast 12 8
BARLOW Sir Thomas P M.B.E. Christmas gift 860 1194
BARNETT E G Syphilis in South Africa 3 0
PARNHILL John Finch *Surgical Anatomy of Head and Neck* rev 120..
Barr Sir James obituary notice of 117
—— John Stoddart, obituary notice of 865
—— Joseph S Intervertebral disk lesions as cause of sciatica 124 (O)—Discussion on 42—Fractures involving knee joint 365
BARRETT Lady Appreciation of Dr Jane Walker 1120
—— Sir James Problem of partially blind 1212
BARTON H Thrombosis of pulmonary artery 6..0
BARUK H *Psychiatrie Médicale Physiologique et Expérimentale* rev 746
BASHFORD Sir Henry Andrew tates 301
Ba tardy (Blood Tests) Bill 1183—Leading article on 1210
Basu Lieut Col Phanindra Nath obituary notice of 814
—— U P (and S P DE) Synergism in experimental chemotherapy of staphylococcal infections 264 (O)
BATCHELOR F C L. (and others) 2 niphanilyl aminopyridine (M & B 693) in treatment of gonorrhoea 114.. (O)—Correspondence on 1227
Bate Arthur Geoffrey obituary notice of 118..
BATEMAN Geoffrey (and Walter HOWARTH) Mastoid operations 1204 (O)
BATES Josh Adrenaline treatment of asthma 921
Bateson Vaughan obituary notice of 972
Baxer Products Ltd Jubilee volume 1070
BEADNELL, Surg Rear Admiral C M. Origin of cancer 196—Evolutionary theory 386—*Dictionary of Scientific Terms* rev 40—A R.P and under ground car parks in London 1015
BEATTIE, John (and others) *Hypothalamus Morphological Functional Clinical and Surgical Aspects* rev 300
BEAUMONT G E *Diets for Diabetes Arranged in Menu Form* rev 1263
BECK Pegena Cook *Laboratory Manual of Hematologic Technic including Interpretations* rev 1200
—— Stephan Carcinogenicity of tar-creosote mixture used by fishermen 1313
Bed new tiltable with donkey mules of 23
—— service emergency in London 25 93 202 42. 476 507 769 1270
BEDFORD S G (and F F HELLIER) Acid atal vaccination of nose 931
Beeswax in ulcerative tuberculous lesions 1309
Belt Memorial Fellowships for Medical Research Meeting of trustees 250—Election of new Fellows 250
Belgium Number of doctors in 46 —Survey of health services 760—Mortality in 1000
BELL, L T *Textbook of Pathology* 3rd ed rev 705
—— Fairfax (and John HARVEY) Extra uterine intra abdominal pregnancy 1044
Belts and trusses (Ralph Coyte) 1322
BENEDICT E B Peritoneoscopy 714
BENNET Edward A States of depression 306—Significance of dreams 1170
BENNETT J Co-operation in health 303
—— John B Complications of cold therapy 1..
Bennett fracture 461 530
BENTLEY F H (and John MORLEY) Late results of partial gastrectomy for peptic ulcer 645 (O)
Benzedrine observations on (E W Anderson) 60 (O)
BERG Charles Unconscious mind and medical practice 105—Psychosomatic illness 319
Berger With Im death of 601
Beriberi polyneuritis with oedema simulating (E B Carrett) 257
BERNSTEIN J Nasal inf ctions in children 16..
BERRY J J V Appreciation of Dr F J Baildon 45
BERTONI C Domagno s reaction in typhoid 1251
BERTWISTLE A J Cancer campaign 205—Museum of practical radiology 1303
BEST Charl Herbert (and Norman Burke TAYLOR) *Living Body Textbook in Human Physiology* rev ——Heparin and thrombosis 977 (O)—Leading article on 906
—— S H *Story of British Red Cross* rev 19
—— Thomas A (and H Craven PITCH) Case of locked twin 1 9
PITT Walter F Georg III (1 38—1820) 664—Correspondence on 764—Presidents of New York Academy of Medicine 864— Typhoid Mary 11 58—Hard Sudhoff 1300
BEVAN Edward V Prevention of war 1402
BEVERIDGE Sir William Influenza problem 1..0
BHATNAGAR S S Misdiagnostication in diagnosis of typhoid fever and typhoid carrier condition 1190 (O)—Annotation on 1..11
BICKART J H Diabetes in lipidus 1277
BICKEL, J W Laboratory diagnosis of glandular fever 1106
BIGG A C B Decline of breast feeding 1301
Bile review of book on 601
Billings John Shaw commemoration of centenary of 405 874
BINNEY Cecil Illegal operations 1.. 3
Biochemistry review of books on 839
Bio-economic book on 10.1
Bird John Wilfred obituary notice of 903
BIRDSALL, S E Haemorrhage following tonsillectomy 1...
BIRDWOOD G T Keratitis from working with creosote 18
Birmingham Hospitals Centre Royal opening ceremony 13—Leading article on 129—Medical School 187—Report for 1937 of M O H 1011
BIRNIE, C P (and J S HAPPIS) Cardiazol therapy in stupor 449 (O)
BISHOP P M F Ovarian therapy 44—Undescended testicle 374 594—Endocrine therapy in gynaecological condition 1103
BLACK M Blood transfusion in obstetrics 31.
BLACKER C P Illegal operations 1274
BLACKLOCK D B (and T SOUTHWELL) *Guide to Human Parasitology* 3rd ed rev 50—Voluntary national register of land for war time 1391
—— Mary appointed member of Royal Commission on investigating social and economic conditions in Jamaica etc 330
Blackmore Major Herbert Stuart Obituary notice of 10..—Parliamentary note on 70..
BLACKWELL P Urethral stricture 1238
BLEWETT P R. Sociological aspects of dereliction 1203
Blind Asylum and School Edinburgh Royal Annual Meeting 147
—from birth woman acquires sight at 2.. (P Colby) 67 (O)
——
——
Blindness advisory committee on 306
—— causes of 790
—— prevention of 994
—— severe night due to vitamin A deficiency (O F Fisher) 944
Blomfield George Wills obituary notice of 124
—— George Wills jun Administration of pituitary extract in third stage of labour 10 3 (O)—Correspondence on, 1...
Blood changes in experimental tuberculosis 209
—— clinical significance and estimation of vitamin B1 in (Erwyn N Rowlands and John F Wilkinson) 58 (O)—Correspondence on 1060 1110
—— diseases review of book on 72
—— films cleaning fluids for 480 690 728
—— groups and legislation 376 471
—— parental whole in prophylaxis of measles (T D Culbert) 705—Correspondence on 64
—— platelet (leading article) 1090—Correspondence 11 9 12..0
—— pressure high review of book on 239
—— —— after spinal anaesthesia 44
—— —— renal pressor substance 597
—— —— restropic activity of (C Wetzler Li tfield and B P Wiesner) 444 (O)
—— storage for transfusion (parliamentary note) 1150
—— supply heart in relation to 750
—— tests in bacteriology cases new Bill 1183—Leading article on 1..10
—— transfusion sequels of 84..
—— —— Service. Annual report 750
—— —— syringes and needles combined 494
BLUMENTHAL, C J Clamp for tarsorrhaphy and plastic operations on lids 663
BLUNT E D Two compressed foetuses and living baby as unusual case of hydramnios 200
Board Birmingham Joint Research for Mental Disease Annual report 912
—— Central Midwives for England and Wales Meeting 809—Post-certificate training for midwives 1097
—— Conjoint in England Information concerning 499 500 532
—— —— in Ireland Information concerning 50 53
—— —— in Scotland Diplomas and passes of 1074—Information concerning 50..
—— of Control (England and Wales) Chairman's address 760—Approval of medical practitioners under Mental Treatment Act 1930 804—Appointment of Commissioners—Annual report for 1937 1096—Correspondence on 1177
—— —— for Scotland (parliamentary note) 1745
—— Dublin Fever Hospital Fifty report of 1..
—— of Education 1937 annual report 1..2—Fifty report of Chief Medical Officer 1233
—— Food Investigation Report of 67..
—— Manchester Joint Hospitals Advisory Annual report 1374
—— Metropolitan Water Opening of new laboratories 805—New address of Water Examination Department 1441
—— Scottish Mental Hospitals Pathological Annual report 667
BOE Finn *Studies in Protein and Pregnancy in Man* rev 946
Boeck sarcoidosis of (P Bodily Section) 777 (O)—Correspondence on 9..0
BOERSHEIM G Child psychotherapy 259
Boil salt water 917
Bonanne Verdath of 477
BOND C J Certain phases in the history of polymorphonuclear leucocyte 781 (O)
BONE J W Co-operation in public health, ...
Bone lengthening 1...1
—— marrow post mortem changes in 909
—— —— terminal pathogenic organisms in 100
——radiographic changes of childhood as seen in adult life 1...
Bonney Ernest, obituary notice of 923
—— Victor (Charles FOX and John MACILWAIN) Tetanus bacillus recovered from scar twenty years after attack of post-operative tetanus 10 (O)
Boorman Herman bicentenary of the Academy 2...—Number of *Nederland's Tijdschrift voor Geneeskunde* devoted to 10 9
BOOKHALTER S (and J J MURRAY) Case of complete hypospadias 699
Books and manuscripts old 1..4—Sale of doctor's collection 162
BOOTH T H Aplastic anaemia with complete recovery 1041 (O)—Correspondence on 12..
Booth W G Civil medical organization in war 902
BOSWELL J C Pellagra in mental hospital 951
BOURNE, Aleck Summons 97—Trial of 1...—Leading articles on 150 252—Correspondence on, 34 315 377 417 470—Legal viewpoint 2...—Illegal operations 1273
BOURNAT P J Chancre of vaginal wall 417
BOWIE F J T. Chemotherapy in gonorrhoea—Report on 2 (p-aminobenzenesulphonamido) pyridine (M & B 693) 257 (O)—Annotation on 294—Correspondence on, 37 424 474 791
BOX Charles (Victor BONNEY and John MACILWAIN) Tetanus bacillus recovered from scar ten year after attack of post-operative tetanus 10 (O)
BOYCE, F F Hepatic function test 1..12
BOYCOTT M. Hormone therapy in gynaecology 304
BOYD Lieut-Col J S K. Preparation of pophy

BRADLEY W H Spread of streptococcal disease 733 (O)
BRAEUNING H *Der Beginn der Lungentuberkulose beim Erwachsenen* rev 30
BRAGE Sir William Brace Paul pulsator 254
Brace Paul pulsator 254 300—Parliamentary note on 269—Note on 2..
BRAHAM D Protection of eczematous face 1027
BRAID Francis Osseous dystrophy following ictus gravis neonatorum 12.. 120
BRAILSFORD James F Prodromal abscess and its differential diagnosis 119 (O)—Congenital deformities of hands and feet 101—Radiographic changes of childhood as seen in adult life 12..
Brain Cerebral integration of ocular movements (Gordon Holmes) 10 (O)—Leading article on, 12
—— review of books on 189 10..
—— Vasomotor control of cerebral circulation 66
BRAIN W Russell Vertigo its neurological, circulatory and surgical aspects 600 (O)—Discussion on 206—Correspondence on 6..0 ..2
BRAINE, G I H. (and others) Nasal basilemma inopyrine (M & B 69) in treatment of gonorrhoea 114.. (O)—Correspondence on 1...
BRAITHWAITE Constance *Voluntary Citizen Enquiry into Position of Physiology in Community* rev 1026
BRAMWELL, Crichton (and Edith A LOVIBOND) *Heart Disease and Pregnancy* rev 114
BRANDER, J Mental aspects of tuberculosis 84
BRANHAM Sara Gonococcal arthritis 6..9
BRANSON W P S *Silver Pieces and Sons* rev 6..
Breast, acute infections of (Charles Donald) 904—Correspondence on 1043 117..

Breast cancer of (G Gordon Taylor) 1071 (O)—*Discussion on 302*—*Correspondence on* 1278
—— inflammatory carcinoma of 982
—— innocent tumours of (W Sampson Handley) 1054
—— reliever pad 957
Breast feeding, modern decline of (J C Spence) 729 (O)—*Discussion on* 249—*Correspondence on* 812 86 91, 967 101 1062 1111 1176 1229 1282 1390
—— —— suppression of by oral oestrogen therapy (C I Jose and I Phillips) 887 (O)—Note on 1154
Breech presentation prolapsed hand and 1402
BRENNEMANN J *Acute Laryngotracheobronchitis* 670
BRIDI J W Rectal reactions following irradiation of cervix 1038
BRIEGER I *After Care and Rehabilitation* 75
BRUCE Allan H Abortion and the law 427
Bristol Specialist services for corporation hospital 730—Health service 421
British Drug Houses Ltd Booklet on *pH* values 1350
—— *Heart Journal* to be published by B M A 1051
—— *Journal of Dermatology* jubilee of 926 1166
—— —— *of Rheumatism* first number 271
—— *Medical Journal* collection of for disposal 874
—— Museum Bill 100
—— *Pharmacopoeia* preparations for next edition (leading article) 1264
BRITTAIN H A Excision of patella 41—Fracture of carpal scaphoid 671
BROADLEY H (and Sir William CRAWFORD) *People's Food* 895—Correspondence on 1018
BROCK A J Psychology of medical profession 97—Abortion and the law 480—Social pathology 765 1114—Air raid precautions 1284
—— R C Empyema in childhood 306—Undescended testicle 423
BROCKBANK W Bronchiectasis 1331
Brodie's abscess and its differential diagnosis (James I Brailsford) 119 (O)
Bronchiectasis points of view of physician and surgeon 1331
BROOMHEAD Reginald Congenital deformities of legs 1311 (O)
BROTHWOOD W C V (and Col C J TIMMIS) Outbreak of Sonne dysentery 1 65 (O)
BROWN Andrew Carbohydrates and alimentary disease 635
—— D Kathleen When to start sulphonamide treatment in gonorrhoea 196
—— C Laing Spontaneous pneumothorax a complication of artificial pneumothorax 1259
—— H C Toxic infective jaundice 238
—— Herbert H Treatment of pneumonia 150—Typhoid vaccines 308—Oxygen in treatment of sciatica 1390
—— J A General practitioner and midwifery 367
—— Officer Empyema in childhood 306
—— R Cunyngham Care of lunatics in Nigeria 900
—— William Problems of mature personality 799—Psychotherapy in organic disease 70—Psychology at Oxford correction 820—Disclaimer 976
Brown-Séquard Charles Edouard Centenary of 43—Tributes to 1388
BROWNE Denis Diagnosis of undescended testicle 168 (O)—Annotation on 189—Correspondence on 293 318 374 423 473 594 636
—— J F Treatment of placenta praevia 28
Brucella abortus infection report on five cases (Michael Caffrey) 880 (O)
—— —— —— treated with formalin and prontosil (A J Thompson) 884 (O)
—— —— infections prontosil group in 471
—— —— *see also* Fever undulant
BRYAN Frank Social pathology 1402
—— T B I Tumour of milk tract 859
BRYANT J I Case gangrene 908
BRYCE A Graham Bronchiectasis 1331
Bubb Charles Henry obituary notice of 1411
Bubo climatic sulphanilamide in (Sydney M Laird) 104
BUCKLEY C W *Arthritis Fifty-first Annual Report* 1937—*Chronic Infective Disease* 1937 1400
Bug, bed in human ear 1068
BUNKER C Occipito-posterior position
Bulimia control of 1255
BULL J W D Congenital atresia of oesophagus 1178 (O)—Correspondence on 1110
Bulletin of the International Health Office Pacific Number 1938—Yaws 1938—Sanitation 1938—Smallpox 1938
BUNNARD Wilfrid Thomas Monro obituary notice of 1411
BURNHAM Edmund F Appendicitis in childhood 1331
BURN J H A Treatment of pneumonia 1
Burrell Lucas Stephen Topham obituary notice of 1252
BURROW H J Operation for cancer of rectum 1241
—— Ivan E Psychiatry and criminal law 1104—Limitation and Visiting Justices 1255
BUTTERFIELD Harold Wilfrid Note on type of joint suitable for treatment by arthrodesis 1411 (O)—Arthrodesis 1411
BUTLIN H T Cancer of the larynx 1411
BUTLIN Sir Henry Trentham (and F J TAIT) Treatment of malignant disease of the larynx 1411 (O)
BYNG J Edward Thomas Anxiety states 902

C

CABLE J Verney Late results of surgical treatment in perforated peptic ulcer 403 (O)
Caesarean section uterine rupture following 90
Calcaneo cavus operation for 1225
Calciferol high potency (ostelin) 947
Calcium effect of on toetin 1227
—— mandelate in treatment of urinary infection (H Droller) 657 (O)
Calculi autochthonous urethral (J Graham) 1057
Calcydic tablets 108
Calciferrum tablets 894 1055
Calenders and drafts 1244
CALLUM I N Congenital deformities of hands and feet 991—Correspondence on 1061
CAMPION C R Toxic infective jaundice 238
—— I Gordon Rare complication of labour 1055
—— S I (and H J THOMSON) Full time extra uterine pregnancies 991
CAMPBELL Argyll (and I I LOUDON) *Oxygen and Carbon Dioxide Therapy* 2nd ed rev 1269
—— Harry Unconscious mind and medical practice 93—Obituary notice of 1253
CAMPS F E Puerperal sepsis 104
Canada Number suffering from mental disease 984
Cancer of alimentary tract comparative study of 898
—— apical bronchogenic (D Owen I I Hewer and I H Whittle) 1360 (O)
—— Bill 1239 1280—Conference on 1257—I C C and 1334—Correspondence on 139
—— breast (G Gordon Taylor) 1071 (O)—Discussion on 302—Correspondence on 1278
—— —— and chronic mastitis (W Sampson Handley) 113 (O)—Correspondence on 219 471
—— —— and urinary bladder discussion on 1390
—— campaign 298
—— —— British Empire Medical secretary to Clinical Cancer Research Committee appointed 207—Quarterly meeting of Grand Council 250—Annual report of Yorkshire Council 675—Annual general meeting 1216
—— of cervix radiotherapy of 669
—— —— cure tetanus from 638
—— —— e) 1398
1267
—— experimental resistance to 807
—— gastric x ray diagnosis of 1274
—— Government versus (leading article) 1091—Parliamentary note on 1184—Note on 1188
—— and heredity 93 1954
—— inflammatory carcinoma of breast 982
—— inoperable of tongue and jaws alcohol injection in (Wilfred Harris) 831 (O)
—— irradiation or surgery for? 18
—— lung (leading article) 184—Correspondence on 316
—— mammary and menopause 1257
—— origin of 41 92 196
—— of pharynx and larynx treatment of and its results (Lionel Colledge) 167 (O)—Discussion on 247—Correspondence on 298
—— —— —— treated by irradiation (C Hamblen Thomas) 247 447 (O)
—— Prague sera reactions for 712
—— pulmonary and silicosis 411
—— *research grants for* 381
—— tar virus 151
—— of testis review of book on 1046
—— Week *International* Paris 1104
Cancers identical in identical twins 733 949
CANDELA A J Axial mutilating membrane (1)
Cannabis indica active principle of 40
Cannula new intravenous 1315—Note on 1402
CAPENER Norman L Orthopaedics in rheumatoid arthritis 391 (O)—Discussion on 304—Correspondence on 9—Axial mutilating membrane 80
CAPON Norman B Congenital deformities of hands and feet 1061
Caravon Maurice death of 924
Carbar one in amoebiasis 94
Carbohydrates and alimentary disease
Carbunculus treatment of 150
Carcinoma mucohydroureteris 1240 1241
Carcinogenicity of tar creosote mixture used by Hellermann (Stephan Beck) 131
Carcinoma See Cancer
Cardiazol for chlorpromazine 1267 1280—Parliamentary note on 1351
—— therapy in stupor (J S Harris and C I Birch) 449 (O)
Cardiology See Heart
Career choice of 1070
Carlisle qualification for 1085
CARMALT H L Varicose veins in haemophiliac 971
Carmichael Hunt Col James Charles Gordon obituary notice of 1200 1428
CARO M L Sulphanilamide in lymphadenoma 90
CARROLL Dan Psychiatry and criminal law 1104—Limitation and Visiting Justices 1255
CARTER Donald Dodin of Cardiff din 1014 1227 1393
CARVER A F A Examination of psychosynthesis 1113—Statistical prediction 1200
Case salvage obituary notice of 1252
CASH Ethel Irene Suffering 1249—Prevention of Physical Deterioration (Report) (O)—Discussion on 93—Leading article on 332
CASSON Ifzal Thomas Anxiety states 902
CATHCART I P Physiological approach to fitness 273 (O)—Discussion on 306
Catheter antrum 963
CAWADIAS A I Incomplete descent of testicle 259—Uses and abuses of benzedrine 961
CAWSTON F G Antimony therapy 258
Celluloid in toys etc reports on 269 1007
Celsus translation of *De Medicina* (W G Spencer) rev 288
CENTO R Beeswax in ulcerative tuberculous lesions 1109 (O)
Certuna new anti malarial drug 900
Cervix rectal reactions following irradiation of 1057
CHAMBERS T S *Conquest of Cholera America's Greatest Scourge* 995
Chancre recurrent or peni 421
—— of vaginal wall 417
CHANDLER Changes in teeth following parathyroidectomy 76
—— —

CH

CHAPMAN O D Cas gangrene 956
CHATTERJI Lieut Col A C Report on housing conditions in Bengal 676
Chauffeur's fracture 360
CHAUSSÉ G Radiographic analysis 1272
CHEESMAN Surg Comm A F P Death from wasp sting 106
Chemotherapy *See* Sulphonamide group
Chemistry review of books on 127 288 290 804 1087
CHÉRICHÉ Jd (J COTTENOT and Max LEVY) *Le Duodénum Atlas de Radiologie Clinique* rev 945
Chest disease serial radiography in 1010
—— diseases review of book on 791
—— injuries treatment of (A Tudor Edwards) 1096
—— radiography of (George Tessel) 276 (O)—Discussion on 347
Chicken pox followed by panophthalmitis 197
Child guidance conference on 1059
—— health diploma in 500
—— sale of for dissection 757
Childbirth *See* Labour
Childhood review of books on 838 1147
—— some nutritional problems of (L G Parsons) 305 920 (O)—Annotation on 915
Children alone in dark 928
—— comparison of physical standards in two groups of Newcastle (H C Miller) 718
—— maintenance of health of (parliamentary note), 47
—— *mentally defective in Lancashire* 383
—— physical fitness in 142
—— psychotherapy of 298

CHINA
Anti epidemic work in 33
Drug traffic in 156
Epidemic situation in 300
Medical relief for 96 148
Opium imports 101
Surgical instruments for 639

Cholera in America history of 995
—— defence against 418
—— in Russia 121
CHOLPA Col R N and C S Opium smoking in India 1277
Chorion epithelioma discussion on 963
Christmas cards 928
CHRISTOPHERS Sir Rickard (and J A SINTON) Correct name of malignant tertian malaria parasite 1130 (O)
CHURCH G Edgar Ischio pubic osteochondritis 94
CHURCHILL J and A Ltd *Medical Directory* 1939 153
Circulation review of book on 1088
—— time determination of 1094
Circumcision (Kenneth Walker) 1255
Clamp for tarorrhaphy and plastic operation on lids 663
Clamps non slipping hysterectomy 62
CLARK A J Aspects of history of anaesthetics 44 1029 (O)
—— W A Case and dramatic criminal history 1402
—— W J Le Cros (and others) *Ophthalmic Morphological Functional Clinical and Surgical Aspects* rev 1270
—— W G Cremation 147—Public health policy 1011
CLARKE H Osmond Fractures involving knee joint 64
Claw Hun death of 601
Clavicle fractured simple ambulatory method of treating 748
—— fractures of 80
—— sign of 328
CLEMMESEN Sv (and C LUMSDEN) *On Deficiency of Vitamin and Visual Disadaptation* rev 710
CLENDENNING Logan *Human Body* revised rev 347
Cleveland C I Henry Francis obituary notice of 1200
—— John Wilmer obituary notice of 1411
Clinic Edinburgh Foot Annual prize giving 420
—— Liverpool Psychiatric Report 857
—— Open for problems of juvenile behaviour 904
—— Tavistock Courses of training 1
Clinics maternity and child welfare (parliamentary note) 157
—— *See International* vol I 1st series 21

Cl. tetani in infection following abortion (P. A. Dawburn and Brian Williams) 270 (O)—Correspondence on 991
Club Old Epsomian—Annual dinner 1170
—— Oslerian meeting of 1938
Cochrane, Elmar, appointed to Executive Council of Finland of Grenada 1204
—— W. A.—Orthopaedics in rheumatoid arthritis 1190—Orthopaedic aspects of sciatica 1231 (O)
Cockcroft, Hubert, obituary notice of 1177
Cockroaches—Note—Review of book on 1084
Codeine as habit forming drug (leading article) 1007
Cohen, Henry—Spasmodic torticollis 1241—Sciatica 1241—Vertigo 1077
—— Michael—Woman in transition to 1130
Cohnheim, A. J.—Sulphonamide chemotherapy in gonorrhoea 1241 (O)—Sulphonamide chemotherapy in surgical infection 1245, 1301—Correspondence on 1066, 1100
Cold, common, new treatment of 1189
—— —— prophylaxis of (J. B. Sherman) 1190—Correspondence on 1015
Cole, Ethel—*Education for Marriage*, review 1241
—— Pupils awarded George M. Robertson medal 1315
Colebrook, Leonard—Control of puerperal fever 1375
Cole, A. C.—Cleaning slides for blood films 1090
Colitis, ulcerative, clinical aspects (E. R. Cullinan) 1331 (O)
—— —— personality studies (Erich Wittkower) 1331 (O)
Colleen, Lionel—Treatment of carcinoma in pharynx and larynx and its results 1677 (O)—Discussion on 1747—Correspondence on 2190
College, Epsom—And *British Medical Journal* 2171—Pensions and scholarships 1774—Annual dinner of Old Epsomian Club 1195—St. Anne scholarships 1229
—— Kings—Information concerning study of medicine 1212
—— of Physicians of Philadelphia—Alvarenga Prize 1112—Premio Alvarenga do Piauhy Prize 1150
—— North East London Postgraduate—Information concerning 1530
—— Royal Australasian of Physicians—Inauguration of 1418, 1345
—— —— C[illegible]
Election in[illegible] 1502
[illegible] (O)
report of [illegible]
—— —— —— of Ireland—Information concerning 1050

COLLEGE, ROYAL, OF PHYSICIANS OF LONDON
Appointments 1376, 1023
Awards, 378
Closed for cleaning 1330
Degrees and passlists 1378, 1083
Diplomas granted 1083
Election of Councillors 1023
—— of officers 1376
—— of representatives 1023
Harveian oration 821
Information concerning examination 1499
Lectures 817, 869
Lloyd Roberts lecture 1101
Members admitted 1378
Memorial to Sir Raymond Crawfurd 1378
Pneumatic diseases, chronic, fourth annual report of committee on 1706

College Royal of Obstetricians and Gynaecologists—Election of officers 2066—Fellows admitted 2066—Members elected 2066, 1023—Information concerning 1900—Uterine inertia 1959—Dinner 2062—Passlists 1023
—— —— of Surgeons of Edinburgh—Degrees and passlists 1321, 1345—Information concerning 1902, 1518—Admission of Fellow 1910—Election of officers 1906
—— —— —— in Ireland—Information concerning 1050, 1521

COLLEGE ROYAL OF SURGEONS OF ENGLAND
Annual meeting of Fellows and Members 1115
Appointments 1163, 1060, 1193
Awards 2650
[illegible]
[illegible] 1066, 1294
[illegible] Presidents 1188, 2650
[illegible]
[illegible] 1900
1066
1293

College Royal (Dick) Veterinary—Edinburgh—Annual prize giving 1890—Appointment of principal 2203
—— University—Information concerning study of medicine 1913—Heparin and thrombosis 1977
—— —— Cork—Information concerning study of medicine 1521
—— —— Dublin—Reprints and pamphlets 1185
—— —— Galway—Information concerning study of medicine 1252
—— —— Hull—Appointment 1115—Award 1115
Colles's fracture and chauffeur fracture (R. A. Fitzsimons) 1337—Correspondence on 1991
COLLEY, P.—Woman blind from birth acquires sight at 22 years 1677 (O)
Collin, Jonas, death of 1977
COLLIS, D. H.—Aetiology of acute rheumatism 2461
—— J. V.—Medical apparatus in 1816 1083
COLLIS, W. P. F. (editor)—*Clinical Psychiatries (The Fifth)*, review 1147
Colon, spasm of 1386
Colour vision, method of testing for and theoretical deductions from observation on colour vision (H. E. Roaf) 1440 (O)—Discussion on 2450
COLT, C. H.—Thumbs for surgeon 1014
COLTART, W. D.—Rheumatoid arthritis 1304
COLYER, Charles—Tomography in vertical position 1866
Committee on Carlos, death of 1226
Committee, Advisory on Blindness, appointment on 1356
—— Interdepartmental on Abortion 2295
—— Inter-Malnutrition, Special report 1139
—— Milk Nutrition—Milk and nutrition 1250—Report 1049
—— Ophthalmic Benefit Approved constitution of 1477
—— Parliamentary Medical—Meeting 1001, 1121, 1345
—— Voluntary Hospitals for London—Election of committee and office 1041
Conceptualism, review of book on 1835
Condensation water from theatre skylight 1138, 1444, 1226
Conference, Child Guidance Interclinic 1050
—— on cremation 1950
—— on health education 2253
—— International Red Cross—Concluding session 1377
—— —— on Pneumatic Diseases, Bath—Effect of spontaneous jaundice on rheumatoid (atrophic) arthritis 1394
—— medical student—training of doctor 1021
—— of military medicine and pharmacy 2281
—— *national on maternity and child welfare* 1477
Congenital disease, human problems of (J. B. S. Haldane) 1100
Congress of Comparative Pathology, Rome, 1939 1955
—— health, Portsmouth 1900
—— International on Life Assurance Medicine 1939, Part 1 1877
—— —— Neurological, Copenhagen 1939 1160
—— —— of Obstetrics and Gynaecology, Rome, 1942 1873
—— —— of Physiologists—Jubilee 1419
—— —— Society of Surgery—Summary of papers published 1769
—— —— of Surgery—Account published 1294
—— on medical postgraduate study—Report 1414
—— of Military Medicine and Pharmacy 1939 1961, 1962
—— Montessori 1420
—— for Psychotherapy—International Medical 1050, 1369
—— South African Medical, 32nd Proceedings 1802
CONNELL, H. C.—Tetanus from cancer cure 1638
CONRAD, Victor—Assistance to medical students from Austria 1977
[illegible]
[illegible] mons House)
opening of 2251
Conversion rules 1315
COOK, L. C.—Convulsion therapy 1441
COOPER, Robert—Pleural effusion 1220—Prorated gastric ulcer 1226
COOPER, Frank B. (and other)—*Sulfanilamide Therapy of Bacterial Infections*, review 1045
Co-operation between ophthalmologist and physician in certain cases of visual loss (C. B. F. Tivy) 1605 (O)
—— —— organized bodies 1413
—— in public health administration 1367
COPE, Zachary—Septic hand 1363—Malignant disease of bile duct and bladder 1930
Copeland Royal, Samuel, death of 1446
COPLET, Robert M.—Prevention of breast infection 1063
CORCORAN, John (Dublin)—Primary intussusception of appendix 1145
—— John (Worcester Park), obituary notice of 1637
Corneal transplantation (J. W. Tudor Thomas) 1365, 1440 (O)
CORNER, S. G.—Chicken pox followed by panophthalmitis 1077
Corporal punishment—Letter to Home Secretary 1877
Corpus luteum, microchemical researches on 2041

Correspondence
Abortion, *Cl welchii* infection following 1474
—— and the law 1995, 2041, 2315, 2372, 2427
Abscess, peritubular 1634
Advertising—science in 1968
Air raid precautions 1869, 1915, 1963, 2016, 2064, 2114, 2170, 2227, 2283—And underground car parks for London 1915—Evacuation of casualties 1113
Alimentary diseases, carbohydrates and 1639
Allergy and immunity 1763
[illegible]
[illegible]
Anatomical terminology 1959
Anatomy, academic versus clinical 1764
Angina of effort—treatment of 1281
Antagonistic diseases 1477
Antimony therapy 2295
Anxiety states, prognosis of 1751, 1763, 1812, 1863, 1909, 1914, 1963, 2113
Apoplexy, treatment of 1932
Arthritis, rheumatoid, gold treatment of 1977
—— —— and jaundice 1477, 1531, 1577
—— —— orthopaedics in 1502
Asthma, adrenaline treatment of 1911, 1963, 1977, 1978, 1979, 2033
Auxiliary ambulance to medical students from 1977
Bed, service, emergency, voluntary hospitals, 1478, 1477, 1959
Bennett, fracture 1990
Blindness, prevention of 1904
Blood groups and legislation 1376, 1477
—— parental, whole as measles prophylaxis 1764
—— plot let 1179, 1250
—— pressure and spinal anaesthetic 1477
Boil, salt water 1917
Brain, Paul, pulsator 1294, 1320
Breast, infection, prevention of 1062, 1177
Breast feeding, decline of 1812, 1863, 1915, 1959, 1963, 1966, 1111, 1176, 1222, 1262, 1310
Brucella abortus infection, protozoal group in 1471
Caesarean section, uterine rupture following 1903
Cancer of breast 1275
—— campaign 1295
—— and heredity 1903, 1905
—— irradiation or surgery for 1315
—— of lung 1316
—— origin of 1411, 1905
—— of pharynx and larynx 2029
Cancers, identical in identical twins 1919
Cannabis indica, active principle of 1940
Carbuncles, treatment of 1300
Chemotherapy, complications of 1991
—— new 1385
Chicken pox followed by panophthalmitis 1977
China, medical relief for 1996, 1148
Colds, cure of 1015
Colles's fracture, reduction of, backward displacement in 1991
Cyclopropane and pulmonary atelectasis 1277
Diabetes and pulmonary tuberculosis 1373
Diaphragm, eventration of 2296
Dietetic, vegetarian 1995, 1979, 1986
Diphtheria prophylaxis 1942
—— treatment of 1942
Doctors, foreign, admission of 1807
Eclampsia, domiciliary, emergency treatment of 1336
Epilepsy, idiopathic 1977
—— sulphonamide for 1261
Epithelial cell, function of 1813
Ether convulsions 1963, 1990, 1977
Faeces, accumulation of, in rectum 1644
Femur, fracture of neck of 1903, 1906
Fever, typhoid, treated with sulphanilamide 1632
—— undulant 1019
Finger, traumatic amputation of 1917
Fitness, holiday, colonies for 1475
Food and nutrition 1015
—— policy, national 2577
—— supply in war time 1175
Footwear, correct 1220
Fund, Royal Medical Benevolent, Christmas gift, 1860, 1161
Galvanism, neglect of 1637
Gas poisoning, protection against 1915
General paralysis or insane, treatment of 1917, 1012, 1111
[illegible]
[illegible] 1950, 2261, 2375, 2375, 1644, 1764
[illegible]
—— lavage for 1424
—— sulphanilamide treatment of 1911
—— when to start sulphonamide treatment in 1990, 1996
Grenz ray therapy 1179, 1226
Haemorrhage following tonsillectomy 1220
—— oral, snake venom for 1475
Hand and finger, treatment of, infections of 1286, 1917, 1974
Hands and feet, congenital deformities of 1011
Harrison, E. F. 1377
[illegible] 1677
[illegible] breast cancer 1319, 1471
Hutchison, Robert, testimonial to 1995
Hypoglycaemia, profound 1174
Influenza, periodicity of 1015
Injection risks—case of gas gangrene 1317
Inquests, medical evidence at 1475, 1990, 1977
Jaundice, catarrhal 1633, 1906
Keratoplasty 1432, 1926
King George III and his physicians 1764
Labour, pituitary extract in third stage of 1225
—— late 1028
—— trial, plastic head 1422
Lymphangitis, filarial, sulphanilamide for 1919
[illegible] 1377, 1765
[illegible]
[illegible]
[illegible]
[illegible] 1660, 1914, 1984
[illegible]

Correspondence *(continued)*
—— re education 921
—— research in England 1060
Morquio's disease personal experience 763
Meningitis meningococcal sulphanilamide for 317 370
Menstruation toilet new 1113 1229 1282
Mental after care 1150
—— factors in medicine 424
—— treatment services 1177
Mere examining body 589 639
Milk accredited what is it? 1285
—— and asthma 1394
—— pasteurization of 1109
—— vitamin C in 597 763
Mind unconscious and medical practice 39 93 150 198 250
Mortality maternal and medical education 425
—— —— rates 471
Neck plaster 1178
Neuralgia facial surgical approach to 1278
Nurses trained organization of in emergency 762
Occipito posterior case 638 681 722 919 968 1063 1178 1225
—— presentation prolonged 593
Oesophagus congenital atresia of 1110
Oil human from omentum 679
Olecranon fractured personal experience 633
Osteochondritis ischio pubic 94 148, 917
Paralysis acute bulbar 1281
Patella excision of 41
Pathology social 762 814 1012 1114 1230 1392
Pelvis measurements of 422
Phosphatase test and pasteurization 1109
Pituitary and diabetes 1174
[illegible] 9 151 1337
1179
ainst 1174
Poisoning sequelae of war gas 39 597
Poliomyelitis convalescent serum for, 588 628, 678 721
—— treatment of 964
Pregnancy abdominal 126
—— and leprosy 9
Prominal overdosage of 860
Prostate enlarged Stomach II operation for 576 [illegible] 593
Prostatectomy Harris 637 684
—— subvesical diathermy 259 423
Psittacosis 151
Psoriasis 152
Psychology of medical profession 97
Psychosomatic illness rising incidence of 149 197 319 376 473 596
Purpura, thrombocytopenic from sedormid 320 476
Quinsy and its treatment 423
—— peritonsillar abscess 41 152
Radiology practical museum of 1393
Radium police and practice 1436
Refuge problem 1593
Respirators mechanical 1389
Rhinitis atrophic 45
Rhinorrhoea vasomotor 817
Sarcoidosis of Boeck 920
Scars adherent human oil and 1339
Schizophrenia cardiazol for 1390
Schopenhauer and syphilis 96
Sciatica oxygen in treatment of 1390
Scurvy *adult* 860 918
Sea bathing hygiene of 427
Septal deflection 1014
Sinuitis acute maxillary sulphanilamide in 260
Small pox and compulsory vaccination 151 598 476 173
—— *in India control of* suggestion 1061 1180 1255 1331
Smoking effects of 750
—— giving up 918
Spinal lesion 1394
Sulphanilamide applications and 863
—— in staphylococcal skin infections 92
Sulphonamide chemotherapy in surgical infection 1063 1109
Surgical instruments for China 639
Syphilis did Columbus discover it? 1250
Tannic acid dressing in wounds of fingers 680
Testicle undescended 29 118 374 423 475 794 [illegible]
Tetanus from cancer cure 155
Thimble for suture 917 1014
Tomography in vertical position 866
Trench fatigue in 507
Tuberculin injections of 790
Tuberculosis diagnosis or chest clinics? 631, 681 [illegible] 791
—— intravesical lomidal 1284 1337
Ulcer perforated gastric 1284
Urticarial diffuse anti-retroviral measures 94 [illegible]
Vaccinal use 1
Vegetarianism nature of 791
Vitamin D in blood estimation of 1060 1110
—— deficiency in 1111 1284
Voluntary national register of land for war time 1091
War hospitals for 792 866
Water chlorination of 851
X-rays [illegible] in general practice 635

Corrigenda 52 272 436 480 604 820 874 976 1070 1188 1296
Corry Lieut Col Matthew obituary notice of 732
Corylos Polyvinyl death of 432
Coryza *See* Cold common
Cot electrically heated 182
COTTENOT P (MAX LÉVY and Ld CHÉRON) *Le Duodénum Atlas de Radiologie Clinique* rev 945
COUTSON T F Drainage of pelvic abscess in acute appendicitis 789—Correspondence on 917 1014 1296
Council Agricultural Research Appointments of
—— British Social Hygiene *Empire Social Hygiene Yearbook* 1938-9 rev 1045
—— Central of Recreative Physical Training Annual report 1 20
—— *Child Guidance* Awards 161
—— Children's Minimum Malnutrition among *school children* 585—Pamphlet on nutrition and local government 1324
—— [illegible] Report 1330
—— concerning 489
— 902—Elections to 687
—— Health and Cleanliness Change of address 1241
—— Joint Tuberculosis Demonstration of tubercle bacilli in sputum 413—Meeting of 1172

COUNCIL LONDON COUNTY
Appointment 1116
ARP in London Hospital and ambulance services 809
Cancer Bill 1334
Demonstration of mechanical respirators 1161
Domiciliary midwifery arrangements report on 1387
Fracture cases at LCC hospitals 117
Hospital services 470—Information concerning 542
Hospitals House appointments 36
Mental hospital lay analysts at 1220 1330
Midwives supervision of 588
Nurses training and salary for 674
Post-graduate instruction in obstetrics 1172
Working hours of nurses 983

COUNCIL MEDICAL RESEARCH
Appointment of member 229
Appointments to Industrial Health Research Board 817
Chemical aspects of antigens and antibodies 186 *Description of* 822
Fellowships awarded 959
Measuring emotion 132
Medical uses of radium 1326
Report of Industrial Health Research Board 998
Radium Beam Therapy, 1209
[illegible] inical science and
Dysfunctional progesterone 116

Council Medical Research of Ireland Awards 140 188
—— Merseyside Hospital After care work of 89—Annual report 587
—— Middlesex County Hospital building scheme 576
Country doctor's notebook 1350
COUTOIS C (and P LEBEAU) *Traité de Pharmacie Chimique* 2 vols 2nd ed 1406
COUTTS J H Tuberculosis 12
COVE SMITH R Co operation between organized bodies 343
COWAN John Physiotherapy in neuritis 1100
COX Alfred J Harrison 577—Appreciation of Sir James Barr 1118
—— C Tissant Tuberculosis in rural areas 83—Tuberculosis in Lancashire 1333
—— H J *Chemical Analysis of Foods* 2nd ed rev 243
COXEPLANS 1221
COYTE Ralph Trusses and belts 1322
CRADDOCK A J Diphtheria prophylaxi 42—Small pox and compulsory vaccination 598
CRAIG I N Co operation in cases of visual loss 313
CRAIN Cindys I (and Nels A NELSON) *Syphilis Gonorrhœa and Future Health* rev 1406
CRAMER W Cancer and heredity 195
CRAWFORD J H (and J B MCDOLGALL) Tomography in pulmonary tuberculosis 755 (O)—
— [illegible] BROADLEY) *Films* on 1018
CREER W Sayle *Common foot ailments* 2 (O)—Non traumatic dislocation of toes 1225
Cremation cure for 53
—— conference on 59
—— in Scotland 147
Creosote containing keratitis 18
CREW W H Respiration and sunburn 1094
CRICHTON BROWNE Sir James *Doctor Remembers* rev 951
CRICHTON MILLER H Multiple examination in psychiatry 993—Psychological factors in physiotherapy 1167—Psychiatry and criminal law 1169 —Simulation of dreams 1170
CRILE G Jr *Surgical Treatment of Hypertension* rev 1115
Criminal Justice Bill 1151 1255—Proposals for mental cases 1121
Criminal law psychiatrist and 1165
CRITCHLEY Macdonald Spasmodic torticollis 241—Sciatica 242
CROFTON W M Rheumatoid arthritis and jaundice 639—Nature of viruses 771
Crohn's disease 1009
Crouzon O death of 765 924
CROWE H Warren Complications of gold therapy 44 261
Croydon 1937 annual report of Obstetric Service 673—Typhoid epidemic 1059—Typhoid lawsuit test case 1250
CRUICKSHANK I W H *Food and Physical Fitness* rev 1250
CUBBITT T D Parental whole blood in prophylaxis of measles 703—Correspondence on 764
Cullen Thomas S 70th birthday of 1294
CULLEY A R Acute bulbar paralysis 1282
CULLINAN L K Toxic infective jaundice 218—Uses and abuses of benzedrine 961—Clinical aspects of ulcerative colitis 1351 (O)
CULLIS Millais Medical relief for China 96
CUNNANE Mary Decline in breast feeding 1112
Curchod Ernest death of 601
Curie Pierre and Marie Homage to 1164—Stamps commemorating 1296
CURRAN Desmond States of depression 306
CURPHEY T R *Hygiene* rev 571
CURTIS Arthur Hale *Textbook of Gynecology* 3rd ed 995
CUSHING Harvey *Tumours Intracranienne* rev 181—Visit to England 188—Hon DSc Oxford conferred on 203
Cyclopropane and pulmonary atelectasis 1579
Cyclotron 25 597 1091 1217
CAILLAN Edgar Treatment of anæmia of effort 1281
—— Times Rheumatic headache 1367 (O)
Cystitis acute sulphonamide in 1350
Cysts pelvic hydatid and obstructed labour (Mostyn T Embrey) 1201 (O)
—— sebaceous inheritance of 350

D

D'ABREU A L (and Lambert ROGERS) *Everyday Surgery* rev 1087
Dabrowski Casimir death of 768
Dale Cuthbert Bracey obituary notice of 1341
—— Sir Henry Future of medicine 850
DALEY W Allen Development of hospital system in Co—Appointed LCC deputy MOH 1116
DALGLEISH W Distribution of cancer 1028
DALRYMPLE CHAMPNEYS Sir Weldon Frontosil group in *Br abortus* infections 171—Appreciation of Alexander Macphail 868
DANN W J Strict vegetarian diet 679
Darier Jean obituary notice of 155 972
DAVIDSON L S P Hospital co ordination 964
—— Maurice *Tuberculosis diagnosis or chest clinics?* 634
—— S M *Hormone therapy* 964
—— S Whately X rays and haemoptysis 243
DAVIES G Llewellyn Recurrent cerebral thrombosis with recovery 124
—— Ivor J Uses and abuses of benzedrine 960
—— Seymour W Histidine in peptic ulcer 106
Davies Colley Hugh obituary notice of 1340
DAVIS Albert A *Dysmenorrhœa its Ætiology Pathology and Treatment* rev 893
—— Hallowell (and Stanley Smith STEVENS) *Hearing its Psychol*
—— I J Medical ev
—— Loyal *Surgeon Dr I B Murphy the*
DAWBARN R V (and [illegible]) cases of *Cl welchii* 579 (O)—Correspondence chronic aortic valvular disease 1350
DAWES A C Elementary ambulance instruction 52
DAWKINS C J M Variations in effective antithetic doses 844
DAWSON OF PENN Lord Address at opening of new medical school at Aberdeen 758—Hospital operations 1271—Address to Medico Legal Society 1150
Daylight in relation to climate and health (W R C Atkins) 60 (O)—Discussion on 11
DE S I (and U J BASU) Synergism in experimental chemotherapy of staphylococcal infections 561 (O)
Deafness review of book on 945
Death certification of cause of 714
—— penalty abolition of (parliamentary note) 1125
—— registration premature 157
—— strange cause of 1351
—— sudden exhaustion in excited patients 791
DEBRÉ J Whooping cough 856
DE CARVALHO Lopo Angio pneumography 802
DECHAUME M (and J DEFONTET) *Hypertrophie en Stomatologie* rev 408
DE GOWIN Sequels of blood transfusion 841
Degree for fee for practitioners 591
DE JONG J J J Resistance to insulin in diabetics 1102
DE KOCK Gilbert Wild animals as carriers or reservoirs of disease 880
DE KRUIF Paul *Fight for Life* rev 408
DELANEY C D Telegraphy in mental hospital 906

DIETHELM (and A. LAQUERRIERE) *Traité d'Electrocardiothérapie* vol. I and II. rev. 807
Dimmick, Cesari death of 476
DINSMORE, Young H. M. Quinsy peritonsillar abscess 1...
DONOVAN, A. J. Botsford Sulphanilamide for filarial lymphangitis 913
Dott, J. M. Suicide of 1025
Dental Department (parliamentary note) 1241
——dismissal, review of book on 1...3
Dental treatment, information concerning, duty of 551
Dentistry, annual report on, for... (parliamentary note) 1...
Department of Scientific and Industrial Research, Director of, to retire 1...
Depression, duties of, in clinical and periodical differentiation (Aubrey J. Lewis) 875 (O)—Discussion on 908
de Quervain, F., retirement of 1025
Dermatitis, chronic, uric acid 604
DEROBERT, L. (and M. DECHAUME) *L'Expertise en Droit Privé* rev. 408
de Schweinitz, George E., death of 1016
DE SCHWEINITZ, E. A. Liquid production of autogenous vaccine for treatment of pneumonia 1140 (O)
DESOUTTER BROTHERS, LTD. *Livret-Guide* rev. 1085
DE VRIES, B. (and others) *L'Exploration Radiologique de l'Appareil Digestif* rev. 1...
de Vesian, Alfonso, death of 765
DEWEY, F. W. Hypertonia in post-encephalitic Parkinsonism 1126
DEY, A. Lindsay, Discussion on 1...
D'HERELLE, F. *Le Phénomène de la Guérison dans les Maladies Infectieuses* rev. 1...21
Diabetes in Ipin, paper on 1...
——(nutritional and [illegible] article) 1045—Correspondence on 1174
Diabetics, employment of (P. D. Lawrence and Kate Maddrell) 1078 (O)
——post mortem record of pulmonary tuberculosis in (S. Poodhouse and Cloyne) 1...18 (O)—Correspondence 1...3
——resistance to insulin in 1110...
Diagnosis, errors in, 1050, 1100, 1126, 1144
——review of book on 1...0
Diaphragm, eventration of, 1...t
Dick test, toxin, observation on potency and stability of (H. Mitchell, Leete, and others) 1...00 (O)
Dickens, A. C., Air-raid precautions 905
Dickins, John Cuthbert George, obituary notice of 476
Dicks, H. V., Spasmodic torticollis 1141—Vertigo 1...0
Dickson, Charles I., death of 1...64
——Thomas Herbert, obituary notice of 1160
Dietetics, review of books on 1...0, 1...6
Digestive tract, pain, review of book on 1...9
DIGGLE, F. Holt, Cancer of pharynx and larynx 1...9
Digitalis, site of action of 1095
DILLON, Frederick, Mental factors in medicine 1424—Prognosis of anxiety states 851, 1014, 1115
DINNER—
British College of Obstetricians and Gynæcologists 1...96
Buckston Browne 1065
Chelsea Clinical Society, annual 1...0
Institute for Scientific Treatment of Delinquency 1...2
London School of Medicine for Women 1...2
Manchester and District Medico-Legal Society 1...9
Medico-Legal Society, annual 1...
Old Epsomian Club, annual 1...
Royal Dental Hospital of London, 1...71
St. Bartholomew Hospital Old Students 1105
Society of Apothecaries, Yeomanry 1...0
——Medical Officers of Health, annual 1102
Surgical Instrument Manufacturers' Association 963
West London Medico-Chirurgical Society, annual 1...46
Westminster Hospital Medical School, student 1...33
Diphtheria, gravis, bacteriæmia in two fatal cases of 1034
——immediate diagnosis of 1...
——immunization against (leading article) 1...63—Made compulsory in Hungary 1065, 1094
——————in Scotland 1...0
——————in London, no case on (Max Sorkin) 1...01 (O)
——incidence and mortality after inoculation 1...3
——inoculation against 1...40...
——intranasal, comparative test of natural and concentrated antitoxin in treatment of (B. A. Peter) 1...44 (O)
——prophylaxis 1...42—Duration of immunity after 1...0
——serum infection in (Philip Science) 1...60
——treatment of 1...42
——vitamin B in 1161
Diploma, special, information concerning 1...49
DIRCKSEN, Robert, and Wilhelm *Fermente Hormone Vitamine und die Bedeutungen dieser Wirkstoffe zueinander* rev. 1...0
Dispensary, new format 1...0
Disinfectant, testing of 1151
Divorce (Scotland) Bill 1...0
DIX, A. W., Organotherapy 1...36
DIXON, C. Jolly, Palpation of trachea 1...86
——J. H. (and D. M. ANDERSON), Acute bulbar paralysis 1...10—(O)—Correspondence on 1...51
——Montague, Simple ambulatory method of treating fractured clavicle 1...45
——R. Halstead, Cure or relief of cases of diabetes diagnosed "angina of effort" 1...81—Correspondence on 1...1
Dobson, Leonard Charles Talbot, obituary notice of 1...4
——Margaret, *Encyclopædia Their Use in Orthoptic Training* rev. 1...40
DOCKRAY, A. W., Faecal accumulation in rectum 1...4
DOLL, Harold, Incontinence from accumulation of faeces in rectum 1...4—Correspondence on 1...4, 1...8
DODD, F. C., Advances in organotherapy 1...61—(A. S. PARKES and P. L. NOBLE), Interruption of early pregnancy by means of orally active oestrogen 1...55 (O)—Annotation on 1...0
——I. I. (and C. MAIZEL), Massive hydronephrosis and pregnancy 1...
Domagk, reaction in typhoid 1...61
DONALD, A. B., Diagnosis of whooping-cough 1...61 (O)—Correspondence on 1...1...86
——Charles, Septic hand 1...36—Acute infection of breast 1...94—Correspondence on 1...3, 1...11
DONALDSON, Malcolm, Air-raid precautions 1...1...
DONOVAN, T. S., Tuberculous infection of bursa over olecranon 1...
DOTT, Norman M., Angio-graphy 1...41—(And others) *Hypothalamus: Morphological, Functional, Clinical and Surgical Aspects* rev. 1...70
DOUCAS, Daniel, Pectoral reaction following irradiation of cervix 1063
DOUGLAS, J. A. Kenneth, Undulant fever 1010
DOUGLASS, Marion (and Robert L. FAULKNER), *Essentials of Obstetrical and Gynæcological Pathology with Clinical Correlation* rev. 1...70
——William Claughton, obituary notice of 1...64
Drama and music, review of book on 1...40
Dream, significance of 1170
DREVER, James, Education of blind children 1...
Drink problem, review of book on 1...23
DRINKER, Cecil K., *Acta Soc. Long. Ago. Chronicle of Medicine and Doctors in Colonial Philadelphia* rev. 1...70
DROFFT, Fatality rates in tuberculosis 1...31
DROLLER, H., Calcium mandelate and alphanilamide in treatment of urinary infections 1...6 (O)
Drowning, experimental 1090
Drug traffic, United Kingdom and 1...31
Drugs, review of books on 1...70...
DRURY, Claud F., Collection of *British Medical Journal* 1...74
Drunkenness, Increase in 1...9—Caused by methylated paint 1...05
DUFFY, H. C., Appreciation of Sir Robert Woods 1...6
DUFFYLAND, G. W., Maternity, fixing quadrant 1...65
DUBIT, CHLP, F., *Dermatologie* rev. 1...
DUPOY, A., Tumours developing after trauma 391
du Boi, Peymond, Lens death of 1026
Dudgeon, Leonard Stanley, obituary notice of 1...2
DUDLEY, H. C., Selenium intoxication 1...3
DUFF, D. G., Use of stretcher as splint 1...3
DUKE-ELDER, Sir W. Stewart, Pathology of glaucoma 1...69—*Textbook of Ophthalmology* vol. I. 2nd ed. rev. 1...46
DUKE, Ethel, Physiotherapy for problem children 1...13 (O)—Play therapy and child guidance 1...31—Infection, quality of, in throat 1...4
DUNCAN, J., *Mental Deficiency* rev. 1...3
DUNLOP, B., Abortion and the law 644
——D. M., Modern view on prevention of tuberculosis 1...
——L. Craig, 1...05
Duodenal ulcer, 1...
Duodenum, review of book on 1...45
Dupont, John Munro, obituary notice of 1026
DU PRÉ, W. H., Orthoptic cure of external squint of 5 degrees in woman of thirty 1...4
DUTANT, J. W., Prevention and control of puerperal pyrexia 1...03
DUTTON, Charles H., *To Drink or not to Drink* rev. 1...3
DYAKOFF, C., Parturition with albuminuria and raised blood pressure 1...
Dysentery, institutional, use of bacteriophage in outbreak of (David Haler) 1...05 (O)
——Sonne, outbreak of (Col. C. J. Trimble and W. C. V. Brothwood) 1...0 (O)
Dysmenorrhœa, review of book on 1...93
Dyspepsia, intestinal, review of book on 1...76

E

FAGGE, A. Austin, Crohn disease 1...03
FAGLE, C. H., Aetiology of acute rheumatism 246
Ear, nose, and throat disease, review of books on 1...46
FALCON, H. L., Elected Hon. Master of Bench of [illegible]
Eclampsia, domiciliary, emergency treatment of (H. J. Thomson) 1...04—Correspondence on 1...7
Economic status and health (leading article) 1...3
Eczema of face, protection 1...7, 1...9
EDE, C., Cattle ringworm in man 1...
EDEN, T. Watt (and Fardley HOLLAND), *Manual of Obstetrics* third ed. rev. 1...0
EDER, E. D., Artificial respiration apparatus 1...
EDGCOMBE, Wilfrid, Rheumatoid arthritis 1...5 (O)—Discussion on 1...04
Edinburgh Medical Journal, New editor 1...8
EDMOND, E. P., Tuberculosis dispensaries or chest clinics 1...
EDMUND, C. (and Sir CLIFFORD), *On Deficiency of Vitamin and Visual Disorders* rev. 1...45
Education, intern and residence, review of books on 1...06
EDUCATIONAL NUMBERS 1938—
Corporation, English medical 1...99
——Irish Medical 1...04
——Scottish medical 1...96...
Dental nurses 1...01
General Medical Council 1...89
Hospitals, clinical, in England 1...2
Ireland, medical registration in 1...0
Local government, hospital services 1...4...
Medical curriculum and present law, need for (Sir Walter Langdon-Brown) 1...81
——practice overseas 1...45
——school and college 1...05
Medicine, psychological 1...71
——tropical 1...9
Note on 1...0
Numbers of the profession 1...5
Postgraduate study 1...5
Provincial medical service 1...45
Profession of medicine 1...4
Public health medical service 1...34
Services 1...
Universities in England and Wales 1...5...
——in Ireland 1...03
——in Scotland 1...01
Women in medicine 1...3
EDWARD, A. Tudor, Treatment of injuries of chest 1096
——Colin, Harris pneumatectomy 1...7
——Harold C., Amputation of [illegible] 1...1—Correspondence on 1...13
——Pete W., Radiography of chest 1...47
Eggs, review of book on 1...1
EINARSON, Lorus (and Axel PINCHEL), *Effects of Chronic Vitamin E Deficiency on Nervous System and Skeletal Muscle in Adult Rats* rev. 1...45
Elbow joint, fractures in region of (S. I. Hirsch) 1...0
——injuries to (S. I. Hirsch) 1...3
Electric heating pad 1...1...
Electrical injuries (leading article) 1...10
Electrotherapy, review of books on 1...1...83
ELKAN, Edward P., Hysterosalpingography with iodized retaining implant 1...0—New formulation for test 1...1—Neoplasm, premalignancy test 1...0 (O)
ELLIOT, Walter, Tuberculosis, death rate 1...—Visit to Sheffield 1...—Opening surgical research department of Edinburgh University 1...
ELLIOTT, C. E., Bed bugs in human ear 1...03
——T. P., Civil medical organization in war 1...10
ELLIS, F., Treatment of uterine haemorrhage 1...03
——Wallis D., *Source Book of Gynæcological Technique* rev. 1...3
ELLMAN, Philip, Tuberculosis dispensaries or chest clinics? 1...03, 1...2
ELMLIE, P. C., Physical fitness in young children 14—Appointed to Royal Commission on women's compensation 1...3
EMBLETON, Dorothy, Glucose tolerance curves in 1...0 obstetric cases 1...5, 1...9 (O)—Dr. claim 1...5...0
Emboli, review of book on 1...0
EMPEREY, Mostyn P., Pelvic hydatid cyst and obstructed labour 1...01 (O)
EMERSON, Mary Fen, H. H. A., Physique of recruits 1...6
Emotion, measuring 1...
Emotion, review of book on 1...9
Emphysema, localized hypertrophic (Kenneth Pories) 1...9
Empyema with colemia 1...4
Employment for boys and girls, guide to 1...
Empyema in children, observations on treatment of (H. L. Wallace) 1...1 (O)—Discussion on 1...6
ENRIGHT, Margaret, New mechanical tonsil 1...
Encephalitis, post-vaccinal (parliamentary note) 1...3
——post-vaccinal 1...6
Encyclopædia Britannica Book of Facts, rev. 1...3
Endocrine [illegible]
Endometrium [illegible]
Energy [illegible]
ENGEL, [illegible]...812—
(PHILIP O. STEPP and G. H. NEWS), Danger of primary abdominal tuberculosis in children 1...10 (O)—Correspondence on 1...4, 1...8
ENGLISH, W. L., Inoculation against diphtheria 1...40...
ENSOR, H., Actinomycosis 1160

EPIDEMIOLOGICAL NOTES—
Anthrax 11
Cholera 49, 103, 1...9, 1...0, 1...1, 1...5, 354, 474, 475, 603, 643, 6...9, 1...2, 1...0, 1...8, 1...0, 1...4, 1...4, 1043, 1065, 1...4

EPIDEMIOLOGICAL NOTES (*continued*)
Diphtheria 49 103 159 207 271 328 384 434 478 603 643 689 727 770 818 870 924, 974 1024 1068 1124 1186 1242
Encephalitis lethargica 1024
Enteric fever 49 103 159 207 434 727, 924, 974 1024 1068 1186 1242 1294 1349
Malaria, 1349
Measles 49 103 159 207 271 328 384 434 478 603 643 689 727 770 818 870 924 974 1024 1068 1124
Plague, 49 103 159 727 770 818 870 924 974 1024 1068 1124
Pneumonia 49 103 159 207 271 328 384 434 478 770 818 870 924 974 1024 1068 1124 1186
Poliomyelitis 271 328 384 434 478 603 643 689 727 770 818 870 924 974 1024 1067 1124 1186 1242 1294 1349 1399
Scarlet fever 49 103 159 207 271 328, 384 434 478 603 643 689 727 770 818 870 924 974 1024 1068 1124 1186
Small pox 49 103 159 271 328 434 1349
Statistics 689 1242, 1294 1349
Typhoid fever, 328 384 478 603 643, 689 770 1123 1242
Typhus 49 103 159 207 770
Whooping cough 49 103 159 207 271 328 384 434 478 603 643 689 727 770 818 870 924 974 1024 1068 1124
See also Supplement p 181

Epidemiological work in Punjab 677
Epidemiology *and* vital statistics 48 102 9 603 642 688 726 1009 1125 1187, 1243 1295 1348 1401
Epilepsy idiopathic *from another aspect with* treatment of fit (Robert G Linton) 837—Correspondence on 967
—— sulphonamide for, 261
Epithelial cells *function of* 813
Erysipelas alphanilamide and treatment of (W R Rennie) 399
Erythema solare 460
ESKEFUND, Viggo *Structural Variations of Human Iris and their Hereditary* rev 453
ESSEX J F S Use of skin of female breast in plastic surgery 1256 (O)
Ether convulsions with recovery (Stephen Taylor and Victor Goldman) 744—Correspondence on, 863 921 967 1188
EVANS A C Cleaning slides for blood films 690
—— Albert Edward appointed Chancery Visitor of Lunatics 1123
—— C A Lova
—— Charles W
—— Geoffrey
—— G S W 386
—— Mary Rectal reactions following irradiation of cervix 1058
—
—
EVI
—
Ever
Evolutionary theory 386
EWING Irene R and Alex W G *Handicap of Deafness* rev 945
Examinations purposes of 1268
Examining bodies medical 268
Exercises remedial in general medicine 1387
Ex-service men Mental welfare of ex-service patients, 85
Eye Cerebral integration of ocular movements (Cordon Holmes) 107 (O)—Leading article on 128
—— clamp for tarsorrhaphy and plastic operations on lids 663
—— co-operation between ophthalmologist and physician in certain cases of visual loss (C B I Thy) 608 (O)
——
——
——
—— spasm of central retinal artery (W Dunlop Hamilton) 992
Eye-dropper pin

FAITHFUL Theodore Infantile anxiety 300
Family allowances (parliamentary note) 156
Fardel Durand death of 1389
Fardon John H obituary notice of 1341
FARNCOMBE H Complications of gold therapy 261
Farquhar Sir Walter 200th anniversary of birth of 22
Fat absorption defective in childhood 952
FAULKNER Robert L (and Marion DOUGLASS) *Essentials of Obstetrical and Gynecological Pathology with Clinical Correlation* rev 570
FAWKNER CORBETT W V Air raid precautions 1114
Fayrer *Lieut Col Frederick Durand* obituary notice of 1343
FELTON A Appreciation of Dr Wm Fletcher 815
Fellowship of Medicine information concerning 528
Femur fracture of neck of personal experience (John C Nicholson) 464—Correspondence on 590 630 682 1278
—— neck of in childhood 1008
FERGUSON Fergus R Spasmodic torticollis 242—Sciatica 242—Aspects of neuritis 1104
FERRARI C Nicotinic acid treatment of pellagra 887
Fever glandular laboratory diagnosis of 1106
—— ovarian 282
—— paratyphoid outbreak in Isle of Lewis (parliamentary note) 46
—— puerperal control of 1378
—— —— uterine swabs in 690
—— rheumatic seasonal incidence of (Arnold B Rowlands) 150 (O)
—— —— on training ship 269
—— scarlet immunization against 580
—— —— Observations on potency and stability of Dick test toxins (H Mason Leete and others) 700 (O)
—— typhoid Croydon epidemic of 1050—Lawsuit test action 1236
—— —— recent experience in (C H A Sims and G B Pigg) 714
—— —— treated with sulphanilamide 638
—— —— and typhoid carrier condition Value of agglutination in diagnosis of (S S Bhatnagar) 1190 (O)—Annotation on 1211
—— typhus early observations on 905
—— undulant in Great Britain (parliamentary note) 1022
—— —— report of case, 1019
—— —— treated with prontosil (Charles Zahra Neumann) 342 (O)—Correspondence on 471
—— —— *See also Brucella abortus*
—— yellow And air traffic *418 803*—Inoculation of pilots against 873
—— —— in Brazil 418
—— —— present situation with special reference to South America 910
Fevers enteric in Indian troops 1277
—— —— rarity of osteo-periostitis in 394
—— terminal disinfection and exclusion of contacts from school 1219
—— *See also* Epidemiological notes
FIDDIAN J V Origin of cancer 92
Fiji Central Medical School Suva 553
Film on treatment of fractures 1276
Films exhibited at Plymouth 369
FINCKH A E Sterilization of syringes 272—Tuberculin in diagnosis 376
FINDLAY G M Mouse protection test and yellow fever, 911
—— G W M Toxic infective jaundice 238
Finger Unusual case of bilateral digital epiphyseal deformity (Henry Poston) 991—Correspondence on 1061
Finger-prints review of book on 1370
—— of twins 330
Fingers amputation of (Harold C Edwards) 631—
— s of 680
— ictures of (David Trevor) 461 583—Correspondence on 590
—— *See also* Hand
FINKELSTEIN H *Sauglingskrankheiten* 4th ed rev 452
Finley Harry obituary notice of 1396
Finsbury Health Centre Opening 912
FISHER O I Severe night blindness due to vitamin A deficiency 944
Fitness holiday colonies for 475
—— physiological approach to (L P Cathcart) 273 (O)—Discussion on 366
FITZGIBBON Gibbon *Obstetrics* rev 570
—— C I S Development of hospital system 500
Fletcher H Morley visit to Australia 1001 1218
—— William obituary notice of 815
Foetus parasitic successfully removed by operation (Max Greenberg) 1153 (O)
FOLEY J F Diagnosis of malaria 1070
FOLLEY S J Breast feeding 249—Organotherapy 7[illegible]
Food analysis review of book on 223
—— and Drugs Act 1938 1334
—— Drugs and Cosmetic Act in U S A (Leading article) 467
—— investigation 675—Index to literature of 891
Food and nutrition (leading article) 895—Correspondence on 1018
—— policy national 139 297
—— supply in war time 117[illegible]
—— tinned review of book on 571
Foot common ailments (W Sayle Creer) (O)
—— and hand congenital deformities of (J W Callum) 991—Correspondence on 1061
—— non-traumatic dislocation of toes 12[illegible]
—— review of book on 994
—— some observations on shoes (Thomas Marlin) 1159—Correspondence on 1280
Footwear correct 1280
FORBES Duncan Terminal disinfection and exclusion of contacts from school, 1219
Forceps gall-bladder 408
—— history and evolution of 137
—— mastoid bridge 225
Foreign bodies swallowed 628
—— doctors and dentists 47 79 155 268—And Colonial Medical Service 380—Admission of 867
FORGAN Robert Anti-venereal measures 196
FORKNER Claude E *Leukemia and Allied Disorders* rev 621
FOLMLINI P Symptoms of cardiac standstill 132
FORREST J *A natural Golfer* rev 1046
FORRESTER-BROWN Maud E Acute poliomyelitis 965
FORSYTH W Leonard Prophylaxis of measles 256
FOSS C L Advances in organotherapy 361—(And P PHILLIPS) Suppression of lactation by oral oestrogen therapy 887 (O)—Note on 1126
FOSTER J S Cyclotron 26
—— I Stanley Eventration of diaphragm 256
—— William obituary notice of 1341
Foundin treatment of *Brucella abortus* infections (A J Thompson) 884 (O)
Foundation Finney-Howell Research Fellowships for cancer research 1042
—— Rockefeller *Review for* 1937 74—Awards 419—Fellowships 419
Fountain pen found 436
FOX Edward Lawrence obituary notice of 1396
FOXTON H V Peritonsillar abscess 684
Fractures film on treatment of 1276
—— personal experiences 464 590 63[illegible]
—— review of book on 222
FRANKEL E M Moulds and asthma 68 (O)

FRANCE
Brown-Séquard C E tributes to 1388
Events postponed 1389
Exchange holiday visits 87
Honorary professorships conferred 1105
Institute Pasteur 50th anniversary of 720 1053
Lectures in Paris 1389
Lyons medical faculty retirement of three professors 44
Medical obituary, 1399
Royal visit to Hertford British Hospital 271
Soundless rest cure in Sahara 1389
Tiffeneau Dr elected dean of Paris Faculty of Medicine 1027
Vincent Prof Clovis 720
Voyage de Noël 1010

Franchini Giuseppe death of 601
FRANCIS Alexander *Adrenaline treatment of asthma* 967 1179 1393
—— *Clement* Air raid precautions 862 1283
FRANKLIN A Spontaneous version of transverse presentation 928
—— K J Short history of International Congresses of Physiologists 419
FRANKLYN Charles V H Final M B B S Lond 295—Abortion and the law 373
FRASER A M Tuberculosis in rural areas 83
—— Eileen *Doctor Comes to Tea Story of Beginnings in the Sudan* rev 1207
—— G Nutritional macrocytic anaemia 715
—— Sir John Appreciation of Sir David Wilkie 599—Hospital administration 1011
—— Louise E Effect of oestrogens on ovum 690
—— Thomas Appreciation of Sir Henry Cray 1234
FRAZER J Ernest (and R H ROBBINS) *Manual of Practical Anatomy* rev 126
FREITAG A Sulphonamide in acute cystitis 1350
Freke John chandelier of 433
FRENCH Alistair Lavage for gonorrhoea 424—Cleaning slides for blood films 728
—— S Gay (and V G HORAN) Sulphonamide in treatment of acute mastoiditis 91[illegible] (O)—*Correction 1070*
FREUD, Anna *Ego and Mechanisms of Defence* translation rev 289
—— Sigmund elected Foreign Member of Royal Society 79
FRIEDMANN Ernst *B welchii* infection after abortion 474
FONTALI G Nicotinic acid treatment of pellagra 887
FRY I S Civil medical organization in war 1015
—— J M Prevention and control of puerperal sepsis Bacteriological aspects 340 (O)—Discussion on 903—Leading article on 952
FULTON J Struthers Technique of contact therapy 1271
Fund Commonwealth of New York Fellowships for British subjects 801—Amended regulations 1041
—— Countess of Dufferin's Annual report 467
—— Sir Frederick Hobday Presentation 1027

Fund King Edward's Hospital Talks in aid of 700
—Council meeting 1275
—— Imperial Cancer Research New address 336
—— Lord Nuffield for Orthopaedic Services in South Africa Meeting of trustees 1186
—— Metropolitan Hospital Sunday Result of collection 444
—— National Birthday Trust Gas and air analgesia 976—Human milk for delicate babies 1276
—— Naval Medical Compassionate Meeting of directors 320 902
—— Royal Medical Benevolent Annual report 777—Christmas appeal 844 850 1181
Fundus nomenclature of diseases of 850
—— vital staining of 719

G

GAFFNEY Michael Report on five cases of *Brucella abortus* infection 520 (O)
Caill ton Surg Comm Alfred Thoma obituary notice of 1014
GAIRDNER Douglas Vitamin C in treatment of whooping-cough 714 (O)
Cale Richard en my ot witche 360
Call bladder forceps 405
CALLOP Edward New ch motherapy 350
CALTON E M G London emergency bed ervice 476
Calvani m need et of 650
Camphon treatment of (E Pearce Could) 415—Correspondence on 590
Gangrene acute preading emphysematous 905
—— of colon in infant 902
—— ga 150 cases of 906
Carden Derry open for benefit of hospital 475
CARLAND E Blake Idiopathic epilepsy 967
—— Hugh G Sciatica 243—Rheumatoid arthritis and jaundice 503
Carlick George Herbert granted authority to wear Order of Crown of Johore 974
CARPITT E B Polyneuritis with oedema imulating beriberi 282
Carrison Feeding H lue and letters of 52
GARTON Wilfrid Neglect of galvanism, 637
Gas casualties evacuation and treatment of (E H Hall) 428
—— defence and Col E F Harrison 203
—— poison review of books on 600
—— poisoning Sequelae of 30 509—Protection against 915
——
Gas 563
Cas lec 628
Ga late results of
(John Mo l v and F H Bentley) 643 (O)
GALVAIN Sir Henry National fitness 366—Marine therapeutics 910—Primary abdominal tuberculosi 124
GEBBIE G Co-operation in practice 367
GECKELER, Edwin O *Fractures and Dislocations for Practitioners* rev 20
Gee Claude Alfred Health obituary notice of 431
General medical ervice for nation B.M.A.'s proposals (parliamentary note) 46
—— paraly i of insane treatment of 917 1012 1111
GENT Surg Lieut Comm J C Treatment of buccal ulcers 850

GERMANY
Admission of refugees 1183
Award to French physicians 1294
Clinics in Prague reopening of 1123
Institute for study of nutrition founded 478
Jewish doctors deprived of permit to practice 386
Medical student numbers restricted 434
Ban of books published in 1933 1027
Refugee doctors and dentists 477 779 1200 268

GERRARD E A Occipito posterior case 1063
—— Maj Gen John Joseph obituary notice of 1342
GESELL, Arnold (and Helen THOMPSON) *Psychology of Early Growth* rev 182
Gestation *See* Pregnancy
Gianelli A death of 476
Gibb John Aldington obituary notice of 971
GIBSON C R Air raid precautions 1227
—— H J Some aspects of recent work on bacteriology of rheumatism, 827 (O)—Discussion on 429
GIESEN J E Treatment of placenta praevia 151
GIFFARD W L Epsom College 277
GIFFORD Sanford R *Textbook of Ophthalmology* rev 20
GILFILLAN Wm Psoriasis 1202
GILFORD Hastings Origin of cancer 41
GILL Col C A *Sea-coal Periodicity of Malaria and Mechanism of Epidemic Wave* 790—Malarial endemicity in E Africa 1386
GILLESPIE Jo
—— R D
GILLIES H
—— J Te
GILLMAN S t of
chizophrenia 16
GILMOUR John R Private patient and ome changes 143
GINESTOUS Étienne Blind man in religion 627
GIPPLESTONE G R Convalescent erum in infantile paraly i 588 6 S
GJE ING R Schizophrenia 144
GLAISTER, John *Glaister's Medical Jurisprudence and Toxicology* 6th ed rev 20
Gland pituitary *See* Pituitary
Glaucoma pathology of 368
GLAZEBROOK A J (and G H JENNING) Comparison of clinical and blood pictures in adult curvy 784 (O)—Annotation on 790—Correspondence on 860 918
Glo itis superficial treatment of 604 750 1023
GLOVER Anna P Modern decline of breast feeding 918
—— Vincent J Glycosuria 1224
GLOYNE S Roodhouse Post mortem record of pulmonary tuberculosis in diabetics 218 (O)—Correspondence on 373
Glucose tolerance curves in 500 obese cases (Dennis Embleton) 305 739 (O)
GLUECK Helen I (and M RACHMILEWITZ) Treatment of pellagra with nicotinic acid 346 (O)—Leading article on 353
Glycosuria prevalence of 1224 1337
Gocht Hermann death of 1026
GOFFEIN P Lionel Psychosomatic illness 475
Goitre early use of iodine for 990
Gold Coast medical service (parliamentary note) 1346
—— therapy complications of 44 160 461 3 9
—— treatment of rheumatoid arthritis 967
GOLDFEDER Anna Testing cancer cures in laboratory 1207
GOLDHAM Richard *Die Anzeigen zum Operativen Eingriff* rev 349
GOLDIE Wm Rheumatoid arthritis and jaundice 503
GOLDMAN Victor (and Stephen TAYLOR) Ether convulsion with recovery 744—Correspondence on 863 901
Golf Medical Medical Golfing Society Summer meeting 890—Autumn meeting 820—Scottish Medical Golfing Society meeting 702—Sussex Medical and Dental Golfing Society Autumn meeting 480
—— review of book on 1046
GOLLA F L Schizophrenia 144
Gonadyl 750
Gonorrhoea ch moth rapy of 260—Report on 2 (aminobenzene sulphonamido) pyridine M & B 693 (F J T Bowie) 283 (O)—Annotation on 294—Correspondence on 370 424 474 501—Leading article on 665
—— lavage for 424
—— sulphanilamide treatment of 91
—— ——
——
—— treated with ulcron (D F Walsh) 215 (O)—*Correction* 430
—— when to start sulphonamide treatment in 90 193
GOODALL, Frances G Organization of trained nurses in emergency 706
Goodbody Francis Woodcock obituary notice of 1233
GOODWIN E St G S Evacuation and treatment of gas casualties 249
GORDON Douglas X ray screening stand for general practice 21—Correspondence on 296
—— George Escape into invalidism 911
—— M Aetiology of acute rheumatism 246
—— P G States of depression 306—Psychology of cripple 116
—— R M. Malarial endemicity in E Africa 1386
GORDON TAYLOR, Gordon Cancer of breast 1071 (O)—Discussion on 30—Correspondence on 127
GOSPER, P A Cancer and hereditary 93
GOSHAM L Whittington (and Thoma ORDWAY) *Blood* rev
[illegible]

GOULD Eric Pearce Adequacy of curriculum 193—Treatment of tenosynovitis and ganglion 415—Correspondence on 590—Carcinoma of breast 1389
GOULDEN Charles *Refraction of Eye including Elementary Physiological Optic* rev 62
GRAHAM J Autochthonous urethral calculus 1026
GRAHAM LITTLE, Sir E Final M.B. B.S. Lond 153—Maternal mortality and medical education 425—Mere examining body 589—Admission of foreign doctors 867
Gram H C J death of 1293
GRANGER E Antagonistic diseases 472
GRANT J C Bolleau *Method of Anatomy Descriptive and Deductive* rev 701
GRASSET E Typhoid endotoxoid vaccine 305
Gray Sir Henry obituary notice of 814 1234
—— L P Civil medical organization in war 1015
GRAYBIEL, A Effect of smoking on heart 157
GRAYLING Arthur Did Columbus discover syphilis? 1285
Greeff Richard death of 1236
GREEN C A. Aetiology of acute rheumatism, 246
GREEN ARMYTAGE, V B Illegal operation 1274
GREENBERG Max Parasitic foetus successfully removed by operation 123 (O)
GREENE, L Two fatal cases of diphtheria gravis bacteriaemia 1034
Greenfield Lieut James Wilson death of 1116
Greenwood Lieut-Col Arthur Powland obituary notice of 92
—— Major Mere examining body 590—Civil medical organization in war 861
Gregory Sir Richard dinner to 1095
Grenz rays 1093 1149 1286
GREVELINK E Ovarian fever 222
GREVILLE A. *Über Maligne Hodeng Neubildungen* rev 1046
Gribben Grant Pos obituary notice of 1341
GRIERSON G A Pituitary and diabetes 1174
GRIFFITH Edward F *Sex in Everyday Life* rev 454—Escape into invalidism, 912
—— Evan Williams obituary notice of 100
Griffith Ethel Rosaline obituary notice of 432
GRIMAL, R. Preservation of tuberculous material for culture 149
GRIMALDI Philip
GRINKER, Roy I
GROENEVELD A hood 293
GRO Paul (and others) *Sulfanilamide Therapy of Bacterial Infections* rev 1049
GROVE E W Hey Fractures of shafts of forearm bone 290—Fracture of neck of femur 633
Growth, some biochemical aspects of 850
Gualdi Carlo death of 687
Guest L Haden memorial mission on development of West African Colonies 907
Guilford William Moore death of 1307
GUNN A Pugge Contact lenses 969
GUTHRIE Douglas Physiology of vocal mechanism, 1189 (O)
GUTT Arthur *Erblehen des Auge* rev 1207
GUTTMANN E Uses and abuses of benzedrine 761
Gynaecology endocrine therapy in 1103
—— review of book on 993
Gynoestryl products 250

H

Haematology review of books on 151 120
Haemoptysis value of radiology in elucidation of (Franklin C Wood) 211 (O)—Discussion on 24
Haemorrhage following tonsillectomy (D W Ashcroft) 1079 (O)—Correspondence on 1250
—— non malignant uterine radiotherapy in (B Windeyer) 1034 (O)—Discussion on 305
—— ——— treatment of (Beatrice M. Willmott) 309 1037 (O)
—— oral snake venom for 470
—— pituitary 750
Haemorrhoids review of book on 1514
Hagen Simard death of 150
HAILEY Lord *African Survey* 1099
HAIMOVICI H *Les Embolies Arterielles des Membres* rev 20
HAIN A M Triphenyl ethylene tested on capons 1043 (O)
HALDANE, J B S Some problems of human congenital disease 1100
HALDIN DAVIS H Treatment of plantar warts, 150
HALE WHITE, Sir William *Keats as Doctor and Patient* rev 349
HALER, David Use of bacteriophage in outbreak of institutional dysentery 695 (O)
Hall Charlton obituary notice of 154
—— E H Evacuation and treatment of gas casualties 428
—— Capt Gilbert Capel obituary notice of 750
—— Surg Comm Henry Baker obituary notice of 429
—— Lieut-Col Richard Harris obituary notice of 720
—— S Barton Mental treatment services 1147
—— Winifred Civil medical organization in war 1016
HALLIDAY James L Rising incidence of psychosomatic illness 11 (O)—Correspondence on 149 197 319 370 479 896—Social pathology 101
HALLOWES K R Collis Rheumatoid arthritis 304—Hygiene of sea bathing 307 427—Marine therapeutics 909
HAMBLEN Thomas C Treatment of carcinoma of pharynx and larynx by irradiation 247 447 (O)—Antrum catheter 603
HAMILTON C K J Breast feeding 249
—— W Dunlop Spasm of central retinal artery 992
—— W J (A. B APPLETON and I C C TCHAPEFOFF) *Surface and Radiological Anatomy for Students and General Practitioners* rev 700
Hand and feet congenital deformities of (E V Callum) 991—Correspondence on 1061
—— and fingers infections of (Norman C Lake) 150 794 798—Correction 874—Correspondence on 866 917 1174
—— septic (Sir David Wilkie) 112 (O)—Discussion on 506—Note on, 1496
—— *See also* Fingers
HANDFIELD JONES R. M. (and A E PORRITT) *Essentials of Modern Surgery* rev 1313
HANDLEY W Sampson Chronic mastitis and breast cancer 113 (O)—Correspondence on 419 471—Acute appendicitis 240—Cancer of breast 303—Innocent tumours of breast 1034
HANCHELL, H M Chemotherapy of gonorrhoea 375 474
HARBORD P P Blood pressure after spinal anaesthetic, 44
HARDMAN Angiography 241
HARKE, W V Rising incidence of psychosomatic illness 149

HARKNESS John (and Fairfax BELL) Extra uterine intra abdominal pregnancy 1044
HARLEY, David Allergy and immunity 763
HARMAN J B Medical research in England 1060
—— N Bishop Pin eye dropper 1207
Harold Charles Henry Hasler obituary notice of 263
HARRIES G Emrys Mechanical respirators 1389
—— *Thomas Davies obituary notice of 601*
HARRIS Arthur Prognosis of anxiety states 649 (O) —Correspondence on, 721 760 812 922 966 1014 1063 1115
—— I *High Blood Pressure* rev 289
—— I S (and C R BUNN) Cardiazol therapy in stupor 449 (O)
—— Kenneth and Judith *Minor Medical Operations for Senior Medical Students and Recently Qualified Practitioners* rev 1147
—— prostatectomy 637 684
——Richard C S Harris prostatectomy 637
—— Wilfred Alcohol injections in inoperable malignant growths of jaws and tongue 831 (O)—Sciatica and its treatment 1245 (O)—Discussion on 242—Correspondence on 1390
Harrison Col F J and gas defence 295 377
—— J W When to start sulphonamide treatment in gonorrhoea 90
HARTFALL Stanley J Rheumatoid arthritis and jaundice 593
HARTLEY Sir Percival Tuberculosis and creative faculty 84
Harveian oration State and medical health (Sir Edward Mellanby) 821—Leading article on 840 —Correspondence on 1060
HARVEY, J Relation of Hodgkin's disease and leukaemias to gastric disorders 833 (O)
HASLAM J K Anaesthesia in cardiac surgery 310
HASTINGS J P Psittacosis 151
—— V J Menuret's disease and fruit diet 976
Haverschmidt Jacob death of 1256
HAWK Philip *Practical Physiological Chemistry* rev 127
HAWLEY S J Case for diagnosis 1070—Cattle ringworm in man 1070
HAWTHORNE C O Appreciation of Dr Hugh Woods 99—Appreciation of Dr Harvey Campbell, 154—Holidays and milk supply 208
HAYWARD J W Injection risks—case of gas gangrene 917—Abdominal pregnancy 426—Neel plaster 1278
He s (Syrian) 1367 (O)
He leading article) 1208—
— 90
- - land Conference on -l timate -06—New
n 2,5
Report 418

HEALTH MINISTRY
Annual report 371 420
Cost of medical care to local authorities 252
Food and Drugs Act 1938 1034
Malaria therapy 796
Report of Chief Medical Officer 907 1004
Trend of urban mortality, 1092
Work of 925
Health Office International Report of medical director 418
—— review of books on 4 1371
—— and unemployment 173
HEANLEY C Laurence Traumatic amputation of finger 813—Three case of intussusception in adults 1309 (O)
Hearing defective children with Report of Committee of Inquiry, 675—Parliamentary note on 1184
—— in lower animal 245
—— review of book on 1315
Hearn Reginald John obituary notice of 378
Heart effect of smoking on 187—Correspondence on 320
—— percussion of 629
—— in relation to its blood supply 75
—— review of books on 948 1088 1140 1144
—— some cardiological fallacies (J W Finnell and W A J *Thomson* 44 (O)
—— studio on coronary occlusion 95
—— surgery of 81
—— symptom of cardiac fatigue till 132
HEBERT C P Discovery and protection of tuberculin content 81—Radiography of chest 1417
HEFFTER *Handbuch der Experimentellen Pharmakologie* vol 1 rev 79
HEGARTY F Function of epithelial cell 819
HEINEL Robert (and others) *Harvard Typ With Special Reference to Man and Domestic Animals* rev 1087
HEINE Erich V *Die Lues und ihre Krankheiten* rev 1147
—— (and others) *Kolloidchemie der Immunität* rev 1147
—— Intravenous dextrose in peptic ulcer 71 —Immunotherapy (W Stanley Sykes and Harold Lawrence) 448 (O)
—— H E (and S C BURROUGH) Accidental administration of 1 Oil 1 Air raid precautions 915
—— Philip S C Irritation water from theatre roof 1188
HENRY Philip S Effect of pyrazolones jaundice in rheumatic (gastric?) arthritis 94 (O)—Anaesthetic 411—Correspondence on 475 506 C
HENDERSON F F Swallowed foreign bodies 628
—— James Abbey appointed to Executive Council of Island of St Vincent 51
—— Vandell *Adventures in Respiration Modes of Asphyxiation and Methods of Resuscitation* rev 790 894
HENRIQUES J Q *Citizen's Guide to Social Service* 666
HENSEL G Successful vaccination with dead tubercle bacilli 188
Heparin 709—Notes on 772 1126
——and thrombosis (Charles H Best) 977 (O)—Leading article on 996
Hospital T Tropical D 1148
677
N) *Physiological and Clinical Chemistry* 2nd ed rev 894
—— Malcolm L Nomenclature of diseases of fundus 807
Herbalist acquitted 1342
Heredity charts 994
—— some aspects of 808
HERMAN Leon *Practice of Urology* rev 406
—— Martin death of 476
Hernia review of book on 707
HERSON R Treatment of buccal ulcers 820
HERTZLER Arthur E *Surgical Pathology of Diseases of Neck* rev 125
Hesperidin (vitamin P) tablets 947
HEWER C Langton Ether convulsions 921
—— Evelyn L *Textbook of Histology for Medical Students* rev 747
—— Thomas F (D OWEN and P H WHITAKER) *Apical* 969 O)
HICKSON ding 863
HIGGS S)—Fractures in region of elbow joint 230
HILDEBRANT Prof Pharmacological actions of jaundice 581
HILL A V Energy and muscular work 1105
—— B P Hypersusceptibility to basal anaesthetics 244 1199 (O)
—— J Falkner Teaching of anaesthesia 310
—— Jamé Air raid precautions 1064
—— Sir Leonard Strict vegetarian diet 417—Correspondence on 480 595 679 864—Mechanical respirators 1389
HIMSWORTH H P Recent developments in treat 1030
towel for midwifery 928
cepts and Problems of Psychotherapy rev 50
Hird Alfred Ernest Wilson obituary notice of 154
Histidine in peptic ulcer 106
Histology review of book on 747
HODGSON J C Measles conduct of school epidemic 171 (O)—Correction 275—*Medical Practice in Residential Schools* rev 992
Hodgkin's disease and leukaemias relation of to rev) 833 (O)
Evacuation of air raid
HOFFMAN J Congenital syphilis 4
HOGAN J J Ether convulsions 1188
HOGBEN Lancelot (editor) *Political Arithmetic Symposium of Population Studies* rev 661
HOLDEN Oscar M Croydon epidemic of typhoid 109
Holiday camp sewage disposal in (parliamentary note) 1185
—— colonies for fitness 475
—— exchange visits with French doctors 87
Holidays and milk supply 208
—— with Pay Bill 156
HOLLAND Hardley (and T Watts EDEN) *Manual of Obstetrics* 8th ed rev 570—Sulphanilamide its use and abuse 908
HOLLINS F J Cattle ringworm in man 1126
HOLMES Gordon Cerebral integration of ocular movements 107 (O)—Leading article on 128
—— J C Aplastic anaemia with complete recovery 1255
Holth Sören death of 661
Home Office Experiments on animal in 1937 459 —Additions to Lotions List 644
HOOTON Earnest Albert *Apes Men and Morons* rev 180
HOPAN V C (and S CAVENDISH) Sulphonamide in treatment of acute mastoiditis 942 (O)—Correction 1070
HOLDER Lord Treatment of crippled children 147 —Abortion and the law 198—Cremation 25 —Quack medicine trade 266 —Leading article on 295—*Health and a Day* 454—Women and medicine 804
HOLT Sir Adam Neurasthenia and employment 85
Hormone preparation (gonadyl)
—— therapy booklet on 1144
—— in gynaecology 64
—— in multiple and breast cancer 819 471
Hormones discussion on 61
—— oral (leading article) 949
—— plant growth 137
—— review of book on 50
—— Symposium on 109
HORNE J Nuttall Aneurysm of common iliac artery 660
HOFFALL O H *Lab Its Technique and Relation to Disease* rev 664
HORWITZ C Treatment of pruritus ani 967
HOUGHTON A S Vasomotor rhinorrhoea with asthma associated with menstruation 70 (O)—Correspondence on 815
HOSFORD John Undescended testicle 318
Hospital Albert Dock new 906
—— Bethlem Royal Information concerning study of medicine 599
—— *Brompton Reports* vol 6 707
—— Central London Throat Nose and Ear Physiology of vocal mechanism 1189
—— Charing Cross Information concerning study of medicine 505
—— Chelsea for women Announcement 207
—— contributory schemes 1171
—— co ordination in Edinburgh 964
—— fees limits of guarantee 476
—— Calashiels Opening of extension 1011
—— Great Ormond Street for Sick Children 68th annual report 1011
—— *Guild* 4th ed 73
—— Guy's Opening of new pathological block 54
——Information concerning study of medicine 507—Prize distribution and opening of new session 810
—— King's College Information concerning study of medicine 507
—— London Fever Opening of new block 191
—— —— Medical College *Information concerning* study of medicine 507—Schorstein Memorial Lecture 851
—— Lord Mayor Treloar Cripples Invitation to special demonstrations 146
—— Madras Ophthalmic Triennial report 1277
—— Manor House Orthopaedic Opening of extension 963
—— Maudsley Research grant to 6—Information concerning study of medicine 33
—— mental accommodation in Lanarkshire 382
—— —— officers superannuation scheme of (parliamentary note) 47
—— Middlesex Information concerning study of medicine 658—Collected Papers from Medical School 1260
—— modern art for 601
—— National for Diseases of Nervous System Queen Square New wards and research department opened 251—*Information concerning* study of medicine 534
—— new general South opening 59
—— Princess Margaret Rose for Crippled Children Edinburgh Opening of Nuffield Ward 147—*Annual meeting of subscriber* 147
—— —— Mary's Royal Air Force Halton Inspection by Princess Royal 1062
—— Lurdyshurn Fever Resident superintendent appointed 1388
—— Queen Charlotte's Maternity Annual report 675
—— Rotunda Report 470
—— Royal Dental (London) School of Dental Surgery Annual prize distribution 759—Annual dinner 1171
—— —— Eye Exhibition 27—Meeting of clinical *society, 1167*
—— —— Free (London School of Medicine for Women) Information concerning study of medicine 521—524—Opening of new session 804 —Annual dinner 1522
—— —— Maternity Belfast Opening of new wing 146—Annual report 860
—— —— National for Rheumatic Diseases Bath Ball in aid of rebuilding fund 987
—— St Bartholomew's Information concerning study of medicine 658—*Reports* vol 71 1086—Old Student dinner 1108
—— St Ebba Epsom *Opening of extensions* 1107
—— St George's Information concerning study of medicine 509
—— St John of Jerusalem Promotions and appointments 64
—— St Mary's Information concerning study of medicine 59
—— St Thomas's Information concerning study of medicine 510
—— services co operation in 1253
—— Southend municipal Loan sanctioned 161
—— Sunday Fund Metropolitan Result of collection 444
—— system future development of 986
—— University College Medical School Cerebral Integration of ocular movements 107—Information *concerning* study of medicine 511—Lister at 800 —Report on radiotherapy 834
—— Warneford Appointment of physician superintendent 0
—— West End for Nervous Diseases Information concerning 55
—— —— London Information concerning study of medicine 1
—— Westminster Information concerning study of medicine 11—Opening of new session 75— Expenditure for electrical equipment 117 — Annual dinner of past and present students 1153
—— Winfield Morris Orthopaedic Gifts to 1417 1557
—— zones in wartime 100
Hospitals Bristol Corporation special treatment for 6
—— Centre Birmingham Formal opening ceremony 158—Leading article on 125
—— I C C Hon appointment 96—Lay analysts at mental hospitals 1253
—— London Information concerning clinical 55— —Street collection 557—And air raid 1257
—— mental tuberculosis death rate in 84

Hospital voluntary system in figures (Lindsay) 4—Emergency hospital service 55 56 457 1076—Committee for London 194—Orthopædic 1
Houses number built 5
Housing condition in Ireland 676
—— (financial provision) (Scotland) Bill 118
—— small house exhibition 84
Howard Alonzo (and death of) 1113
—— C L C Epidemic prevalence in 140 (O)
HOWARTH Walter (and Geoffrey LATHAM) Mastoid operations 1 04 (O)
HOWELL C M Hind Co-operation in cases of artificial 919
Howie James Experimental aspect of treponema infection 1 05
Hulme William of his notice of 4
Hume Edmund (and others) Human Parasitology With Special Reference to Man and Domestic Animals rev 108
HUMPHRY C A Treatment of superficial closed wounds for City of York 1 41
—— W Kent Quinsy and its treatment 4 3
Human body rev review of book on 84
—— oil in treatment of ailments of ear (Cecil I C Wakeley) 1 15 (O)—Correspondence on 1 1
HUNTER Urban Technique of anæsthesia 110—Ether convulsion 1
HUNTLY Graham Sam retracted for plastic surgery 15
Hunter fracture of neck of
—— fractures of left and hospital records of (T I M Murray) 1 4
HUMPHREY C E Simple inhaler 10 5
Hurley Immunization against diphtheria made compulsory 30 5 4 3
HUNT Alan H (and Eric C O HOWE BEEVE) Perforated peptic ulcer in organic nervous disease 105—(O)—Correspondence on 1 1
HUNTER Donald Toxic infective jaundice 2 6—Anæsthesia in thoracic surgery 911
—— Lt-Col T Sinclair H operation for prostatic enlargement 6 95
—— William Management of trial labour and retroversion 1134 (O)
HUPPERT Kate Campbell *History of Women in Medicine from Earliest Times* (Winifred Cullis) rev 1
HURST Sir Arthur Toxic infective jaundice 909
HUTCHINSON W Psychosomatic illness 71
HUTCHINSON C A Adrenaline treatment of asthma 1112 1 59—Cause for diagnosis 1 44
HUTCHISON Robert Testimonial to 193 96—Opening address to Westminster Hospital Medical School 505
Hydramnios two complicated foetuses and living baby a unusual event (F D Blunt) 1 0
Hydronephrosis massive and premature (J L Dodd and C Mazlin) 1 5
HYAMS review of book on 180 1044 1045
—— rural and League of Nations 5
Hypertension review of book on 1148
Hypertonia in post-encephalitic Parkinsonism 11 6
Hypertrichosis 4 0
Hypoglycæmia pontaneous (J A Price and A B Kapur) 95 (O)—Correspondence on 11 4
Hypospadias complete case of (J J Murray and S Bookhalter) 6 9
Hypothalamus review of book on 5 0
Hysteria neurological study of 1 09
Hysterosalpingography with chromotubation in treatment, 08

I

Iceland medicine in 100 years 1 0 956
Icterus gravis neonatorum osteoclasty in treatment of 1 6
Immunization against scarlet fever 5 0

INCOME TAX
Allowance for wife earning 604
Army pay while at road 08
Back duty paid—allowance due 92
Capital payment by instalment 5
Children 854
Deductible expenses 644
Deduction for assistants house 8 4
Expenditure on apparatus and books 161
Expenses of part time M O H 456
—— proportion of 85
Extension of allowances for children 909
Life assurance relief educational policy 105
Motor car Obsolescence allowance—Professional use of 161—Expenses 427 644 854
Partnership share increase in 8 4
Repayment of loan 1 90
Sale of general practice book debt 690
Service gratuity 604
Stock of material drugs etc 85
Tax deducted from annuity 1349

Incontinence from accumulation of fæces in rectum (Harold Dodd) 6 4
Indexes half yearly 1 3 155
INDIA
Association for Supplying Medical Aid by Women to Women of India Annual report 86
Bengal Housing condition of the—Model health unit 5
Enteric fevers in Armies 1
Fund Countess of Dufferin 467
Madras Ophthalmic Hospital Triennial report 1
Medical unemployment in 462
Opium smoking in 1
Plague in Bombay 405
Population of Punjab 3
Punjab Epidemiological Bureau 6
Report of Public Health Commissioner 1—
Small pox control in vaccination 1001 1180 1205
Tuberculosis campaign in 11
—— hospitals in 5
Women and Medical Service for 825

Industrial health research 915
Industrial health in (leading article) 978
Industrial medical profession in 6
Infancy diseases of review of book on 405 1147
Infirmary Dumfries and Galloway Royal Opening of auxiliary hospital 1012
—— Dundee Royal Annual meeting 676
—— General at Leeds Cut of iron lung 85
—— Royal Edinburgh Annual meeting of League of Subscribers 1—4
—— Victoria Glasgow Co-operation in hospital services 1—3
Influenza immunity in 1100
—— institute for study of in Belgium 1161
—— prediction of 1015
Infra-red rays for in urinary 1—0
INGRAM John Stallard Sodium nitroprusside solution for protection of kidneys in urinary 345
Inhaler simple 10
Injections risk—es of mass examinations 1
Inquest medical evidence at 4 5 956 —— 5
Institute British Radiological Annual conference 1—1
—— Child Psychology Opening of new premises 56—Royal visit to Children's Centre 11
—— Parliamentary Health Service Scholarship 40 904
—— Gardiner of Medicine Chair Opening 760
—— for hygiene social medicine and industrial pathology for Empire 161
—— medico-legal Government aid withheld 14—Annotation on 1 5
—— National of Industrial Psychology Retirement of D Myers 9—Annual report 1 41
—— Nutrition 10th annual report of 1 0 105 1 0
—— Mental Anti coryza serum 110
—— Psychological Course of training 5 4
—— Queen of District Nursing Scheme of nursing home for Edinburgh 914
—— Statistical Information concerning 5—Annual report 1
—— Postgraduate Hospital Appointment 470
—— Royal of British Architects Small house exhibition 84
—— for Scientific Treatment of Delinquency dinner in aid of 1
Institution British Standard and personal safety equipment 34
—— Crichton Royal Dumfries opening of addition 91
—— Liverpool Medical Clinical education 12—0—Pathology of chronic aortic valvular disease 1038
In trauma tolerance 5
In ulin resistance to in diabetes 110
—— and vitamin B 1111 1
In urance for medical profession 5

IN URANCE NATIONAL HEALTH
Administrative cost of 1155
Approved societies benefit 1347
Australian scheme 403
Cost of health in urance for dependants 65
Dental benefit 1 41
Dependants and 1154
Incapacity of in ured workers in Scotland 1105
In urance practitioners No in England and Wales 10—Post graduate courses for 11
Medical certificates 11 3
—— service of dependants in Scotland 1184
New Zealand 456
Regional medical references 955
Women medical in pector for in ured persons 15

International Clinics Nov 1 t series vol rev 200—vol rev 1148
Intussusception in adult three cases (C L Heaney) 1309
Invalidism escape into 911
Iodine for goitre early use of 995
Iodo-caffeine elixir 1148
Iraq plan for improvement of sanitary condition 1 09

IRELAND
Apothecaries Hall Information concerning 50
Dublin Fever Hospital Board annual report of 860
Medical members of Senate and Dail 470
—— registration in 50
—— Research Council Award 146 1055
Tuberculosis in Belfast 1755
Ulster Medical Society 1170
Vital statistics for Northern Ireland 809

Iris pattern review of book on 455
Iron lungs *See* Respirator
Irwin Maj Gen Sir James Murray obituary notice of 1116
—— S T Fractures involving knee joint 765
ISAAC P E Treatment of buccal ulcers 5
ISELIN M Infection of hand and finger 1175
Italy dismissal of Jewish professors 1347

J

Jackson Chevalier autobiography of 903
—— R Fractured olecranon personal experience 630
Jacobi Walter death of 470
Jahrbuch für Unfallheilkunde new international journal 1105
Jamaica Medical service appointment
JAMES K L Volvulus of pelvic colon in young person 1 Unusual complication of appendicectomy 961—*bilateral rupture of quadriceps tendon* 1 03
—— Col S P Malarial endemicity in E Africa 1—1
Japan Population or and No of doctors in 705
JAPMAN T Francis Condition of nursing service 5
Jaundice catarrhal 951 6 905
—— pontaneous effect of on rheumatoid (atrophic) arthritis (Philip S Hench) 3 4 (O)—Annotation on 411—Correspondence on 4 5 952 6 0
—— toxic infective (C E Lakin) 4 7 (O)—Discussion on 5—Annotation on 951—Correspondence on 6 1
Jaw nappin 1—5
JEFFCOATE, T M A Uterine inertia 909
JEFFERSON Geoffrey Vertigo 0
JELLETT Henry Treatment of placenta praevia 1
JENNING Dean Identical cancer in identical twins 919
—— C H (and A J CLAZEBROOK) Comparison of clinical and blood pictures in adult curvy 4 (O)—Annotation on 5—Correspondence on 5 915
JENNER John *Heart in Pregnancy* rev 1146
JEQUIER Edouard (and G F M ARNEY) Antipernicious principle from exercise with urine 0 4 (O)—Correspondence on 111 1—0
Jeremy Harold Powell obituary notice of 4
JELL L Geoffrey Skiagraphy of chest 7 0 (O)—Discussion on 4—Prevention of tuberculosis—Tuberculosis dispensaries or chest clinics 5—Serial radiography in chest disease 1019
JEWESBURY Eric C O (and Alan H HUNT) Perforated peptic ulcer in organic nervous disease 10 (O)—Correspondence on 1
JILLA Ardeshir D Decline of breast feeding 1 91
Johnson Alice Neville Lewes 1 0
JOHNSTONE R W Prevention and control of puerperal psychosis including its medico-legal aspect 3 1 (O)—Discussion on 0—Leading article on 9—*Textbook of Midwifery for Nurses and Practitioners* 9th edition rev 5 0
—— Sir Robert James obituary notice of 0 1 1
JOLLY J Swift Tumour of bladder 1
JONES Chester M *Diseases of Tract Pain Diagnosis and Treatment* rev 9
—— Ernest Unconsciousness and medical practice 195
—— J Treatment of pruritus ani 8 0
—— Sir Capt Kenneth Hurlstone obituary notice of 1151
—— V Emrys Tuberculosis in rural areas 84
Jordan Lieut Col John Cranbrook obituary notice of 1152
Journal of diseases of metabolism and of digestion new German publication 0
—— *of Neurology and Psychiatry* founded 404
—— *of Pediatrics* November issue devoted to D Williams McKim Marriott 1 9
—— C 1 0
JUDI on 426
JUNG Jon D Sc conferred on 0

Jurisprudence medical review of book on 20

K

KAGAN S R *Life and Letters of Feodor Hermann* rev 5
KAHAN Leon Teaching of obstetrics 5
Kanavel Allen Burkett Death of 1155—Julius Sturgis Memorial Oration and Obituary devoted to 4
Kapp Max death of 1—4
KAYNE, C Cancer Radiography of chest 247—Prevention of tuberculosis 51—Tuberculosis dispensaries or chest clinics 5
KEATH H C Control of small pox in India 1151
Keat review of book on 949
KEEVIL, Noah L Control of bilharziasis 5
KEITH Alexander At Aberdeen to-day 1 0
KELKAR S K Treatment of placenta praevia 101
KELLEHER D Overdose of pyramidal 5
KENDALL, James *Breath Free Thrift Edition* rev 6
KENNEDY A M (and D A WILLIAMS) Association of anæmia and *allergic* diathesis 1 0 (O)
—— P C S London emergency hospital service 425

KENNON R Septic hand 362—Infections of hands and fingers 917—Air raid precautions 963
Kenny method of treatment of anterior poliomyelitis report on 852—Leading article on 841
KER F I (and others) *Observations on potency and stability of Dick test toxins* 700 (O)
Keratitis from working with creosote (G T Bird wood) 18
Keratoplasty 43 262
KERLEY P X rays and haemoptysis 244
KERR Douglas J A Cremation Act and Regulations 147
—— J M Munro Occipito posterior positions of vertex 240—Pelvic measurements 422
KERSLEY G D Rheumatoid arthritis 304
KEYNES Geoffrey Cancer of breast 302—Hormone therapy for mastitis and breast cancer 471
Kidney double cured by nephrectomy 659
—— *renal pressor substance* 897
KILGALLEN T J Acute spreading emphysematous gangrene 928
KILNER T Tomfret Injuries of nose 248—Disclaimer 772
KINDERSLEY Charles F Fractures involving knee joint 364
King Appointment of Honorary Physicians to 428 725—Speech to Parliament 1020—Debate on Address 1020 1066
—— Charles II death of 1089
—— George III (1738–1820) 664 764 928
KIRSHNER A (and T SOUTHWELL) *Guide to Veterinary Parasitology* rev 407
Knee joint fractures involving 364
—— injuries to review of book on 893
KNIGHTS Trevor H Personal experience of tetanus 233—Sterilization of syringes 976
Knoebelmacher Wilhelm death of 155
KOCH Walter *Bericht über das Ergebnis der Obduktion des Gorilla Bobby des Zoologischen Gartens zu Berlin* rev , 288
KOIB Action of quinine in myotonia 77
Koinbetin [illegible] 894
KON S K
KOUNTZ [illegible]od supply 78
KOVACS Richard *Electrotherapy and Light Therapy* 3rd ed , rev 747
Krickes *Textbook of Clinical Pathology* rev 708
KRUBS Walter *Die Bechterewsche Krankheit* 708
KRFIS Boris *La Maladie d Armstrong Chorio méningite* [illegible]
KREMPF (an [illegible] *der Lungen tuberkulose*
Krizg Paul death of 1026
KRONFELD Peter C *Introduction to Ophthalmology* rev 350
KUCZYNSKI Jurgen *Hunger and Work Statistical Studies* 794
KUNKEL I Psychological mechanisms in child hood 299
KUPTZ Chester M *Orthodiascopy* rev 1314
KUTAR S H Intratracheal adrenaline for relief of asthma, 927

L

Labbé Alphonse death of 724
Laboratories Bernhard Baron Research pamphlet on 52
Laboratory National Physical View day, 27—New Director 973
—— Strangeways Research Annual report 1376
Labour administration of pituitary extract in third stage of (George W Blomfield) 1083 (O)—(C [illegible]
—— [illegible] d blood pressure 272
—— [illegible] cysts and (Mostyn P [illegible] mbrey) 1201 (O)
—— rare complication of 1025
—— safe 1013
—— trial management of and selection of cases (William Hunter) 1134 (O)
—— trial and pelvic measurements 422
Labour Office International Supplement to *Occupation and Health* published 19–
La Chard Louis William Finger prints of twins 330—Obituary notice of 431
Lactation See Breast feeding
Lactoflavine [illegible]
LADELL J Macdonald Unconscious mind and medical practice 1 0—Prognosis of anxiety states 963
LAFORGUE Ren *Clinical Aspects of Psychoanalysis* translation rev 707
LAKIN C J Toxic and infective jaundice 457 (O)—Discussion on [illegible]—Annotation on 981—Correspondence on 683 906—England of Lett on 943—Sulphanilamide 908—Carcinoma of bladder 1 0
LAIDLAW Sir Patrick *Virus Diseases and Viruses* [illegible]
LAIN Dr Erick C *French Its Life History and Heart Disease With It* rev 408
LAIRE Sydney M Sulphanilamide in climatic bubo 1043
LAKE Norman C Infection of hand and fingers [illegible] 954 [illegible]-section 854—Correspondence [illegible] 1154—*Acute* rev [illegible]ed 944
LAMBERT Dame Barrie Lay analysts at L C C mental hospitals 1330
LAMY M Whooping cough 286
Land Voluntary national register of for war time 1391
LANDAU Intravenous sedatives in peptic ulcer 713
LANDER C *Development of hospital system* 366
LANGDON BROWN Sir Walter Recent advances in organotherapy 773 (O)—Discussion on 361—Medical curriculum and present day needs 481—Correspondence on 589 639 921—Escape into invalidism 911—*Thus We are Men* rev 1146—Hon LL D conferred on 1276
LANGDON DAVIES John Panic and A R P 1328
Lange Johannes death of 724
LANGE Meyer J Medical evidence at inquests 728
LANGSTON H H Treatment of poliomyelitis 964
LANKESTER A Medical evidence at inquests 596
L Année Thérapeutique 1937 rev 623
LAPORTE R Preservation of tuberculous material for culture 145
LAQUERRIÈRE A (and L DELHERM) *Traité d Électroradiothérapie* vols 1 and 2 rev 837
La Riforma Medica issue devoted to two congresses 1398
LAPKIN Edward Behaviour of patients under insulin 144
—— E H *Disorders of adolescence* 369
LARKEY Sanford V Facsimile of *Preservation of Sight* etc by Andreas Laurentius issued 454
LAROCHE Guy *La Puberté Étude Clinique et Physiopathologique* rev 1315
Laryngologists debt to research 1008
Laryngology and otology diploma in 550
Laryngoscope origin of 604 873
Laryngotracheobronchitis acute 670
Larynx carcinoma of treated by irradiation (C Hamblen Thomas) 447 (O)
—— treatment of carcinoma of and its results (*Lionel Colledge*) 167 (O)—Discussion on 247—Correspondence on 259
LAUFENCE Geo Rheumatoid arthritis and jaundice, 592
Laurentius Andreas facsimile of *Preservation of Sight* etc issued 454
LAUPIE J Shanks Sulphanilamide in acute maxillary sinusitis 260
Lavastine Laignel presentation to 1356
LAWRENCE J O Cyclotron 25
—— R D (and Kate MADDERS) Employment of [illegible] hypoglycaemia 1174 27
— [illegible] ley SYKES) Helium in anaesthesia 448 (O)
LEADER H Modern decline of breast feeding 915

Leading Articles

Abortion therapeutic and the law 225
Air raid precautions 749
Arteriosclerosis 1317
Blind man in religion 627
Blood platelet 1090
—— tests Bill 1210
British Pharmacopoeia next edition of 1264
Cancer Government versus 1091
—— lung 184
Codeine as habit forming drug 997
Economic status and health 1373
Electrical injuries 710
Factories lighting in 1318
Food and Drug Act new in U S A 457
—— and nutrition 895
Gonorrhoea chemotherapy of 665
Harveian oration 1938 840
Health and agriculture 1205
—— *industrial* 978
Heparin and thrombosis 906
Hormones male 949
Hospital voluntary system in figures 24
Hospitals centre pioneer 129 1265 1095—
Malaria [illegible]onal periodicity in 750
Maternity service for New Zealand 793
Medical profession and the emergency 710
Medicines quack and obscurantism 902
Milk raw and pasteurized 1049
Mortality maternal rates 900
Occipito posterior cases 957
Pathology status of 1149
Pellagra nicotinic acid for 353
Pelvis are pelvic measurements worth taking? 901
Phthisis management of 7
Pituitary and diabetes 1048
—— gland 137–
Play therapy and child guidance 1150
Plymouth Plans for 1–0—Meeting 824
Poliomyelitis anterior treatment of 841
Presidential address 183
Radium beam therapy 1209
Renal pressor substance 897
Rockefeller and frontiers 74
Science clinical 125
Sepsis puerperal prevention of 325
Social service 669
Statistics of wages 704
Thames watch on 945
Trial of Mr Bourne 185, 225
Vision greater 410
Vitamin B complex 6–

LEAGUE OF NATIONS
Anti epidemic work in China 33
Conference on rural planning and hygiene 1050 [illegible]s
Drug traffic and United Kingdom 951
Health Organization Meeting of subcommittee 33—Treatment of malaria 827—Radiotherapy of carcinoma of cervix 669—Report on assistance to China 843—Codeine as habit forming drug 997
Hygiene rural 78
Opium production Limitation of, 414—Convention on 713
Survey of health services of Belgium 769
LEAK W N Catarrhal jaundice 683—Air raid precautions 1284
LEATHART Percival W Biological significance of tonsils and adenoids and other external lymphoid masses 835 (O)
LEBARD Ledoux X ray diagnosis of gastric cancer 1272
LEBEAU P (and G COUTTOIS) *Traité de Pharmacie Chimique* 2 vols 2nd ed 1206
LE COMPTE P M (M C WINTERNITZ and R M THOMAS) *Biology of Arteriosclerosis* 1317
Lecture Blair Bell Memorial Uterine inertia 959
—— Dawson Williams Memorial 305 929
—— Guthrie 1105
—— Kettle Memorial 1060 1162—Leading article on 1149
—— Lloyd Roberts Problems of human congenital disease 1100
—— Macalister This mortal coil 86
—— Norman Kerr Memorial 847
—— Rede 668
—— Schorstein Memorial Haemolytic anaemias of childhood (L G Parsons) 851
—— Semon 1008
—— Silvanus Thomp on Memorial 1252
—— Victor Horsley Memorial 34—Cerebral integration of ocular movements 107—Leading article on 128
—— W E Dixon Memorial Resistance to experimental cancer 807
—— William Mitchell Banks Memorial 951
Lectures Chadwick Public Programme 762—Congested populations 962—Control of puerperal fever 1378
—— Harvey in New York publication of 1315
—— Honyman Gillespie 809
LEDINGHAM J A Gangrene of colon in infant 957
LEE Maurice New intravenous cannula 1402
LEES Robert (and others) 2 sulphanilylamino pyrid [illegible] of gonorrhoea 1142
LEFTE [illegible] bservations on potency and stability of Dick test toxins 700 (O)
LEIPANE W R *British Periodicals of Medicine* rev 747
LE FLEMING Sir Kaye Difficulties in co operation 68—Appreciation of Sir Robert Johnstone 971
Leg congenital deformities of (Reginald Broomhead) 1311 (O)
LEITCH J Neil Disclaimer 100
LEITNER Z A Grenz ray therapy 1179
LEMIERRE A Suicide by tubercle bacilli 458
LENGOFF J Carotid sinus reflex 356
Lenses contact 369
Leprosy effect of pregnancy on 39
Lett Hugh elected President of Royal College of Surgeons of England 188
Lettsom England of 849
Leucocytes transfusion of 1092
Leukaemia review of book on 651
Leukaemias and Hodgkin s disease relation of to gastric disorders (F Harvey) 853 (O)
Leverhulme Research Fellowships and Grants 313 433
LEVITT W M Treatment of uterine haemorrhage 309
LEVY Herbert Sarcoidosis of Boeck 920
LÉVY Max (I COTTENOT and Id CHÉLIDZE) *Le Duodénum Atlas de Radiologie Clinique* rev 945
LEVY S Disclaimer 1028
LEWIN Louis *Drugs their Use and Abuse* translation rev 792
LEWIS Aubrey J *States of depression their clinical and aetiological differentiation* 870 (O)—Discussion on 96
—— E O Genetical problems in mental deficiency 145
—— Ivor Disclaimer 874
—— Lieut Col Stanley Everard obituary notice of 1230
—— W P (and F Huntly WOODCOCK) *Canned Foods and Canning Industry* rev 971
Lewis s Medical and Scientific Library Catalogue part I 1371
LEWIS JANSE E Trend of urban mortality, 1091–
Library Surgeon General s founder of 455
Licht in relation to climate and health (W J G Atkins) 560 (O)
LILLIE Geoffre [illegible]
LILLINGSTON [illegible]
LINDSAY Colin and public
LING H C Two fatal cases of diphtheria gravis bacteriaemia 1034
LINNELL J W (and W A J THOMSON) Some cardiological fallacies 442 (O)
LISTON Robert G Idiopathic epilepsy from another aspect with treatment of fits 5—Correspondence on 90

Lip cleft of 962
Literature University College and Hospital 800
—— Hunt Col A E J Appreciation of Dr Hector Duff Smith 816
—— Spencer Prophylactic inoculation against pneumonia 1174
Little George Whitfield obituary notice of 971
Liver surgery and 1212
Liverpool Annual report of Port Health Authority 469
LLOYD J H Vitamin C in milk 907
—— O Treatment of placenta praevia 1061
—— W E X ray and haemoptysis 24
Local education authorities and medical inspection 783
—— government hospital service Information concerning 42
Lockhart Neal Leo obituary notice of 1035
LOCKHART L I National fitness 366—Condemnation water from theatre kills hit 1206
Lockhart Mummery J P Mayo Foundation lecture published 69
LOEFFE Maurice *Intoxications et Carences Alimentaires* rev 1042
LOEHLE, Alfred A Hormone therapy in mastitis and breast cancer 319
Lowne Arno death of 1026
LOEWY F E Thrombocytopenic purpura from eclampsia 320—Intravenous whole blood as measles prophylactic 764
LOGAN D C Decline in breast feeding 1111

LONDON
Diphtheria Immunization in note on 701
Free service beds 93 203 425 476 505 760 1270
Hospitals and air raid 685 809
—— treat collection 585
Medical Exhibition 859
M O H report of 205—Report of 945
Notification of measles and whooping-cough 201
Nursing inquiry Views of London hospital 469
Underground electric parking and A R P 1015
University of *See* University
Voluntary Hospitals Committee elections 194

LONGDON Edith A (and Crichton BRAMWELL) *Heart Disease and Pregnancy* rev 1146
LOUGHRIDGE J S Quick sleep warning 1244
LOUPIE, F M Malarial endemicity in East Africa 1256
LOVE J J McNeill Acute appendicitis 239
Lovegrove Frederick Thomas Alexander obituary notice of 764
LOWENBERG Harry Ben *Care of Infants and Children* rev 1147
LOWENFELD Margaret Play therapy 299—Disorders of convalescence 309—Play therapy and child guidance 1251
LOWIA Wilbur C Appreciation of Dr W Hudson 45
LOZANO A P Habitual vomiting 760
LUCEY H C Combined blood transfusion syringes and needles 494
Luger Alfred death of 685
Lunacy and mental deficiency Report of Board of Control 1006—Correspondence on 1177
Lunatics criminal certification of 208
—— as pets 205
Lung apical bronchogenic carcinoma (D Owen T F Hewer and P H Whitaker) 1360 (O)
—— cancer of (leading article) 1284—Correspondence on 516
—— collapsed respiratory movements in 245
—— cyclopropane and pulmonary atelectasis 1279
—— disease investigation in South Wales 1184
—— physiology and collapse therapy 80
—— tuberculous cavities in and artificial pneumothorax treatment (Lawrence Roberts and W Iagel) 1255 (O)
Lymphadenoma Gordon test for 1153
Lymphangitis filarial ulphanilamide for 919
Lymphogranuloma inguinale *See* Poradenitis venerea
LYTTLE, J D Acute nephritis and streptococcus 1206

M

[illegible] Watkins 681
MACARTHUR Lieut Gen W P Wisdom of old learning 905
MACALLAN Bryce J *Ship Surgeon's Handbook* rev 350 1371
—— Mary Parents of future 143
MACALLAND Stuart Varicose veins 1185
MCCLEARY G F *Population To Day's Question* rev 1205
McCOWAN P K Schizophrenia 144
McCRACKEN I F Medical apparatus in 1816 1206
McCULLOCH E Co-operation in cases of visual loss 816
McCUPPICH H J Medical man power in war 762
McDANIEL, W B Affair of 1613 printing of Johannes Rumelin's *Catoptrum* 433
McDONAGH J F P Heparin 772—1126—Blood platelet 1179
MACDONALD A D Spinal anaesthesia 244
—— Duncan I memorial unveiled 800
—— Letter Co-operation in public health 68
—— W S Dolorimeter of hospital system 365
McDOUGALL, I B (and J H CRAWFORD) Tomography in pulmonary tuberculosis (O)—Correspondence on 801
—— William obituary notice of 12 2 1293
Macedonia nutritional [illegible]
McFELICOTT C L M in gonorrhoea 424
—— and abuse 908
McFADDEN George D F Chronic pubic osteochondritis 317
MACFADYEN Norman Evils of concession 962—Social pathology 1200
MacFALL J L Whitley obituary notice of 816
McFARLAN A M Incidence of pathogenic staphylococci in nose 939 (O)
McFARLAND Bryan Operation for calcaneocavus 1222
McFETRIDGE F M Hepatic function test 1212
McCAFFITY J (and other) Observations on potency and stability of Dick test toxin 700 (O)
McCONIGLE C C M Decline of breast feeding 1062
McCOWAN J I National food policy 205—Food and nutrition 1018—Health and agriculture 1338
MACGREGOR, A S M Co-operation between organized bodies 143—Health of Glasgow 1105
McGREGOR H C *Protozoal Factor in Visceral Disease* rev 1261
MACGREGOR T N Oestradiol benzoate treatment of senile vaginitis 205—Dysfunctional uterine bleeding treated with progesterone 116 (O)
McGUIRE C Sensitiveness to beetling and ant bites 45
MACHARDY P S Treatment of uterine haemorrhage 309
McILROY Louise Puerperal epsi 304
MACINTO H P I (and C L C PRATT) Carbohydrate metabolism in anaesthesia 695 (O)
MACKAY Charles V Pathological changes in Australian aboriginal bones 1163
MACKEE, George M *Value and Padimin in Treatment of Diseases of Skin* 3rd ed rev 221
MACKEITH S A (and D V PAFFITT) Suicide after treatment as voluntary patient 451
Mackenna Luis Calvo death of 601
[illegible] of gonococcal [illegible] 949 197 [illegible] e D W SCOTT) Treatment of apoplexy by infiltration of tellate ganglion with novocain 1 (O)—Correspondence on 93
MACKINTO H James M Hospital co-operation 1011—Health and general practitioner 1105
MACKWOOD John Significance of dreams 1171
MACLACHLAN John T Prolonged occipito posterior presentation 959
Maclagan Thomas John (1838–1903) 459
McLAUGHLIN C R New menstruation toilet 129
MACLAY David T Abortion and the law 259
McLEAN E K Seasickness as possible aetiological factor in volvulus of small intestine 1260
MACLEAN Sir Ewen Puerperal epsis 304
MACLENNAN John (Victor BONNEY and Charles BOX) Tetanus bacillus recovered from ear ten years after attack of post-operative tetanus 10 (O)
MACLEOD Douglas H Endocrine therapy in gynaecological condition 110
MACMAHON Pyan Treatment of malaria 651
McMILLAN Kenneth Set of non-slipping hysterectomy clamps 643
McMURRAY T P Fractures of haft and subcapital region of humerus 134
MACNAGHTEN Justice Unchanging Common Law 136
MACNALTY Sir Arthur Appreciation of Dr L S T Burrell 706—Ministry of Health report 905 1004—Board of Education report 1283
McNEIL, Charles Decline of breast feeding 863
Macphail Alexander obituary notice of 600 868
—— Sir Andrew obituary notice of 703
—— J M Tuberculosis and post partum haemorrhage 10 0
McShane Arthur Hutton appointed member of Legislative Council of Colony of Trinidad and Tobago 974
McVea James Anthony obituary notice of 154
MADDEN Kate (and R D LAWRENCE) Employment of diabetics 1076 (O)
MAEGRAITH B C (and R L VOLLUM) Bacteriostatic effects of sulphonamide P oluenetamine and M & B 693 959
MAGNER William *Textbook of Haematology* rev 181
MAGNIER, M F Reduction of backward displacement in Colles fracture 991
MAINLAND D Percussion of heart 629
—— Donald *Treatment of Clinical and Laboratory Data* rev 1252
MAIZELS G (and R L DODDS) Massive hydronephrosis and pregnancy 1
Malaria availability of new drugs used in 359
—— control in tropical Africa 802
—— diagnosis of 1010
—— in East Africa 1338
—— in England 1351
—— new anti malarial drug (certuna) 900
—— parasite malignant tertian co rect name of (per Pickard Christophers and J A Sinton) 1130 (O)
Malaria in pregnancy review of book on 60
—— seasonal periodicity in (leading article) 705
—— treatment of 205 695 851 906—Correspondence on 917
—— units in British colonies (parliamentary note) 47
MALGRAN P (and others) *L Extraction Post Opératoire de la Voie Biliaire Principal* rev 71
MALK Michael Alopecia 91
MALLORY Frank Burr *Pathological Technique* rev 1056
Malnutrition local inquiry into 1275
Maloen Georges death of 601
Malvoz Ernest death of 1119
Manchester Annual report of school medical officer 116
Manipulation of difficult joint (George Perkins) 1179
—— in surgery (George Perkins) 1114—Correspondence on 1194
MANN Ida Contact lenses 69
MANZELLO A Immediate diagnosis of diphtheria 1152
MAPOTHER Edward Mental equilibrium of head injuries 85—Physical basis of alcoholic mental disorders 847
MARCUS M Sulphanilamide in staphylococcal skin infections 92
Marine therapeutics discussion on 909
Marinesco Georges obituary notice of 100
MARINKOVITCH P M & B 69 in gonorrhoea 1255
MARLIN Thomas Some observations on hoes 1190—Correspondence on 1250
MARR, D M Air raid precautions 1064
MARRACK J P *Chemistry of Antigens and Antibodies* 156
Marriage review of book on 1205
MARPI W A Treatment of pruritus ani 820
MARSDEN J Pickford Control of small pox in India 1205
MARSH Leonard C *Health and Unemployment* 1373
MARSHALL, C Jennine *Chronic Disease of Abdomen Diagnosis and Treatment* rev 1309
—— C R Active principle of *Cannabis indica* 40
—— J F *British Medical* rev 804
MARTIN Derrick J Endometrioma of appendix, 644
—— Margaret Anxiety states 202
MARTINEZ A Adult curvy 918
MARX Hermann *Kurzes Handbuch der Ohrenheilkunde* rev 1251
MASON George Thoracic surgery at Newcastle 844
MASSEY A A Condemnation water from theatre kylight 1244
MASSEY A Prevention and control of puerperal epsi administrative aspects 337 (O)—Discussion on 303—Leading article on 302—Correspondence on 471
MASSOBRIO E Pernicious anaemia and psychoses 1166
Mastitis chronic (Cecil Powntree) 1002
—— —— and breast cancer (W Sampson Handley) 113 (O)—Correspondence on 319 471
Materia operations (Walter Howarth and Geoffrey Bateman) 1304 (O)
Mastoiditis acute sulphonamide in treatment of (V C Horan and S Cay French) 94 (O)—Correction 1070
Maternity and child welfare Conference on 14—Information concerning medical officers 983
—— living quad (E Farquhar Murray) 654 (O)—Discussion on 313—Correspondence on 377 765
—— service for New Zealand (leading article) 73
Matrimonial Causes Act Medical superintendent and 1184—Care and treatment und 1254
Mavor O H appointed to advisory committee on Cinematograph Act 1076
Maxwell Ernest James obituary notice of 42
—— James *Introduction to Diseases of Chest* rev 791
—— J Presson Puerperal epsis 304—Chorion epithelioma 363—Sterility 364
MAYER GEO W Early diagnosis of schizophrenia 960 (O)
Mayors medical election of 1067
MAYR Julius *Handbuch der Ärztlichen* rev 1370
M B B S Londinal 1033 1205
Measles Conduct of school epidemic (F G Hobson) 1171 (O)—Correction 1272
—— parental whole blood in prophylaxis of (T D Culbert) 705—Correspondence on 764
—— use of placental extract in epidemic of (T V Parish) 65 (O)—Correspondence on 206
—— virus 1019
Medal Darwin awarded 1077
—— Davy awarded 1077
—— Mary Kingsley awarded 1356
—— Trudeau awarded 434
Medical apparatus in 1816 1025 1206
—— certificates (parliamentary note) 1123
—— curriculum and present-day needs (Sir Walter Langdon Brown) 481—Correspondence on 629 961
—— —— training of doctor 1077
—— *Directory* 1939 1031 1111—Uncommunicated addresses 339
—— Exhibition London 859
—— *History Calendar of* 923
—— Insurance Agency Agent appointed 207—Air raid insurance announcement 1273
—— *Life* to cease publication 769
—— man power in war 762
—— men in Victorian era 1164
—— museums information concerning 549

NAPP
CLASSICAL ETHICAL PRODUCTS

NORMACOL

A purely vegetable Product for the treatment of Constipation

A British made "NORGINE" Product

HAY FEVER & SUMMER COLDS



Quick relief may be obtained by the direct administration of 'Endrine' to the nares

'Endrine,' by virtue of its content of natural ephedrine, exerts prompt control which is maintained for several hours

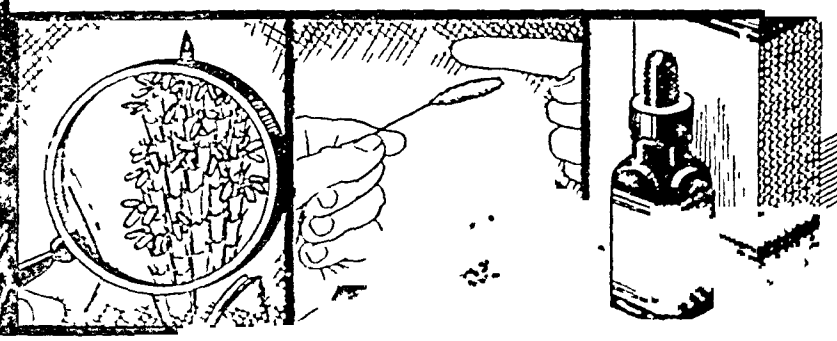
For small children or where the membrane is hypersensitive use 'Endrine' Mild (Green label)

'ENDRINE'

Brand *Regd*

NASAL COMPOUND

JOHN WYETH & BROTHER LTD., 25, OLDHILL PLACE, LONDON, N 16



Benger's Food is specially devised to be used with fresh cow's milk



Benger's Food when prepared is a dainty food cream in which the tough curd of cow's milk has been broken down so that it can no longer form indigestible clots. Because it is so easy of assimilation Benger's Food is almost universally prescribed by the Medical Profession for enfeebled digestion and for extreme conditions its prescription is almost standard. Benger's Food is so delicious that it is eaten with enjoyment by those who find milk or diluted milk unpalatable.

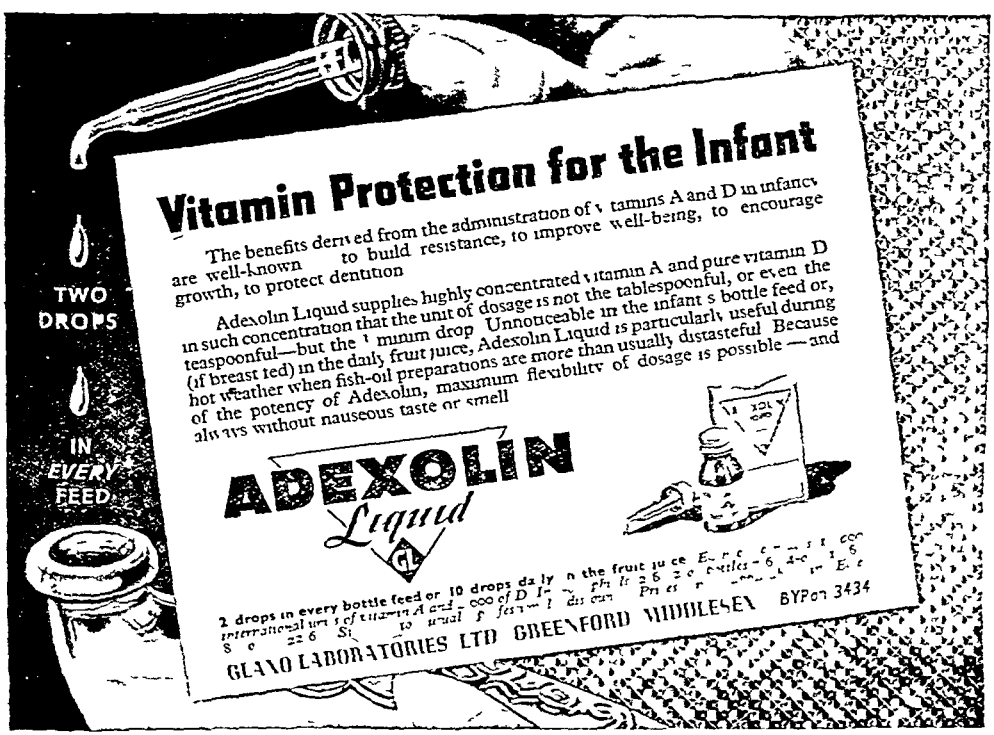
A physician's sample and pamphlet post free on request.

BENGER'S Food

BENGER'S FOOD, LTD., Holmes Chapel, CHESHIRE, Eng.

NEW YORK U.S.A. 41 Madison Ave. SYDNEY N.S.W. 350 George St. CAPE TOWN P.O. Box 22

Benger's Food is sold in tins or is obtainable through any chemist anywhere.



BAUMOL TOILET SOAP

A pure super-fatted soap introduced to the public more than half a century ago Recommended by the medical profession



BAUMOL BATH SOAP

A super-fatted hard soap specially milled and perfumed for use in the bath

Particulars on application

BAUMOL MEDICATED SOAPS

A full range of medicated soaps Invaluable in dermatological practice

DUNCAN, FLOCKHART & CO.

EDINBURGH and **LONDON**

104-108, HOLYROOD ROAD, 8 **155, FARRINGDON ROAD, E.C.1**

OXO LIMITED

"HORMONOXOID"

TABLETS

A reliable preparation for the stimulation of the Endocrine Glands

Corrects menstrual irregularities

Extensively prescribed for rejuvenation and premature senility

"PITOXYLIN"

A protein free extract of the Pituitary Posterior Lobe Eliminates all risk of protein shock

In 0·5 c.c. and 1 c.c. ampoules

VITAMINS "A" & "D"

CAPSULES

Each capsule contains

7 000 International Units of Vitamin A
900 D

"LIVEROID"

Brand

PREPARATION OF LIVER

A concentrated preparation of the natural uncoagulated juice of fresh liver in combination with nerve forming substances

Highly recommended for the treatment of Anaemia in all its forms Pleasant to take

"ERYTHOID"

An active and efficient stomach tissue preparation In boxes of 10 vials Each vial contains 15 grms. of desiccated material

"OXOID" LIVER EXTRACT

FOR INJECTION

The potency of this extract is guaranteed Each batch clinically tested In 2 c.c. ampoules

Oxo Cubes and Bottles—Hospital Oxo—Beef Essence—Meat Juice

OXO LIMITED

THAMES HOUSE, QUEEN STREET PLACE, LONDON, E.C.4



ASCORBIC ACID B.D.H.

(VITAMIN C)

During all pyrexial conditions the body requirements of Vitamin C are raised considerably above the normal Modern opinion favours the administration of large doses of Vitamin C to meet such increased demands The B D H range of preparations of Ascorbic Acid (Vitamin C) includes forms suitable for administration in all such cases, the requirements of which cannot be adequately met by an increased dietary intake

Sample on request

THE BRITISH DRUG HOUSES LTD
LONDON N 1

VI C/SI 5~

BAXTER'S INTRAVENOUS SOLUTIONS

IN

"VACOLITERS"

AND

BAXTER'S BLOOD TRANSFUSION APPARATUS

WE INVITE YOU TO AN EXHIBITION
OF THE ABOVE APPARATUS ON OUR

STAND (No. 40)

AT THE B M A MEETING AT PLYMOUTH

JULY 18th to 22nd

JOHN BELL & CROYDEN
WIGMORE STREET,
LONDON, W.1

Day and Night Service *Tel WELbeck 5555*



By Appointment to His Late Majesty King George V

GAYMER'S CYDER



By Appointment to The Prince of Wales, 1933 1936

OLD AND NEW FRIENDS WILL BE WELCOMED AT

STAND NO. 14

BRITISH MEDICAL ASSOCIATION EXHIBITION
DRILL HALL, PLYMOUTH

JULY 18th to 22nd, 1938

If unable to attend, write for Free samples, quoting B M J, to

WM. GAYMER & SON LTD. ATTLEBOROUGH, NORFOLK

In Allergic Cases and for Cosmetic-sensitive Patients

you will find it helpful to be able to prescribe

QUEEN Non-Irritant Toilet Preparations

This comprehensive range of toilet preparations has been prepared under Medical guidance and supervision for prescription in Allergic cases It does not contain orris root, or any other of the many ingredients capable of provoking Allergic Symptoms The " Queen " range can safely be prescribed in place of suspect preparations to any lady patient, their excellent quality affording little excuse for backsliding or ignoring instructions

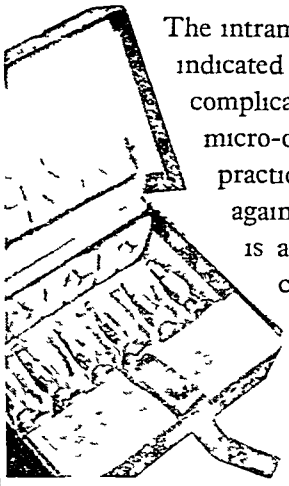
The ' Queen " series includes Face Powder, Day Cream, Liquid Powder, Night Cream, Sunburn Lotion, Seaside Cream, Bath Powder, Levigated Talcum Nursery Powder, Complexion Milk, Liquid Medicated Skin Cream, Skin Soap, Special Skin Food, Theatrical Cold Cream, Astringent Lotion, Muscle Oil

Orders may be placed through your Chemist, or direct from

BOUTALLS LIMITED

150, SOUTHAMPTON ROW, LONDON, W.C.1

In the treatment of acute infections



The intramuscular injection of Manganese Butyrate B D H is indicated in the treatment of such acute infections as the complications of gonorrhœa caused by secondary coccogenic micro-organisms Its chief value in routine clinical practice, however, lies in its power to fortify the host against staphylococcic and streptococcic infections, it is administered, therefore, in the treatment of furunculosis, carbuncles, erysipelas (including the form following vaccination), boils, whitlows and ulcers

MANGANESE BUTYRATE B D H

Sample on request

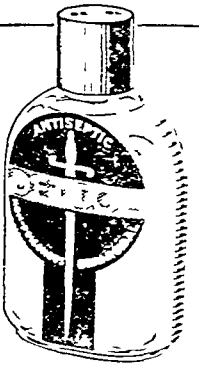
THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

MB S/-3

GERMICIDAL EFFICIENCY maintained in the presence of organic matter.

In the conduct of labour 'Dettol' possesses marked superiority over carbolic and cresylic antiseptics 'Dettol' has a Rideal Walker co-efficient of 3 0, yet 'Dettol' can be used at really effective strengths — without discomfort, danger or staining 'Dettol' maintains high bactericidal efficiency in the presence of blood and other organic matter 'Dettol' is a clean, clear non poisonous fluid — with a distinctly pleasant smell



Sold by Chemists and Medical Suppliers in bottles 1/-, 1 9 3 5 - and - 6 and in larger sizes for Medical and Hospital use These prices do not apply in Eire or Overseas Samples and further information on request

'DETTOL' TRADE MARK THE MODERN ANTISEPTIC

RECKITT AND SONS LTD (PHARMACEUTICAL DEPT) HULL LONDON 40 BEDFORD SQUARE W C 1

OUTSTANDING Products!

No. 24

KAYLENE
(Kaylene Brand of Colloidal Kaolin)

KAYLENE-OL
(Kaylene Brand of Colloidal Kaolin with highly viscous liquid paraffin)

MAGSORBENT
(The original and standard brand of Synthetic Hydrated Magnesium Trisilicate)

★
Visit our stand at the BRITISH MEDICAL ASSOCIATION EXHIBITION. PLYMOUTH. JULY 18th to 22nd.

Samples and literature obtainable from the sole manufacturers —

KAYLENE, LTD, Sole Distributors ADSORBENTS, LTD, **WATERLOO RD, LONDON, N W 2**

Telephone GLAdstone 1071/2/3 *Telegrams Kayloidol, Gold, London*

MAWMAWMAWM

BY APPOINTMENT

Schweppes

SUGAR-FREE GINGER ALE . . . .
SUGAR-FREE TONIC WATER. . .
SUGAR-FREE SPARKLING LIME

Approved by the Institute of Hygiene and the Diabetic Association

These beverages have been analysed by the Institute of Hygiene and found "free from sugar and metallic contaminants" The analyses shown have been accepted by the Medical Advisory Council of The Diabetic Association and recommended for diabetic and obese subjects

ANALYSIS SHOWED THE FOLLOWING RESULTS

	Schweppes Sugar-Free Dry Ginger Ale	*Ordinary Dry Ginger Ale*
Carbohydrates	absent	6 2%
Protein	absent	absent
Fat	absent	absent

	Schweppes Sugar-Free Tonic Water	*Ordinary Tonic Water*
Carbohydrates	absent	9 1%
Protein	absent	absent
Fat	absent	absent

	Schweppes Sugar-Free Sparkling Lime	*Ordinary Sparkling Lime*
Carbohydrates	absent	11 8%
Protein	absent	absent
Fat	absent	absent

FOR FREE SAMPLES WRITE TO MESSRS SCHWEPPES LTD, 1 CONNAUGHT PLACE, LONDON W 2

The advantages of T.C.P. in the local treatment of

ECZEMA



A powerful antiseptic, T C.P prevents the spread of infection

\+ + + +

It relieves congestion and infiltration

\+ + + +

T C.P allays pain and irritation by its combined antiseptic—analgesic action

\+ + + +

In mild cases, T C.P may be painted on and allowed to dry It is invisible and obviates the need for bandaging

T.C.P.

Literature and clinical samples of T.C.P will be sent on request to —

BRITISH ALKALOIDS LTD

Dashwood House London E.C.2.



Indian
The White Tara
(Goddess of Mercy)

"ALOCOL"

Colloidal Hydroxide of Aluminium

For Gastric or Duodenal Ulcer

IN view of the increasing adoption of intensive alkaline medication for gastric and duodenal ulceration, the selection of a suitable antacid agent is a matter of considerable importance to the general practitioner

Alocol allows of antacid therapy in a particularly effective, safe and reliable form, and replaces with advantage mixtures composed of sodium bicarbonate, magnesia, bismuth, etc It does not determine any unpleasant secondary reactions, even when taken in strong doses and over a long period of time

The powerful antacid effect of "Alocol" is more mechanical than chemical in nature It acts by adsorbing excess of hydrochloric acid, thus facilitating its elimination It promptly relieves pain and being non absorbable is free from toxic sequelae

Complete chemical history of Alocol with convincing clinical reports and supply for trial sent free to physicians on request

A WANDER, Ltd, Manufacturing Chemists,
184, Queen's Gate, London, S W 7

Works KING S LANGLEY HERTFORDSHIRE M787

ALASIL

Better Salicylate Therapy

WHATEVER be the season of the year there is a wide sphere of utility for Alasil, the improved form of salicylate medication

Alasil is a very definite advance on ordinary compounds of salicylic or acetyl salicylic acid both in therapeutic efficiency and in freedom from the risk of unpleasant gastro intestinal sequelae This high tolerability is due to the fact that Alasil is composed of calcium acetyl salicylate—the least irritating of the salicylate compounds—and Alocol (Colloidal Hydroxide of Aluminium) a powerful gastric sedative and antacid

A careful series of experimental tests has shown that Alasil is more completely absorbed than ordinary salicylate compounds and that it is practically free from the risk of liberating free salicylic acid in the stomach

Wide clinical experience anticipated these findings by demonstrating that Alasil can be pushed or prolonged to a much greater extent than ordinary salicylate compounds and that it can be given with safety to children adults the aged and patients with finely balanced digestive capacities An analgesic antipyretic and sedative of established value

A supply for clinical trial with full descriptive literature sent free on request

A WANDER, Ltd, Manufacturing Chemists,
184, Queen's Gate, London, S W 7

Laboratories and Works KING S LANGLEY, HERTS

AT THE EXHIBITION OF

THE BRITISH MEDICAL ASSOCIATION

TAMPAX

THE *Adaptation of the medical tampon to menstrual hygiene*

Members of the medical profession will at once appreciate the significance of the new method of sanitary protection which is being displayed at the Exhibition of the British Medical Association

The principle of Tampax is that of the vaginal tampon, which every doctor knows to be safe and efficacious for absorbing cervical discharges at the site Dispensing with sanitary towels Tampax spares the patient much local discomfort and minimises risk of infection

Tampax is made of long fibred surgical cotton wool which has been sterilised and highly compressed Each tampon has an absorption capacity of 1—1½ ounces It is individually sealed within its own patented applicator which enables every user to insert it in the proper position without contact with the hand The tampon is easily removed by means of a cord sewn through the cotton by an exclusive stitching process which makes disintegration impossible The tampon being contained within the vagina away from contact with the urethra contamination from this source is minimised There is complete elimination of labial irritation Odour is almost entirely prevented as the menstrual fluid does not come into contact with the air

Tampax may confidently be recommended by physicians to their women patients the only exceptions being those infrequent cases of intact hymen with orifice too small for insertion

TAMPAX is displayed at Stand No 43 of the Exhibition of the B M A, where a qualified attendant will explain the method of construction of the tampon and the principle of the applicator Samples and all further information may be obtained at the Stand, or on request to Tampax Ltd, 10, Bolton Street, London, W 1

TAMPAX

Regd Trade Mark

A new test for Tuberculosis

TUBERCULIN PATCH TEST

(VOLLMER)

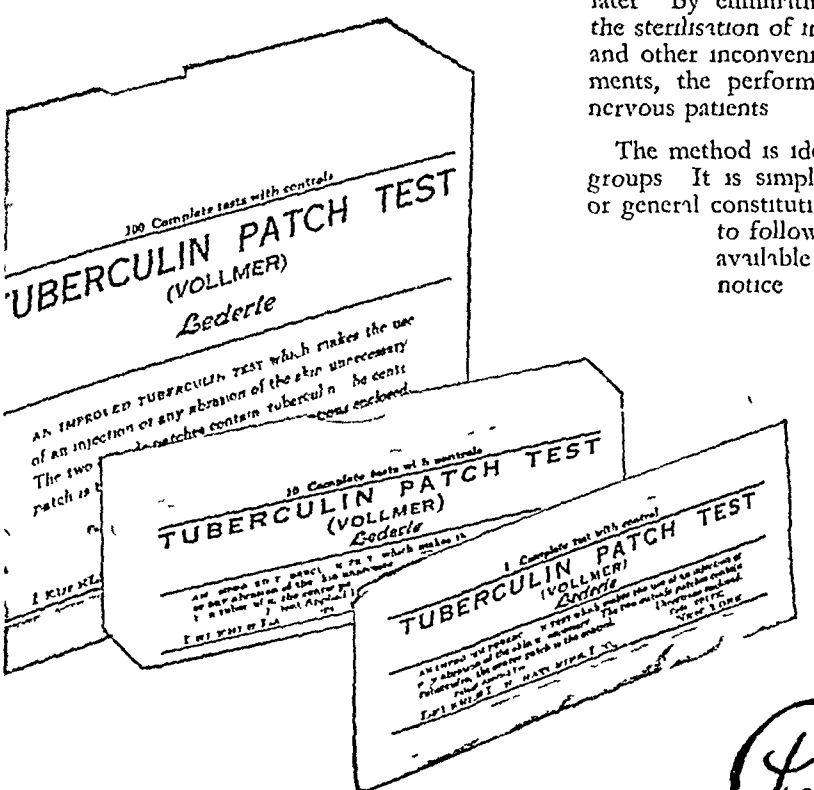
Lederle

THE notable progress made in recent years in the control of tuberculosis has been due in large measure to earlier diagnosis and improved methods of diagnosis

Among the significant advances in tuberculin testing is Vollmer's development of the *tuberculin patch test* This test, which has been shown by clinical trial to be at least as reliable as the Pirquet test, possesses the important advantage of insuring co-operation of the patients, especially in the cases of children

The patch is applied for 48 hours and read 24 hours later By eliminating pain, elaborate preparation in the sterilisation of instruments, etc trauma to the skin and other inconveniences attending the use of instruments, the performance of the test avoids exciting nervous patients

The method is ideally suited to the testing of large groups It is simple, safe and time-saving A focal or general constitutional reaction has not been known to follow the application of the test It is available for immediate use at a moment's notice



"TUBERCULIN PATCH TEST (VOLLMER) *Lederle*" is available in the following packages—

Single tests	1/3
10 tests	10/3
100 tests	42/-

A PRODUCT OF THE
Lederle LABORATORIES
INC NEW YORK

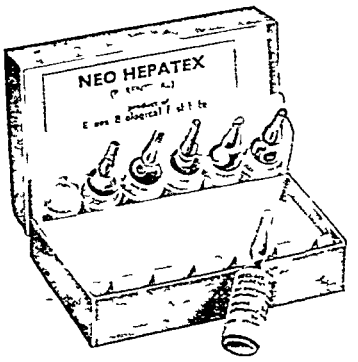
Distributed in England by

Chas. F. Thackray LTD

The Old Medical School **LEEDS**
Telegrams and Cables ' Aseptic Leeds *Telephone* 20085 (3 lines)

252 Regent Street **LONDON W 1**
Telephone Telegrams and Cables Regent 1884 London

Agents for Eire
WILCOX JOZEAU & CO 19 Temple Bar Dublin



Boxes of 6 Ampoules { 1 cc 5/3 ; 2 cc 8/- }
3 " 4 cc 7/-

Liver Extracts
of
High Potency

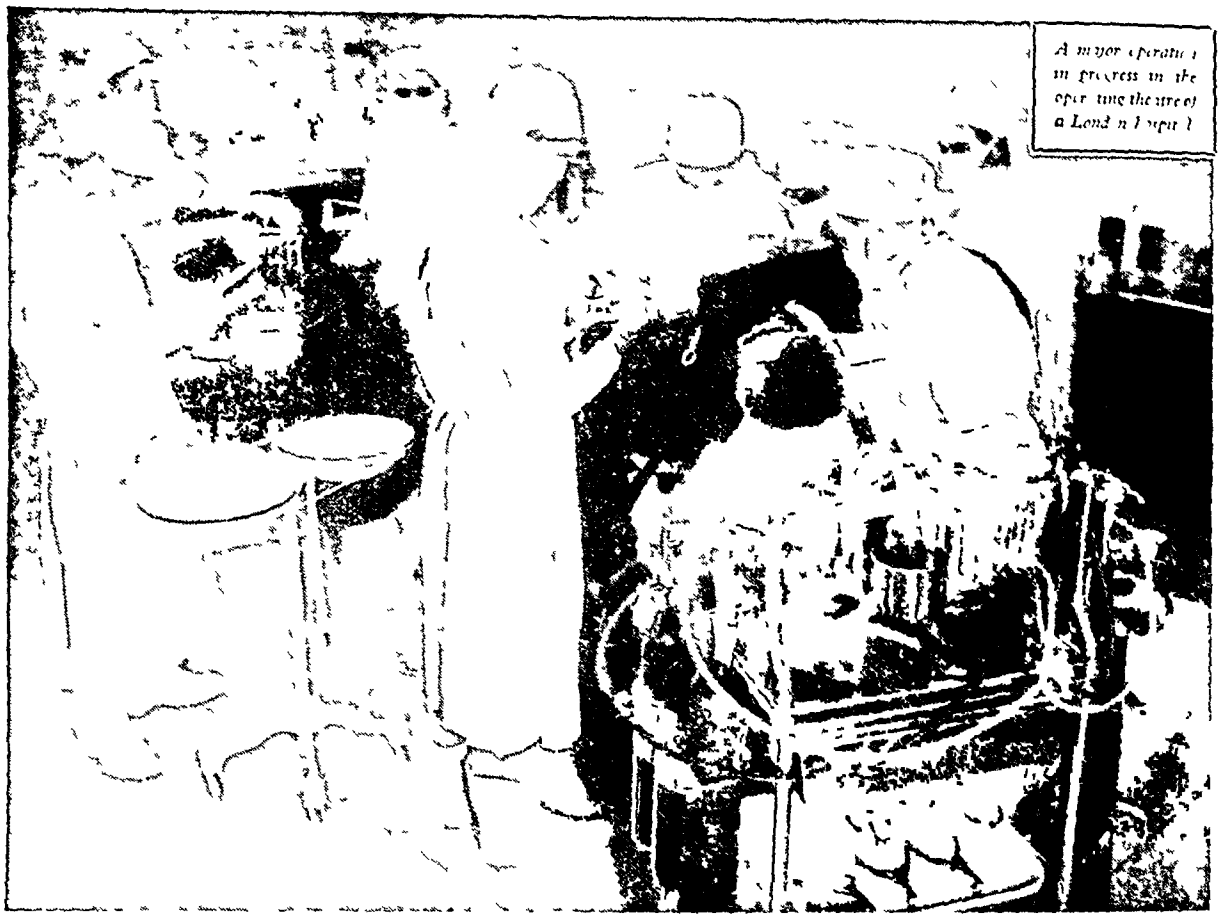
NEO-HEPATEX
(Parenteral)
Intravenous and Intramuscular
Clinically tested

HEPATEX
(Oral)
Palatable and efficiently fractionated
Contains the full therapeutical efficiency
of 16 times its weight of fresh liver
The most active liver extract

Made at
The Evans Biological Institute
By
Evans Sons Lescher & Webb Ltd
LIVERPOOL and LONDON



In Bottles of 4-oz 12 6 each.



A major operation in progress in the operating theatre of a London Hospital

THE DANGER OF INFECTION

It is not only in the operating theatre that the value of antiseptic protection is to-day recognised Men and women in everyday life are learning the importance of germ-free cleanliness More careful attention to hygiene is resulting in better standards of health

Of course, it is not possible in everyday hygiene for ordinary people to take such elaborate precautions against infection as those taken by the surgeon before an operation Nevertheless, protective measures against the daily risks of infection are obviously needed, and it is generally accepted that the simplest and probably the most effective protection is that given by washing exposed parts of the body, such as the hands and face regularly with a reliable antiseptic soap

Wright's Coal Tar Soap has enjoyed the confidence of the medical profession for health protection for over 70 years It has substantial antiseptic and antipruritic qualities, and is made from the costliest materials obtainable It is the only soap in the world to contain 'liquor carbonis detergens' (Wright's), the valuable skin therapeutic recommended by leading dermatologists An investigation by the Institute of Industrial Psychology reveals that more doctors *themselves* use Wright's than any other brand of *toilet soap* *You are safe in recommending* Wright's to your patients—and in using it in your own practice

WRIGHT'S COAL TAR SOAP

The Safe Soap

Wright Layman & Umney Ltd 44 to 50 Southwark Street S.E.1

For the
EARLY PREVENTION
of
VITAMIN & MINERAL DEFICIENCY
IN INFANTS

It is now a widely recognized fact that infants need vegetable food as early as possible in order to balance and augment the usual milk diet The difficulty, hitherto inseparable from vegetable in any form, has been the intestinal disturbance—notably diarrhœa—of which inability to digest the tough fibrous tissue surrounding the food cells is the primary cause

By the Libby process of Homogenization this fibrous covering is broken up into fine particles which provide non-irritant bulk and smooth, easy elimination The nutriment is of course at the same time released so that it comes into direct contact with the digestive enzymes

There are six scientifically formulated combinations of Cereals Vegetables and Fruit in Libby s Homogenized Foods which can be prescribed in any case where Vitamin and mineral deficiency is indicated and have been given successfully to infants as young as 12 to 8 weeks

A partial analysis of one combination set out in the table below, shows how the deficiencies in any one vegetable are compensated for by the values in the others

Partial Analysis of a Group of Vegetables

	Protein	Fat Per Cent	Carbohydrates	Calcium	Phosphorus Mg per 100 gms	Iron	Vitamin A	Vitamin B	Vitamin C	Vitamin G
SPINACH	2 1	0 3	3 2	67	68	2 5	— — —	— —	— — —	— —
CARROTS	1 1	0 4	9 3	56	46	0 6	— — —	— —	— —	— —
PEAS	3 6	0 2	9 8	28	127	2 0	— —	— —	— — —	—

Libby's
HOMOGENIZED FOODS
VEGETABLE - CEREAL - FRUIT - SOUP

Samples together with clinical data and laboratory reports will be gladl supplied upon request to Messrs Libby, McNeill & Libby Ltd, 15, Lime Street, London, E C 3

THE MEDICAL CASE FOR A WHOLE WHEAT CRISPBREAD

*

WHEAT has always been Man's first choice among the cereals, whenever climatic conditions did not prevent his getting it. That remains true of all bread, either white or wholemeal, either soft or biscuit-crisp. And Vita-Weat, the wheaten crispbread with the WHOLE of the wheat left in it, has advantages which entitle it to a very high place among the staple foods of the world.

ITS CALORIFIC VALUE

Bread is *the* 'energy component' and Vita-Weat, since it contains only 3 per cent. of water, has a fuel value nearly twice that of ordinary bread—according to *The Practitioner* its calorie value is 2,132 per lb.

Each section of such a crisp bread—each 'slice,' so to speak—has a calorie value of 37. That is to say that in meeting what is probably the greatest requirement of a national staple food Vita-Weat is *almost twice as effective as the softer kinds of wheaten bread.*

STARCH AND DIGESTION

A crisp bread, obviously, calls for a more thorough chewing than a soft 'crumb' bread and salivation is therefore more healthily promoted. The starches and cellulose in Vita-Weat are also 'converted' into a more digestible form by the special processes which go to make a good crispbread—just as toast and crust have become greatly more digestible than bread in its quite unconverted' starchy form. While *all* the wheat berry is used the bran and fibre are thoroughly di-integrated.

The result is, therefore, that the weight which quantities of unconverted starch places on the digestion is almost entirely eliminated where Vita-Weat has been prescribed.

VITA-WEAT AND ITS ADVANTAGES

In addition to these great advantages of superior fuel-value and digestibility Vita-Weat retains the 'protective' elements of the wheat-berry which are frequently rejected in the 'refining' of white flours. Proteins, vitamins and minerals in which bread is normally deficient are present and the 'balance' of this crispbread as a food is therefore increased.

The use of Vita-Weat can be shown to be especially desirable in cases of mild anæmia, liability to infection, lack of appetite, poor digestion, diabetes, obesity and as a food of 'protective' value to the teeth.

A little booklet has been prepared for the medical profession briefly summarising the medical case for a whole wheat crispbread and it will gladly be sent post-free to any doctor on application to Peek Frean & Co., Ltd., Keetons Road, London, S.E. 16.

Vita-Weat

THE BRITISH WHOLE WHEAT CRISPBREAD



Antiphlogistine BRAND DRESSING IS useful as a surgical dressing

It is antiseptic in the bacteriostatic sense, without harsh or caustic qualities It has a tonic action on the capillaries Its use obviates the need for constant redressing of a wound Its application and removal are not painful It is an aid to leucocytosis and, therefore, *a real adjunant to the natural healing process*

Made in England

THE DENVER CHEMICAL MFG CO, 12, Carlisle Rd, London, N W 9

GLANOID

GROWTH FACTOR

OF THE

ANTERIOR LOBE OF THE PITUITARY GLAND.

Clinically the growth hormone is indicated in cases of stunted growth or dwarfism occurring before the closure of the Epiphyses

The preparation of "Glanoid" Growth Factor is practically free from gonadotropic hormones and is especially suitable for children

Standardised physiologically, the assayed potency of the "Glanoid" Growth Factor is 100 growth units per c c

"GLANOID" GROWTH FACTOR IS SUPPLIED IN 5 c c RUBBER CAPPED VIALS.

Write for literature to –

THE Armour Laboratories
(ARMOUR AND COMPANY LTD.)
ARMOUR HOUSE • ST MARTINS LE GRAND • LONDON • E C 1

Telephone National 2424 *Telegrams* "Armosata Cent" London

'BENZEDRINE'

BRAND

TABLETS

β-Phenylisopropylamine (Isomyn) Sulphate

Prolonged Medication

Beta-Phenylisopropylamine Sulphate has been the subject of extensive clinical and pharmacological investigation Since 1930 more than eighty published articles have described its action and uses

The effects of continuous large doses of Benzedrine Brand Tablets were recently reported in the *New Eng Jour Med* (217 696 1937) The author concludes

> "My experience supports the experience of others that benzedrine sulfate, when used in the proper manner, has no apparent permanent deleterious action All ill-effects noted thus far have been largely of minor character and only temporary There is no evidence of habit formation"

The drug has shown special promise in the following conditions —

NARCOLEPSY

POST-ENCEPHALITIC PARKINSONISM

ASTHENIC AND DEPRESSIVE STATES

GASTRO-INTESTINAL SPASM

A sample and the latest literature will be sent to any interested physician

Distributed by

MENLEY & JAMES LTD, 64, HATTON GARDEN, LONDON, E C 1,

for Smith, Kline & French Laboratories, owners of the Registered Trade Mark, Benzedrine

INDICATIONS FOR 'SANATOGEN' No 4

General Debility

"91% subnormal"

found the Pioneer Health Centre at Peckham.

The physicians responsible for the celebrated Pioneer Health Centre at Peckham recently examined 1530 individuals, composing 500 families Of these, 8 per cent were under medical treatment for recognised disease, but of the remainder only 9 per cent were perfectly healthy, whilst 1270 persons were found to "have something the matter, and to be doing nothing about it"—most of them believing themselves to be well This widespread subnormality would seem to be attributable to urbanisation and industrialism on the one hand, and to faulty nutrition on the other Experience has shown that the body's disease-resisting capacity is greatly increased by the regular use of 'Sanatogen'—a carbohydrate-free product of 95 per cent pure milk casein, with 5 per cent sodium glycerophosphate 'Sanatogen' is easily digested and quickly absorbed It strikingly promotes healthy nervous functioning and the harmonious interplay of the endocrine glands

'SANATOGEN'

Casein and Sodium Glycerophosphate

all chemists price 2/3 to 19/9

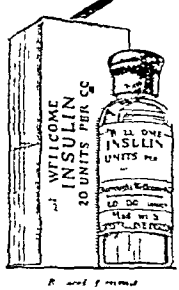
DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants teaspoonful added to each bottle feed

Clinical samples and literature available on request to

GENATOSAN LTD., LOUGHBOROUGH, LEICESTERSHIRE.

Insulin

Supreme in quality and reliability



TRADE MARK **'WELLCOME' INSULIN**

Made with pure crystalline insulin A triumph of many years of patient research

20 Units per cc 5 cc phials 1 6 40 Units per cc 5 cc phials 2 10
cc 10 cc 2,10 80 cc 5 cc 3 6

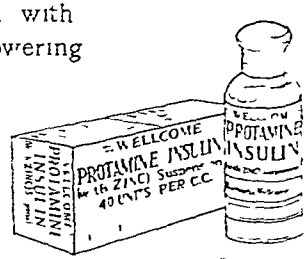
TRADE MARK **'WELLCOME' PROTAMINE INSULIN (with ZINC)**

Suspension

Injected as an alternative to or in association with unmodified insulin to prolong the blood-sugar lowering action Quantity may be so adjusted as to maintain the patient on a single daily dose

40 Units per	cc	5 cc phial	2 4
	cc	10 cc	4 6
80	cc	5 cc.	4 6

London Prices to the Trade Net Prices



BURROUGHS WELLCOME & CO LONDON

Address for correspondence SNOW HILL BUILDINGS E C 1

Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W 1

Associated Houses

NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

H 3669 COPYRIGHT

Testimony by members of the Medical Profession . . .

Read what a doctor says —

"I may say that I frequently recommend 'Typhoo' tea to patients who cannot take the common varieties without the production of dyspepsia" M R C S, L R C P

The above is one of many hundreds of testimonials received

Medical men and women, throughout the country, are recommending our pure "Typhoo" tea as indicated by the daily despatch of hundreds of samples which doctors direct us to send to their patients.

Delicious

"Ty-phoo" TEA

is so mild that it does not cause indigestion

Further

you save by using "Typhoo for being so rich in 'leaf-edge" it "goes just half as far again' as coarse astringent tea

Over 18 000 DOCTORS use "TY PHOO" in their own homes

Write to

Sumner's Ty-phoo Tea Ltd., Birmingham, 5, for a FREE sample

(This offer applies only to the British Isles We regret that we cannot send 'Typhoo tea abroad)

"Vitamin B_1 deficiency an outstanding fault

in the diet of many millions of people"

(*B M J*, 16 *Oct*, 1937, *p* 753)

The reduction in Vitamin B_1 intake, due to changes in dietary habits during the last hundred years, normally amounts to at least 50 per cent, and may be as much as 70 per cent It has been demonstrated, both experimentally and clinically, that a shortage of Vitamin B acts as a limiting factor in the maintenance of health and nutrition, and often results in gastro intestinal disorders, loss of appetite, indigestion, constipation and, if long continued, to neuritis and arthritis

The logical way to rectify such shortage is to restore to the diet the Vitamin B-containing substance whose removal is responsible for the deficiency

This substance is available in the form of Bemax

For years it has been the policy of the proprietors of Bemax to ensure its Vitamin B_1 activity by biological assay of *every day's output* So far as is known, Bemax is the only food product for which such a claim is or can be made

The quantity of Vitamin B_1 supplied by the normal daily dose of Bemax—one tablespoonful—is 200 International Units, an amount sufficient to raise a deficient diet to an optimal level

The normal daily dose of Bemax supplies, in addition to Vitamin B_1, significant quantities of Vitamin B and B_2, Copper, Iron and Phosphorus as well as rich quantities of Vitamin E and other essential dietary elements

Bemax is an entirely natural product consisting only of stabilised wheat germs selected for their Vitamin B_1 activity with no addition whatsoever Clinical sample and literature on request The Bemax Laboratories, 23, Upper Mall, Hammersmith, W 6

Sterility and Habitual Abortion

The increasing use of Vitamin E for habitual abortion and sterility of dietary origin demands a wheat germ oil of proven high activity and of stable Vitamin value Such an oil is available for the medical profession in Fertilol

FERTILOL

Wheat Germ Oil Capsules

A highly active source of Vitamin E

A complimentary box of Fertilol Capsules and brochure sent on request

Vitamins Ltd.

(Dept B 61), Upper Mall, London, W 6

BRITISH MEDICAL JOURNAL

LONDON SATURDAY JULY 9 1938

A SURVEY OF PROSTATIC ENLARGEMENT AND ITS TREATMENT*

BY

KENNETH WALKER, F R C S

Genito Urinary Surgeon Royal Northern and St Paul's Hospitals London

The fact that I propose to give a general survey of prostatic enlargement and note any advances that have been made in our understanding of it and in our methods of treating it, is an indication that I have reached that time of life at which a man is prone to look back into the past and to contrast what he thought once with what he thinks now And in spite of the big gaps that still remain in our knowledge and of the imperfections of our treatment this survey will give cause for satisfaction The last ten years have witnessed a great activity not only in our surgery but also in our knowledge of the aetiology of prostatic enlargement We have made definite progress and unless I am mistaken are on the threshold of still greater advances

Some sixteen years ago I had the honour of delivering a Hunterian lecture before the Royal College of Surgeons on The Nature and Causes of Old Age Enlargement of the Prostate When I came to assess the result of my two years work on this subject it amounted to little more than an assertion that every theory that had so far been advanced to explain the nature and causes of prostatic enlargement was inadequate We were not only in ignorance of its aetiology we did not even know what it was The only positive statement in my lecture was the following which I give verbatim

> The close dependence of the prostate on the ductless glands during its period of development affords sufficient ground for considering carefully the possibility that enlargement may be associated with some change in the endocrine system The menopause in the female is generally accompanied by a temporary loss of endocrine balance and it is not improbable that a similar state of affairs may arise during the period of sexual decline in the male The condition of the endocrine glands in cases of prostatic enlargement offers a fruitful field for research

This at the time was a new point of view Up till then enlargement of the prostate had been considered to be an inflammatory lesion (Czechanowsky and Rothschild 1903) an adenoma (Cohnheim Rindfleisch and Velpeau) or a form of degeneration associated with arteriosclerosis (Launois 1882) My suggestion that it might be the result of a disturbance of the endocrine balance was a blind shot that modern research has shown to have been very near the mark I did not know at the time that Paul (1910) of Liverpool had twelve years previously been struck by the resemblance between the enlarged prostate and involutionary cystic mastitis and had suggested that enlargement was an involutionary lesion similar to that of the female breast at the time of the menopause

It is difficult to say what particular subsequent research was responsible for establishing beyond doubt the endocrine factor in enlargement but if emphasis is to be placed on the work of any one researcher it would have to be on that of Lacassagne in 1933 While experimenting on the carcinogenetic powers of various sterols Lacassagne found that if oestrone was administered over long periods to mice it produced an overgrowth of the dorsal prostatic lobes This interesting discovery was confirmed independently by de Jongh (1933) by Burrows and Kennaway (1934) and by other workers

Care must be exercised in applying these results to the problems of human enlargement The dorsal prostatic lobe of a mouse is a specialized gland secreting a semen coagulant There is no true homologue of this in man Zuckerman and Groome (1937) have however shown that prostatic enlargement can be produced in dogs by injections of oestrone and that the histology of this artificially produced enlargement is similar to that which often occurs spontaneously in this animal Parkes and Zuckerman (1935) have also studied the histology of the oestrone stimulated prostates of monkeys and found that they undergo a fibro muscular overgrowth and a stratification of the uterus masculinus

These experiments suggest that enlargement of the prostate in man may also be due to the action of an excess of oestrogenic substance It has of course long been known that the male body forms oestrogenic as well as male hormones and that both of these substances could be extracted from the testis It is therefore not illogical to suppose that an upset in the normal balance between these two antagonistic principles may be the cause of prostatic enlargement But so far no direct confirmation of this theory has been obtained from any quantitative estimate of the hormones formed by sufferers from prostatic enlargement Hamilton and his co-workers (1936) failed to extract any oestrogenic substance from seven enlarged prostates and Lower (1933) stated that the concentration of male hormone in the blood of prostatics was even higher than normal Buehler (1933) has however

* A paper read to the Gloucestershire Branch of the British Medical Association

asserted that this is only true of the blood of the younger prostatics, and does not apply to older patients Direct evidence is therefore still lacking that artificially produced prostatic enlargement in animals is a true analogue of the condition found in man, and we shall have to wait for further evidence before we can feel fully satisfied that we have really found the key to the riddle Our uncertainty need not, however, prevent us from attempting in the light of these animal experiments, treatment along hormonic lines This subject will now be considered

Hormonic Treatment of the Enlarged Prostate

The fact that the testicle forms both male and female hormones supplies a rationale for the old treatment of prostatic enlargement by means of castration No modern surgeon would care to revive this practice, even although in many cases it appears to have achieved its object—namely, the shrinkage of the prostate He prefers rather to aim at restoring the normal balance between the two principles by injecting male hormone De Jongh has shown experimentally that male hormone does possess the power to inhibit the action of oestrone on the prostate, and Parkes and Zuckerman (1935) have confirmed his findings in the case of monkeys Incidentally it would appear that progestin is capable of exerting the same antagonistic action as male hormone, thus supplying another example of interchangeability of hormone in the two sexes

There is plenty of experimental support, therefore for the attempt to deal with human enlargement by means of endocrine therapy either directly by injection of male hormone or else indirectly by the use of gonadotropic substances Until recently these attempts have been handicapped by the difficulty of injecting enough hormone to produce an effect, but with improvements in methods of extraction and of manufacture this difficulty is being overcome The Ciba Company have now prepared ampoules containing 50 mg of testosterone propionate in sterile oil A large supply of this has been put at the disposal of the Medical Research Council, and some half-dozen of us are testing it out on carefully investigated cases of prostatic enlargement What will be the outcome of this trial remains to be seen It must be remembered that second only in importance to the actual hormone preparation given is the method of giving it

Important work, which may have a bearing on future lines of treatment, is at present being done by Parkes Zondek and others on the rate of absorption of hormone after injection The ideal to be aimed at is to ensure a slow continuous absorption of small amounts over a long period A result that has been obtained in animals by injecting compressed tablets of hormone into the muscle It is possible therefore that new methods of administration will in the future play a part in the hormonic treatment of prostatic enlargement

The Steinach Operation

Bilateral vasectomy was used as long ago as 1890 by Lichtenstern of Upsala in the treatment of prostatic enlargement as a substitute for castration Interest in this operation was revived by the writings of Steinach in 1918 and it has since been used extensively as a treatment of both premature senility and prostatic enlargement on the assumption that it increased the output of male hormone in the testicle The original Steinach operation of ligature of the vas not having given satisfactory results Niehans in 1927 substituted for it ligature of the efferent ducts of the testicle It is difficult to see why a ligature in this situation should prove more effective than a ligature placed higher up on the vas It is even uncertain that a cutting off of the external secretion of the testicle is necessarily followed by an increased output of hormone Nevertheless Niehans and other operators have claimed many successes for this simple form of treatment

The proof of the pudding lies in the eating, the value of Niehans's operation can only be assessed by the results that are obtained from it The ingenious endocrinological arguments put forward by Niehans as a justification of his operation carry with them little conviction, for in the present state of endocrinology it is possible to bolster up almost any thesis by choosing those observations that happen to support it and rejecting those that are opposed to it We would be wise, therefore, to judge the Niehans operation by the results that follow it rather than by the endocrinological arguments that support it What, then, are the clinical results of the ligature operation that goes under the name of Steinach II? Niehans himself gives no actual statistics, but makes only the following general statement

> Since 1927 I have operated on about six hundred prostatic patients in my clinic at Clarens and in the hospitals at Vevey and Montreux, and my experience for ten years empowers me to assert that Steinach's ligature II is particularly suitable for the soft adenoma of the prostate so often encountered and equally suitable for myomata whilst its influence is less apparent or *nil* on small hard fibromata In fact, the great majority of hundreds of patients with adenoma of the prostate who have undergone Steinach ligature II see their bladder troubles gradually disappear often indeed very quickly They pass urine more easily and in greater quantities, consequently less often Strangury ceases and the bladder is completely emptied The prostate decreases in size'

Niehans's statements have found little favour either in Europe or in America, and few urologists of repute have even given his methods a trial Personally I feel that, however incredulous one may be about any form of treatment, it should not be condemned offhand without any attempt having been made to assess its value I have therefore during the last two years carried out Niehans's ligature operation on a number of patients who have come to me with the express wish that I should do so Out of some thirty patients within my range of observation, three only would appear to have benefited from their operation and to have maintained their improvement Three or four others have asserted that they were slightly better and the remainder have either expressed doubt whether any change had occurred or else have been sure that it had not

The only statistics bearing on the subject of the Steinach II operation that I can find are those published by Elliot-Smith (1936) He performed the operation on twenty patients, most of whom were admitted to hospital as emergency cases with acute retention Three died and seventeen left hospital with four ounces or less of residual urine It was noticeable that several patients with complete retention passed urine on the same day as the operation This makes it likely that the improvement was due to a reflex action on the sphincter mechanism at the neck of the bladder It is inconceivable that in so short a time any change could have been effected through the influence of hormones

The Surgery of Prostatic Obstruction

It is unnecessary in this paper to describe at length the work of Bellfield and Fuller in America and of McGowan and Freyer in this country in laying the foundations of

prostatic surgery Here we are not concerned with foundations but with the building that is being erected on those foundations What form is it now taking? Where have we failed in our building and where have we succeeded?

In the *British Medical Journal* of July 20 1901 Freyer first advocated and described the technique of suprapubic enucleation of the prostate It was a crude and blind proceeding guided only by the sense of touch and entailing the insertion of a finger in the rectum After enucleation no attempt was made to deal with haemorrhage by the usual method of ligature or suture reliance being placed on the haemostatic processes of the body to bring bleeding to an end Drainage was provided for by means of a large tube inserted not in the most dependent but in the highest part of the field of operation Although the results were as a rule excellent no conscientious surgeon could feel entirely satisfied with the operation described by Freyer since it violated almost every surgical principle Obviously it could only be regarded as a stepping-stone to a more finished operation

We will now consider the efforts that have been made to get rid of the shortcomings of the Freyer technique and try to estimate what success if any has attended them

The Perineal Operation

In this country these efforts have been mainly directed to a more finished toilet of the prostatic bed and to the adoption of better methods of arresting post operative haemorrhage We have hitherto never departed very far from the original technique nor abandoned for long the suprapubic approach to the prostate In America the suprapubic route has been seriously challenged by the perineal operation elaborated by Proust, and strongly advocated by H H Young of Baltimore There are many points in its favour, notably the better drainage provided by a wound in the perineum and for a time the protagonists of the suprapubic and of the perineal routes seemed evenly matched Of late years however, the protagonists of the suprapubic operation have steadily gained ground and it is now chiefly through the influence of H H Young and of those trained in his clinic that perineal prostatectomy still remains the routine operation for the relief of prostatic obstruction in certain American clinics In this country it has never gained any hold A few of us have at one time or another been attracted by the advantages of the perineal operation and have provided ourselves with the necessary equipment for carrying it out but at the end of a year or two this equipment has usually found its way into our surgical lumber rooms

Suprapubic Prostatectomy

The first serious effort to eliminate the more obvious shortcomings of the Freyer operation was made by the late Sir J Thomson Walker in 1928 By means of a larger suprapubic incision, introducing a suitable retractor and placing the patient in the exaggerated Trendelenburg position after the prostate had been enucleated the field of operation could be inspected torn shreds of tissue cut away so as to reduce subsequent infection and bleeding points ligatured Haemostasis was completed by the insertion of a continuous suture along the posterior segment of the bladder outlet The originator of this open operation hoped by these means to reduce post operative haemorrhage and sepsis to a minimum and to banish entirely that occasional sequel to operation post-prostatectomy obstruction

Ten years have elapsed since Thomson Walker introduced his open operation and experience has shown that it affords no certain guarantee against the occurrence of any of the accidents that its originator hoped to prevent Severe haemorrhage sepsis and post prostatectomy obstruction have all occurred after an open operation Their incidence may be less frequent but none of these accidents has been entirely eliminated and many of us have come to the conclusion that the extra half hour required for the open operation is not justified by the benefits it confers Where speed is necessary the old Freyer operation still remains preferable A glance at the last annual surgical report of St Peter's Hospital in which the results of the various operations performed there during the year are admirably set out serves to confirm this view There it will be seen that the highest mortality rate is that which follows the performance of the Thomson Walker operation Undoubtedly its originator was right in attempting to eliminate the defects of the Freyer operation but unfortunately his efforts to do so have not met with the success that he hoped for

The Harris Technique

To a worker in Australia—namely the late S H Harris (1933 1935) of Melbourne—must be accredited the next serious effort to get rid of the glaring defects of the Freyer technique Dissatisfied with the half measures of Thomson Walker he aimed by means of carefully placed sutures to arrest haemorrhage so completely that the bladder could be closed by primary suture Young's boomerang needle a clever invention that had been originally devised to aid in the difficult task of closing fistulae left by the perineal operation provided him with the instrument necessary to his purpose With the boomerang needle it was possible to take a big bite of the tissues round the prostatic cavity to underpin all bleeding points and to reconstitute the neck of the bladder The suture on which Harris placed most emphasis was a median posterior suture so inserted as to carry a tongue of mucous membrane and muscle deep down into the prostatic cavity This trigonization suture as he termed it served to re form the floor of the urethra Lateral stitches were then inserted in such a manner as to draw together the walls of the cavity and to help to obliterate it Drainage was provided for by an indwelling urethral catheter anchored in position by means of a stitch passed through its eye and brought out through the abdominal wall The bladder was then closed by primary suture Harris claimed excellent results from his operation and published a remarkably low mortality rate That ugly trio of the Freyer operation—haemorrhage sepsis and post prostatectomy obstruction—had apparently been conquered and the author of the new operation waited confidently for his colleagues blessing on the new technique

The urological world was slow to take note of his writings In opening a discussion on prostatectomy at the Centenary Meeting of the B M A held in London in July 1932 Mr Swift Joly commented unfavourably on the Harris operation He expressed the opinion that attempts to perform plastic operations on the prostatic cavity resulted only in an increase of sepsis Other speakers were inclined to agree with him Harris was bitterly disappointed

Soon afterwards the tide began to turn Clifford Morson and Ogier Ward gave his method a trial and later published good results from the new technique Other British urologists followed suit, and at the annual meeting

of the Urological Section of the Royal Society of Medicine a complete reversal of opinion was found to have taken place It was the majority of speakers who now upheld the Harris operation, the minority who opposed it But it was very noticeable that everyone who was using the new operation had considerably modified Harris's technique, one having eliminated the posterior trigonization suture, another the postero-lateral, and a third the antero-lateral Moreover, only a few had dared to follow Harris's lead in carrying out primary closure of the bladder as a routine measure Usually a small suprapubic drainage-tube was inserted and retained during the first few days of convalescence

Present Position of the Harris Operation

Operations are subject to the same laws as those that control other human inventions, at first a new operation meets with a certain resistance, and then if it has any merit it is acclaimed as a great advance that will supersede all other methods Finally it reaches the period of equilibrium or of decline it either takes a permanent place in the repertoire of the surgeon or else sinks into oblivion This I believe will be the history of the Harris technique, but at the present moment I am not prepared to say what the final stage will be I am sure, however, that in the exact form in which Harris planned it his operation will not survive, for it suffers from a great defect, a defect from which the Freyer operation is altogether free In inserting some of the sutures the boomerang needle passes well outside the limits of the urinary tract, and is therefore capable of carrying with it infection—if infection there be—into the cellular tissues of the pelvis That this is not merely a theoretical objection but a very real danger is shown by the fact that practically every operator who has used the Harris technique at all extensively has met with cases of pelvic cellulitis It can of course be urged that pelvic cellulitis may occur after every type of prostatectomy, but the consensus of opinion favours the view that it is more frequent after the employment of the Harris technique This is a very serious objection, and Harris's insistence on the necessity for the careful preoperative treatment of infection does not remove it However carefully we prepare our patients we cannot guarantee that we have rendered the bladder aseptic

A second shortcoming of the operation is that while the lateral sutures certainly diminish bleeding they do not obliterate the prostatic cavity All that they do is to draw the bladder together over the hole left by the prostate, unless, of course, the boomerang needle is inserted so wide that it goes well outside the prostatic capsule Such a big excursion of the needle not only increases the risk of pelvic cellulitis but also when the stitches are tied, turns in a great part of the base of the bladder and causes a marked deformity of that viscus Although Harris himself showed no hesitation in inserting these widely placed sutures I cannot feel that so gross a deformity of the bladder is desirable

Because of these weak points in the Harris operation some of those who had previously adopted it have given it up while others have so greatly modified the method that it can no longer be called a Harris operation My own position is that I still employ a modified Harris technique but only in those favourable cases in which I am fully satisfied that the patient is able to support a longer operation When a two stage operation is advisable or when I feel any doubt about the patient's capacity to withstand a more formidable procedure, I have fallen back again on an operation that in its essentials resembles the old defective method of Freyer For me the technique of Harris, which at one time I hailed as a great advance in prostatic surgery, appears to be a method of definite but of limited utility I look upon it as a portent of things to come rather than as a method that has already arrived It indicates the lines along which we must continue to work—a direction and not a goal

On the Continent and across the Atlantic the Harris method has met with no favour Efforts to advance in prostatic surgery have in the United States taken another direction, more particularly the development of perurethral methods of treatment This important branch of prostatic surgery will now be discussed

Perurethral Operations on the Prostate

Again it will be unnecessary to deal with the foundation of perurethral surgery laid by Bottini, Civiale, Young, Caulk, and Luys, for we are mainly concerned with modern developments After the usual period of resistance this method of dealing with prostatic obstruction received widespread recognition rather suddenly By some enthusiasts it was even proclaimed to be a method that within a decade would entirely replace all others Prostatectomy would then retain merely a historic interest This has only proved to be approximately true in the case of the Mayo Clinic, at which about 98 per cent of prostates are now being dealt with by perurethral methods Elsewhere it has been felt, first, that resection is not a universal substitute for prostatectomy but a valuable alternative to be used in certain cases and, secondly that it is not a minor proceeding immune from all dangers At a very early stage after the spread of perurethral methods disturbing reports of deaths from haemorrhage and sepsis destroyed the illusion that the resectoscope was an instrument that could be used by all and sundry with light hearted enthusiasm Even to the experienced urologist a perurethral resection often proves to be a difficult operation In the hands of the inexpert the resectoscope can be an instrument that is more deadly than the knife Years of practice are necessary in order to become master of it

As in the case of prostatectomy, the chief dangers of perurethral resection have proved to be haemorrhage and sepsis, and it has been to eliminate these, and at the same time to increase the facility with which prostatic tissue is removed, that our efforts have in the main been directed All techniques that entailed the leaving behind of a large area of coagulated tissue have now been abandoned on account of the sepsis that they encouraged Of the many instruments that have been devised two have now definitely gained the ascendancy, these are the McCarthy resectotome and the Thompson punch In this country we prefer a modification of the former instrument, not necessarily because it is the better weapon, but because we find the direct-vision ocular system of the Thompson punch more difficult to use From the point of view of sepsis however, the Thompson punch, which employs a cold knife for cutting and only uses a coagulating current for stopping haemorrhage, is probably the better instrument

On the whole it may be said that in this country urologists have reached an agreement not only as to the best method of carrying out perurethral resection but also as to the indications for doing so Only in America do we find discrepancies of opinion so wide as to result in the perurethral method being used or

exceptionally at one clinic and as a routine procedure in another Here we regard it as a treatment that is suited to certain prostates and to certain circumstances Perurethral resection is no longer on its trial but has established for itself a definite place in the surgery of the prostate

Conclusions

Having surveyed the work that has been carried out by innumerable researchers in the laboratory and in the operating theatre during the last twenty years I feel that we have no reason to be dissatisfied with the results We have made definite progress both in our understanding of the aetiology of enlargement and in our methods of dealing with it The investigations of the biologist and of the biochemist are now leading us in a direction which may well mean that within a few years we shall be able to prevent its occurrence and possibly cure the condition once it has arisen In the meantime close co operation between the clinicians and the designers of instruments has provided us with a valuable alternative method of surgical intervention in the shape of perurethral resection Finally it may be said that even if the efforts of prostatectomists to rid the original Frever operation of its shortcomings have not so far met with success there is no reason to disbelieve that in the end this also will be achieved

BIBLIOGRAPHY

Buchler F (1933) *Z ges exp Med* 86 650
Burrows H and Kennaway N M (1934) *Amer J Cancer* 20 48
Caulk J R (1934) *Surg Gynec Obstet* 58 341
Chechanowsky S (1903) *Anatomical Research on Prostatic Hypertrophy*
Elliot Smith A (1936) *Proc roy Soc Med* 29 825
Frever P (1901) *British Medical Journal* 2 125
Hamilton S B Deming C L and Allen E (1936) *Proc Soc exp Biol N Y* 34 193
Harris S H (1933) *Brit J Surg* 21 434
—— (1935) *Austral New Zeal J Surg* 4 226
de Jongh S E (1933) *Acta brev Neerl Physiol* 3 112
—— (1935) *Arch int Pharm Ther* 50 348
Lacassagne A (1933) *C R Soc Biol* Paris 113 590
Launois P E (1885) *These de Paris*
Lower W E (1933) *New Engl J Med* 208 872
Niehans P (1936) *Lancet* 1936 1 307
—— (1937) *Presse méd* 45 1858
Parkes A S and Zuckerman S (1935) *Lancet* 1 925
Paul F T (1910) Ibid 2 294
Swift Joly J (1932) *British Medical Journal* 2 192
Thomson Walker J (1930) *Lancet* 1 1165
—— (1936) *Genito-Urinary Surgery* London
Walker Kenneth (1922) *British Medical Journal* 1 297
Zuckerman S (1936) *Proc roy Soc Med* 29 1557
—— and Groome J R (1937) *J Path Bact* 44 113

The fourth annual meeting of French radio electrologists will be held in the physics theatre of the Paris Faculty of Medicine from October 5 to 8 Professor Joliot-Curie will deliver an opening address on the biological applications of the neutrons and the artificial radio elements including the therapeutical hypotheses concerned Professor Didier will speak on the radiological methods of examination of sections of organisms Professor Baudouin and Dr Fischgold will present a communication on the bio-electrical phenomena of the nervous system and their possible applications in practice Dr Gaston Daniel of Marseilles will discuss radiotherapy as an antidote to inflammation Lectures on various aspects of biophysiology will be given by Professors Lamarque Soula Marques and Strohl of Djourno Visits will be paid to institutes and hospitals and there will be entertainments and excursions Full information may be obtained from Dr Delherm 1 Rue Las Cases Paris 7e

ANAEMIA AND THE GASTRO-INTESTINAL TRACT*

BY

JANET M VAUGHAN D M, M R C P

Senior Assistant in Clinical Pathology, British Postgraduate Medical School

It is recognized to day that the commonest cause of anaemia is a lack of one or other of the essential haemopoietic principles The known haemopoietic principles are (1) iron (2) the P A substance in liver effective in Addisonian pernicious anaemia (3) vitamin C Minute quantities of other minerals such as copper cobalt and manganese may be required for normal haemopoiesis but are usually present in sufficient quantities even in poor diets since only extremely small amounts are needed Thyroxine is often included but its effect is probably an indirect one (Bomford 1938) The body is dependent for its supplies of these haemopoietic principles upon the food ingested and subsequently digested and absorbed in the intestinal canal It is therefore not surprising that there is a close relationship between anaemia and disturbances of gastro intestinal function since abnormalities in food intake digestion and absorption must result in a deficiency of these principles It is essential in treating a patient with a deficiency anaemia to recognize not only the type of anaemia—that is whether it is due to lack of iron liver or vitamin C—but also to determine how the deficiency is brought about so that an attempt may be made to correct the disordered mechanism It must also be remembered that an adequate supply of haemopoietic principles may be converted into an inadequate supply if the demands are increased Thus iron-deficiency anaemias are extremely rare in men unless there is some source of chronic haemorrhage On the other hand iron deficiency anaemias are common in women of the working classes because the iron content of the diet is not sufficient to make good the continuous iron drain of normal menstruation (Davidson and Fullerton 1938)

For purposes of discussion the disturbances of gastro intestinal function that may convert an adequate into an inadequate diet so causing what Castle has called a conditioned deficiency may be grouped as follows (1) haemorrhage (2) deficiency of gastric digestion (3) deficiency of intestinal absorption (4) production of toxic substances So far as is known such factors influence only the utilization of iron and the P A principle There is no evidence that intestinal abnormalities affect the utilization of vitamin C

Haemorrhage

The commonest sources of gastro intestinal haemorrhage are bleeding gastric and duodenal ulcers and haemorrhoids The latter especially in men are an important cause of severe iron-deficiency anaemia It should always be remembered that in tropical countries bleeding from hookworm infestation associated with a poor diet is a possible cause of hypochromic anaemia An analysis of the stools for occult blood is an essential investigation in all cases of anaemia of unknown aetiology

Deficiency of Gastric Digestion

Deficiency of gastric digestion may be due to (*a*) organic lesions (*b*) diminished secretion of hydrochloric acid (*c*) diminished secretion of the intrinsic factor of Castle

* A paper read to the Exeter Division of the British Medical Association on March 10 1938

(a) ORGANIC LESIONS

Within the term "organic lesions" are included new growths of the stomach and complete or partial gastric resection. Such lesions cause anaemia in part by diminishing gastric secretion and in part by altering intestinal function. They respond well, so far as the blood picture is concerned, to treatment with iron and liver extract.

(b) DIMINISHED SECRETION OF HYDROCHLORIC ACID

There is a high incidence of achlorhydria associated with all types of anaemia. It is invariably present in Addisonian pernicious anaemia, and is often found in iron deficiency anaemia of women and infants and in anaemia associated with hookworm infestation, sepsis, and nephritis. It was thought at one time to play such an important part in the aetiology of the iron deficiency anaemias that the type occurring in women was called by some workers "achlorhydric anaemia". The evidence available to-day suggests that inability to secrete acid favours the development of iron deficiency, especially when the diet is defective, but that iron deficiency often occurs when the acid secretion is excellent. Barer and Fowler (1937) have recently made elaborate iron-balance observations on people with and without achlorhydria. They found that people with achlorhydria retain less iron on an ordinary diet than those without achlorhydria. Medicinal doses of hydrochloric acid do not increase retention. It must be remembered, however, that such acid is quickly neutralized by the stomach contents. If food is given buffered to an acid *p*H (Mettier and Minot, 1931) iron is more readily absorbed than if it is given buffered to an alkaline *p*H. Barer and Fowler (1937) found that when large quantities of iron are given the amount retained was unaffected by the gastric acidity, being the same approximately in people with normal acid secretion and in those with achlorhydria. These observations suggest, therefore, that in practice the use of hydrochloric acid will not help the absorption of iron either from the ordinary diet or from medicinal supplies. It is, however, impracticable and also unnecessary to give a diet buffered to an acid point, since medicinal iron administered in large amounts appears to be well absorbed.

As a result of their observations Barer and Fowler suggest that in iron deficiency anaemias there may be a lack of some as yet unidentified substance in the gastric secretion. Evidence on this point is at present conflicting and unsatisfactory.

(c) DIMINISHED SECRETION OF THE "INTRINSIC FACTOR OF CASTLE"

Addisonian pernicious anaemia is dependent upon a deficiency of such a substance, called by Castle "the intrinsic factor". In a series of classical experiments Castle showed that if beef-steak was fed to patients with pernicious anaemia the blood picture was unaffected. If normal gastric juice was fed the blood picture was still unaffected, but if beef-steak predigested with normal gastric juice was given the blood picture became normal. Predigestion with gastric juice from patients with pernicious anaemia, or with hydrochloric acid and pepsin alone, was ineffective. He concluded, therefore, that the fundamental abnormality in pernicious anaemia was an inability on the part of the stomach to secrete some principle essential for the digestion of certain foodstuffs and the consequent elaboration of the active liver principle. It is probable that inability to secrete the intrinsic factor is not absolute—that is that some patients are able to excrete small quantities and that the amount may vary from time to time (Goldhamer 1936). This would account for the occurrence of spontaneous remissions before the days of liver therapy. Goldhamer (1936) goes so far as to suggest that there is a constant relation between the blood level and the volume of gastric secretion. The cause of this inability to secrete the "intrinsic factor" remains obscure. Gastroscopic examination of the stomach shows atrophic gastritis affecting the fundus and cardiac portions in pernicious anaemia and to some extent in iron-deficiency anaemias. Histological examination of the stomach in pernicious anaemia shows atrophy both of mucosa and of muscle coats (Magnus and Ungley, 1938), affecting the fundus and cardiac portions only. Since all experimental evidence (Meulengracht, 1935) suggests that the intrinsic factor is secreted by the pyloric glands and Brunner's glands, this anatomical abnormality is at present difficult to interpret. There is no evidence that after treatment the power to secrete the intrinsic factor ever returns to normal, though it may improve slightly. Goldhamer (1937), who has estimated the quantity of gastric juice before and after liver treatment, has obtained only an insignificant increase. The average gastric-juice volume in normal subjects he found was 150 c.cm. per hour, in pernicious anaemia patients it was 20 c.cm. in relapse and 46 c.cm. in remission. It is therefore essential to continue treatment with liver extract indefinitely in true Addisonian pernicious anaemia.

Anaemias associated with gastric dysfunction are usually simple—that is, there is lack of the P.A. factor alone or of iron alone. Therapy takes the form therefore of either liver extract or iron. This is true particularly of iron deficiency. In practice it is sometimes found that patients with Addisonian pernicious anaemia have also some degree of iron deficiency. The red cell count reaches a level of 4,000,000 per c.mm. or slightly higher when liver extract is given in adequate doses, but even with increased dosage it will not rise further. Treatment with large doses of iron in addition to liver extract however will often result in satisfactory haematological improvement. Realization of this is important, since it is absolutely essential, if subacute combined degeneration is not to develop or grow worse when already present that a red cell count of 5,000,000 per c.mm. and a haemoglobin of 100 per cent. should be maintained in all patients with Addisonian pernicious anaemia.

Deficiency of Intestinal Absorption

It is known that in many patients hyperchromic anaemia responds better to liver extract given by parenteral injection than to liver extract given by mouth, while anaemia is often found in association with various disturbances of intestinal function. It is concluded, therefore, that failure to absorb haemopoietic principles may play a part in the development of anaemias. The following abnormalities of intestinal function are thought to hinder absorption: (*a*) changes in the *p*H of the intestinal contents, (*b*) increased motility, (*c*) abnormalities of muscle tone, (*d*) abnormalities of intestinal mucosa.

(a) CHANGES IN *pH*

Gastric secretion of hydrochloric acid, so far as is known at present, regulates the *p*H of the intestinal contents. Evidence showing that small doses of iron are better absorbed from an acid medium and that unless food is given in a buffered medium it is impossible to alter the *p*H of the intestinal contents has been already discussed.

(b) INCREASED MOTILITY

Increased motility of the intestinal contents is a more frequent cause of anaemia than is generally recognized Following gastric operations such as gastro enterostomy gastrojejunostomy or partial resection anaemia often develops Many studies have been made as to the cause of this anaemia but only one abnormality has been demonstrated to occur at all constantly Hartfall (1934) found in a large series of such cases that on screening a barium meal appeared to fall through the small intestine—that is there was greatly increased motility Little time is available therefore for absorption of essential principles when they occur in normal amounts If given in large quantities they are apparently absorbed more easily The mechanism of this increased absorption in the presence of large amounts is not clear Such increased motility is probably a factor also in the production of the anaemia of sprue and the anaemias associated with severe diarrhoea of any type

(c) ABNORMALITIES OF MUSCLE TONE

In the case of sprue abnormalities of muscle tone and movement have been demonstrated during a relapse and have been shown to be absent during remissions (Mackie Miller and Rhoads 1935) No increased motility was demonstrated, but in a series of seventeen cases the following changes were almost invariably present

(i) Great variation in contour and size of the lumen (ii) segmentation of the column of barium (iii) pocketing of barium (iv) mucosal changes shown by a distorted mucosal pattern Studies by barium enema frequently demonstrated a dilated and somewhat redundant colon Following treatment, considerable if not complete improvement was noted Since many patients with sprue respond better to liver extracts when given by injection than when given by mouth it is thought that some failure of intestinal absorption must be present probably dependent at least in part on these demonstrable changes in muscle function

(d) ABNORMALITIES OF THE MUCOSA

Anaemia is common in all forms of colitis Here probably mucosal as well as muscular abnormalities play their part in hindering absorption of essential foodstuffs

In idiopathic steatorrhoea there is failure to absorb many essential substances from the intestinal canal not only haemopoietic principles The cause of such failure remains obscure Other intestinal abnormalities such as multiple resection multiple adhesions stenosis of the canal or fistula formation may all result in anaemia presumably through interference with intestinal absorption through one or other of the abnormalities discussed

It has been suggested that lack of ascorbic acid may result in a failure of intestinal absorption especially of iron It is known that apart from glutathione ascorbic acid is the most powerful reducing agent present in the body (Hopkins and Morgan 1936) The mucosa of the small intestine is unusually rich in ascorbic acid and since iron is absorbed in the ferrous form it has been thought that a deficiency of this powerful reducing agent in the intestinal canal might result in a failure to absorb sufficient quantities of iron (Macfarlane 1936) This view however at present lacks any direct experimental support

The changes in intestinal function already discussed might be expected to affect the absorption of many substances simultaneously rather than to exert a selective action This is often found to be the case A mixed type of anaemia is common in anaemias of intestinal origin—that is there is a deficiency of both iron and the P A principle The recognition of such a dual cause may sometimes direct attention to the intestinal canal when a lesion there has not been suspected Stained blood films in such cases show the small pale cells containing little haemoglobin which are characteristic of iron deficiency anaemias together with the large well coloured cells full of haemoglobin which are characteristic of P A deficiency anaemia Such cases require treatment with both iron and liver Their recognition therefore important When such a picture is seen in the stained film an intestinal abnormality should at once be suspected A special examination should be made in all patients with a known gastro intestinal lesion to discover if this dual deficiency is present It may occur with only a mild degree of anaemia but administration of both liver and iron in such cases will result in remarkable clinical improvement Such treatment has to be continued indefinitely since it can only replace a deficiency and does not affect the disturbed mechanism

Production of Toxic Substances

Recent experimental work has shown that the production of toxic substances in the intestine associated with a deficiency of certain food substances in the diet may cause anaemia possibly of a haemolytic type It may be necessary in the future to think in terms of conditioned toxicities as well as of conditioned deficiencies Rhoads (1937) found that when he fed indol to dogs on a normal diet the dogs remained well, but when he fed indol to dogs on a deficient diet a severe anaemia rapidly developed This was cured by liver extract and its onset prevented by the addition of liver to the diet Indol is a substance which may be present in the normal intestine and under some circumstances may occur in large amounts These observations are too recent to enable us to do more than note them They serve however, to emphasize the extraordinary importance of an adequate diet in maintaining normal health and are a yet further indication of the close relationship of normal gastro intestinal function to normal haemopoiesis

REFERENCES

Barer A P and Fowler W M (1937) *Arch intern Med* 59 785
Bomford R (1938) Personal communication
Davidson L S P and Fullerton H W (1935) *Edinb med J* 45 1 102 193
Goldhamer S M (1936) *Amer J med Sci* 191 805
—— (1937) Ibid 193 23
Hartfall S J (1934) *Guy's Hosp Rep* 84 285
Hopkins F G and Morgan E J (1936) *Biochem J* 30 1346
Macfarlane W D (1936) Ibid 30 1472
Mackie T T Miller D K and Rhoads C P (1935) *Amer J trop Med* 15 571
Magnus H A and Unger C C (1933) *Lancet* 1 720
Mettier S R and Minot G R (1931) *Amer J med Sci* 181 25
Meulengracht E (1935) *Proc roy Soc Med* 28 641
Rhoads C P (1937) *Proc Soc exp Biol N Y* 36 652

Cremation as the most hygienic means for disposal of the dead was advocated by Dr W G Clark deputy medical officer of health for Edinburgh at the joint conference of the National Association of Cemetery and Crematorium Superintendents and the Federation of Cremation Authorities in Great Britain held in Edinburgh last week Dr Douglas Kerr medical referee to the Edinburgh Corporation said that cremation was advancing so rapidly becoming so widespread and such extensive practical experience of the working of the present Act had accumulated that fresh legislation could be foreseen in the near future

FURTHER OBSERVATIONS ON BENZEDRINE

BY

E W ANDERSON, M D, M R C P, D.P M.

The interest in benzedrine, particularly in its use in psychiatry, would seem to justify yet another contribution to the literature The following is an account of a study of the effects of benzedrine, over a period of fourteen months or so, on a group of patients at the Cassel Hospital who were suffering chiefly from the minor forms of mental disorder

Thirty-three patients in all were given benzedrine orally in doses ranging from 5 to 45 mg In addition, eight normal subjects were given the drug Among the patients twenty-one were male and twelve female The diagnostic grouping was as follows twenty-eight depressives, two "anxiety states," three schizophrenics, and one organic (manic-depressive with disseminated sclerosis)

At the beginning of this study the pressor effect of the drug was studied as well as its central effects, and careful observations of the blood pressure and the mental state were made throughout the day The blood pressure was taken each morning at 9 o clock, in the lying and standing positions, the third reading being taken in each case The drug was then given, the variations in dosage being concealed from the patient by using tablets of a neutral substance (calcium lactate) as well, so that the same number of tablets was given each time The normal variations of the blood pressure in the individual were also determined These observations presented nothing new, and will not be discussed further After a time, therefore, we ceased to study the blood pressure alterations and devoted our interest entirely to the psychological changes, and it is these which form the main topic of this paper

After Davidoff and Reifenstein s (1937) excellent paper and a recent leading article on benzedrine in the *British Medical Journal* (1937) it is unnecessary to review the literature at length The two main effects of this sympathomimetic drug—the pressor and the central action—are now familiar Its use in narcolepsy (Prinzmetal and Bloomberg 1935, Ulrich, Trapp, and Vidgoff, 1936), post-encephalitic Parkinsonism (Solomon, Mitchell, and Prinzmetal 1937) intestinal spasm and hence its employment in gastro intestinal radiology (Myerson and Ritvo, 1936), as a vasoconstrictor in rhinology (Scarano and others, 1934) and its effect on the gastric juices (Myerson, Rinkel, and Dameshek 1936) now require no further mention A more recent non psychiatric use is in orthostatic hypotension (Korns and Randall 1937) in which favourable results have been observed it seems, however, inferior to ephedrine in the treatment of this condition Although containing a benzene ring no effect on the blood constituents has been observed either at the time or months later (Schube, Raskin, and Campbell 1937) although before this Myerson, Loman, and Dameshek (1936) had reported dramatic changes, including a polycythaemia in some cases, as well as a striking leucocytosis It would appear that still further work on this problem is required in view of these observations So far as its use in psychiatry is concerned there is fairly general agreement as to its effects, the change of mood in the direction of elation, removal of inhibition fatigue and so forth call for no further mention, but before discussing the psychological effects in greater detail the present results will be considered

The Present Investigation

The patients have been grouped in three categories (1) those showing no change mentally or physically after taking benzedrine (Table A), (2) those who appeared to benefit by it, including those cases in which the beneficial psychological effect outweighed any unpleasant physical sensations which may have occurred (Table B), and (3) those in whom it was necessary or desirable to discontinue the drug because of untoward effects or because it proved of no value (Table C) In an earlier paper I described with Dr Scott some unfavourable cardiovascular complications, the most notable of which was a transient heart block These experiences made us for a time exceedingly cautious in dosage, but we now believe this case to have been exceptional and in view of increased experience with benzedrine, together with the fact that others—for example, Prinzmetal and Bloomberg (1935)—have now given the drug continuously for long periods, in some of their cases for over a year, without mishap we have not hesitated to give larger doses Nevertheless I consider there is still need for caution in its administration and more detailed investigation of its cardiological effects in particular I agree with Davidoff and Reifenstein (1937) that it is best given under supervision in a hospital So far, despite the comparatively large amount of work which has been done, the drug is still in the experimental stage

TABLE A

No	Sex and Age	Diagnosis	Maximum Dose	Duration	Unfavourable Physical Symptoms	Psychological Symptoms
1	M aged 49	Recurrent depression (third) with paranoid features and much retardation	30 mg	One month	None	No change During period of severe retardation no change
2	F aged 34	Schizophrenia (catatonic stupor)	20 mg	One occasion	None	No change
3	M aged 44	Depression with hypochondriasis	10 mg	One day	No change	No change
4	M aged 49	Depression (agitated self accusatory)	20 mg	Two days	No change	No change
5	F aged 56	Depression (retarded)	20 mg	One day	No effect	No effect

Of the total number of patients to whom the drug was given, in fifteen or just under one half, it was found necessary or desirable to discontinue the drug In two others the drug appeared to be of no value and was discontinued essentially for this reason Some undesirable symptoms also occurred in these patients, but they were not severe enough in themselves to have justified discontinuance of the drug had there been a concomitant psychological effect of any value One patient a man (C 10), was the 'organic case' mentioned above the other, a woman, was a case of anxiety state (C 11) with numerous phobias, who had been depressed for a day or two and for whom it was thought the drug might have a beneficial effect in tiding her over this crisis In eleven

TABLE B

No	Sex and Age	Diagnosis	Maximum Dose	Duration	Unfavourable Physical Symptoms	Psychological Symptoms	Remark
1	F aged 27	Depression with obsessional and hysterical features	10 mg. Usual dose 20 mg.	Twice or thrice weekly for one year	Felt shaky. Tingling sensation over head and body. Tachycardia. Tingling sensation later got worse and she felt her heart nearly choked her. Anorexia. Pains over loins. Strangled feeling and palpitation.	Felt lively — tranquil feeling. Feeling of lightness and happiness. Sense of remoteness. Time seemed pass more quickly. Feeling of confidence and loss of self-consciousness (in particular sexes). After small or moderate doses marked decrease in depersonalization with larger doses feels drawn out of self more absorbed and more	On the whole a beneficial effect.
2	M aged 46	Depression with obsessional features (Phases of severe agitation)	30 mg.	Twice	Shakiness in legs. Dry mouth. Feeling of film on tongue noticed two hours after ingestion of drug. Later tongue felt dried up.	More composed. Treading on air. Light headed. Alteration of time experience — felt he was living in the present. Felt for first time his illness was really his fault. After 30 mg. felt as if he had had alcohol but with difference that head was clear. Later felt drowsy but on questioning this was shown to be more a feeling of absolute control. Obsessional preoccupation over bad dreams and bowels diminished. Increased talkativeness. Likes and dislikes for people heightened.	Definite beneficial effect. Disappearance of depersonalization. Definite improvement in mood. Had a bad night after.
3	M aged 33	Schizophrenia (Earlier acute attack with hallucinosis and paranoid features—now disappeared)	20 mg.	Regular for one month	None.	More toned up physically. Drive. More energy.	Doubtful whether psychotic symptoms which could be attributed to drug.
4	M aged 60	Involutional depression with prominent hypochondriasis	45 mg.	Sixty two days.	Severe pain in occipital region (probably of same nature a similar sensation associated with illness). Tachycardia and consciousness of heart's action which he interpreted as a good sign as against former unawareness, which he felt indicated trouble with heart.	Queer feelings in scalp modified favourably by drug. More cheerful. Feeling it was unnatural — not himself. After 10 and 25 mg. very elated and talkative.	Effect variable. After several days drug began to lose effect. Effect of B. benzedrine after a time. Effect of withdrawal of drug. Withdrawal of drug would probably be impossible.
5	F aged 41	Depressive psychopath with periodic severer depression with suicidal ideas, heavy spirit drinker taken to overcome inhibition	30 mg.	Frequent occasions over period of two months	Heavy feeling in epigastrium. Consciousness of heart's action.	Felt more relaxed, less depressed. More inclined to talk to people. Less energy than with alcohol. Did not regard drug as so effective. Felt drug enabled her to go through task more easily. Toward end of treatment with drug felt more depressed than usual when effect passed off — ? usual constitutional intensification of mood. This seemed more probable.	On the whole the drug had been a bad effect.
6	M aged 49	Depression with hypochondriasis (first attack)	10 mg.	Three isolated occasions, then continuously some months later for twelve days.	Increased feeling of pressure in head when drug (first course) given. When second course given some months later this symptom was not made worse.	Talked more. More assurance. Spirits risen 100 per cent. Felt a little drunk. Depression increased five hours after one dose.	On the whole had a beneficial effect.
7	M aged 28	Recurrent depression with prominent anxiety with phobias, etc.	10 mg.	Three occasions.	Palpitation and sweating. Tremulousness.	Felt drowsy and heavy headed. Alteration of time perception in direction of normal — recent past events seemed more vivid.	Doubtful whether beneficial effect.
8	M aged 51	Recurrent depression with obsessional features	30 mg.	Five weeks (thirty five days)	None.	Absolutely right as rain one might say too high all my trouble fell away. After five days on 15 mg. thought drug losing effect. Dose increased to 30 mg. and this has been steadily effective since.	Action variable in psychosphere but almost entirely favourable effect. Duration of period between dosage and psychic effect — varied.
9	M aged 49	Depressive (first attack) with obsessional colouring — i.e. inability to make decisions	10 mg.	On isolated occasions during one month.	None.	More cheerful. Not so tense. More talkative, confident, and hopeful. Felt he could deal with his problem better.	Administration of drug encouraged with definite and progressive clinical improvement.
10	M aged 49	Recurrent depression (second) self-reproach, feeling of inadequacy.	20 mg.	Two occasions.	Slight headaches and giddiness.	Drowsiness and heaviness. Seemed easier in the eyes. More confident and self reliant.	Great relief of [illegible] and much easier and [illegible] much [illegible].
11	M aged 49	Recurrent depression (second). Emotional instability, inability to concentrate. ? early organic. (Suffered from asthma)	30 mg.	Isolated occasions at first. Regularly for first night also after discharge.	Felt wobbly. Asthmatic symptoms improved and breathing easier. Some blurring of vision. Limbs ached. Slight headache.	Felt a little low. Rather more cheerful. After 30 mg. feeling of euphoria. More talkative. Feeling of depersonalization. Alteration of time percept on (time seemed to go faster). Concentration improved.	Beneficial effect after discharge (20 mg. per day). Effect of same dosage varied.

TABLE C

No	Sex and Age	Diagnosis	Maximum Dose	Duration	Unfavourable Physical Symptoms	Psychological Symptoms	Remarks
1	M aged 51	Chronic depression with depersonalization	20 mg	Three times	Slight headaches and dizziness Anorexia	Head slightly clearer Felt more tired and was unable to concentrate so well	
2	M aged 35	Depressive with hysterical features	10 mg	Four occasions	Dizziness Legs felt heavy	Dazed More depressed	
3	F aged 29	Anxiety state (palpitation acid dyspepsia some phobias etc)	10 mg	One occasion	Dizziness Later palpitation headache and nausea Increased lability of blood pressure and some extrasystoles	No change in mood	
4	F aged 35	Mild manic depressive	20 mg	On isolated occasions during one month	Severe headache Pain from chest upwards and including all face Intermittent spells of giddiness (? entirely due to drug as she had reported this before) They ceased immediately after drug to reappear at intervals	Less tense Body felt more comfortable Mind worked very actively and poor sleep	Dubious value so discontinued
5	M aged 29	Depression with self-reproach Feeling of inferiority etc	10 mg	One occasion	Headache Tremulousness	Felt frantic More self reproachful two and a half hours later felt calmer then one and a half hours later still shaky and complained of headache Some diarrhoea	No beneficial effect
6	M aged 35	Depressive psychopath obsessional and paranoid features	10 mg	Several isolated occasions	Head throbbing Giddiness	Made head a bit more clear I think I feel more gives me a little more brightness More self confidence After two or three doses asked that it should not be given him again as it made him feel unnatural and excited	Left hospital as he refused to continue treatment with drug
7	M aged 29	Recurrent depression with obsessional features	30 mg daily	Twenty two days	Complained of heavy sensation in epigastrium *Marked fall in weight* (physical examination revealed no reason) Anorexia more marked	Indecision less after drug Felt he could concentrate better more energy *Brain more active* Pleasant thoughts Days passed more quickly than before To wards the end of period effect seemed to wear off and symptoms became relatively more prominent for which patient blamed the drug Fatigue	Discontinued chiefly owing to loss of weight which it was felt might be due to the drug
8	M aged 49	Involutional depression with paranoid features	30 mg	One occasion	Transient heart block	Calmer Lived more in the present Did not think so much about his trouble	Reported in earlier article
9	F aged 47	Depression with hysterical features	20 mg	One occasion	Tachycardia Vision blurred and felt shaky Numb feeling down the arms	Felt brighter	
10	M aged 46	Manic depressive with disseminated sclerosis	40 mg	Continued for one month	Feeling of constriction in neck Unsteadiness of gait Dizziness and nausea	No change in mood Felt if anything a bit more lethargic and unreal	
11	F aged 46	Anxiety state phobias etc	15 mg	Four times	Skin dry and hot Hot and tight in head	Brain worked all night and raced from topic to topic No change in mood	Given during a brief period of depression lasting two days or so
12	F aged 52	Involutional depression with hysterical features	20 mg	One occasion	Severe sympathetic reaction Faint Nearly collapsed Extrasystoles	No change	Case reported in earlier article
13	M aged 29	Manic depressive with depersonalization	20 mg	Two days		Dazed unsteady and headache	Increased activity
14	F aged 56	Manic depressive Hypochondriasis Pain in head and face	20 mg	Two days		Giddy and drunk	No effect
15	F aged 38	Manic depressive Hypochondriasis	20 mg	Four days	Palpitation and nausea	Talked with greater ease	
16	M aged 24	Schizophrenia Depressed tense hypochondriacal	20 mg	One day	Pain in chest	No change except exacerbation of hypochondriasis	
17	F aged 24	Depression (retarded)	20 mg	Two days	Dazed	*Some days later said inner excitement had been present*	

of the patients (one-third) a beneficial effect could be claimed in some cases with reservations In two of them the benefit was somewhat dubious one (B 7) was a man of 28 with mild depression and depersonalization with some phobias and anxiety features palpitation, sweating and tremulousness which were increased as might have been expected This is in accord with Guttmann and Sargant's (1937) observations of the effect of the drug in anxiety conditions The other (B 3) was a schizophrenic in whom there was a slight clinical improvement which seemed doubtfully due to the drug Nevertheless he thought it "toned him up

Physical Symptoms

Of the eleven patients who appeared to benefit from the drug only three had no physical symptoms—that is the drug appeared to exert its effect in the psychic sphere alone Of these three, one had 30 mg daily for a month,

TABLE D—*Normal Controls*

No	Sex and Age	Maximum Dose	Duration	Unfavourable Physical Symptoms	Psychical Symptoms
1	M aged 35	20 mg	Once	Palpitation Pains in left chest and in left axilla Shakiness in walking Sweating increased Absence of fatigue	Thinking quick and easier Appreciation of humour Less reserve Feeling of well-being Time seemed to pass more quickly Sexual attitude towards wife the opposite sex was remarked Feeling of being [illegible] every situation Self-confidence increased but [illegible] ready to overestimate Feeling of well-being and energy Feeling of [illegible] an hour after taking drug
2	F aged 46	20 mg	Once	Felt changes in sensation in finger tips and muscles of jaw Giddiness Tendency to walk to left Difficult to keep a straight line Blurring of vision Got tired of holding teacup it was an effort to eat	Slightly apprehensive More alert All round happier than usual
3	F aged 35	20 mg	Once	Some swimmingness on lying down Tingling sensation in legs Breathlessness and dizziness. Anorexia tiredness later some dimness of vision momentary some abdominal discomfort. Dry mouth Decreased micturition	Elation Increased output [illegible] energy mental and physical
4	M aged 46	20 mg	One day	Fullness in head Nausea. Tiredness Feeling of nausea day after test Increased frequency of micturition	Full of beans More [illegible] and energetic Time passing more quickly Less reserve
5	M aged 34	20 mg	Three days	Pain in chest	Increased activity
6	M aged 35	20 mg	One day	Pain in chest	Increased activity cheerfulness and [illegible] talkativeness
7	F aged 23	20 mg	Twice	None	None
8	F aged 19	30 mg	One month	Some anorexia	None

the second 10 mg on isolated occasions during a similar period and the third the schizophrenic already mentioned 10 mg daily for a month In the other eight it was considered that the favourable central effect outweighed any physical phenomena which may have appeared though these in several cases were quite unpleasant In five cases no mental or physical change was noted Two of these (A 1 and 5) were depressives with much retardation Here the result was in accordance with what Guttmann and Sargant have found in this type of case Another was a case of catatonic stupor (A 2) All the controls except-one had physical sensations some of them unpleasant

The principal symptoms were headaches giddiness and cardiovascular symptoms—for example tachycardia pains in chest extrasystoles and the case of heart block already reported elsewhere Two patients complained of a heavy feeling in the epigastrium possibly due to an increase in gastric acidity Four complained of blurred vision including two of the normals five complained of anorexia including three normals—one of the patients (C 7) showing this symptom had complained of anorexia before but it became definitely worse while the drug was given This patient was also the only one of the series to show a notable loss of weight (over a stone) which might have been secondary to the anorexia but may also have been an effect of the drug Davidoff and Reifenstein found a loss of weight in most of their subjects Physical examination in this case failed to reveal any cause for it These results are all the more noteworthy when the relatively small dosage used in most cases is taken into account, One normal subject (D 4) had decreased frequency of micturition the other (D 5) also normal increased frequency One patient (B 2) complained of a sensation he described as a film on his tongue One patient reported diarrhoea (C 5)

Psychical Effects

So far as the effect of the drug on different psychiatric conditions goes the best results were obtained with the depressives It seems impossible to predict what patients will benefit by the drug It seems as if the drug were perhaps of greatest value in the terminal stages of a depression—that is when clinical improvement has already appeared This was true of several of our cases and is again in agreement with what Sargant and Guttmann had found These authors are diffident of giving the drug to patients with prominent hypochondriasis but in some of the patients of this series the hypochondriacal symptoms were beneficially modified however temporarily and it seemed in one case the only form of therapy known likely to prove of much value It enabled this patient (B 4) to face a medical board and perhaps even to launch him again on his duties In another case (B 3) a depressive psychopath who had been accustomed to take large quantities of alcohol to overcome her inhibition and enable her to do her work it was hoped to replace alcohol by benzedrine This was unsuccessful In this context it may be mentioned that Wilbur MacLean and Allen (1937) found it gave marked relief to the craving in chronic alcoholics acting as a supplementary stimulant over a period of months A subjective alteration of time experience was noted in a number of cases (Table B) One or two of the patients complained that the drug made them feel unnatural and one of these (C 6) implored me to give him no more of the drug although he admitted the beneficial psychic effect He finally left the hospital in order to escape the treatment One or two others although admitting benefit were unwilling or reluctant to have any more—an odd and probably unique situation in therapeutics Others again—as might be expected depressives—*while admitting benefit pointed* out that it was after all a drug and they did not wish to be dependent on this an attitude precisely similar to that adopted by many such patients towards the necessary sedatives to procure sleep

With regard to sleep the results were very variable Several on the larger doses 30 to 40 mg a day slept well even when the drug was given at midday Moreover the sleeplessness when it occurred was usually not a painful or unpleasant experience In general the effect observed on sleep was similar to that found by other workers and needs no further comment Four patients felt drowsy or dopy after the drug and two felt fatigued In one

or two cases there was an increase in the depression when the effect of the drug was wearing off, and it is important to bear in mind that Davidoff and Reifenstein mention a case of manic-depressive illness in which the patient impulsively attempted suicide One of our patients (the alcoholic depressive) became very much more depressed, and the question of suicide was uppermost in our minds for some days, and in another (C 5) the depression was considerably intensified This might, of course, just as well have been a usual constitutional intensification in the first case, but it appeared to be a definite effect of the drug in the second

Comment

It must be admitted that, so far at least as these results are concerned, it is difficult to claim any great therapeutic value from benzedrine Nevertheless, if its use relieves the depressed patient even transiently and gives him a few hours' respite, the drug has a place in psychiatry To claim more than this from it at the moment, however, is impossible, and there are many limitations to its usefulness, not the least of which is the variability of its action A small minority of cases seem to benefit definitely from benzedrine, and its greatest usefulness perhaps is in those cases of depression in which a clinical improvement has already set in Here it may be helpful in giving the patient a temporarily increased insight, which has been of use psychotherapeutically Apart from this, the drug is of doubtful value as an aid to psychotherapy It was difficult to resist the impression in one or two cases that the speed of convalescence from a depression was increased, but this is difficult, if not impossible, to establish objectively *Indeed it* is almost impossible in many cases to separate the changes of the normal process of recovery from the effect of the drug, which makes any pronouncement of its value in such cases very dubious For those patients who have clinically improved but who for economic or other reasons are unable to stay in hospital and must return to work, benzedrine is sometimes of help in enabling them to face their day's work The drug should, however, be controlled by frequent examination of the patient afterwards For those depressed patients who may at any time get worse, and perhaps contemplate suicide, suitable doses of benzedrine may enable one to keep them in a hospital or even in everyday life without extra supervision Here, again, they should not be given a bottle of tablets and allowed to go their way

With regard to dosage, 10 to 40 mg in ordinary cases should be enough, and a divided dosage—say, 15 mg at 9 a.m. and a further 15 mg at 11.30 a.m.—is to be recommended, and certainly, unless the patient is under full in-patient supervision, this dosage should never be exceeded The drug is admittedly still in its experimental stage but enough work has now been done to make it doubtful how far, if at all, it is likely to be of greater value in psychiatry than it is at present The contra-indications are now being established, but from my experience it would appear to be unwise to give benzedrine to any subject with cardiovascular disease in any form, or to those with prominent anxiety symptoms The initial dose should not exceed 10 mg and the optimum dose should be determined carefully I agree with Davidoff and Reifenstein that it should be used cautiously in certain depressives because of the possibility of intensifying the depression with consequent suicidal risk This risk has not been sufficiently stressed

Summary

Thirty-three patients suffering from different forms of mental disorder and eight normal subjects were given benzedrine orally in doses of from 5 to 45 mg In sixteen the drug had to be discontinued because of untoward effects, mental or physical, and in two more because no beneficial effect was produced In eleven (one-third) the drug appeared to be helpful In five no effect, mental or physical, was produced Dosage, contraindications, and the general value of benzedrine in psychiatry are discussed

I should like to thank my colleague Dr W C M Scott for having furnished me with his observations on several patients in this series and some of the controls, and also for much valuable help in the preparation of this paper

I would like also to thank Messrs Menley and James, the distributors, for supplying me with a generous supply of the drug with which to carry on this work

REFERENCES

Anderson, E W, and Scott, W C M (1936) *Lancet* 2, 1461
British Medical Journal (1937), 2, 625
Davidoff, E, and Reifenstein, E C (1937) *J Amer med Ass*, 108 1770
Guttmann, E, and Sargant, W (1937) *British Medical Journal*, 1, 1013
Korns, H M, and Randall W L (1937) *Amer Heart J*, 13, 1, 114
Myerson, A, Loman, J, and Dameshek, W (1936) *Amer J med Sci*, 192, 560
—— Rinkel, M, and Dameshek, W (1936) *New Engl J Med* 215, 1005
—— and Rivo, M (1936) *J Amer med Ass* 107, 24
Prinzmetal, M, and Bloomberg, W (1935) *J Amer med Ass*, 105, 2051
Scarano, J A (1938) *Med Rec* 140 602
Schube, P G, Raskin, N, and Campbell, E (1937) *New Engl J Med* 216, 922
Solomon, P, Mitchell, R S, and Prinzmetal, M (1937) *J Amer med Ass* 108, 1765
Ulrich, H, Trapp, C E, and Vidgoff, B (1936) *Ann intern Med*, 9, 1213
Wilbur, D L, MacLean, A R, and Allen, E V (1937) *Proc Mayo Clin* 12, 97

The following medical promotions in and appointments to the Venerable Order of the Hospital of St John of Jerusalem are announced in the *London Gazette* of June 24 As Knights Major A W Anderson, M.B., Major W O Evans, M.B.E., L.R.C.S., as Commanders D W A Bull, M.D., C Armstrong M.B., as Officers L L Westrope M.D., H Riddell, M.B., E H Knowles, L.R.C.P. and S.Ed., H Banks F.R.C.S., A P Martin, M.B., J Vaillancourt, M.D., Lieutenant Colonel F A Young M.D., Major General P S Mills, C.I.E., W T Thomson M.R.C.S., C A Verco, M.B., W G Shellshear, M.B., Colonel J L Hamilton, M.C., T.D., M.D., K S Maurice Smith, M.R.C.S., Lieutenant Colonel C L Dunn, C.I.E., J K Milligan M.R.C.S., A T McKay, M.D., E Lewys Lloyd, M.R.C.S., Hon P P Debono, M.D., F.R.C.S. Professor J Ellul, M.D., E L D Parry, M.B., as Associate Officers Colonel D H Rai, M.C. as Serving Brothers F M Longson, M.B., E Ringrose, M.D., J R Hall M.B., G Fisk M.D. (since deceased) G H Edgecombe, M.B., L A Williams, M.D. W O F Sinclair, M.B. J F Scales, M.R.C.S. J C P Bayley, L.M.S.S.A., J B McKay, M.B., F C Cozens, M.B. W W A Kelly, M.B. A J Craig M.D. T D Delprat M.B. A F Jones M.B., H C F Donovan M.B. J McK Woods M.B., C S Renwick M.B. F L Firkin M.B. P D Braddon F.R.C.S., as Serving Sister Frances C B McKay M.B.

THE USE OF PLACENTAL EXTRACT IN AN EPIDEMIC OF MEASLES

BY

T. N. PARISH, M.A., M.D.,

Medical Officer to Benenden School

This is an account of an epidemic of measles in a girls school in which placental extract was used as a prophylactic

The girls vary in age from 13 to 17 years. There had been no such epidemic in the school for nine years and at the beginning of the Easter term 1938 of the 205 girls under my care eighty nine had not had measles. *On January 18 a few hours after the return to school* one child was found to be in the incubation stage of measles. She came by the school train and school bus so that contacts were widely spread throughout the school. Prophylactic measures were discussed and in view of the difficulty of obtaining convalescent serum it was decided to use placental extract in an attempt to modify the subsequent attacks and to lower the complication rate. Moeller (1937) maintains that this extract is as efficacious as convalescent serum and of greater prophylactic value than adult serum. Parents were circularized and forty-seven asked that their children should be given the injection, some of them requesting that this should be done at once. When the time of injection was left to our discretion the injection was given as soon as a case occurred in either the girls' house or form. All were given between January 27 and February 16. The term ended on April 3.

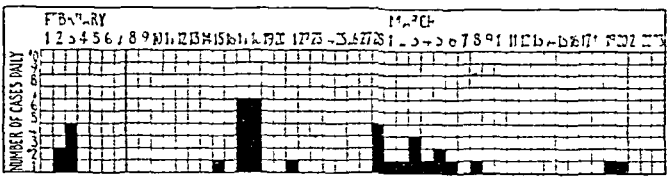


FIG. 1.—Unmodified cases (36).

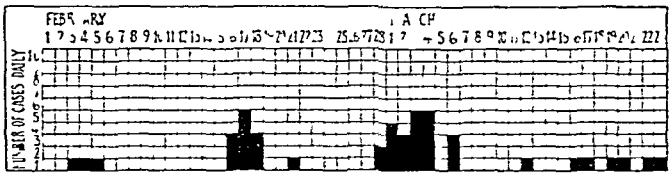


FIG. 2.—Modified cases (44).

Dose and Reactions

The extract used was Lederle's immune globulin and it was given in one intramuscular injection of 4 c.cm. into the buttock. There were no immediate reactions but after a few hours stiffness and some pain at the site of injection were usual. The stiffness persisted for about two days. One child had a temperature for twelve hours but in no case was there constitutional disturbance of any severity nor did any delayed reactions occur.

Course of the Epidemic

The case incidence throughout the term after the initial infecting case (which is not included in these statistics) is given in Figs. 1 and 2. Fig. 1 shows the day of onset of rash in the unmodified cases and Fig. 2 the day of onset in the modified cases.

Taking into consideration the larger number of cases in which the prophylactic injection had been given it does not appear that the extract had any effect in delaying the onset of the attack.

By the end of the term seventy five of the eighty-nine susceptibles had developed measles as well as five of the 116 said to have had measles previously of whom two had also received a prophylactic injection. The distribution of cases in the modified and unmodified groups is shown in Table I.

TABLE I.—*Incidence of Measles*

	Previous Measles (116 Cases)		Susceptibles (89 Cases)	
	Modified (2 Cases)	Unmodified (114 Cases)	Modified (75 Cases)	Unmodified (14 Cases)
Measles developed	2	3	42	33
No measles	0	111	3	11

It is obvious that the extract had no effect whatsoever in preventing the attack of measles. On the contrary the above figures show that among the susceptible cases measles developed in 93 per cent. of those who had been given the modifying injection and in only 75 per cent. of those who had not. The two children who had previously had measles and who had also been injected both developed measles.

The epidemic was of moderate severity although there was a most remarkable freedom from serious complications. Temperatures of over 103 were present in 66 per cent. of the total cases. The only complication of any severity was one case of suppurative otitis media.

Effect of Extract on Attack

The effects of the prophylactic injections were much more noticeable in the first half of the term. It is not possible to convey a clinical impression by statistics but the impression received by all observers was that those cases in which the attack developed within three to four weeks of the injection suffered far less constitutional disturbance. A few of these showed a slight rash of small discrete papules with no tendency to coalesce but on the whole little difference was observed in the rashes of the modified and unmodified cases. The most noticeable feature of the recently modified cases was that although the temperature was high and a well developed rash was present *the patient remained surprisingly* cheerful and undisturbed and did not present the typical woebegone facies and prostration.

The cases were classified (Table II) as they occurred as mild, moderate or severe this classification being based on the degree of constitutional disturbance. This is necessarily a somewhat arbitrary classification for the degree of disturbance did not appear to have any relation to the temperature or nature of the rash.

The effect of the extract in reducing the severity of the attack is most noticeable in those cases in which it had been given within three weeks of onset of rash.

a century of association

There are abundant grounds for the belief that DINNEFORD'S continues to enjoy the approval and patronage of the Medical Profession as surely as when—over a century ago—it was originally prepared at the request of the most prominent practitioners of the day

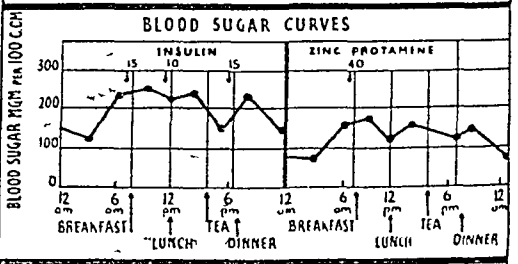
DINNEFORD'S
Pure Fluid MAGNESIA

DINNEFORD & CO LTD 12 CLIPSTONE STREET LONDON W 1
CFH

PROTAMINE INSULIN
(with Zinc) SUSPENSION ..BOOTS

The fall in blood sugar after injection of Protamine Insulin (with Zinc) Suspension is gradual, and the Insulin carbohydrate metabolism reproduces closely the continuous secretion of Insulin as it takes place in the normal person

RELATIVE HYPOGLYCAEMIC EFFECT OF
PROTAMINE INSULIN
(WITH ZINC) SUSPENSION BOOTS and INSULIN



Blood sugar curves from a man aged 65 years the first when taking Insulin the second while taking Protamine Insulin (with Zinc) Suspension—Boots The diet was the same on both occasions (See Brit M J 1937 1 511)

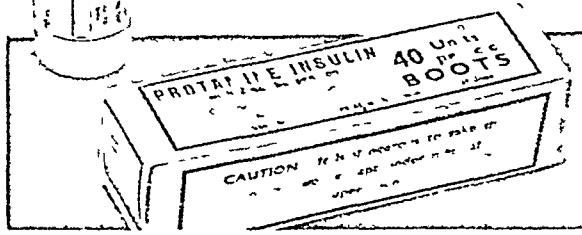


With small doses (under 30 units) the risk of hypoglycaemia is less than with Insulin and Protamine Insulin (with Zinc) Suspension is particularly valuable for use in general practice Supplied in rubber capped vials in the following strengths

10 units per c.c.
5 c.c. vial (200 units) - 2/4
10 c.c. vial (100 units) - - 4/6

30 units per c.c.
5 c.c. vial (100 units) - 1/6

Full details of the treatment of Diabetes Mellitus with Protamine Insulin (with Zinc) Suspension are given in our booklet a copy of which will be sent on request to the



WHOLESALE & EXPORT DEPARTMENT
BOOTS PURE DRUG CO. LTD.
NOTTINGHAM ENGLAND

B 39-356-B

PURE CRYSTALLINE

ROCHE VITAMIN B_1

Roche Products Ltd who first introduced 'Benerva' Vitamin B_1 in May 1936 have pleasure in announcing that this preparation is now

Manufactured in England

at their laboratories in Welwyn Garden City Herts 'Benerva' is issued in oral tablets each containing 1 mg aneurin equal to 500 int vitamin B_1 units, 1 c.c. ampoules each containing 2 mg and 'Benerva'-Forte ampoules, each containing 10 mg

'BENERVA'

Oral Tablets and Ampoules

Roche Products Ltd, 47, Bowes Road London, N 13 and Welwyn Garden City Herts



ASTHMA

BRONCHOVYDRIN

Inhalation Therapy with the "WEIL" Glass Inhaler Prevents and arrests Asthma attacks Obviates [illegible] Orig Bottles cont 12.5 c.c.

Dr R & Dr O WEIL, CHEMICAL WORKS

SOLE DISTRIBUTING AGENT IN GREAT BRITAIN

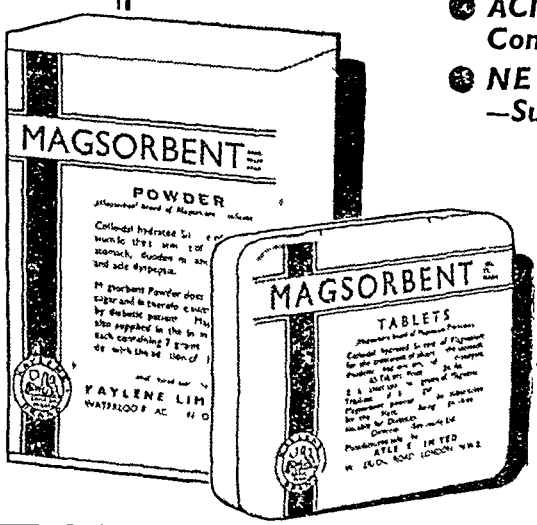
FRANCIS RIDDELL LTD., Axtell House, Warwick St., Regent St., London, W 1

The Original and Standard Brand of Synthetic Hydrated Magnesium Trisilicate —

MAGSORBENT

REG. TRADE MARK

The safe and effective **ANTACID** for the treatment of CHRONIC PEPTIC ULCER, HYPERCHLORHYDRIC DYSPEPSIA and ACID FERMENTATION



- ***ACIDITY — Complete Control***
- ***NEUTRALISATION —Sustained***
- ***No Toxic Alkalosis***
- ***Correct Physico-chemical Constitution***

REDUCED PRICES — Magsorbent Powder 2 oz **1/6**, 5 oz **3/-**, 16 oz **8/9**, 3 lbs **23/-** Tablets—65 for **2/4**, 250 for **7/9**, 600 for **15/-**

SAMPLES ON REQUEST

Manufactured only by

KAYLENE, LTD, WATERLOO RD, N W 2

Sole Distributors ADSORBENTS LTD

MARMITE

its value in reduction of puerperal death rate

PARTICULARS OF GROUP	NUMBER OF WOMEN IN GROUP	PUERPERAL DEATH RATE FROM SEPSIS (per 1 000 total births)
Cases receiving special food ★	10 384	0 09
Cases not receiving special food	18,854	2 91

★ The food given consisted of a certain milk preparation and Marmite The Marmite was rich in the vitamin B complex which was a neuro muscular stimulant

Another point was that Marmite had a very important haemo poietic action which was not understood and was probably not associated with any of the vitamin B constituents at present recognized" *(Brit Med Journ Jan 22nd 1938 p 191)*

for VITAMIN B COMPLEX

For sample and literature apply to—

THE MARMITE FOOD EXTRACT CO LTD, Walsingham House, Seething Lane, London, E C 3

In Jars 1-oz 6d 2-oz 10d 4-oz 1s 6d 8-oz 2s 6d 16-oz 4s 6d Special quotations for Marmite packed for u e in hospitals clinics welfare centres etc. 353 7



MANDECAL

(Compound Calcium Mandelate B.D.H.)

In Pyelitis of Pregnancy

Experience in clinical practice has now established beyond doubt that by the use of Mandecal the nausea which is often set up by mandelic acid preparations is almost entirely eliminated. Mandecal, therefore, is ideal for administration in pyelitis of pregnancy.

Further, in Mandecal the immiscibility of calcium mandelate has been overcome, and a pleasant, palatable suspension is easily formed by stirring the powder in water. As with preparations of ammonium mandelate, the collateral administration of ammonium chloride is rarely necessary.

Sample and literature on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Mand 10

'PANOPEPTON'

AS A RESTORATIVE FOOD

'PANOPEPTON' presents, in a form ready for absorption, the entire nutritious substance of beef and wheat. It is a complete solution of all the nutrient, savoury, and stimulant nitrogenous and inorganic constituents of these typical foods.

Supplied in 12-oz. bottles

'Zymine' Peptonising Tubes

FOR THE PREPARATION OF PEPTONISED MILK AND OTHER PREDIGESTED FOOD for the SICK

Peptonised Milk prepared with 'Zymine' Peptonising Tubes is a perfectly digestible and absorbable food. Its use precludes all accumulation of unassimilable matter in the intestinal tract.

Supplied in boxes containing 6 and 12 tubes

Originated and Manufactured by—

FAIRCHILD BROS & FOSTER (Inc. N.Y.) NEW YORK and 69 Holborn Viaduct, London, E.C.1

Agents—

BURROUGHS WELLCOME & CO., LONDON, SYDNEY and CAPE TOWN

The respective merits of

DETOXICATED and TOXIC VACCINES

The obvious advantage of Detoxicated Vaccines is that large doses can be administered without causing serious reactions This is of great value in the treatment of cases where any given bacterial disease is already established In such cases toxic vaccines are apt only to aggravate the symptoms whereas moderate doses of the appropriate detoxicated vaccine can be given safely without further aggravation of the disease

We have always upheld the superiority of detoxicated vaccines, but some authorities prefer the toxic varieties because they believe that it is important to obtain more or less marked reactions in order to produce a satisfactory immunity

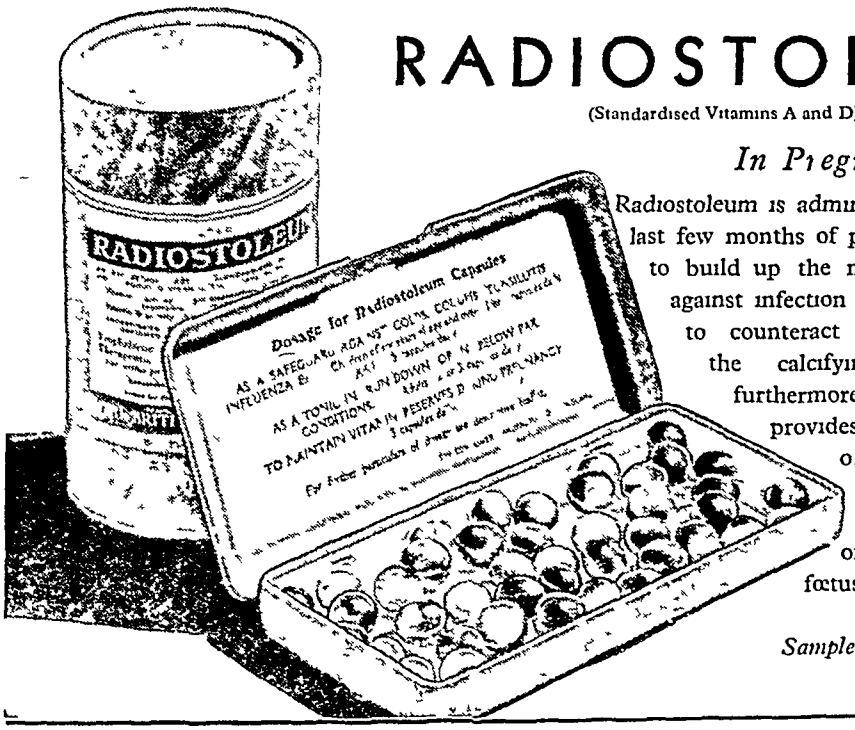
The toxic vaccines have the advantage of cheapness The detoxicated vaccines are more expensive, for the obvious reason that the dosage is nearly one hundred times greater so that much larger quantities of bacteria are used in their preparation

We supply both the detoxicated and the toxic varieties of vaccines in order to cater for the two different schools of thought in this matter A booklet, giving details of our full range of Detoxicated and Ordinary Vaccines, will gladly be supplied on request

GENATOSAN LTD.,

VACCINE DEPARTMENT

LOUGHBOROUGH, LEICESTERSHIRE



RADIOSTOLEUM

(Standardised Vitamins A and D)

In Pregnancy

Radiostoleum is administered during the last few months of pregnancy in order to build up the mother's resistance against infection at the birth and to counteract any deficiency of the calcifying Vitamin D, furthermore, Radiostoleum provides an abundance of the essential Vitamins A and D to meet the needs of the developing fœtus

Sample on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Rstm/S/358



FOR SUBNORMAL HÆMOGLOBIN PRODUCTION

Liver Extract with IRON *plus* COPPER

Cofron Elixir (Abbott) supplies Whole Liver Extract, Iron and Copper in definite standardised proportions It is indicated for the treatment of mild anæmias and for use in many non-specific conditions in which there is a decreased red cell count or a lowered hæmoglobin percentage The product is particularly suitable for general use as an iron tonic, or to hasten restoration of normal red cell values following illness that has resulted in anæmia ● Each fluid ounce of Cofron Elixir represents Fresh Liver 40 gms (1¼ oz) Iron 66 mgms (1 gr) (the equivalent of 6 grs of iron and ammonium citrate B P) and Copper 2 66 mgms (1/25 gr) ● The liver extract contains the factor or factors necessary for the maturation of red blood corpuscles and in addition supplies appreciable amounts of vitamins B_1 and B which supplement the patient's daily intake of these factors and thus contribute to improved appetite ● Iron is essential in the synthesis of hæmoglobin while much clinical evidence indicates that copper aids in the full utilisation of iron by the body ● Cofron Elixir is supplied through pharmacies in 12-oz and 80-oz bottles Descriptive literature and a free sample will be sent upon request

COFRON CAPSULES

For Severe Secondary Anæmias

Supply about twice as much liver extract as Cofron Elixir in proportion to their copper and iron content In bottles of 50 and 100 capsules

ABBOTT LABORATORIES
(ENGLAND) LIMITED
Wadsworth Road Perivale Middlesex
MONTREAL SYDNEY JOHANNESB PG BOMBAY
BUENOS AIRES NEW YORK HIC GO MEXICO CITY
HANGH I RIO DE JANEIRO M NILA HAV N

COFRON ELIXIR

Abbott

Please send literature and a sample of Abbott's Cofron Elixir to

NAME_____

ADDRESS_____

_____

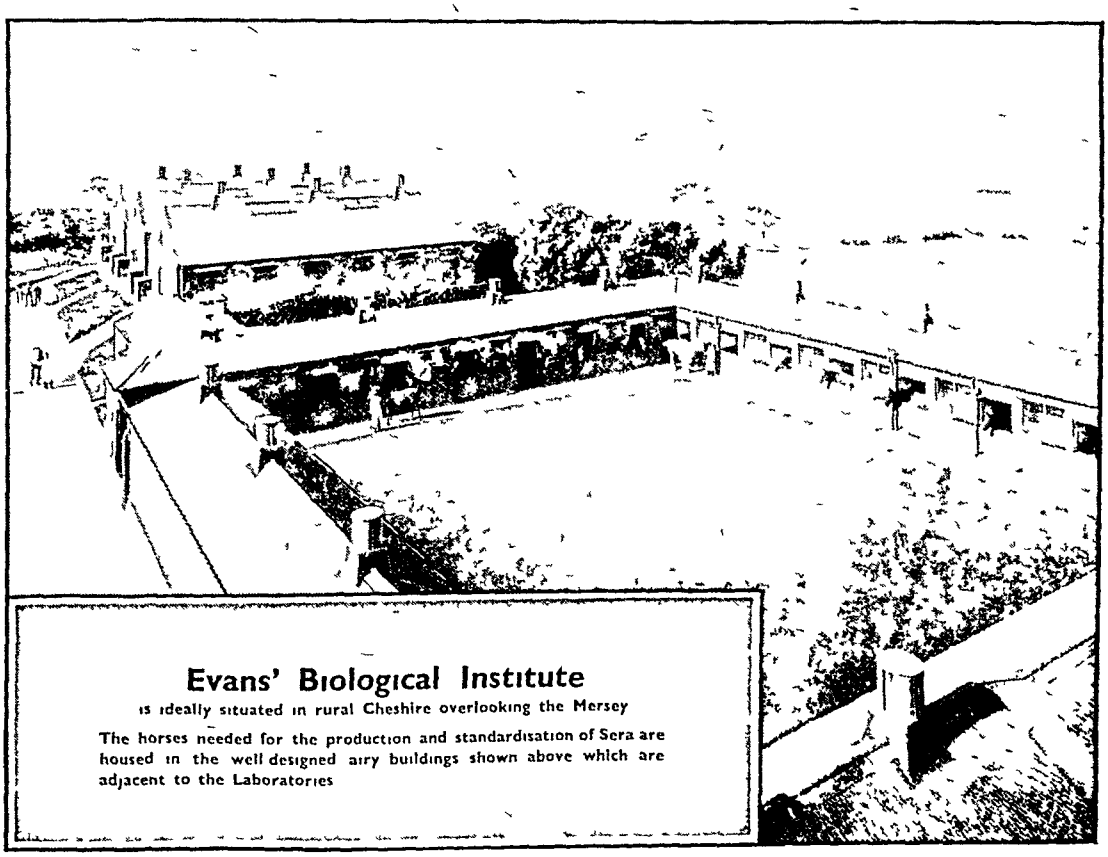
BMJ 2-7

EVANS' ANTITOXINS

Diphtheria Antitoxins - - Concentrated
1,800 2,200 units per cc
Super-Concentrated
3,000 (or more) units per cc.

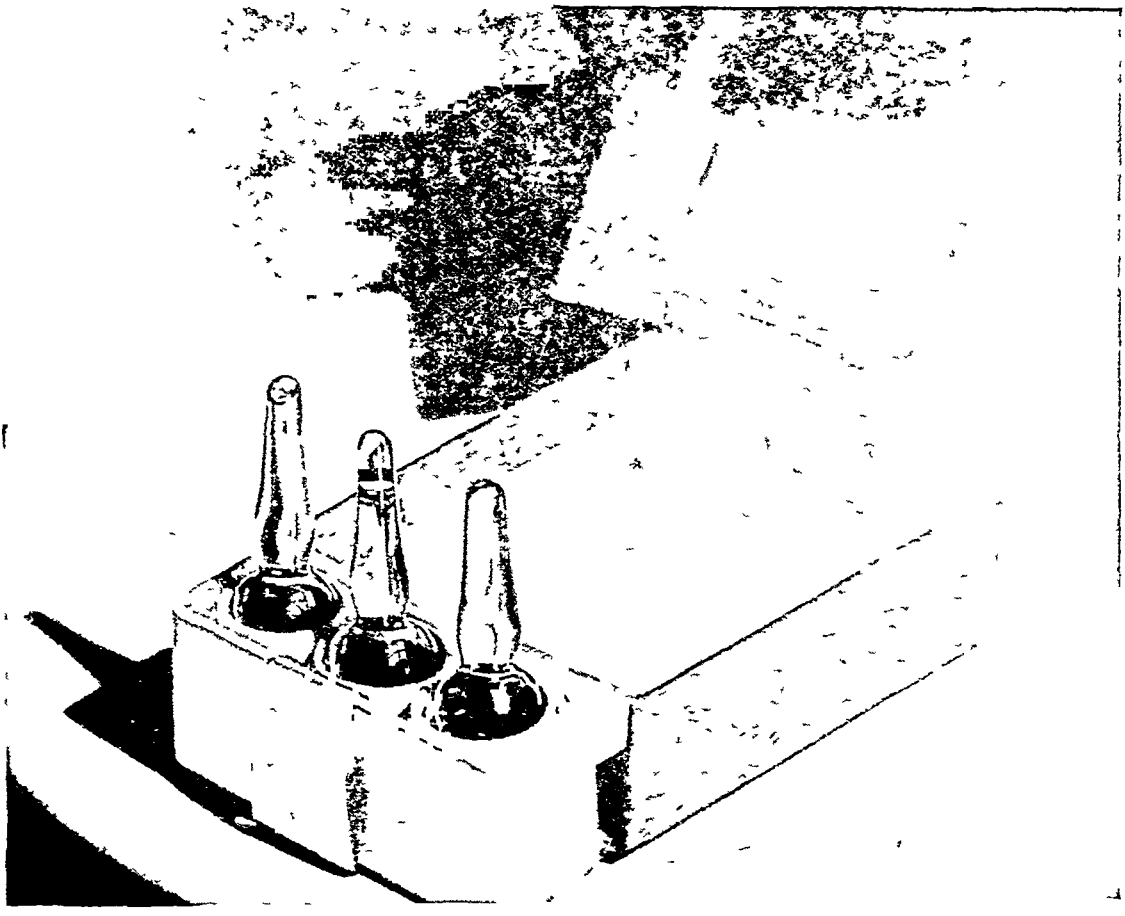
Streptococcus Antitoxins Erysipelas
Puerperal
Scarlatina

Tetanus Antitoxins - - - Prophylactic
Curative



Evans' Biological Institute
is ideally situated in rural Cheshire overlooking the Mersey
The horses needed for the production and standardisation of Sera are housed in the well designed airy buildings shown above which are adjacent to the Laboratories

Evans Sons Lescher & Webb Ltd.
LIVERPOOL and LONDON



ANAHÆMIN B.D.H.

In the Treatment of Pernicious Anæmia

Clinical evidence in support of the value of Anahæmin in pernicious anæmia continues to accumulate, physicians find that an initial injection of 2 c c of Anahæmin followed by 1 c c every 14 days constitutes effective treatment, whilst maintenance treatment consists of a monthly injection of 2 c c A recent clinical report, confirmatory of the foregoing, states that ' the patient was bedridden, face like parchment and very weak He rapidly gained weight, enjoys normal health now on 2 c c monthly '

Sample on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

INDICATIONS FOR 'SANATOGEN' No 2

Disease-emaciation

"EVERY medical practitioner knows how difficult it is to nourish a patient suffering from disease-emaciation Do we not all recognise the fact that the starving tissues are fed, not by the food swallowed by the patient, but by the amount of nutrient matter absorbed by the gastric and intestinal mucous membrane? If we could ensure the absorption of nutriment into the blood, the problem of nutrition in disease would be reduced to a matter of mere chemistry and mechanical feeding Judging from clinical results, 'Sanatogen' appears in many cases to possess some power of ready absorbability, without which the richest foodstuff represents simply so much foreign matter in the stomach and intestines My own experience of 'Sanatogen' is that it stays the diarrhœa —ten or twelve motions a day are thereby reduced to one or two, it stops vomiting, and it improves general conditions and causes the patient to put on flesh"

"NUTRITION IN WASTING DISEASES OF CHILDREN AND ADULTS"
(*Medical Press and Circular*)

"THIS condition, which results from imperfect digestive or absorptive power, or which may follow stomatitis, pyloric stenosis, deformity of the tongue or palate, tuberculosis or syphilis, is most frequently associated with improper feeding Fats in such cases are not well tolerated, but the contrary is true with respect to proteids The use of 'Sanatogen', in these cases, proved so satisfactory that we have been encouraged to try it in other cases of infantile atrophy, and have had almost equally pleasing results in a number of patients suffering from this condition It is quite apparent that 'Sanatogen' has considerable power in influencing nutrition"

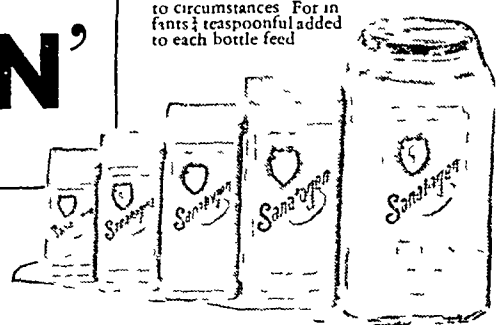
'INFANTILE ATROPHY"
(*Practitioner*)

"I HAVE before me the records of forty cases fed with 'Sanatogen' They show, what was obvious to myself and the nurses when watching the cases, that these patients wasted less during the acute stage, and picked up more rapidly during the convalescent stage, than patients who did not have 'Sanatogen' This fact, indeed, was soon recognised by the ward sister, without my having in any way drawn her attention to it .. I am firmly convinced that it is a most valuable food for the typhoid patient"

"THE TREATMENT OF TYPHOID FEVER"
(*Medical Times*)

'SANATOGEN'
(Trade Mark)
A Brand of Casein and Sodium Glycerophosphate

DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants ½ teaspoonful added to each bottle feed



Sold by all chemists prices 2/6 to 19/9

Clinical samples and literature available on request to
GENATOSAN LTD., LOUGHBOROUGH.

The word SANATOGEN is the Trade Mark of the Genatosan Ltd and denotes the brand of Casein and Sodium Glycerophosphate manufactured by GENATOSAN prior to manufacture GENATOSAN Ltd Loughborough Leicestershire

ELI LILLY AND COMPANY LIMITED

Pharmaceutical and Biological Products



SODIUM AMYTAL

Sodium Iso amyl Ethyl Barbiturate

The anxiety and apprehension with which patients once anticipated hospitalization have largely become things of the past due to the efforts of hospital personnel to make the stay as pleasant as possible It has been learned that many disturbing recollections can be avoided when 'Sodium Amytal' has been the hypnotic and sedative of choice It contributes to the rest and relaxation which are so essential to proper convalescence.

Prompt Attention Given to Professional Inquiries

2 3 AND 4 DEAN STREET LONDON W 1

Distributing Agent in Britain for

ELI LILLY AND COMPANY, INDIANAPOLIS, U S A

CRUNCHY FOODS AND THE TEETH

Crisp, fibrous foods are generally considered to perform a useful function in scouring the teeth, thus keeping them free from sticky food particles, which are apt to ferment and cause decay. The plentiful saliva, which hard, dry foods produce, is also of value in cleaning the mouth

Furthermore the vigorous mastication that hard foods demand is generally held to assist the growth and correct development of the jaws.

For these reasons many practitioners recommend that the normal diet should include a proportion of hard, dry foods. They find that Ryvita eaten daily has a beneficial effect upon the teeth, especially those of children Free samples of Ryvita for distribution to patients will gladly be supplied on request

THE RYVITA COMPANY LIMITED
96-98 SOUTHWARK ST LONDON SE1
Bakeries in Birmingham

1313



Simplify the Technique of Infant Feeding by using

Allenburys Progressive System

ALLENBURYS SYSTEM EMBODIES THE FOLLOWING ADVANCES IN THE SCIENCE OF INFANT FEEDING

(1) **Humanised Casein lactalbumen ratio**
(2) **Intimate incorporation of Dextrin-Maltose**, the benign starch-free mixture of non fermenting carbohydrates
(3) **Homogenised Cream** in reconstituted Milk Foods
(4) **Prophylaxis of Scurvy** Every tin of Allenburys Foods bears and has borne in the past explicit instructions for daily administration of vitamin C
(5) **Prophylaxis of Rickets** Calcium Phosphorus ratio adjusted 560 units of vitamin D per quart reconstituted **Independent biological assay of antirachitic potency**
(6) **Prophylaxis of Anæmia** The reconstituted foods contain 4 parts per million of available iron

Allenburys System provides every known Nutritional Requirement of the Infant
It enables the physician to replace unreliable home-made milk mixtures with readily prepared infant foods which eliminate the risk of enteral infection, and provide easily digested, scientifically balanced meals for babies at every stage in their development

ALLENBURYS Humanised MILK FOOD No 1 (Entirely Free from Starch)

The best first artificial food because it resembles breast milk closely in composition and in the ease with which it is digested

Composition when reconstituted by dilution (1 6) with water as instructed on tins

Fat	Casein	Lactalbumen	Lactose	Dextrin Maltose	Ca as CaO	P as P O	Fe parts per million	Vitamin D per fl oz
3 1%	1%	0 7%	7 3	3 3	0 9	0 16%	4	not less than 14 units

This food is intended for use from birth to 3 months or for longer periods in dyspeptic infants who tolerate it readily

ALLENBURYS Humanised MILK FOOD No 2 (Entirely Free from Starch)

Milk Food No 2 is prepared in exactly the same way as No 1 and retains its general features It is intended for use during the second trimester when digestion is established and it contains a higher proportion of milk protein and correspondingly less carbohydrate The mineral content is adequate in respect of calcium, phosphorus and iron and each fluid ounce of reconstituted food contains not less than 14 international units of vitamin D

ALLENBURYS MALTED FOOD No 3 (The First Step to Weaning)

This food introduces partially converted starch at the seventh month *It has a mineral* and vitamin content equal to No 1 and No 2 and it is intended for use in conjunction with the broader dietary now recommended for the second six months of infancy

Malted Food No 3 prepared for use with cow's milk and water has this composition

Protein	Fat	Carbohydrate	Ca as CaO	P as P O	Fe parts per million	Vitamin D per fl oz.
2.8%	2.2%	9 7%	0 14	0 13%	4	not less than 14 units

ALLEN & HANBURYS LTD LONDON E 2



Formula

Intestinal glands	0·05 grms
Biliary extract	0·10 „
Lactic ferments	0·05 „
Agar-agar	0·05 „
Fiat tablet -	0·35 „

Initial Daily Dose
Two Tablets

Laxatives, it is well known nowadays, must have two essential characteristics

1. They must be biological, i.e., they must accord with and imitate in their action the natural physiological processes of the intestine
2. They must be capable of educating the intestine, so that the habit of a laxative is not formed and the intestine can function unaided when bowel adjustment is attained

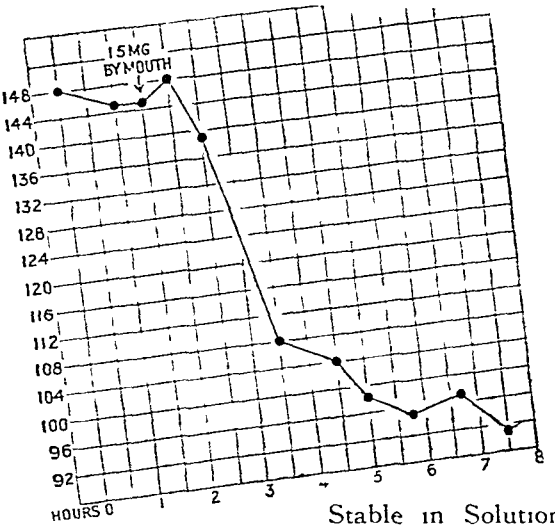
Taxol has both these advantages

Taxol has not the violent irritant action of many laxatives and purgatives, but stimulates the intestine by processes which resemble those of nature. The intestinal gland which is an important part of its composition acts on the intestine by reinforcing the deficient function which has culminated in constipation. This stimulating action is gentle, and does not force the weakened intestine to efforts beyond its power, which would culminate in aggravation of the constipation.

Taxol is not habit-forming. It re-educates the intestine to resumption of normal function unaided, thanks to the biological nature of its action. It contains no irritant drug of violent and artificial action to which the intestine can become accustomed. On the contrary, many stubborn cases of constipation, after a course of TAXOL, revert to normal and regular peristalsis.

CONTINENTAL LABORATORIES LTD. 30 MARSHAM STREET, LONDON, S.W.1

DIGOXIN (B. W. & Co.)



Showing effect of a dose of 1·5 mgm. of DIGOXIN by mouth on ventricular rate in auricular fibrillation

The stable digitalis glucoside for rapid reliable effects

Stable in Solution and as 'TABLOID' DIGOXIN
It occurs as a micro crystalline powder is of known and definite composition and requires no biological testing

Orally or intravenously its action is rapid and consistent in those conditions leading to myocardial insufficiency in which digitalis therapy is employed
The value of its characteristics is particularly marked in auricular fibrillation

"TABLOID" DIGOXIN 0·25 mgm. *For Oral Use*
Bottle of 25 products 1/4 each Bottles of 100 products 4/4 each

SOLUTION OF DIGOXIN (B.W. & Co.)
0·5 mgm. in 1 c.c. *Bottles of 10 c.c. 2/- each 30 c.c. 3/6 each (with dropper) Bottles of 250 c.c. 24/- each*

"MINIMA" HYPOLOID DIGOXIN *For Injection*
Each ampoule contains 0·1 mgm. Digoxin in 0·1 per cent. solution
Boxes of 10 Hospital ampoule of 1 c.c. at 3/4 per box
Lord Provost in Wellcome Professor

DIGOXIN is a pure stable glucoside isolated from leaves of *Digitalis lanata*. Its action is fully described in the booklet Digitalis in Cardiac Arrhythmia post free to Medical Men on request

BURROUGHS WELLCOME & CO LONDON
Address for communications SNOW HILL BUILDINGS E.C.1
Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W.1
Associated Houses
NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES
H 360
COPYRIGHT

SUPREME QUALITY IS BURROUGHS WELLCOME QUALITY

PRODUCTS OF THE  GLAXO LABORATORIES

For Allergic Disorders that come with the Summer

CALCIUM & VITAMIN D *for successful prescription*

All practitioners are familiar with the wide variety of allergic conditions occurring at this time of year The majority of such conditions specially call for the administration of calcium and its controlling vitamin D

Prominent amongst these indications are *urticaria, pruritis, sweat rash, migraine, hay fever, hypersensitivity* to certain foods and to insect bites

For effective oral treatment, and for routine prophylaxis, Ostocalcium can be suggested This substantial tablet provides a generous quantity of assimilable calcium in pleasant, eatable form Utilisation is ensured by Ostelin vitamin D (500 international units per tablet) For intensive treatment by injection there is Colloidal Calcium with Ostelin which quickly relieves the symptoms, restoring control of the capillary circulation and producing rapid subsidence of the irritation, pain, and swelling

FOR ORAL TREATMENT OR ROUTINE PROPHYLAXIS



OSTOCALCIUM TABLETS

Each contains 7½ grs calcium sodium lactate and 2½ grs calcium phosphate (yielding 1·5 grs of the metal), together with 500 international units of vitamin D Improved flavour and friability make this tablet readily acceptable Cleavage lines facilitate halving or quartering, so rendering dosage nicely adjustable In tins of 50, 2/3, 100, 4/-, 500, 12/6 1,000, 17/6

FOR INTENSIVE PARENTERAL TREATMENT & PROPHYLAXIS



COLLOIDAL CALCIUM with **OSTELIN**

Vitamin D for injection, subcutaneously or intravenously Each cc contains 5,000 international units of vitamin D and 0·5 mgm colloidal calcium An effective measure for relieving the congestion, swelling and irritation in conditions such as urticaria, serum rashes, severe reactions to insect bites, and hay fever Boxes of 6 × 1 cc ampoules, 5/-, 12, 8/6 30 cc bottles, 10/-

Prices (not applicable in Eire) are subject to usual professional discount

GLAXO LABORATORIES LTD, GREENFORD, MIDDLESEX BYRon 3434

BRITISH MEDICAL JOURNAL

LONDON SATURDAY JULY 2 1938

TREATMENT OF APOPLEXY BY INFILTRATION OF THE STELLATE GANGLION WITH NOVOCAIN

BY

W ARTHUR MACKEY, M B, Ch B, F R F P S, F R C S Ed

Assistant to the Regius Professor of Surgery University of Glasgow Dispensary Surgeon to the Western Infirmary of Glasgow

AND

LAURANCE D W SCOTT, M B, Ch B, F R F P S

Assistant to the Regius Professor of Medicine University of Glasgow Dispensary Physician to the Western Infirmary of Glasgow

A paper by Leriche and Fontaine (1936) suggests the use in cases of apoplexy of a method of treatment which may be dramatic in its immediate effects It consists essentially in the temporary anaesthesia of the stellate ganglion by means of novocain These authors submit that in any case of apoplexy the vascular lesion be it haemorrhage or softening acts as an irritant on the surrounding vessels and produces a halo of irritative vasospasm If this be true then vasospasm by rendering anoxaemic an area of cerebral tissue around the organic lesion may play an important part in determining the scope of the initial symptoms and if persistent may contribute to the ultimate neuronic degeneration Leriche and Fontaine claim that vasospasm can be abolished by interrupting the sympathetic outflow to the head by infiltration of the stellate ganglion with novocain and suggest that such treatment, by sparing neurons that would otherwise perish may in certain cases save life and also aid many patients to make the most complete recovery

Their argument in favour of this treatment is supported by the results obtained in two patients who developed hemiplegia during convalescence following gynaecological operations The first case was that of a woman aged 59 who developed right hemiplegia with coma eight days after the performance of hysterectomy for uterine fibroids She was *in extremis* and 10 c cm of 1 per cent novocain was injected into the region of the left stellate ganglion There was immediate improvement and in fifteen minutes she was so far recovered that she was able to reply to questions with a few words Her improvement was maintained The second case was less dramatic for the patient though aphasic was not comatose Within fifteen minutes of the injection of novocain she could articulate with difficulty The injection was repeated next day and in three days the signs of hemiplegia cleared completely

In view of these results further investigation of the method seemed to be desirable and therefore during the past few months all patients with apoplexy admitted to the wards of Professor J W McNee have been treated by infiltration of the stellate ganglion with novocain

Method

The injection is made into the neighbourhood of the stellate ganglion on the side of the lesion—that is the non paralysed side The ganglion is not easily accessible lying at the inner end of the first intercostal space between the heads of the first and second ribs above and below the body of the first thoracic vertebra medially and the pleura in front It is reached by means of a long needle of the type used for tapping the spinal theca passed in a downward and medial direction under the neck of the first rib The landmark of the neck of each rib is roughly a point 4 cm lateral to the tip of the spinous process of the vertebra above The needle mounted on a syringe is therefore inserted 4 cm lateral to the tip of the spine of the vertebra prominens and driven steadily on until at a depth of about 4 cm it impinges on the transverse process of the first dorsal vertebra which must if necessary be sought and found The needle is then withdrawn slightly and made to pass in a downward and medial direction under the transverse process and the neck of the first rib until its progress is arrested by the body of the first dorsal vertebra This occurs at a depth of 7 to 8 cm and the needle point must now lie in close proximity to the stellate ganglion between the heads of the first and second ribs The needle is withdrawn slightly and gentle suction exercised by means of the syringe If no blood is obtained it is safe to proceed with the novocain injection and 20 to 30 c cm of a 1 per cent solution may be introduced without apprehension The objective is to infiltrate the ganglion and the surrounding tissues if this is achieved Horner's syndrome develops within a few minutes This consists of enophthalmos narrowing of the palpebral fissure contraction of the pupil and absence of sweating on the side of the injection

Rationale of the Method

It has come to be realized in recent years that the results of vascular occlusion do not depend entirely upon the mechanical obstruction to the circulation A whole lung may be removed at operation or the pulmonary pedicle

ligated, with trivial upset of the circulation, while a pulmonary embolism obstructing a much smaller proportion of the pulmonary circulation may result in sudden death When embolism occurs in the main vessel of a limb there is widespread spasm of the collateral vessels, which may be relieved by antispasmodics such as papaverine (de Takats, 1936 , McKechnie and Allen, 1936), passive vascular exercises (Herrmann and Reid, 1934), spinal anaesthesia, sympathetic ganglionectomy, etc The importance of vasospasm in determining the extent of ultimate degeneration has been demonstrated experimentally by Chase (1934) in mesenteric air-embolism Leriche and Stricker (1933) go even further and regard an area of *chronic* arterial occlusion as a source of vasospastic stimuli, treating such cases by excision of the thrombosed portion of the artery, with immediate benefit to the circulation of the limb The therapeutic procedure which we describe is an extension of these principles to the blood vessels of the brain These blood vessels derive a rich sympathetic nerve supply from the plexuses surrounding the internal carotid and vertebral arteries Presumably these nerves are vasomotor, and under stimulation are capable of setting up a condition of cerebral ischaemia The brain however, differs from the tissues of the limbs in its lability, oxygen deprivation is tolerated for only a short time It is to be expected, therefore, in cases of cerebral vascular accident that good results will be obtained from vasodilator therapy only if it be instituted very soon after the onset of the illness The anatomical and physiological facts and the preceding analogies provide *a priori* grounds for expectation of improvement in cases of cerebral vascular occlusion, but the clinical course of our first case seems to justify the hypothesis that even in cerebral haemorrhage there is a considerable amount of vasospasm in the surrounding brain, and that this may be removed by sympathetic anaesthesia

Case Records

Case 1—A man aged 26 suddenly became unconscious on the day of admission On examination presystolic and systolic mitral murmurs were noted The face arm, and leg on the left side were paralysed, he was deeply comatose and could not be roused Two hours after the onset 30 c.cm of 1 per cent novocain was injected into the region of the right stellate ganglion, and within two minutes he regained consciousness, and was able to recognize his relatives and give accurate details of his previous illnesses Horner's syndrome appeared but there was no change in the paralysis The improvement was maintained for some hours when he gradually became stuporous and relapsed to a level of consciousness little above that on admission Another injection of 30 c.cm was given eight hours after the onset and this was followed by a Horner syndrome and improvement similar to that previously noted This improvement was maintained for the next five days but on the sixth day it was evident that he was much weaker physically, although still conscious On the seventh day he again lost consciousness and a further injection of 30 c.cm produced a Horner syndrome but no other changes death occurring within four hours Post mortem examination showed a hypertrophied heart which was the seat of subacute bacterial endocarditis A large haemorrhage measuring six inches in diameter was present in the right cerebral hemisphere, apparently arising from a ruptured mycotic aneurysm A recent embolus was present at the termination of the left internal carotid artery, extending a short distance into the middle cerebral artery

Case 2—On the day of admission the patient, a man aged 48 suddenly became unconscious On examination there was weakness of the face and arm on the right side but no obvious paralysis of the right leg the right plantar response was extensor in type He was unconscious but could be roused with difficulty The heart was not enlarged, and the blood pressure was 110/70 mm Hg Two hours after the onset 30 c.cm of 1 per cent novocain was injected with no immediate change in the clinical condition and Horner's syndrome did not develop Within an hour he regained consciousness and within two hours was able to converse freely On the following day it was noted that there was no longer any paralysis, the right plantar response being indefinite in type Five days from the onset he became stuporous, and the weakness of the right arm returned, 30 c.cm was again injected, with no improvement in the condition despite production of a Horner syndrome Following this he gradually improved, and was dismissed one month later with the right plantar response extensor in type but with no other evidence of neurological damage

Case 3—On the day before admission the patient, a man aged 53, suddenly developed a paralysis of the right arm and leg and at the same time became aphasic There was paralysis of the face, arm, and leg on the right side, and the right plantar response was extensor in type He was deeply unconscious The heart was not enlarged and the blood pressure was 100/70 mm Hg Thirty c.cm of 1 per cent novocain was injected thirty-six hours after the onset, with reproduction of Horner's syndrome but no other immediate change in the clinical condition Twelve hours later he was much less drowsy, but the paralysis was unaltered and the aphasia was pronounced Improvement in this case was slow, and the patient was dismissed six weeks later with paresis of the right leg and a slight degree of aphasia

Case 4—This patient, a man aged 60, was admitted complaining of severe headache and vomiting The heart was enlarged and the arteries thickened and tortuous the blood pressure was 250/150 mm Hg Thirty six hours after admission he suddenly became unconscious The right arm and leg were flaccid and the plantar responses were extensor Thirty c.cm of 1 per cent novocain was injected half an hour after the onset of coma without the slightest change in the clinical condition He died thirty minutes later Post mortem examination showed a greatly hypertrophied heart A large haemorrhage was present in the left internal capsule and lateral ventricle, and a smaller one in the pons There was extensive destruction of the left lenticular and caudate nuclei

Case 5—A man aged 57 had on two previous occasions been under treatment in the Western Infirmary for aortic incompetence, the Wassermann reaction was positive at these times Some hours before admission he suddenly became unconscious There was paralysis of the right arm and leg, the right plantar response was extensor in type The blood pressure was 224/68 mm Hg and systolic and diastolic murmurs were present over the aortic area Four hours after the onset 40 c.cm of 1 per cent novocain was injected Immediately afterwards Horner's syndrome developed and he was able to move the right arm at the elbow slightly and the right leg at the hip quite strongly He regained consciousness to some extent and was able to say a few words with difficulty This improvement was maintained during the next twelve hours, after which time his condition gradually deteriorated and eighteen hours after the onset he was again completely paralysed in the right arm and leg Thirty c.cm was again injected, and following the injection Horner's syndrome developed and there was a return of muscle power to the paralysed limbs He was dismissed five weeks later still aphasic and with a severe residual hemiplegia

Case 6—A woman aged 55 suddenly became unconscious on the day of admission On examination she was deeply comatose and could not be roused, there was a flaccid paralysis of the right arm and leg, with an extensor plantar response on that side The head and eyes were rotated to the left The heart was enlarged to percussion and the blood pressure was 240/130 mm Hg Two hours after the onset 30 c.cm of 1 per cent novocain was injected Horner's syndrome developed and the head and eyes were no longer rotated to the left Two hours later she was much less comatose and made efforts to speak, but aphasia was almost complete She retained this degree of mental improvement to

the day of her death which occurred seven days after admission from hypostatic pneumonia the paralysis remaining unchanged Permission for a post mortem examination was refused

Case 7—On the day he was admitted to hospital a man aged 54 began to have convulsions which lasted until his admission He was deeply comatose and the face arm and leg on the right side were paralysed The heart was not enlarged and the blood pressure was 160/68 mm Hg Four hours after the onset 30 c cm of 1 per cent novocain was injected with no immediate improvement Horner s syndrome did not develop One hour later he regained consciousness and made efforts to speak his vocabulary being defective Eighteen hours later another injection of 20 c cm was given this being followed by the development of Horner s syndrome Immediately thereafter he was able to move his right arm quite strongly and to feed himself One hour later there was some return of muscle power in the right leg This improvement was maintained and he was dismissed four weeks later with some aphasia weakness of the right leg but with full function of the right arm

Case 8—On the day of admission the patient a woman aged 64 suddenly became unconscious On examination she was comatose and could not be roused There was paralysis of the face arm and leg on the left side The plantar responses were extensor The heart was enlarged to percussion and the blood pressure was 225/125 mm Hg Fourteen hours after the onset 30 c cm of 1 per cent novocain was injected with the production of Horner s syndrome Within a few minutes of the injection she began to speak but there was no change in the paralysis This improvement lasted a few hours only and eighteen hours after the injection she was again deeply comatose and the head and eyes were strongly rotated to the right Thirty c cm was again injected with reproduction of a Horner syndrome a similar immediate improvement in the mental condition and disappearance of the deviation of the head and eyes This improvement lasted some eighteen hours when she again became comatose with rotation of the head and eyes to the right A further injection of 20 c cm was made with a slight immediate improvement in the mental condition the production of Horner s syndrome and abolition of the rotation of the head and eyes This lasted only a few hours and she gradually became weaker dying five days after admission Permission for a post mortem examination was refused

Case 9—One hour before admission a man aged 44 suddenly became unconscious On examination there was a flaccid paralysis of the left arm and leg the plantar response being indefinite on that side Twenty c cm of 1 per cent novocain was injected one and a half hours after the onset but Horner s syndrome did not develop No immediate change occurred in the clinical condition but thirty minutes later there was a return of some muscle power in the left arm and he could be roused Following this he improved slightly and one and a half hours later could move the left arm weakly and made efforts to speak Thirty c cm of 1 per cent novocain was again injected three hours after the onset, and with the completion of the injection he became deeply cyanosed and respiration ceased Artificial respiration was commenced and maintained for thirty minutes when he began to breathe naturally Two hours later he was greatly improved and could move the left arm quite strongly there was some movement at the left hip and knee and he was talking freely This improvement was maintained for some hours but thereafter he gradually became weaker and died fourteen hours after admission Post mortem examination showed a hypertrophied left ventricle with vegetations on the mitral valve suggestive of healed bacterial endocarditis Emboli were found in the right internal carotid artery and also in the right sylvian artery A large red softening was present in the area of the left lenticular nucleus there was evidence of old infarction in the island of Reil on the left side and also in the left lateral cerebellar lobe

Case 10—A man aged 67 collapsed on the day of admission On examination the heart was found to be enlarged and there was paralysis of the face arm and leg on the left side The head and eyes were deviated to the right the plantar response was extensor Twenty c cm of 1 per cent novocain was injected into the region of the right stellate ganglion two hours after the onset, the injection being followed by Horner s syndrome No change was noted in the clinical condition Six hours after the onset another injection of 20 c cm was made resulting in the production of Horner s syndrome but with no other effect Following this he became progressively weaker and died suddenly on the sixth day Post mortem examination showed a large haemorrhage present in the right cerebral hemisphere that appeared to have been there for some days Apparently the haemorrhage had ruptured into the lateral ventricle on the sixth day and the ventricular system was filled with blood

Results

Since some cases of apoplexy improve spontaneously during the hours immediately following the catastrophe the results of any form of active treatment must be reviewed critically If however marked improvement occurs *within a few minutes* of the carrying out of a therapeutic procedure there can be less doubt of the existence of a causal connexion For the purposes of the present investigation the injection is regarded as being without effect unless a change was produced in the clinical picture within a few minutes of the injection of novocain

Infiltration of the region of the stellate ganglion was practised on nineteen occasions in nine of these improvement in the clinical condition was produced within a few minutes of the completion of the injection Only in Case 1 was the immediate improvement dramatic and in this patient the result was so remarkable that by comparison subsequent results seemed rather disappointing Life was certainly prolonged and the patient was brought from deep coma to a state of clear consciousness in which had it been necessary he might have made a will On occasion this might be of medico legal importance Death occurred seven days after the onset of the apoplexy from a subsequent massive embolism of the middle cerebral artery on the opposite side

In the other cases in which there was immediate improvement the effects were much less striking Some showed diminution of the depth of unconsciousness and more ready response to questions and physical stimuli Others revealed some return of muscle power in the paralysed limbs In all of these nine successful injections introduction of novocain was followed by the development of a Horner syndrome indicating that the stellate ganglion had been anaesthetized and that the injection had been correctly placed

On ten occasions the injection of novocain produced no immediate improvement, after five of these injections however Horner s syndrome did not develop and presumably therefore the absence of improvement may be attributed to the fact that the sympathetic outflow was not blocked in these cases Some proof of the truth of such an explanation was obtained in Case 7 This patient received two injections of novocain the first was given four hours after the onset of the apoplexy but was apparently incorrectly placed as a Horner syndrome did not develop and no improvement was noted in the clinical condition The second injection given twenty two hours after the onset, produced Horner s syndrome and was followed by immediate return of muscle power in the hitherto paralysed arm

On five occasions there was no immediate improvement after the novocain injection in spite of the production of a Horner syndrome In one of these the injection

was made seven days, and in another five days, after the onset of the apoplexy, when it was most unlikely that benefit would accrue from relaxation of vasospasm Two injections were given in a case of massive cerebral haemorrhage which eventually ruptured into the lateral ventricle and was of such severity that no improvement could reasonably be expected from any form of treatment In the remaining case the failure of the injection to produce improvement cannot be explained at the present time These findings are summarized in the table

Case No	Injection No	Suspected Variety of Apoplexy	Interval since Apoplexy	Immediate Result	Horner's Syndrome
1	1	Cerebral haemorrhage	2 hours	Recovery of consciousness from deep coma	Yes
	2		8	Recovery of consciousness	Yes
	3		7 days	No improvement	Yes
2	1	Cerebral thrombosis	2 hours	"	No
	2		5 days	" "	Yes
3	1		36 hours		Yes
4	1	Cerebral haemorrhage	½ hour		No
5	1	Cerebral thrombosis	4 hours	Return of muscle power to arm and leg slight recovery of consciousness	Yes
	2		18 "	Return of muscle power in arm and leg	Yes
6	1	Cerebral haemorrhage	2 "	Head and eyes no longer rotated to side	Yes
7	1	Cerebral thrombosis	4 "	No improvement	No
	2		22	Return of muscle power to arm	Yes
8	1	Cerebral haemorrhage	14 "	Recovery of consciousness	Yes
	2		32 "	Recovery of consciousness head and eyes no longer rotated to side	Yes
	3		50	Slight recovery of consciousness	Yes
9	1	Cerebral embolism	1½ "	No improvement	No
	2		3 "	Collapse respiratory failure	No
10	1	Cerebral haemorrhage	2 "	No improvement	Yes
	2		8 "	" "	Yes

It is necessary to point out that the procedure described is not always devoid of danger Case 9 received a first injection of 20 c cm of 1 per cent novocain in the region of the right stellate ganglion without noticeable effect A second injection some hours later was followed by immediate respiratory failure, and artificial respiration had to be carried out for thirty minutes before breathing was re-established A possible explanation of this accident is that some of the novocain was injected intravenously, despite the effort always made to ensure that a vein had not been entered A similar case is mentioned by Cyrnx (1937) as occurring at the clinic of Leriche Our patient died twelve hours later and was found to have had a large cerebral softening, yet the suspicion persists that in this instance death may have been accelerated by treatment Furthermore, it is not always possible to differentiate cases of cerebral haemorrhage from cases of cerebral vascular occlusion and it might be supposed that the production of cerebral vasodilatation in the former would carry with it the risk of increased haemorrhage, and so would be dangerous We have been fortunate in encountering no untoward effects suggestive of this complication even in cases which seemed likely to be suffering from cerebral haemorrhage,

Summary and Conclusions

Infiltration of the region of the stellate ganglion was carried out on nineteen occasions in cases of apoplexy, a definite clinical improvement followed nine of these injections Only in one case—the youngest of the series—was the improvement dramatic, and in this instance the immediate beneficial effect of the treatment cannot be doubted In the other cases the degree of improvement was relatively slight In one instance the injection was followed by respiratory failure apparently produced by the solution being accidentally introduced into a vein

The results obtained do not justify the adoption of anaesthesia of the stellate ganglion as a routine method of treatment in apoplexy, but further study is necessary before the method is rejected as of negligible value In the small series of cases studied it was impossible to control such important variables as the age of the patient, the duration of the illness, and the nature of the causal lesion, but it is believed that the following tentative conclusions are justified

1 The use of the method in cases of severe cerebral haemorrhage in patients of middle age and older will serve only to bring it into disrepute

2 Cases of cerebral thrombosis may show some improvement of their clinical condition following anaesthesia of the stellate ganglion, the degree of such improvement will be partly dependent on how much arterial sclerosis is present

3 The ideal case would seem to be one of cerebral embolism, especially in the young

4 It is important that in all cases the treatment should be given as soon after the onset of the apoplexy as possible, and probably only a negligible degree of improvement can be expected if the illness has lasted longer than twenty-four hours before treatment is commenced

Our thanks are due to Professor McNee for permission to treat patients in his wards One of us (L D W S) was in receipt of a grant from the Rankin Medical Research Fund

REFERENCES

Chase, W H (1934) *Surg Gynec Obstet* **59**, 569
Cyrnx, J H (1937) *British Medical Journal* **2**, 1199
de Takats, G (1936) *J Amer med Ass* **106**, 1003
Herrmann, L G, and Reid, M R (1934) *Ann Surg* **100**, 750
Leriche, R, and Fontaine R (1936) *Rev Chir* Paris **55** 755
—— and Stricker, P (1933) *L'Arteriectomie dans les artérites oblitérantes*, Paris (quoted by Young, A (1936), dixieme Congres de la Societé Internationale de Chirurgie, **2**, 406)
McKechnie, R E, and Allen, E V (1936) *Surg Gynec Obstet* **63**, 231

E Hoffmann (*Amer J Syph Gon* March, 1938) confirms the doctrine of "without a syphilitic mother no syphilitic child" He points out the importance of a search for spirochaetes in women suspected of infection especially in the cervix, and of blood and cerebrospinal fluid Wassermann and Kahn examinations after the fourth month He considers that the germ cells and foetus up to the fourth month are never affected, and points out the value of (1) a note of the placental size (2) search for spirochaetes in blood from the umbilical vein and (3) a ray examination to reveal osteochondritis in infants In treatment he stresses the good tolerance of mother and child to the arsenobenzene group

COMMON FOOT AILMENTS*

BY

W SAYLE CREER, M Ch Orth, F R C S

(From the Orthopaedic Service Salford Royal Hospital)

Abnormalities and deformities of the feet causing pain and disability are so exceedingly common that the difficulty is to choose conditions which can be described and discussed with profit within a reasonable space I am told that the average medical practitioner is ignorant of them because there is no literature in which he can read about them This is not strictly true though one must admit that the textbooks dismiss the subject with very few words and that only the specialist is likely to read the journals or buy the books in which full descriptions are given It is in the hope that help can be given that I have dared to produce this resume

The medical profession is privileged to see the private life of the public to enjoy confidences not given to any other and is at times burdened with the responsibility of making or marring a life The orthopaedic surgeon's responsibility is very often to restore an injured workman to full earning capacity or to relieve the foot troubles of those whose life is to say the least made a burden because of pain

This problem of pain so frequently glossed over or forgotten is a very real one and because there is a widespread belief among the public that surgeons are too fond of the knife there is a great deal of hesitation in seeking aid Too often after assuring the patient that some simple form of non surgical treatment will give relief one hears the sigh. I wish I had known that twenty years ago! For twenty years afraid to seek help! What this aid could have amounted to is revealed by a consideration of some common foot ailments and their treatment without recourse to surgery

No better idea of the prevalence and ratio of some of these conditions can be obtained than by analysing the figures for the orthopaedic clinics of two foot hospitals In these two institutions every patient who requires advice or treatment for conditions that are not simple or straightforward chiropody is referred to the orthopaedic surgeon for advice In two years these cases amounted to 1 000 In the following table the figures in the column Cases refer to the number of times such a condition has been seen As the patient may have more than one condition the number of cases does not correspond to the number of patients In fact the average is 1 35 lesions or conditions per patient

Table Showing Analysis of 1 004 Patients seen from April 1936 to March 1938

	Cases	/	
Metatarsal arch abnormalities (flattening pain etc.)	254	24	Found in 327 or 33% of the patients
Hallux valgus complex (see below for description)	203	20	
Flat foot (acquired only)	194	20	
Hallux rigidus	103	10	
Hammer toe	40	4	
Unusual severe or persistent corns and ingrowing toe nails etc	150	—	

These figures convey some idea of the extraordinary number of patients seeking relief from chiropodists for foot complaints which have always been regarded as orthopaedic conditions There is a reason for this Later in the paper palliative methods of treatment are described and the reasons why they are used are given under the heading Contraindications to Operation as well as in the paragraphs dealing with the methods All the measures described are commonly used by chiropodists to a far greater extent than by surgeons (unless the orthopaedic department is fortunate enough to have a chiropodist attached) so that the nervous patients fearing surgery yet craving relief have gone to those from whom non surgical treatment could be obtained

The Hallux Valgus Complex

By far the most common of the afflictions that beset the feet of the twentieth century Briton is an abnormality of the metatarsal region Excluding the figures for metatarsal arch defects which include all cases in which the metatarsal arch is flattened irrespective of symptomatology the most common ailment is the hallux valgus complex Although much has been written in recent years of the operative treatment of this condition little has been said regarding the many factors of which it is an aggregation and which suggest the name hallux valgus complex

Examination of some 300 cases has shown that the various parts of the foot are affected approximately in the following order of frequency and include the following conditions (Fig 1)

(1) Flattening of the metatarsal arch with spreading of the metatarsals and the formation of

(2) callosities on the plantar aspect

(3) valgus deformity and inward rotation of the hallux

(4) formation of a bunion over an exostosis on the inner side of the first metatarsal

(5) The second toe lies either under or over or is pushed laterally by the hallux If the former it is generally a hammer toe and has a painful corn on the dorsum of the proximal interphalangeal joint

(6) The outer three toes are usually crowded together the fifth tucked under the fourth the fourth under the third and the third under the second In other cases they are clawed and more or less rigid The worse the metatarsal arch reversal—that is the arch reversed from a concavity downwards to a convexity—the more likely will there be clawing of the toes

(7) Dislocation of the second metatarso phalangeal joint is surprisingly common when looked for In my experience not less than 8 per cent are so affected Sometimes the dislocation is of the third metatarso phalangeal joint and I have seen it affecting the fourth while two joints may be concerned

(8) A genuine flattening of the longitudinal arch with both foot and calf symptoms may be found

(9) Corn formation on the dorsum of the fifth toe and at the tips of the second and third toes is frequent

(10) Affections of the nail of the great toe are common Pressure of the second toe on the nail sulcus causes in growing toe nail Interference with the nail bed gives rise to onychogryphosis onychatrophia and the like

(11) Swelling of the foot from oedema not due to general conditions is occasionally met with

Any or all of these conditions may be bilateral or unilateral This picture is not an exaggeration in any way It is not surprising that the patient complains of pain in several sites In fact every single factor of the deformity may give rise to pain or tenderness I say tenderness because so often it is pressure when walking which causes the pain while at rest there is comparative comfort

Possible Modes of Production

One could argue about the cause of all these troubles for years without being able to give conclusive support to any contention A few facts clear the ground a little My figures show that the number of males affected is only one to every fifteen women It is usual to find on inquiry that the males whose feet are really deformed have suffered from a general or local infective disease such as rheumatic fever generalized arthritis gonorrhoea or frost bite Clinical examination shows that metatarsal flattening and spread and callosity formation are more common that slight hallux valgus and a small exostosis

*This paper is an expansion and adaptation of a lecture illustrated by sketches and a cine film given to the Lancashire and Cheshire Branch of the B.M.A. at Salford Royal Hospital on February 23 1938.

come next, and that the whole gamut of deformities is present only in the fully developed condition

There is one other factor to consider, and this in my opinion is the key to the whole problem Women wear "high-heeled" shoes which slope down from the heel to the base of the toes (Fig 2a) This, as can be demonstrated by radiographs, means that the metatarsals are more or less vertical and that the body weight is thrown forward on to the metatarsal arch This throwing or sliding forward at each step causes (1) rubbing of the plantar skin on the sole of the shoe at point × in Fig 2a, and almost certainly accounts for the thickened skin, (2) distorts the transverse or metatarsal arch, (3) crowds the toes into the front of the shoe, (4) dorsiflexes the toes at the metatarso-phalangeal joints and leads to secondary contracture of the long and short extensor

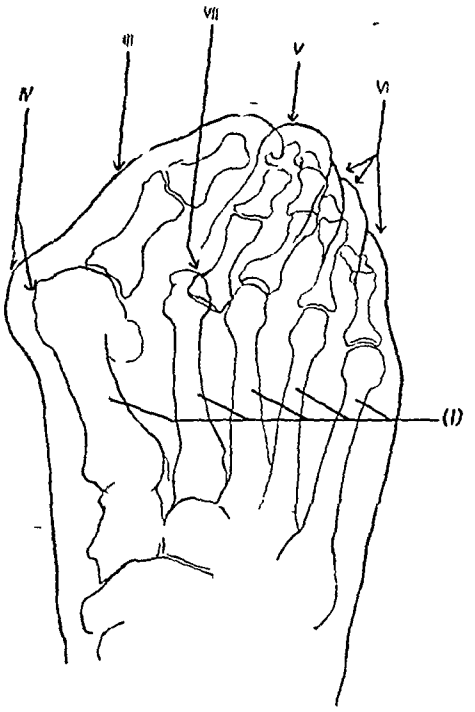


FIG 1—Tracing of a radiograph of hallux valgus complex (see text)

muscles, with stretching of the small foot muscles, the interossei, and lumbricals

If the heel part of the shoe were horizontal instead of sloping (Fig 2b) the sliding might be reduced, though it can never be abolished with heels higher than about one inch Added to the heel height and slope we have the fact that there is insufficient heel and instep grip in most shoes and none at all in court shoes—that is, shoes with no fastening across the instep A strap across the instep is effective only with moderate or low heels With high heels it presses too hard and causes pain The inefficient grip of the mid- and hind-foot necessitates the toes being used in a manner that Nature never intended, in order to prevent the shoe falling off This upsets the normal muscle balance and is the cause of the flexion contractures at the interphalangeal joints—the gripping effect necessary

The effect of sloping and high heels is therefore to change the posture of the foot, to pitch the body weight on to the metatarsal heads and the transverse arch, and to cause spreading of the arch Inevitably the toes are dorsiflexed at the metatarso-phalangeal joints, and in order to grip the shoe become flexed at the interphalangeal joints (Fig 3)

To account for the lateral deviation—the valgus deformity—of the hallux is perfectly simple, though there are two chief schools of thought The first says that short tight hose and/or shoes are the deforming factor This hypothesis takes no notice of heel height It can not be gainsaid that since our maidens start wearing pointed shoes at a very tender age this is a not unreasonable theory It is undoubtedly the explanation for the crowding together and overlapping of the outer toes But I cannot help remembering the cases one sees in males, where pointed shoes have not been worn and where there is the other factor—generalized infection Anyone who has seen a pair of feet swollen and distorted with gonorrhoea or acute rheumatic fever must be struck by the fact that all the tissues are oedematous and softened The effect on the small muscles and the ligaments is only too easy to visualize And we know, too, how these feet become deformed, almost as we watch them, even though the patient is wearing no shoes

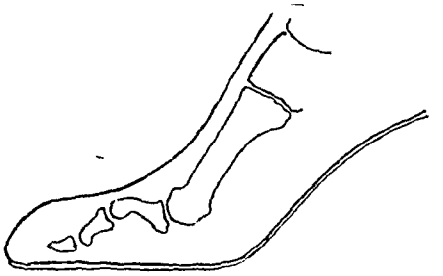


FIG 3—Tracing of a radiograph of a foot in a high heeled shoe showing the vertical position of the metatarsals

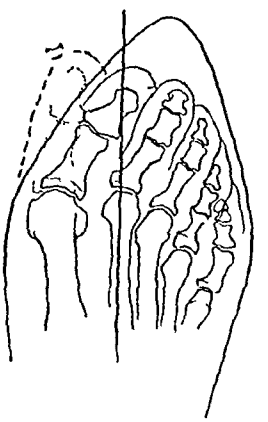


FIG 5—Tracing of a radiograph of a foot in a shoe, showing that pointed shoes prevent the great toe being kept straight and that the point of the shoe is lateral to the mid line of the foot

Whereas before the attack they were reasonably or perfectly shaped, by the time it is over, some very few weeks later, there is spreading of the metatarsal arch, hallux valgus, and clawed toes as severe as one can ever see

By analogy I have been forced to believe that in women the wearing of high heels and the abnormal posture of the feet cause vascular and mechanical disturbances which, by affecting the small muscles and ligaments, allow the metatarsals to spread or "fan out" This spreading separates the attachments of the adductor transversus and the adductor obliquus hallucis The outer attachments are to bone, and are therefore "fixed" The inner attachments are virtually to the base of the phalanx of the great toe, and as the phalanx is connected to the foot by a joint any pull on the bone will move the joint and move the toe into the known valgus position An argument supporting this is that as the muscles are attached to the plantar aspect of the phalanges one would expect them to cause rotation around the long axis of the toe as well as lateral deviation We would expect the rotation to be so that the toe is twisted inwards till the nail looks towards the opposite foot The rotation is found (Fig 4)

Briefly, then, it can be asserted that the hallux valgus complex is caused by (1) an "infective" process affecting the feet, or (2) the wearing of unsuitable shoes The

former cause is less common but is the more frequent one in males

That the valgus deformity is assisted by narrow-pointed shoes cannot be doubted The point of a very large proportion of feminine shoes is outside (lateral to) the centre line of the second metatarsal and toe and it is impossible to fit a foot with a normally positioned great toe into these shoes All these points are easily demonstrated by radiographs Tracings of radiographs are much more easily understood therefore some are presented here instead of the original films (Fig 5)

The explanation of the dislocated metatarso phalangeal joint(s) is easy It is caused by the pull of the tight extensor tendons on toes which are kept dorsiflexed because of the high heels The proof is simple and depends on clinical facts anatomical and operative dissection and experimental stimulation of muscles at operation

Surgical Treatment

The surgical treatment of hallux valgus deformity has been argued and discussed for at least two generations In one group of operations an attempt is made to correct the fanning of the metatarsals as well as to correct the great toe So far as I know these operations have not gained any wide popularity because although they look well on paper their execution is not easy nor is their effect that which might be hoped for

The popular operations take the form of making a false joint for the great toe by excision of (1) the base of the phalanx or (2) the head of the metatarsal I will refer you to some correspondence in the *Journal* (1935 1 446 504) for opinions on the relative merits of these operations After months of facts and figures no side won The truth is that in many cases any reasonable operation will cure the valgus deformity of the hallux but as Sir Robert Jones pointed out many years ago there is small satisfaction for patient or surgeon if the more shapely foot is still painful and he emphasized what most of us know that the foot (as a whole) must be considered as a whole In so many cases the patient complains of pain only at the base of the second toe The enthusiastic surgeon who corrects the deformed great toe and neglects the cause of pain in the second toe has performed a good operation but has not necessarily performed one to cure the complaint which made the patient consult him

If the patient's complaint is referable to the second toe and there is a dislocation here one must either excise the base of the phalanx of the second toe or tenotomize the extensor tendons If the pain is due to compression of the second toe between the first and third toes and there are no other complaints it may be wiser to amputate the toe It has been argued that this will allow the great toe to deform further I doubt it But it does allow the vain lady to go on wearing *pointed* shoes—no small psychological point

The trouble may be the painful corn on the hammer toe There may be corns on other toes These corns may be due to the tight extensor tendons which press the toes up against the shoe In such cases tenotomy of the extensor tendons must be performed or the tendons may be transplanted to the metatarsals in order to aid reformation of the metatarsal arch One can go on almost for ever describing the many things which may need doing and one or more of which will have to be done in many cases but as this is a matter for the surgeon I will not take up any further space here

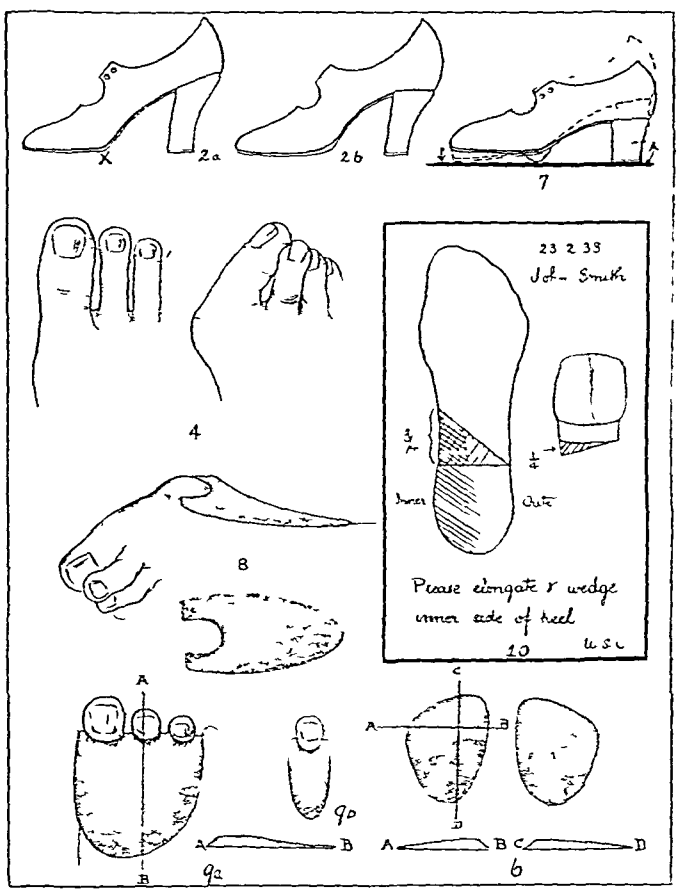


FIG 2a — High heeled shoe showing sloping heel
FIG 2b —Similar shoe with level heel
FIG 4 —Showing rotation of hallux in a case of valgus deformity
FIG 6 —Metatarsal dome or pad
FIG 7 —Metatarsal rocker bar showing range of movement permitted without movement of great toe
FIG 8 —Protective bunion pad
FIG 9a —Dorsal toe prop
FIG 9b —Single dorsal toe padding
FIG 10 —Example of instructions sent to a shoemaker in case of flat foot

Contraindications to Operation

What of those who refuse operation or on whom operation cannot be performed? The former are a very large group The medical contraindications to operation are exceedingly few If it were necessary to use a general or spinal anaesthetic one might hesitate to suggest operating on a lady of 70 whose cardiovascular system was poor But if she is suffering constant pain as a result of a foot condition which can be relieved one has to ask oneself whether it is not true that relief of the pain would improve her general condition Seeing that it is perfectly easy to perform almost any operation under local anaesthesia the operative risk itself is negligible I refuse however as a result of experience to transplant tendons under local anaesthesia It is not wise to operate on a case where there has been recent rheumatic fever or gonorrhoea because of the risk of lighting up the inflammation Severe cases of diabetes arteriosclerosis or other vascular disturbances and advanced nephritis or

cardiac disease or varicose veins with oedema of the feet make one pause, because a poor circulation in the foot always implies the risk of sepsis or poor healing of the wound, but each case must be considered on its merits The final contraindication is when the patient refuses to wear reasonable footwear after the operation the corrected foot will not fit pointed shoes, and if the foot is forced into them soon after operation the deformity will recur

A much more important group of patients includes those who cannot afford the time for operation and after-treatment I warn all my patients that they must expect to be away from work for not less than six weeks In some cases nearly three months is required It is not that the patient is laid up for long—most patients can start walking in three weeks—but when we remember that the feet do more work and support more weight than any other part of the body it is not surprising that in the elderly it takes two months to restore them to their original agility and power There is always this consoling fact when deciding whether the time can be afforded that whereas before the treatment the patient was a cripple, afterwards he or she will rediscover the joy of painless movement

Palliative Treatment

But to those for whom operation is an impossibility we can offer palliative measures that are worth while They may involve a little trouble and some attention to details, but those of us who have prescribed them know how grateful the patients are for the *relief of the pain* These measures apply to all foot conditions—not only hallux valgus complex They can be divided into

(1) Alterations to shoes or the prescription of special types
(2) The fitting of protective pads
(3) The application of corrective strapping
(4) Attention to corns, callosities, etc
(5) Physiotherapy—that is, heat in various forms, massage, exercises

The whole of this issue of the *Journal* could be filled on these subjects alone, so I will confine the account to examples of what can be done and the reasons behind the suggested treatment

ALTERATIONS TO SHOES

I have seen a number of cases of hallux valgus complex where the patient's whole life was overshadowed by her foot troubles Shoes were ordered from ordinary shoemakers—not surgical shoemakers We sent a draft or outline of the foot together with measurements taken with an ordinary domestic tape-measure, and asked for modified straight-inner-sided shoes with one-inch heels, plenty of toe room, etc These shoemakers supply good-looking comfortable shoes in a short time and at a reasonable price In some cases my patients, who decided to have these shoes until such a date as they could take time off for the operation, were so relieved by wearing them that the operation never was performed

Simpler measures include the fitting of a rubber "metatarsal dome into the shoe (Fig 6) This is a most useful little support It distributes the weight of the forefoot and the callosities and pain due to localized pressure in this region are greatly relieved An alternative support of great value is made by cutting and shaping 7/16-inch semi-compressed adhesive felt, which adheres to the foot

In the case of hallux rigidus where there is pain because the metatarso phalangeal joint *cannot* be moved or *when* it is moved, the fitting of a metatarsal rocker bar makes it possible to walk without any movement here I have patients whose radiographs showed very marked osteo arthritis, but who have been freed from all pain by this fitting which costs 1s 6d Fig 7 illustrates the principle well

PROTECTIVE PADS

Bunions corns callosities, and all tender areas can often be relieved by the fitting of a well-shaped pad I knew of these measures as a medical student, but it was a chiropodist who taught me the secret of success I used the same material as he did—adhesive felt But whereas I only cut out what I thought was a good shape he carefully makes his pad to shape from a metal template and then skives or bevels it so that it fits without any abrupt edges (Fig 8) Similar kinds of pads can be used for the toes The type illustrated in Fig 9a fitted on to the dorsum of clawed toes and overlying the metatarso phalangeal joints, with a smaller one underneath the toes, will provide an extraordinary degree of comfort The smaller type (Fig 9b) on one toe—for example, hammer-toe—will protect and relieve painful corns It will be obvious that the limit to the use and design of pads is that of the ingenuity and skill of the doctor or chiropodist The important point is to skive or bevel the edges To make and apply them consumes more time and patience than the busy surgeon or doctor may possess And one must express the opinion that here is a case where we might very profitably utilize the skill and time of the chiropodist, who spends his life working with such material

CORRECTIVE STRAPPING

The uses of this method of treatment are somewhat limited, but of value in the young No other treatment is required for deformed toes in early childhood In hallux valgus one can sometimes prevent pressure of the great toe against the second by employing it, but unless the patient has a particularly good pair of shoes the benefit of the strapping is lost

CORNS AND CALLOSITIES

Callosities form most commonly under the heads of the metatarsals in metatarsal arch flattening and in hallux valgus usually under the second, third, and fourth metatarsals, in pes cavus most commonly under the first and fifth They can be exquisitely tender Protection by adhesive strapping or a metatarsal dome alone is of a little value The best treatment is to remove the thickened skin A special form of scalpel—a spade scalpel—which cuts at the end of a broad blade is a very easy instrument to use and is a favourite of the chiropodist After removal some means of preventing rapid return must be devised The metatarsal dome or pad such as that described is one measure A special insole shaped and hollowed is even better, and for this a good surgical shoemaker's aid must be sought Ideally one should order shoes made on a last which has been built up to match a plaster cast of the foot This ensures—provided the surgeon insists on it—that the inner surface of the sole is shaped to the foot the exact opposite of trying to make the foot fit the shoe

There are two common ways of treating corns One is to prescribe a corn paint or plaster These contain for the most part salicylic acid They do help but so often do infection of the corn and inflammation of the foot follow their misuse that I have no hesitation in condemning them Far better to let the chiropodist use his skill in enucleating the corn 'root and all' Corns, like callosities are due to intermittent pressure of the shoes When the shoes are unsuitable permanent cure is ensured by seeing that correctly shaped shoes are obtained

PAIN CORNS AND FLAT FEET

Aside from the discomfort itself, corns, callosities, and other causes of pain play a much more important part in the production of foot disabilities than is commonly realized Most of us have experienced this at some time or other when, on a long walk or march, we developed a painful blister or rubbed toe or simply made a hole in our socks We soon became conscious that besides the pain there was a tired aching feeling in the foot and the calf This ache is the symptom of muscle fatigue Why should muscle fatigue arise because of a pain? Previously we walked with no trace of it

The muscles of the legs have a postural tone or supporting action, which is under reflex control Agonist

and antagonist groups of muscles influence each other and in conjunction with stimuli from skin and joints a perfect balance of power is maintained Sherrington and others have shown how easily this reflex balance could be affected how the tone of one group of muscles could be altered by stimuli of many types and from many sites and organs In particular pain could inhibit the tone If for instance the action of one muscle causes pain from pressure against a nail in the shoe a blister or a corn then the tone of that muscle is reflexly inhibited and its power reduced This upsets the delicate balance and if we persist in trying to walk the muscles protest by aching and tiring While there is no agreement as to whether the human foot should or should not possess an arch or whether the muscles of the leg are the principal supports of the arch common experience teaches us that the first symptoms of flat foot are tiredness of the legs and aching in the calf Furthermore treatment directed to the relief and cure of muscle strain relieves the condition For this reason one believes that the muscles are of supreme importance

In the treatment of mobile flat feet and of muscle fatigue in the legs it is manifestly important first to make sure that there is no painful corn present So often there is such a cause After treating this, or if there is no such painful element in the case the following measures are needed First the overstrained muscles must be relaxed and rested by providing a mechanical support Wedge the inner side of the heel The heel must be low enough and wide enough to allow of it If high heels are worn the stability of the whole foot is impaired and the condition made worse Depending on the width of the heel the wedge should be from three sixteenths to one third of an inch The inner side of the heel should be elongated by about three quarters of an inch to provide extra support under the astragalus and scaphoid (Fig 10) In very severe cases rest in bed for a few days may be required To restore the tone and power of the muscles massage exercise and electrical stimulation must be ordered After a few treatments the patient may be permitted to continue to exercise at home without supervision

PHYSIOTHERAPY

It is not possible to say very much here on this subject but it must be mentioned Radiant heat or infra red rays relieve pain help to loosen rigid joints and assist recovery after operation Massage influences the circulation and increases the blood supply so improving local metabolism and aiding in the removal of fluids The mechanical effect of massage and wrenchings also removes fluid breaks down adhesions and restores mobility Exercises restore mobility to joints and increase the tone and power of muscles

In minor foot conditions there is unlimited scope for the use of all these measures but I will not enter into details now except to say that many of us are apt to neglect them in the after-treatment of feet which have been operated on There is not the slightest doubt in my mind that they are almost essential in the elderly and in those cases where no operation is performed they play a most important part

Shoes

The correspondence columns of the *Journal* have shown how little agreement there is on the question of what constitutes a good shoe I hold definite views on the subject That they are of value can be demonstrated to any who care to examine and question the patients for whom I have ordered what I consider correct footwear It is very simple (1) the shoe must grip the heel firmly (2) there must be a bar or other tie which fits over and grips the instep (3) the fore part (vamp) must conform to and be a little more anatomically correct than the foot and must allow enough room for the toes to move about (4) the heels of the shoes worn out of doors or at work or play (and in the case of indoor occupation those worn during the day) must not be higher than one to one and a half inches So simple yet so difficult to obtain though in the last three years or so there has been a marked improvement in the models made by good shoe manufacturers

A Problem

There are two theoretical objections to the palliative measures I have described The first is that they are palliative only But as we have seen they frequently do restore the patient to comfort The other is that so much of them is tedious to carry out and requires regular repetition We have the trained masseur or masseuse to give physiotherapy but in the past there has been no one to see to the paddings strappings corn cuttings etc It may be for this reason that they have been neglected The specialist cannot expect his private patients to pay his fees for regular visits He has no time in a busy orthopaedic clinic The general practitioner is far too busy and in any case has no wish to acquire a reputation as a corn-cutter

There are specialists in this branch of auxiliary medical work—the chiropodists The public discovered them many years ago and are going to them in ever increasing numbers for such treatment as I have mentioned There were 45 000 attendances at two of Manchester's foot hospitals last year Very few medical men and fewer hospitals have felt it wise to enlist their aid We at Salford Royal Hospital have had the benefit of a chiropodist's help for over a year and we appreciate to the full just what he can do I would like to make a plea for some definite liaison between properly trained and approved chiropodists and the medical profession There is so much that they can do They are doing it in their own private practices and clinics One wonders whether we are not missing an opportunity to render even better service to our patients by failing to utilize their skill in our hospitals and our own private practices

Since the above was written a report has appeared from University College Hospital advocating the appointment of a chiropodist to all diabetic clinics They state that since they appointed a chiropodist the incidence of gangrene among diabetics has fallen by 50 per cent One wonders whether there is not a medico legal aspect to be considered The hospital which does not appoint a chiropodist may be guilty of negligence in not providing expert treatment to the best of its ability as laid down by several High Court judges

---

G C Higoumenakis (*Ann Derm Syph* Paris December 1937) points out that in 1927 he recorded the case of a patient with congenital syphilis who had a swelling on the inner third of the right clavicle and he showed at the same time a radiograph of the clavicles of another patient suffering from these two conditions After investigating a large number of unselected dermatological cases and reviewing the literature on the subject the author has become convinced that this sign is as important as any in the diagnosis of congenital syphilis and that its frequency is as great as that of the better known stigmata of the disease It does not occur in those who are healthy or in persons suffering from acquired syphilis He stresses the selection by the spirochaete of connective and lymphatic tissues the presence of a secondary centre of ossification at the inner end of the clavicle and the membranous origin of the clavicle He considers that another factor in the production of this swelling is the repeated irritation of the sternal end of the clavicle at the sterno-clavicular joint as it is the clavicle which prevents the acromion from sliding towards the mid line when the arm is being used Although the condition most commonly affects the inner third of the right clavicle he has thirteen cases of people who are left handed or who use the left hand a great deal who have developed a swelling of the inner end of the left clavicle X ray examination and the pathological finding indicate that the condition is essentially a formation of new bone and not a periostitis

TETANUS BACILLUS RECOVERED FROM THE SCAR TEN YEARS AFTER AN ATTACK OF POST-OPERATIVE TETANUS

BY

VICTOR BONNEY, M S , B Sc , F R C S , F R A C S.
CHARLES BOX, M D., F R C P , F R C.S

AND

JOHN MacLENNAN, M B , Ch.B.

(From the Departments of Obstetrics and Gynaecology and of Pathology of the British Postgraduate Medical School Hammersmith Hospital London)

In 1928 a young unmarried woman aged 31 was admitted into the Royal Masonic Hospital under one of us (V B) with a large mass of uterine fibroids reaching to the umbilicus He performed myomectomy, enucleating fifty-three tumours from the uterus and then reconstructing it The suture material used was composed of strands of catgut and very fine silk interwoven Fifteen days after the operation the patient complained of not being able to open her mouth, difficulty in swallowing, rheumatic pains, and stiffness of the posterior cervical muscles, and in a short time all the typical features of tetanus presented themselves

She was placed under the care of C B , who carried out intensive serum treatment Cistern puncture was performed three times, 20,000 units of anti-tetanic serum being injected on each occasion, and, in addition, the patient was given a total of 26 000 units by two intrathecal injections and a total of 9,000 units by two intramuscular injections Morphine, heroin, chloral, and bromide of potassium were also administered As the result of this treatment and after a period of great anxiety, the spasms diminished and she eventually completely recovered The abdominal wound healed by first intention, and the condition of the uterus did not appear at any time to be unsatisfactory The discharge from the uterus and the unused remainder of the suture material employed at the operation were examined for *Cl tetani*, but it was not found, and therefore the diagnosis of tetanus rested on the clinical picture, which was unmistakable

Early in 1938 the patient, now aged 41 and still unmarried, came to see V B because for the last year she had noticed her abdomen enlarging He found a large mass of new fibroids and advised subtotal hysterectomy The possibility that the spores of *Cl tetani* might still exist in the uterus or the abdominal scar occurred to him, and he communicated with C B on the matter The latter strongly advised a prophylactic dose of anti-tetanic serum after the patient had been protected against anaphylaxis by desensitizing her

She was admitted to Hammersmith Hospital, where, after the precautions mentioned had been carried out, V B opened the abdomen through the old scar and performed subtotal hysterectomy, at the termination of which he excised with scissors, in two strips, the whole thickness of the abdominal scar tissue After the operation two further prophylactic injections of anti tetanic serum were given The patient made an uninterrupted recovery except for a certain amount of joint and muscle pain, which was judged to be the result of the serum

Bacteriological Findings

The specimen submitted to the bacteriologist (J MacL) consisted of a portion of the uterine wall and two strips of scar tissue, including the skin and the whole thickness of the abdominal wall

These were finely minced up by means of sterile scissors, inoculated into a series of tubes of cooked meat medium and of glucose blood broth, and incubated anaerobically for forty eight hours at 37° C At the end of this period there was some slight growth of a coccus in one tube only, but after a further two days incubation all six cultures made from the operation scar gave considerable growth of typical slender bacilli with round terminal spores in one of the tubes these were apparently in pure culture, in four there was in addition *Staph albus* and in one *Staph albus* and *Cl sporogenes* The cocci were destroyed by heat and the drumstick bacilli readily isolated by the method of Fildes (*1925*) Apart from some scanty growth of *Staph albus* in two of the tubes the cultures made from the uterine wall remained sterile after one month s anaerobic incubation, and were then discarded

The six cultures obtained from the scar tissues were examined and compared in considerable detail, and were found to be quite indistinguishable It was assumed, therefore, that one strain alone was involved This was in all respects a perfectly typical tetanus bacillus In view of this it would be unnecessary to detail the morphological and cultural investigations Toxigenicity was tested for in a series of mice Intramuscular inoculation of 0 25 c cm of a twenty-four-hour broth culture produced spasm and death in from twenty-four to forty-eight hours , previous injection of a similar amount of anti tetanic serum invariably gave complete protection

By agglutination tests with sera prepared against the nine types of *Cl tetani* the organism proved to belong to Tulloch s Type III , incidentally it was one of the comparatively uncommon Type III strains which do not agglutinate spontaneously in saline suspension Apart from the Type VI strains (which are non-motile) this differentiation of *Cl tetani* into various serological groups depends very largely if not entirely, on the flagellar antigens The heat stable 'O" agglutinins of *Cl tetani* have recently been studied by Gunnison (1937) Heated suspensions of our strain were tested out against 'O antisera of the nine types The results are in complete agreement with those obtained by Gunnison with her Type III strains —that is, it possessed the "O' antigen common to all nine types, but not the additional heat-stable component found in toxigenic strains of Types II, IV, V, and IX To sum up after presumably ten years in the spore form this strain of *Cl tetani* showed no difference from other representative strains in its morphology, cultural characters, toxigenicity or antigenic composition

In view of the long time that the organism had remained in the tissues it was thought of interest to investigate whether any antibody response had been evoked in the patient Unfortunately she had received several hundred units of anti-tetanic serum before the bacilli had been identified so that any investigations from that standpoint were impossible However, it has been suggested that in tetanus an actual anti bacterial immunity may be developed, and in support of this Ten Broeck and Bauer (1923) and Condrea (1937) have demonstrated naturally occurring agglutinins in man and certain animals The patient s serum was tested for the presence of 'H and O" agglutinins against the original strain and against

representatives of all nine serological types with completely negative results In addition her serum was tested against a suspension of the original strain which had been allowed to spore very freely but no reaction could be detected either by agglutination or by complement fixation technique

Discussion

Comparatively early in the study of the bacteriology of tetanus it was realized that the spores of the bacillus had very great powers of resistance Thus von Eiselsberg (1888) reported that a splinter of wood which had caused tetanus in a boy was capable of infecting rabbits two years later and Henrijean (1891) recorded similar results after an interval of eleven years As regards survival within the animal body opinion was much more guarded It is true that Vaillard and Rouget (1892) Tarozzi (1906) and others had shown experimentally that spores might lie dormant in the tissues for several months yet this was generally looked upon as quite exceptional and it was not until the war and after that a number of cases of tetanus were recorded in which the primary infection had occurred months or even years previously

The longest latent period about which there can be little doubt is in the case reported by Ernst (1931) in which tetanus developed fourteen years after the original war injury but intervals of seven years (Brunzel 1929) and four and a half years (Kaposi 1917) are also on record None of these cases however are comparable with our case for in all of them the symptoms of tetanus developed first and then a possible source of previous infection was sought For instance in Ernst's case a wad had remained embedded in the tissues of the hand for fourteen years but without any symptoms The patient then accidentally crushed his hand but without breaking the skin and developed tetanus the spores of the organism presumably having lain dormant in the wad

In post-operative catgut tetanus examination of the remainder of the ligature material used and of the discharge from the operation area has often failed to show *Cl tetani* and it has been suggested that the condition is not true tetanus but in the case we now publish the findings show that it certainly was They also show how important it is even after the lapse of many years to take anti tetanic precautions when operating on a patient who has previously had tetanus

We are indebted to Sir Frederick Menzies Chief Medical Officer London County Council for permission to publish the record of the case from Hammersmith Hospital

References

Brunzel (1929) Quoted by A Buzello *Der Wundstarrkrampf beim Menschen*
Condrea P *et al* (1937) *C R Soc Biol* Paris 125 768
Eiselsberg A von (1888) *Wien klin Wschr* 1 2 2 259 274 289
Ernst W (1931) *Arch Hyg* 106 235
Fildes P (1925) *Brit J exp Path* 6 62
Gunnison J B (1937) *J Immunol* 32 63
Henrijean F (1891) *Ann Soc med chir Liege* 30 367
Kaposi H (1917) *Wien klin Wschr* 30 237
Tarozzi G (1906) *Zbl Bakt* Abt I Orig., 40 505 451
Ten Broeck C and Bauer J H (1923) *J exp Med* 37 479
Tulloch W J (1917) *J R.A.M.C* 29 631
Vaillard L and Rouget J (1892) *Ann Inst Pasteur* 6 385

Dr Wu Lien Teh for thirty years in the health and medical services of the Chinese Government and for fifteen years editor of the *National Medical Journal* now the *Chinese Medical Journal* has recently retired to his home in Penang. He was founder of the Chinese National Medical Association in 1914

THE RISING INCIDENCE OF PSYCHOSOMATIC ILLNESS

BY

JAMES L HALLIDAY, M D, D P H

Regional Medical Officer Department of Health for Scotland

The increase in incapacitating sickness its maintenance at a high level and the growth of chronic invalidism among insured persons have puzzled many commentators both lay and medical Recent inquiries by the Regional Medical Staff of the Department of Health for Scotland have shown that the mass of chronic incapacity in that country may be regarded as "genuine" (McKinlay 1937) In a previous study (1935) of the incidence of psychoneurotic illness I wrote It is interesting to speculate how far the rise in the rate of incapacity among insured persons during the last ten years has been due to an increased prevalence of psychoneurotic disability The present paper—an analysis of morbidity statistics—shows that in the light of modern knowledge the only possible interpretation of the maintenance of the present high sickness rates is an increase in psychoneurotic and psychosomatic illness

Note on the Term Psychosomatic Illness —The words psychoneurotic illness suggest *inter alia* the absence of structural change Recent researches however have shown that emotional reaction may bring about changes not only in function but also in structure (Dunbar 1933) A more appropriate term for disorders of this nature—whether (to use medical jargon) they are "cases of functional disease" or cases of organic disease"—is psychosomatic illness This term is cumbrous but useful It connotes both an aetiology and a mechanism As regards aetiology it indicates that the external agents which provoked the reaction of illness were of a special kind being neither physical nor chemical nor micro organic but psychological—as for example the loss of a beloved object As regards mechanism it indicates that the external agent is encountered by the individual not directly by the outer or inner surfaces of the body such as the skin or mucous membranes but indirectly via the special senses and the integrating mechanism of the diencephalon autonomic nervous system and endocrine glands This triad is sometimes called the psycho-neuro endocrine system or the bodily mechanism of emotion By its means psychological factors may affect an individual profoundly bringing about changes in chemistry rhythm secretion and even structure in one or more parts of the body In other words bodily disturbances may be the secondaries of preceding disturbances in the integrating psycho neuro-endocrine system which in turn was set into a turmoil when the individual encountered events which to him represented deprivation frustration upset strain or difficulty

Knowledge of Psychosomatic Disorders of Statistical Relevance

1 THE LABELS

The presence of psychosomatic illness in a community is not revealed directly in its morbidity statistics but lies concealed under a number of labels which with the exception of such terms as neurasthenia nervous debility and neurosis have a reference to localized or mechanistic faults only A knowledge of the considerable latent content of psychoneurotic and psychosomatic illness in certain common diagnostic labels" has now become available as a result of recent researches Some of these which are relevant are indicated below but the reader is referred to the original papers for an adequate presentation of the problem

(a) *Gastritis Rheumatism Anaemia Debility Heart Disease* —Of 735 unselected insured patients suffering from psychoneurotic illness (mainly anxiety states) the certificated cause of incapacity in approximately one half (1170) was one or other of those labels The proportion of psychoneurotic illness for each label was as follows gastritis 70 per cent

rheumatism, 40 per cent, anæmia, 40 per cent debility, 60 per cent, heart disease, 14 per cent (Halliday, 1935)

(*b*) *Peptic Ulcer*.—Of 205 unselected patients with peptic ulcer (both gastric and duodenal), in 84 per cent the symptoms of ulcer first emerged at a time of emotional reaction in response to psychological factors associated chiefly with occupation finance and family health The mechanism involved was considered to be the psycho-neuro endocrine system The authors concluded that the crux of treatment was to free the patient from his anxiety, and if this could be achieved they believed that the patient's dyspepsia would trouble him no more (Davies and Wilson 1937)

(*c*) *Chronic Rheumatism*.—Among insured persons the various terms which indicate "non arthritic rheumatism" frequently cover anxiety states or hysteria with or without the presence of 'rheumatoid' swellings of joints (Halliday, 1937, *1938*) The need for considering psychological factors for an understanding of aetiology and as a guide to scientific treatment of clinically defined rheumatoid arthritis and osteo arthritis has been demonstrated by American observers, such as Jelliffe and White (1935, 1936), Nissen (1936), and Booth (*1937*)

(*d*) *Chronic Bronchitis*.—"It is little known to practitioners that there exist purely psychogenic forms of bronchitis" (Stekel, *1923*) This author summarizes many examples No systematic investigation of the relation of psychological factors to the primary onset and recurrences of chronic bronchitis appears to have been made Among insured persons I have noted that male patients with chronic bronchitis who are enmeshed in a 'pension situation" for this disability are often better understood when regarded as examples of anxiety hysteria with secretory neurosis of the bronchi I have also noted that persons may work for years in a dusty atmosphere but only become ill with bronchitis on encountering psychological factors and reacting with emotion This also applies to many persons whose occupation in no way involves fumes, gas or dust Another interesting point is the not uncommon alternation of bronchitis and rheumatism in the same patient—that is to say, when the bronchitis is troublesome the rheumatism is quiescent, when the rheumatism is troublesome the bronchitis is quiescent A similar alternation of peptic ulcer and rheumatism is not uncommon A number of authors—for example, McDowall (1934)—have noted how patients with chronic bronchitis may be cured by psychotherapy, and in my own limited therapeutic experience I have seen some interesting improvements after the patient has 'coughed it up' or 'got it off his chest" The application of the psychological approach to chronic bronchitis is a virgin field for research There is evidence however, that recurring or chronic bronchitis is sometimes a localized manifestation of psychosomatic disorder, but in what proportion of the patients thus labelled we do not yet know

This section is not intended in any way to suggest that "every person with rheumatism, bronchitis, gastritis, etc, is a case of psychoneurosis" Its purpose is to indicate that a proportion of patients whose illness is certified to be "caused" by certain common labels of disease are suffering from disorders which are psychosomatic in origin and nature This applies not only to labels which are often used in a vague sense—for example, anæmia—but also to labels correctly applied—peptic ulcer, bronchitis, fibrositis, etc

2 THE AGE INCIDENCE

Statistics of age and sex incidence are few and incomplete, but all available evidence points to the age incidence of primary onset of the symptoms being highest in the younger age groups or in early middle life The following examples may be quoted

In my inquiry of 1935 the incidence of psychoneurotic disability among the patients examined was the same for each sex As regards age, the incidence (for the combined sexes) was highest in the youngest age groups Thus the incidence in the age groups 16–34 was 33 per cent, in the age group 35–54 42 per cent but in the age group 55–65 it was only 14 per cent

Bruce Pearson (1938) in an analysis of 950 unselected outpatients at a general hospital found that the incidence of psychoneurotic illness among the patients examined was highest in females As regards age (for the sexes combined) the incidence in the age group under 29 was 22 per cent in the age group 30–49 19 per cent and in the age group over 50 only 5·5 per cent

In their series of 205 patients with peptic ulcer Davies and Wilson (1937) found that the age distribution of onset for the sexes combined was as follows under 35 years, 60 per cent, 35–55 years, 33 per cent over 55 years, 7 per cent

In a series (unpublished) of 134 consecutive referred insured persons certified to be incapacitated because of terms indicative of rheumatism, the age incidence of psychosomatic rheumatism in the age group under 35 was 45·8 per cent in the age group under 55, 41·8 per cent, and in the age group over 55 only 14·3 per cent

In a series of 450 patients with rheumatoid arthritis Glover (1928) compiled a table which shows that for males the age distribution of onset is highest in the group 30–40 years, and for the females in the group 20–30 years

It is perhaps of interest to note that these age distributions are comparable to those found for the onset of asthma in adults (Bray 1934) and for nystagmus in miners (M R C *Report, 1922*)

3 DURATION IN RELATION TO RECOGNITION AND TREATMENT

If the need for supplementing the ordinary examination of the teaching schools with an investigation into psychological factors is not understood, the range of clinical observations is too narrow and adequate remedial measures appropriate to each individual cannot be taken In such circumstances the doctor has regard only for the "secondaries," and treatment is confined to standardized mechanistic and local interference However, in so far as this action ignores primary causes it may be ineffective in preventing recurrence and in cutting short incapacity Further, because of the features of innocence and increased suggestibility which are present in all patients with psychosomatic disorder, routine continuation of mechanistic treatment may succeed in fixing the symptoms for life (Examples of such procedures are perennial alkaline powders for peptic ulcer, course upon course of physiotherapy for rheumatism, or successive nasal operations for bronchitis) The risk of fixation is increased whenever treatment becomes very intensive, very elaborate, or very impersonal, and to-day, when ever growing facilities are available for mechanistic diagnosis and therapy, there is a danger, if relevant considerations are omitted, of inducing "fixation invalidism" on a scale hitherto unknown

The Indices of an Upward Trend in Psychosomatic Illness

From the information surveyed in the previous section it would be reasonable to infer an upward trend in psychosomatic illness (relative to illness with aetiology dependent on other environmental factors) if, over a period of years, morbidity statistics showed changes in three respects, namely

1 An increase in the average duration of "incapacities"

Note.—Increasing facilities for intensive mechanistic treatment provide only one of the many factors which may contribute to the prolongation of sickness

2 An increase in the certificated causes known to cover *psychosomatic illness*

3 These increases would be most marked in the younger age groups

The Application to Morbidity Statistics

Note.—Statistics of morbidity are not common In Scotland, since 1930 the Department of Health has issued Annual Reports on Incapacitating Sickness in the Insured Population These statistics deal mainly with the incapacitating illnesses which begin and end within each annual period under review A valuable survey of these statistics was recently made by McKinlay (*1937*), who, from the standpoint of a statistician, sums them up as follows

> The major problems, from the point of numbers seem to be at least six (1) droplet infections (including influenza), (2) accidents and sepsis of the skin (3) rheumatism especially in its chronic forms (4) gastric upsets of various kinds (5) chronic respiratory diseases (bronchitis), and (6) those ill defined states of ill health

which constitute the bulk of cases labelled debility neurasthenia D A H and tachycardia and perhaps in less degree anaemia

He adds that the divergence of these illnesses from those found in statistics of mortality is very striking

1 INCREASING AVERAGE DURATION OF INCAPACITY

The most significant feature of sickness among insured persons has been its rise over the past twenty years For example in England and Wales the rate of sickness during the years 1921 to 1926 rose by nearly 50 per cent and that of disablement by nearly 80 per cent These have since continued at a high level Turning to the more detailed data available for Scotland since 1930 we find (Report No 6 1937) that, although there has been no definite increase in the *incidence* of 'incapacities (only 2 3 per cent), there has been a very definite increase in their *average duration* (about 11 per cent) Moreover during these years the number of 'chronic patients (that is those who were on the sick list continuously throughout the annual period) increased by one third Indeed of the nineteen million days of incapacity in 1935–6 more than half (eleven million days) is attributable to a sickness of a year or more duration

2 THE RISE MOST MARKED IN CERTIFICATED CAUSES WHICH COVER PSYCHOSOMATIC REACTION

The table illustrates the growth of chronic incapacitating sickness between the annual periods 1931–2 and 1935–6 In Column A are shown the principal certificated causes of chronic illness arranged in order of relative increase Those specified account for 86 per cent of the patients on the chronic register By placing a tick opposite the terms which cover psychosomatic illness we find nine of the fourteen certificated causes specified in Column A to be our old friends

Table showing Chronic Incapacity in Scotland (1931–2 to 1935–6)

A	B				C	D
Certificated Cause	Percentage Increase (1931–2 to 1935–6) of Patients at Various Age Groups				Register (1936) Percentage Constitution	Order of Absolute Rise (1931–6)
	All Ages	16–34	35–54	55–65		
Peptic ulcer	130–140	126	168	92	1 9	7
Gastritis	110–120	121	189	65	1 9	8
Nervous debility	90–100	154	96	58	2.0	9
Bronchitis	70–80	166	136	31	7 9	4
Anaemia		90	79	59	1.3	12
Rheumatism	50–60	85	90	31	12.6	1
Cardiac debility		95	112	54	1 4	13
Diseases of the circulation		78	88	35	11 4	2
Other diseases of the respiratory system		76	78	35	3 9	6
Neurasthenia	30–40	74	46	12	3 5	10
Injuries		51	37	28	3 4	11
Insanity	20–30	60	31	1	21 2	3
Tuberculosis		42	18	2	11 2	5
Cerebral haemorrhage		84	61	5	2 4	14
					86 0	

Note—In 1930 certain details about insured persons in Scotland who became ill and unfit for work began to be collected and analysed (See Reports on Incapacitating Sickness in the Insured Population of Scotland 1931–7) A special register was devoted to those persons who had been on the sick list continuously for more than twelve months. The table is compiled from this Chronic Register and is adapted from data provided in Report No 6, pages 39 to 52 Column A shows the fourteen certificated causes of incapacity which provided the greatest increase in the number of patients between 1931 and 1936 Column B shows the percentage rise in respect of each cause at various age groups Column C shows the percentage constitution of the Chronic Register in 1936 and indicates that those fourteen causes provided 86 per cent of the total register Column D indicates the order of absolute increase in the number of persons allotted to each of the certificated causes for example against rheumatism which provided the highest increase—namely 1 500 persons—is placed the number 1 whereas against cerebral haemorrhage which provided an increase of only 170 persons is placed the number 14

3 THE RISE IN THE YOUNGER AGE GROUPS

Column B shows the percentage increase in the certificated causes at various age groups The highest rate of increase for all ages is shown by peptic ulcer and gastritis Next in order of rate of increase are nervous debility bronchitis anaemia rheumatism and cardiac debility If we underline the age group which shows the maximum rise in each certificated cause we find in age group 16–34 the highest rise was in respect of nervous debility bronchitis anaemia, and neurasthenia whereas for age group 35–54 the highest rise was in respect of peptic ulcer gastritis rheumatism cardiac debility and diseases of the circulation In no instance was the percentage increase greatest in the oldest age group The finding that the increase in such illnesses as rheumatism and bronchitis is *not* in the older age group will surprise only those who have not appreciated the influence of psychological factors as a cause of illness

Note— Chronic illness is still relatively more frequent in the old than in the young and the tendency towards an increasing proportion of older people in the population would tend other things being equal towards an increase in chronic sickness but within the ages under consideration this factor offers at best only a small part of the explanation (McKinlay 1937)

The table contains many other points of interest For example one fifth of all chronic illness is due to insanity and the rise in this during the last five years is most marked in the youngest age group Again rheumatism (see Column D) shows the greatest absolute increase in the number of patients Also the rise of cerebral haemorrhage in the younger age groups is an interesting phenomenon

Findings from the Analysis

On analysis of chronic sickness returns during recent years we find the three indices which in combination reveal an upward trend in psychosomatic illness—namely (1) increasing duration of incapacity (2) increase in the labels known to cover a significant proportion of psychosomatic illness and (3) the younger age groups most affected It is therefore reasonable to conclude that psychosomatic illness is becoming more prevalent and that the maintenance of the high rates of morbidity at present existing in the community can only so be understood No other interpretation covers all the known facts

Note—It is misleading and even erroneous to regard illnesses of this nature as "nervous diseases It is more appropriate to describe them when we are thinking or speaking in terms of mechanism as diseases of the psycho neuro endocrine system" Certain writers however would describe them as illnesses of the spirit or sicknesses of the soul In any case to state that nervous diseases are increasing misses the whole point of the phenomenon

Discussion

(*a*) A high level of incapacitating sickness dependent on psychoneurotic and psychosomatic disorders is not incompatible with concomitant happenings such as a falling death rate increasing height and weight of school children and the abeyance of major epidemics These occurrences—the usually accepted indices of improvement in the public health—have been achieved by action directed mainly towards the noxious physical chemical and micro organic factors of environment Psychosomatic illness on the other hand may be regarded as a response to noxious psychological factors of environment The potency and practical implications of these however have hitherto received little systematic attention in so far as they affect the health of the community as a whole and as a result psychosomatic illness progresses

without check and even with unwitting encouragement A discussion of the "causes" of a high incidence of psychosomatic illness does not, however, enter into the scope of this paper, the aim of which is to point out the phenomenon and to indicate that it is a matter which concerns all medical men

(*b*) A few remarks may be devoted to the problem of preventing incapacity once this type of reaction has occurred To avoid confusion, it may be said at once that only a minority of these patients require specialist psychotherapeutic treatment The great majority can be handled, as they are to-day, by the practitioner—but with a difference The first requirement is the recognition that there is a problem The second is an alteration in thought—an appreciation that illness is a reaction to environment in all its aspects, including the psychological In other words, curative medicine can no longer be contented as at present with the academic question, "What has the patient got?"—because the answers to this question—no matter how accurate and detailed—may in isolation be irrelevant as a proper guide to scientific and effective action A guidance which is often more valid and pertinent may be obtained by posing the natural questions of biology—for example, 'Why did he take ill when he did?", "What is he behaving like this for?" To know what a patient has *met*, or feels he *may meet*, is often of more practical value than to know what a patient has *got* The third requirement is an alteration in action—namely, the inclusion in practice of what may be called the modern supplement to medical examination, especially when the patient first consults the doctor In the absence of this, much incapacity preventable at the beginning becomes prolonged and permanent I have noted that practitioners who examine their patients in this more adequate way do not tend to produce invalids in their practice, whereas those who are unaware of it, or who neglect it, tend to induce or even create incapacity This observation, which refers to civilian practice, may be collated with the observations of others which refer to service practice during the great war For example, "At all times the most important single influence determining the ratio of war neurosis was that of the regimental medical officer" (Mapother, 1936) And again, "Correct handling of patients in the early stage is likely to make all the difference between rapid recovery and chronic invalidism The first link in the chain is the unit medical officer He alone has the power to supply relevant information concerning the causes of breakdown in each case He should have sufficient psychological knowledge to make an early diagnosis" (Burton, 1936)

(*c*) Certain of my medical friends have suggested that if this interpretation of the facts be true, it is a grave reflection on the medical profession Actually, however, there is no reflection, and morals are not concerned Neither is there any criticism Historical observation has shown that the slow percolation of a new scientific outlook is a natural and predictable happening Instead of studying the data and the inferences made from them with attention and clear-headed thinking, people respond with emotion, the reactions being characterized on the one hand by intense enthusiasm and on the other hand by indifference (the 'blind spot") or even open resentment When we react emotionally we exhibit the feature of increased suggestibility Thus, if we become emotionally excited about any theory, our perception and judgment become distorted—we see what we want to see and infer what we want to infer On the other hand if we resent the introduction of a new technique into medicine (as our grandfathers resented the bacteriological and some doctors of to-day resent the psychological), our emotional state prevents us from seeing what we do not want to see and inferring what we do not want to infer

'The influence of emotion on reasoning is considerable when the question is one affecting either the interests of an individual or some theory deeply rooted in his prejudices Darwin recounts that one of his geological friends tried to assure him, against all evidence, that a certain fossil was not found in a given locality, for otherwise his argument (the geologist's) on the geology of the neighbourhood would be wrong, *four of his volumes would go for nothing* This incident made a great impression on Darwin's mind It showed him that the pursuit of truth demanded qualities of courage and will, not less than those of the intellect" (Quoted from Lynch, 1912)

However, the reluctance of the profession to adopt a psychological outlook cannot be dissociated from the growth of unorthodox cults which continue to flourish and impress in fields where orthodox medicine often fails Moreover, within the medical profession itself, lack of instruction in how to think about illness in an adequate way is responsible for many "good men going wrong" when, discouraged by their failure to get permanent results by standardized mechanistic methods, they begin to adopt freakish methods of treatment which have no real scientific foundation It is true that they may obtain "results," but to the detached observer their successes are very obviously a function of their personality on the one hand or of the magical aspects of their treatment on the other

(*d*) Lastly, it is interesting to speculate whether, *ceteris paribus*, a still further extension of mechanistic forms of treatment provided to all comers in the absence of a "threshold" examination which includes the modern supplement will result in a still further increase in the *duration* of invalidism Time and the yard stick of morbidity statistics will show As McKinlay neatly puts it "The efficiency of a service must ultimately be judged by the standard of health of the people rather than by the nature and amount of the facilities available for its preservation"

Conclusions

1 An analysis of Scottish morbidity statistics in the light of modern knowledge reveals a rising incidence of psychoneurotic and psychosomatic illness

2 The extent and significance of this phenomenon are not yet generally realized, but it has definite bearings on the public health as well as on the future of medicine—in outlook, training, research, treatment, and prevention

For assistance in the presentation of this study I am indebted to my colleague Dr P L McKinlay, Medical Statistician to the Department of Health for Scotland

REFERENCES

Booth, G C (1937) *J ment Dis* **85**, 637
Bray, G W (1934) *Recent Advances in Allergy* 2nd ed, p 193, J and A Churchill, London
Burton, H L (1936) *Proc roy Soc Med* **29**, 865
Davies D T, and Wilson, A T M (1937) *Lancet* **2** 1353
Dunbar H F (1935) *Emotions and Bodily Changes*, Columbia University Press New York
Glover, J A (1928) Ministry of Health Report on Chronic Arthritis No 52, p 17 London
Halliday, J L (1935) *British Medical Journal (Supplement)*, **1**, 85, 99
—— (1937) *British Medical Journal* **1**, 213, 264
—— (1938) *Proc roy Soc Med* **31**, No 1, 167
Jelliffe, S E, and White, W A (1935) *Diseases of the Nervous System* 6th ed, p 245, Philadelphia
—— (1936) *Amer J Psychiat* **92**, 1051
Lynch, A H (1912) *Psychology* **1**, p 363, Stephen, Swift and Co, London
McDowall, R J S (1934) *Science of Signs and Symptoms* 3rd ed, p 250, Heinemann London
McKinlay P L (1937) *J roy san Inst* **58** 374
Mapother E (1936) *Proc roy Soc Med* **29**, 858
Medical Research Council Report of the Miners Nystagmus Committee (1922) No 65, 1, 52 London
Nissen, H A (1936) *New Eng J Med* **214**, 576
Pearson, R S Bruce (1938) *Lancet* **1**, 451
Report on Incapacitating Sickness in Scotland, No 6 (1937), Edinburgh
Stekel, W (1923) *Conditions of Nervous Anxiety and their Treatment* p 56 Kegan Paul London

SEASONAL INCIDENCE OF RHEUMATIC FEVER IN THIS COUNTRY

BY

ARNOLD B ROWLANDS, M B , Ch B

The study of the seasonal fluctuations of infectious diseases in this country reveals the existence of two characteristic types

1 *The Solstice Type*—This type dominated by the prevailing temperature includes certain respiratory and alimentary infections which we associate respectively with the winter and summer solstices

2 *The Equinox Type*—Measles and whooping cough usually show a conspicuous increase at the vernal equinox while the autumnal equinox is associated with an increase of throat infections diphtheria scarlet fever and rheumatic fever

Though this classification has severe limitations it has the merit of simplicity Further—and this is the reason for its presence here—it emphasizes a contrast between the conditions prevailing at the two equinoxes It is much easier to appreciate the nature of this contrast than to state directly what is the characteristic feature of the autumnal equinox First in respect to negative evidence there is no significant difference between the temperature and the relative humidity at the two equinoxes What, then is the nature of this contrast?

Dynamic Change

The answer to this little riddle is to be found in dynamics rather than statics The seasonal variation of temperature is determined by the obliquity of the ecliptic which effects a periodic variation of the angle of elevation of the sun's rays At any one place this angle is of course equal at both equinoxes However during the weeks in immediate relation to the equinoxes the angle is changing very quickly Thus the angle increases rapidly in the spring and decreases in like manner in the autumn It is this rapidity of change in opposite directions which supplies the fundamental difference between the equinoxes We have not only a contrast but a significant reciprocal relationship between the two periods of the year when climatic accelerations and decelerations are at their height

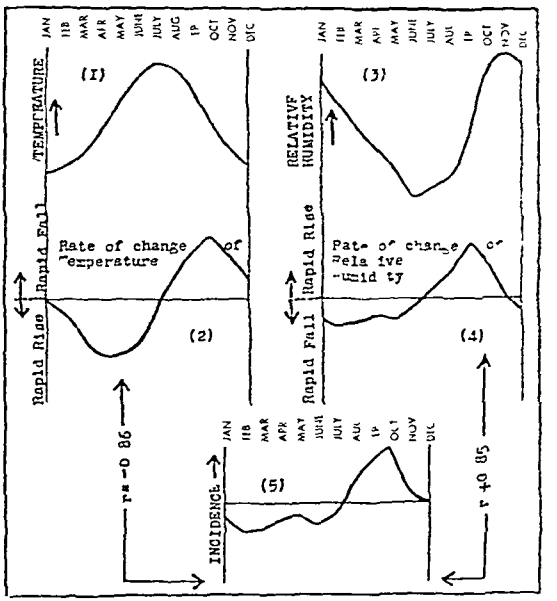
The Rate of Change of Temperature

Graphs 1 and 2 illustrate our point Graph 1 portrays the average seasonal variation of temperature at Greenwich Graph 2 deduced from the former represents the rate of change of temperature and shows clearly the contrast between the equinoxes Despite many secondary climatic factors the changes of temperature are still dominated by the theoretical solar climate The most important deviation from our standpoint is the lag in the earth's response to changes in the sun's elevation Thus the most rapid changes of temperature are post equinoctial phenomena

Rate of Change of Relative Humidity

We are aware of an approximate inverse relation between the changes of temperature and relative humidity in this country (Graphs 1 and 3) We can therefore anticipate a close inverse association between their respective accelerations (see Graphs 2 and 4) Let us summarize

Graphs showing the Seasonal Incidence of Rheumatic Fever and its Association with Climatic Factors



GRAPHS 1–5 —Seasonal Incidence of Rheumatic Fever

Graphs 1 and 3 illustrate respectively the seasonal variations of temperature and relative humidity at Greenwich

Graphs 2 and 4 deduced from Graphs 1 and 3 show the rates of change of temperature and relative humidity at Greenwich Graphs 2 and 4 are merely an expression of the steepness of the more familiar Graphs 1 and 3

Graph 5 illustrates the seasonal incidence of rheumatic fever in London

these views in the simplest possible form relevant to our subject We may say that in London September and October are characterized by a deceleration of temperature and an acceleration of relative humidity

Seasonal Incidence of Rheumatic Fever

Graph 5 is based on the onset of symptoms in nearly 1 500 first attacks of rheumatic fever (St Bartholomew's Hospital 1882–1904) This graph shows a striking resemblance to the preceding graphs (2 and 4) Study of these graphs suggests a promise of close correlations This promise is realized

Rate of change of Temperature } and { Seasonal variation of Rheumatic Fever } $r = -0.86$

Rate of change of Relative Humidity } and { Seasonal variation of Rheumatic Fever } $r = -0.85$

(In the text I have refrained from including the mathematical probable error as this may lead to a false idea of accuracy The rate of change of temperature for each month has been derived graphically from the rate of change between individual months This leads to an error in draughtsmanship Thus the total error is probably in the neighbourhood of ± 10 per cent)

There can be no doubt that in this country there is a significant correlation between the seasonal variations of rheumatic fever and the rates of change of temperature and relative humidity Is there any causal relationship between these climatic accelerations and the onset of rheumatic fever?

Climate and Rheumatic Fever

In this country there are two well-established associations between climate and the incidence of rheumatic fever

1 Sir Arthur Newsholme (1935) has clearly demonstrated that the incidence of rheumatic fever is highest in *hot dry* years

2 *Damp cold* has been implicated by numerous workers (Poynton and Schlesinger, 1937)

At first glance these associations appear to be mutually antagonistic Fortunately this paradox is apparent rather than real It will be appreciated that the maximum seasonal incidence of rheumatic fever does not occur in the hottest and driest months, neither does it occur in the damp cold of winter It is to be found between the two, when the hot dry conditions of summer are changing most rapidly to the damp cold of winter

If we regard hot dry and cold damp conditions as two extremes, then the rate of change between the two will be accentuated by an increase of one or both of these factors It would therefore appear that, while hot dry conditions predispose to the onset of rheumatic fever, it is the rate of change to damp cold which acts as the precipitating climatic factor

Conclusion

In view of the presence of significant correlations and a happy reconciliation with current ideas on climate, I submit that one of the factors controlling the seasonal incidence of rheumatic fever in this country is the reciprocal acceleration of temperature and relative humidity

I wish to express my indebtedness to Professor P C Cloake of Birmingham, without whose inspiration and kindly encouragement this investigation would not have been undertaken

REFERENCES

Church, W S (1906) Allbutt and Rolleston's *System of Medicine*, 2, 594
Newsholme, Sir Arthur (1935) *Fifty Years in Public Health* London
Poynton, F J and Schlesinger B (1937) *Recent Advances in the Study of Rheumatism* London

At the annual general meeting of the Society for Relief of Widows and Orphans of Medical Men, with Mr V Warren Low, president, in the chair, the report for 1937 and the financial statement were presented and adopted During 1937 sixty-one widows and seven orphans were in receipt of grants and the total amount distributed was £4,702 Owing to the increase of the number of widows in receipt of grants there were not sufficient funds available to make them the usual Christmas present, but each orphan received a present of £5 The receipts for the year amounted to £5 390, including £367 18s 11d from subscriptions and donations The total membership of the society is 285 which is a very small proportion of the medical men eligible for membership Relief is only granted to necessitous widows and orphans of deceased members Membership is open to any registered medical man who at the time of his election is residing within a twenty mile radius of Charing Cross Each widow receives a grant of between £60 and £75 per annum, and the orphans £50 per annum Any widow with an income of £125 or under is eligible to receive a grant The directors are anxious to bring the great advantages of membership of the society to the notice of medical men The invested capital which amounts to over £140 000, may not be used as income, only the interest is available for this purpose This year the society celebrates the one hundred and fiftieth anniversary of its foundation Full particulars may be obtained from the secretary at the office of the society, 11, Chandos Street, Cavendish Square, W 1

Clinical Memoranda

Treatment of Schizophrenia

Since Sakel (1935) introduced his method for the treatment of schizophrenia by the induction of hypoglycaemic 'shocks' a wave of optimism has spread among psychiatrists of almost every country in the world, and insulin therapy in its different sphere is rivalling in popularity the malarial treatment of general paralysis

The Vienna technique has been practised at the Hatton Mental Hospital since June, 1937, and fifty nine cases of schizophrenia have completed a course of treatment comprising fifty or more shocks, unless cure was established with a smaller number In order to get the results of treatment in their proper perspective we have inquired closely into the results obtained in cases of schizophrenia during the years 1931 to 1935 inclusive, with TAB vaccine with somnifaine prolonged narcosis, and finally with no special treatment beyond ordinary nursing care and the psychotherapy of friendly interest We have collected the after-histories of these schizophrenics up to the present, but here we are only concerned with the results achieved during their first year after admission

Table showing Immediate Results in Treatment of Schizophrenia

	No of Cases	Cases Discharged		Average Stay in Hospital	Average Age	Relapses in One Year	Final %
		No	%				
Symptoms 0-¼ year							
Treatment—				Mths	Years		
Insulin	18	18	100 0	4 5	22 8	2	88 8
TAB	49	40	81 6	7 3	23 7	3	76 9
Somnifaine	6	3	50 0	4 7	25 2	1	33 3
None	26	22	84 6	8 8	23 7	2	76 9
Symptoms ¼-1 year							
Treatment—							
Insulin	12	9	75 0	5 3	21 9	0	75 0
TAB	16	13	81 2	9 9*	23 6	3	62 5
None	9	6	66 7	8 5	24 6	0	66 7
Symptoms 1-2 years							
Treatment—							
Insulin	10	5	50 0	4 5	24 2	1	40 0
TAB	22	12	54 5	8 9	23 9	6	27 3
None	9	6	66 7	8 1	24 2	0	66 7
Symptoms over 2 years							
Treatment—							
Insulin	10	3	30 0	3 0	25 1	0	30 0
TAB	17	6	35 3	15 0	25 8	1	29 4
None	4	3	75 0	4 0	25 0	1	50 0
Second Attacks							
Treatment—							
Insulin	9	4	44 4	3 5	25 1	0	44 4
TAB	16	7	43 7	7 3	24 7	3	25 0
Somnifaine	6	4	66 7	7.2	23 0	2	33 3
None	32	15	46 9	5 7	25 5	7	25 0

* Excluding one case in hospital for 4½ years If this case is included the average stay in hospital becomes 13 1 months Of all cases in this table the immediate discharges are for insulin 66 % for TAB vaccine 65 % for no treatment 65 and for somnifaine narcosis 58 3%

Although the series is small it has the advantage that almost every patient was well known to one of us (D N P) and the diagnostic criteria are therefore essentially the same in each group The effects observed are summarized in the table

It will be seen that the superiority of insulin is only slight when the percentage of discharges is considered and careful study of these cases has convinced us that this is a genuine comparison James (1938) has pointed out the great reduction in the period of residence in hospital and this is the chief advantage of insulin for the period in hospital is roughly halved and clinically it is striking to see the rapid improvement which often takes place and which is apt to generate an exaggerated idea of the value of this form of therapy In every group of insulin results in the table the hospital period is short and as a general rule it can be stated that if treatment is going to be successful this will soon be apparent

With T A B vaccine as it has been used here no patient's life has been in danger but one insulin patient died and several have had close calls This is an important feature when one is deciding whether the results of insulin therapy justify the difficulties it incurs The results of T A B treatment would appear from the table to be worse than those obtained without special treatment but this is largely explained by the frequent use of T A B when progress was delayed and we believe that this treatment was in most cases a mere incident of no great importance

SUMMARY

Our conclusions about insulin therapy at present are

1 The period in hospital is roughly halved

2 There is a slight superiority in the percentage of cures when compared with other methods

3 These advantages justify its continued use

S W GILLMAN M R C S L R C P
Assistant Medical Officer
D N PARFITT M D M R C P D P M
Medical Superintendent
Coventry and Warwickshire Mental Hospital

REFERENCES

James G W B Freudenberg R and Cannon A T (1938) *Proc roy Soc Med* 31 578
Sakel M (1935) *Neue Behandlungsmethode der Schizophrenie* Vienna

Massive Hydronephrosis and Pregnancy

The following case is considered worth reporting because of its rarity

CASE HISTORY

A primipara aged 23 was seen on September 17 1937 as an abnormal case at Dulwich L C C Hospital on account of the great discrepancy between the apparent size of the uterus and the duration of amenorrhoea Her last menstrual period began on March 17 1937 and twenty six weeks later the abdominal swelling had extended up to the diaphragm and rendered the abdominal wall tense Otherwise the case was obstetrically normal The pelvis was commodious the Wassermann reaction was negative and there were no signs of toxaemia The patient had felt foetal movements for six weeks only No foetal parts could be felt and the foetal heart was not heard

A radiograph was taken and the report read One foetus of about twenty eight weeks lying in the right iliac fossa the head being uppermost presumably a case of hydramnios

The patient was admitted for paracentesis abdominis in the hope that the presence of urea in the fluid would confirm the radiological diagnosis and exclude the alternative one of ovarian cyst Urea was present but in a concentration of 0 75 per cent which could not be regarded as indicative of hydramnios for it is about double the concentration of urea in normal liquor amnii Moreover the abdominal mass presented a firmer consistency in the right iliac fossa than elsewhere The patient was in excellent health and anxious to have a child The distension was so enormous that premature labour was considered inevitable As the diagnosis of hydramnios was doubtful the decision was made with full explanation to the patient to explore the abdomen We were almost certain that the case was not one of hydramnios but at the same time could not understand why a cyst should contain so high a concentration of urea The true diagnosis never occurred to us

OPERATION

The abdomen was opened under general anæsthesia on September 30 1937 A tense cyst was found reaching from the diaphragm down to the pelvic floor The uterus was identified in the right iliac fossa with the cyst overlying it above and in front The intact tumour was quite unmanageable so it was tapped and twenty five pints of clear greenish fluid withdrawn The cyst wall then lay in folds upon fold in the abdomen like a collapsed balloon Careful examination of these folds showed that the transverse and descending parts of the colon were closely applied to that portion of the cyst wall which had occupied the right side of the abdomen It was then realized that the cyst was a colossal left hydronephrosis Peritoneum to the left of the colon was stripped up and the whole wall separated by blunt dissection in the space corresponding with the perinephral tissue This led to isolation of the renal pedicle the vessels of which were small They and the ureter were ligated and divided separately and the cyst wall removed No cause of the hydronephrosis could be seen in the region of the renal pedicle The right kidney was felt to be larger than normal

An enormous dead space occupying the left side of the abdomen and pelvis was covered with peritoneum as well as possible and the colon replaced A large drainage tube was placed down to this area The uterus now occupied its normal position and corresponded in size to cyesis of twenty eight weeks The emptying and removal of the cyst caused considerable collapse of the patient but she began to recover as soon as the abdomen was closed

During the following week 2 units of proluton were given daily and 5 minims of adrenaline eight hourly with a view to preventing premature labour

The only complications which took place were a stitch abscess at the top of the wound pus from which grew *Staphylococcus aureus* and a severe *B coli* infection of the remaining kidney The wound was well healed in three weeks but the urinary infection remained till delivery in spite of every variety of medical treatment

DELIVERY

Labour started with rupture of the membranes on December 29 1937 thirteen weeks after operation Except for a first stage lasting thirty two and a half hours the confinement was normal The second stage lasted two hours and fifty minutes A live male child weighing 6 lb 9 oz was delivered without rupture of the perineum. The puerperium was normal and on the fourteenth day the urine was sterile Mother and child left hospital in good condition on the eighteenth day after delivery the baby then weighing 7 lb 12 oz.

The case was remarkable for the size of the tumour which possibly represents a record for hydronephrosis for the quiescence of the uterus after an operation of the first magnitude and for the courage of the mother The only comparable case we have found in the literature is that of Dr Heinz Kustner of Leipzig[1] Here the cyst weighed 20 German pounds (17½ pints) and was removed intact Miscarriage at five months took place the next day

R L DODDS M Ch., F R C.S., M C O G
G MAIZELS M B., Ch B M C O G

[1] *Mschr Geburtsh Gynak* 1931 89 179

Treatment of Plantar Warts

There is no doubt that during recent years plantar warts have become much commoner There is a consensus of opinion on this point among those concerned in their treatment, whether general practitioners, dermatologists, or chiropodists During the recent discussion on the subject in these columns, little attention appears to have been paid to the pathology of these troublesome little tumours As regards this it has been established beyond all doubt that they are infective in origin, which accounts for the fact that they are very often multiple, but they are extremely superficial in nature, never penetrating deeper than the epidermis Sometimes a large one may be as much as a quarter of an inch thick, but even then it always lies as it were in a cup, of which the base is the dermis while the sides are formed by the epidermis with a greatly thickened horny layer The thickening of the horny layer is no doubt a compensatory reaction in order to take the pressure from the wart itself, which is usually extremely sensitive, and transfer it to a healthy skin This thickened collar is exactly analogous to the corn plasters, with a hole cut in the middle, commonly used for the relief of corns The leading principle in the treatment of plantar warts is to effect a separation of the base of the wart from the underlying dermis In the case of small warts this may often be done by the employment of some keratolytic agent, salicylic acid, which softens the horny layer, being the best On the heel and the ball of the foot the horny layer is very thick, and after treatment for some days with a salicylic ointment or plaster it will often peel off in an almost unbroken sheet, carrying away with it small warts—for example, those which are not of greater diameter than two or three millimetres, but in the case of the larger specimens, which may be as much as a centimetre in diameter, macerating treatment alone is ineffective For them some form of surgery is usually required, but excision by means of a scalpel, followed by the insertion of sutures, should never be practised It is unnecessary, and often leads to the formation of a painful scar

SURGICAL TECHNIQUE

People sometimes talk about the "roots" of warts, but there are really no such things Even the largest of them, if extracted entire, will be found to have a smooth pearly white basal surface which lies in a capsule formed by the surrounding skin As a rule it is not very difficult to find the line of demarcation between the wart and its capsule and to curette it out with the aid of a sharp spoon Whether this little operation should be done under local or general anaesthesia depends very much upon whether the patient is a child or an adult Usually, general anaesthesia is best for children and a local anaesthetic for adults The base of the wart is often tightly attached to the dermis, so that there is a chance that the line of demarcation may be missed and the adherent dermis be removed with it, thus making a wound right through to the subcutaneous tissue such as is likely to lead to the formation of a painful scar It is desirable, therefore, before curettage to adopt some means of loosening the wart in its bed There are two good methods of doing this first, by the administration of a dose of x rays, secondly, by the application of a pencil of carbon dioxide snow If available, the administration of x rays is to be preferred It is, indeed, quite possible to kill plantar warts and cause their disappearance by the use of x rays alone but for this purpose a very heavy dose is required in the case of large and thick warts, and there is some degree of uncertainty as to exactly how much is necessary in each case As a measure preliminary to curetting a dose equivalent to two Sabouraud pastilles may be safely given, provided of course that the surrounding skin is carefully screened This dose is at all events sufficient to cause a certain amount of shrinkage of the wart, and after a few days it is much easier to curette, as it is no longer so tightly adherent to its bed The administration of x rays has also the advantage that it at once diminishes tenderness on pressure, which is usually the chief symptom complained of by the patient The application of the carbon dioxide pencil is also useful because it causes a certain amount of effusion between the wart and its bed thus facilitating removal, but it has the disadvantage that it is painful in itself and has no analgesic effect subsequently Many cases, probably amounting to some hundreds in all, have been treated on these lines with unfailing success I do not remember ever to have seen a recurrence

H HALDIN DAVIS,
MD FRCP
London, W

Keratitis from Working with Creosote

These two cases are of clinical interest from an ophthalmological point of view and also useful as drawing attention to the danger to employees of working with creosote Both cases arose in gardeners who were creosoting a fence in different localities Neither of them was conscious of a splash of creosote getting into the eye but rather thought fumes got into their eyes, and they suffered later from irritation and consulted their own doctors after work In reality small droplets must have gained access to the eyes

CASE I

H H aged 67, was creosoting a fence on January 28, 1938 He thought some fumes of creosote got into his left eye He had uneasiness and blinking but no great pain He was treated by his doctor till February 10, when he came to me saying the sight of the left eye was blurred On examination there were three small grey maculae below the pupil, but also numerous small grey spots on the cornea and a hazy superficial keratitis a condition due, I thought, to numerous small droplets of creosote impinging on the cornea The condition under treatment has settled down but there will be permanent impairment of vision

CASE II

A G, aged 49, consulted me on May 13 with a history of creosote fumes getting into his left eye about two months previously, since when his vision has been hazy He did not have much pain, but he went to his doctor, who treated him But the haziness remained On examination on each side of the pupil there was a small grey macular patch where two bigger globules of creosote must have landed, but there were also numerous small grey specks and a superficial hazy keratitis where minute droplets of creosote must have settled The condition had apparently settled down but left hazy vision

In both cases the history was the same Both patients complained of irritation of eyes after working with creosote, neither complained of great pain, such as one would expect in such damage to the cornea, and the clinical appearances were the same—both were gardeners In both the impairment of vision will be permanent

Creosoting of posts and fences is a common occupation both for amateur gardeners and their employees, and the publication of these two cases may lead to general practitioners giving a warning to any of their patients who work in gardens

G T BIRDWOOD MD, BC,
War Memorial Hospital, Deal

May 26 1938

Reviews

THE BRITISH RED CROSS

The Story of the British Red Cross By S H Best Foreword by The Hon Sir Arthur Stanley G B E (Pp 275 11 illustrations including a frontispiece 8s 6d net) London Toronto Melbourne and Sydney Cassell and Company 1938

The British Red Cross is a subject on which not a great deal has been written and indeed its discontinuous history—for it is only in war that it becomes really significant—is not easy to relate Mr S H Best in *The Story of the British Red Cross* which has appeared opportunely during the 16th International Red Cross Conference tells a plain unvarnished tale and Sir Arthur Stanley who contributes a foreword is equally matter-of-fact but even these sober details of organization pulse now and then with adventure It is strange that no Red Cross organization was built up in this country following the Crimean War for Florence Nightingale embodied if anybody ever did the Red Cross spirit It was the Franco Prussian War of 1870 which led to the foundation of the National Society for the Aid of the Sick and Wounded in War which was the precursor of the British Red Cross Society An organization was swiftly improvised and British Red Cross surgeons were operating amidst the bullets at Sedan But it was not until 1897 just before the Boer War that the organization of Red Cross work in this country took a decisive step forward when representatives of the National Aid Society the St John Ambulance Association and the Army Nursing Reserve met in conference with a view to finding out how best they could co operate with the Army Medical Service and with one another As a result the permanent Central Red Cross Committee came into existence and almost immediately had its baptism of fire on the South African battlefields Later it was felt that the principle of unification might be extended and the present British Red Cross Society came into existence in 1905 with Queen Alexandra as its president— essentially a woman's work said the Queen in her inaugural speech But when the European War broke out the Society was still a small organization occupying two rooms in Victoria Street and living on a negligible income Its expansion was on a similar scale to that of the British Army itself To take the financial measure alone by the end of the war it had raised £24 000 000

Nearly half the present book is taken up with the story of the Society in the war of 1914–18 This again is not easy to relate for Red Cross work had no well defined limits merging sometimes almost imperceptibly into the work of the Royal Army Medical Corps At first much confusion was caused by the fact that the Army Council in which the control of the Red Cross emblem is vested had granted authority for its use to the Ambulance Association of the Order of St John so that there were two bodies engaged in the same work sending personnel and material to the armies at the front The situation was remedied by the formation of a Joint War Committee consisting of representatives of both bodies In the early days of the war the Red Cross offered an obvious channel for patriotic and compassionate service To Sir Frederick Treves it fell to interview the doctors who wished to serve and 400 were engaged at £1 a day with quarters and rations Many of them served in France some in Serbia and elsewhere Some were in units of which the Society had sent out thirteen and the joint organization a further six before the end of 1914 Vivid memories of those days are recalled by these chapters—the establishment of the auxiliary hospitals the organization of the V A D s (who were a matter of jest at first, but earned the tribute from Sir Arthur Sloggett D G M S that they were one of the greatest factors of the medical organization of the war) and the purchase of the Star and Garter Home The Red Cross emblem was the brightest thing that many a war-weary eye saw in four years Here is a typical example of service which perhaps would not be accounted much of an achievement to day but twenty years ago made a shining record

> A telegram was received at Boulogne headquarters requesting a supply of pituitary extract urgently needed by a casualty clearing station A supply of this extract was received at noon on the following day and was immediately dispatched by motor cyclist who delivered it at the casualty clearing station the same evening

But that is only one of scores of quotable instances A bare dozen pages are allotted to the post war activities of the Red Cross but these include such work as the blood transfusion service the clinic for rheumatism in London and the training of personnel for the A R P

ACTIONS AND USES OF DRUGS

The Essentials of Materia Medica Pharmacology and Therapeutics By R H Micks M D F R C P I Second edition (Pp 378 12s 6d) London J and A Churchill 1938

The appearance of a second edition of Professor Micks's textbook confirms the opinion we expressed when the first edition appeared three years ago that it was of exceptional merit and would prove popular The outstanding feature is the clearness with which the author states the really important actions and uses of drugs At the same time he has little respect for age in relation to therapeutic traditions and when he believes a drug to be useless states this opinion without superfluous qualifications This simple method of approach results in a textbook which is both interesting and easy to read

The material has been thoroughly revised An account is given of the numerous important new drugs that have appeared during the last three years A separate chapter is devoted to prontosil and sulphonamide and it is interesting to note that as much space (seven pages) is given to these drugs as to the treatment of cough Emetics on the other hand are dealt with in a single page while volatile oils occupy four pages which end with the remark that the presence in pharmacopoeias of most of these substances is a relic of the past rather than a testimony to their therapeutic importance These examples suffice to show the striking difference between the textbook under review and those which follow more classical traditions Professor Micks's treatment of the subject is of course the one which really accords with up-to-date clinical practice It would indeed seem that though pharmacology is one of the youngest of the medical sciences yet it already has acquired classical traditions which are tending to lag behind current practice Professor Micks's textbook undoubtedly helps to ward off this threatened senescence since its very omissions emphasize the fact that most of the points around which controversy centred during the nineteenth century are to day of minor importance

We congratulate the author on the care he has taken, not merely to incorporate an account of *new drugs* in the new edition but to rewrite whole chapters so that the relative importance of new and of old methods is shown in true perspective

AN AMERICAN HANDBOOK ON EYE DISEASE

A Textbook of Ophthalmology By Sanford R Gifford M A M D, F A C S (Pp 496 249 figures, 10 coloured plates coloured frontispiece 18s net) Philadelphia and London W B Saunders Company 1938

Dr Sanford R Gifford, professor of ophthalmology in the North-Western University Medical School, Chicago, has written a handbook on the diseases of the eye for the use of medical students and general practitioners The book follows the usual lines of such works There is a good account of the examination of the superficies of the eye, then of ophthalmology and the functional reactions of the eye There follow chapters on refractive errors, the diseases of the several parts of the eyes, and a chapter on the eye in general disease There is an appendix giving the appraisal of loss of visual efficiency according to the standard method approved by the House of Delegates of the American Medical Association in 1925 The text is well and clearly written, it is a safe guide to the student and to the general practitioner The type and paper are good, but the illustrations of which there are many, are disappointing Dr Gifford has used photography far too much There are many fundus pictures done by photography which are clever in themselves but which in our opinion are quite useless as an aid to the student Such pictures in their lack of distinction are in sharp contrast to the several colour prints prepared from drawings made by the artists of Theodore Hamblin of London There are few photographs of eye conditions which can equal the careful limning of the intelligent artist

PERIPHERAL EMBOLECTOMY

Les Embolies Artérielles des Membres By H Haimovici Preface by R Leriche and J Fiolle (Pp 336 55 fr) Paris Masson et Cie 1937

In this welcome monograph Dr Haimovici reviews the whole subject of the occlusion of the limb arteries Based on the personal experiences of the author as well as a bibliography of several hundred references, which is by no means the least valuable part of the book, the field covered includes sections on history, aetiology, symptomatology, diagnosis, prognosis, pathology, and treatment It is introduced by a short preface by Professors René Leriche and J Fiolle, who, in drawing attention to its importance, state that hitherto the subject has been dealt with in only a random way, and that this is the first contribution to analyse the subject and deal with it as a whole The pathological aspect, however is given most prominence, and the whole of the twenty-four illustrations, with the exception of the first few which are concerned with experimental work, are photomicrographs from sites of vascular occlusion and depict emboli or the vessels containing them This is our chief criticism of this excellent monograph, we should have welcomed some illustrations of the clinical aspects—for example, common sites of lodgment of emboli and of the various methods used in their treatment by surgery Very appropriately the work of Swedish surgeons is referred to, but we should have liked to have seen Professor Einar Key's important personal contributions and those of his associates given even more prominence for it is to the Swedish school that we have been accustomed to look for some time now for guidance in the treatment of cases of arterial embolism British readers might think that undue importance is given to arteriectomy since many have failed to confirm the striking results claimed for this procedure, so popular in parts of the Continent Other explanations may be given for some of the results ascribed to sympathetic denervation by arteriectomy, since success has also followed embolectomy with ligature of the main vessels Making due allowance for such considerations, however, there is much to recommend this work to those interested in vascular surgery

A MEDICO-LEGAL CLASSIC

Glaister's Medical Jurisprudence and Toxicology By John Glaister M D, D Sc Sixth edition (Pp 747, 107 illustrations, 8 plates, 3 of which are in colour 25s net, postage 7d) Edinburgh E and S Livingstone 1938

In preparing the sixth edition of this famous book Professor Glaister decided that considerable changes were inevitable It was originally written for the student, and he found that it contained too much minor detail and interpolation in small type for modern tastes He has therefore opened up the whole format by using larger type and has improved the style of the index Considerable portions of the book have been recast in order to include new matter Dermal prints and palmar prints are treated in some detail, and the section on putrefaction now contains some useful data on the identification of maggots, for various species have life-cycles of various lengths The Ruxton case gives the editor an opportunity to enlarge the original section on the identification of dismembered remains He also includes the latest information on blood grouping the use of filtered ultra-violet light, the Pharmacy and Poisons Act, 1933, and war gases He has a large toxicological section, with two fine coloured plates of various poisonous berries and seeds As might be expected, Dr Glaister treats adequately one of the subjects he has made peculiarly his own the identification of fibres and hairs The civil aspect of medical jurisprudence is dealt with in a somewhat perfunctory way, but the section on the General Medical Council informs the practitioner of most of the pitfalls of the medical code of conduct A valuable feature is the close attention paid to Scots law, which in its medical aspects as in others, differs widely from the law of England The value of this work, already great, has been considerably increased by its learned and experienced editor

Notes on Books

Very opportunely since the Glasgow Exhibition will doubtless attract more than the usual number of visitors to Scotland this year, the Automobile Association has issued the *Road Book of Scotland* thus completing the trilogy of A A roadbooks covering Great Britain and Ireland The 400 pages which this book contains are packed with useful information, and, what is more, this mass of material is so arranged that whatever the reader wants to know—from the best of several possible routes to the size of the golf course at, say, Wick or (for the Englishman) the correct pronunciation of Gaelic names—that information is to be found with a minimum of effort There are more than 250 specially surveyed, detailed itineraries which are cross referred to a gazetteer of more than 800 cities, towns villages, and lochs Day drives from twenty-nine centres, chosen to cover the country as a whole, are described, and there is also a descriptive article with regional sketch maps on 'Touring in Scotland Sections of the book are devoted to mountaineering angling and shooting and miscellaneous information is to be found on steamship communications ferries and highland clans and lowland families Finally there are

excellent road maps in full colour on a scale of twelve miles to the inch Altogether a volume which no serious motorist in Scotland can afford to be without Its price to members of the A A is 8s 6d

It is an act of piety on the part of Dr Louis Sauve—himself a hero-worshipper—to save *Le Docteur Recamier (1774–1852)* from the oblivion into which he was fast sinking Recamier in his day was a great figure in French medicine as a physician surgeon and gynaecologist He was among the first to remove the uterine cervix by means of the ligature he invented a new form of speculum and he taught that cancer was at first a local condition which could be cured by early operation He came of old French stock His father was notary royal and mayor of Rochefort his godfather was Brillat Savarin the gourmet who wrote the *Physiologie du Gout* Recamier himself entered the Army of the Republic when the Terror was still at work He was present at the siege of Lyons in 1793 and then passed into the Navy to fight the English in the *Ca Ira* Eventually he became physician to the Hotel Dieu in Paris then surgeon to the charity for the profession was not then so strictly separated and he ended his life as Professor of Medicine in the Royal College of France His friends were numerous and included most of those who are familiar to us by their classical writings This little book (Paris Edition Spes 20 frs) is interesting to the general as well as to the professional reader It gives a first hand account of the state of affairs in France at the end of the eighteenth century when Recamier's pay was three hundred livres a month paid in assignats worth twenty sous a hundred in cash The father's income had been attached so the son had to live on his pay Dr Sauve reproduces a portrait of Recamier in middle age

Scientific Contributions in Honor of Joseph Hersey Pratt on his Sixty fifth Birthday is published at 7 dollars by the Lancaster Press Incorporated of Lancaster Pennsylvania A hundred and thirteen colleagues former pupils and friends of Dr J H Pratt of Boston, under the leadership of Dr Richard C Cabot pay this tribute to one who has done such notable service to the sick poor in such an effective and warm hearted manner Dr Cabot writes enthusiastically of Joe Pratt the pupil of Osler and Welch at the Johns Hopkins who thus inspired has been able to prove that scientific fervor and delight can be maintained at white heat in the cool climate of Boston for forty years More than thirty years ago he instituted his class method of helping tuberculous poor patients to get well in Boston and obtained as good results as those at Saranac Lake and other first class sanatoria another psychological but similar method of helping the sick poor the thought control class has also been strikingly successful Most of the articles here brought together have already appeared in the *Annals of Internal Medicine* and cover a wide field For example Sir Arthur Hurst writes on alcoholic gastritis 1833 and 1937 and Dr G C Shattuck a well known Boston name describes the incidence type and probable cause of anemia in the highlands of Guatemala It is interesting to hear that a hundred bedded Joseph H Pratt Diagnostic Hospital is to be constructed in honour of this famous physician

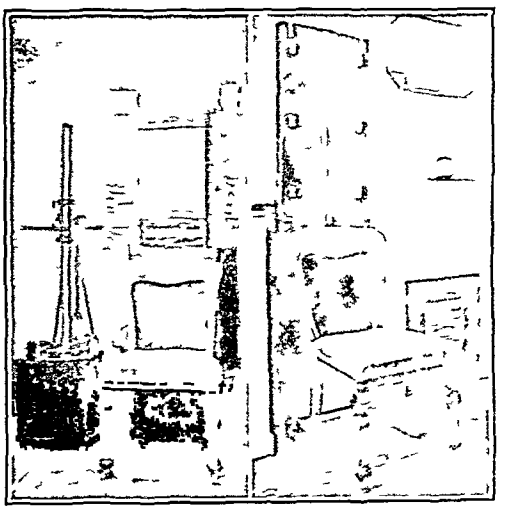
The first volume of the first series of the *New International Clinics* (Philadelphia Montreal New York J B Lippincott Co 4 vols 30s) appears under the editorship of Dr GEORGE MORRIS PIERSOL professor of medicine at the Graduate School of Medicine University of Pennsylvania and differs externally from the old series by appearing in a blue binding with a green label The volume contains seventeen original articles eight clinical lectures on a great variety of subjects and a review of recent contributions to the subject of biliary stasis and decompression

Preparations and Appliances

X RAY SCREENING STAND FOR GENERAL PRACTICE

Dr DOUGLAS GORDON (Richmond) writes

Radiology is not yet practised as generally as it is abroad and in the dental profession but with the introduction of shock-free apparatus it appears likely that the next decade will show a considerable increase of general practitioners with installations However even a shock free self protected x ray tube is not as safe as it sounds if used for screening chests I myself suffered from a sudden attack of alopecia within a few weeks of installing an x ray apparatus A complete cure was effected by constructing the screening stand here illustrated



The stand has the great merit that when not in use it occupies practically no space at all owing to the employment of a chair to keep it vertical and of wheels to permit of easy movement A 15 inch by 12 inch Lewis West screen with 10 mm lead glass slides in grooves in the two upright members and is capable of adjustment as is a small panel of wood and lead which lies below it in the grooves The vertical members are drilled and a brass rod passing through them retains both screen and panel Wheels are fitted at the bottom of the vertical members and strips of wood fix them to the back of the chair so that the chair legs prevent the stand being moved when in use but a slight tilt enables it to be wheeled about easily Protection is completed by lead apron fixed to the vertical members from the level of the top of the back of the chair down to within a few inches of the floor and laterally by four hinged flaps of lead and wood as seen in the illustrations The two upper serve the double purpose of protecting the observer from x rays and when shut of protecting the screen from sunlight The lower flaps fold back on double hinges when not in use The range of adjustment available suffices for all chests and a suitable stool or box for the patient to stand on permits screening of the abdomen Omitting the cost of the Lewis West screen and of the chair the whole apparatus was constructed for less than £2

APPLE DIETARY

Aplona (Messrs Coates and Cooper) is a German dietary preparation made from apples It contains 1 per cent tannins cellulose and pectine Clinical reports have been received that it is valuable in the treatment of diarrhoea both in children and adult

Nova et Vetera

ST HELENA AND ITS HISTORY

In *St Helena 1502–1938* Dr Philip Gosse has produced not only an important historical work but also a vivid and interesting narrative of the island's chequered story[1] To the great majority St Helena is known solely as the place of Napoleon's second captivity and previous writers have devoted themselves almost entirely to the last days of the illustrious exile Dr Gosse, however, has wisely refrained from allowing any undue concentration upon this over-written period to upset the careful chronological balance of his book This is to be commended, for both the romantic early history of the island and the reasoned and sympathetic survey of the deplorable conditions existing at the present day are more worthy of the reader's attention

An uninhabited island, St Helena was first discovered by the Portuguese admiral, da Nova, in 1502, and for eighty-six years, realizing its great importance as a calling station for their homeward-bound argosies from the East, the Portuguese succeeded in keeping the discovery to themselves Then the English and Dutch came upon the scene, and there followed a period of sea-fights and assaults, of which Dr Gosse with his wide knowledge of the old sea-rovers, is well fitted to write Turbulent too, was the internal history of the island, disturbed by frequent mutinies, and marred by the cruel treatment of the black slaves who had been imported under the auspices of the East India Company, to furnish labour for the plantations and farms The East India Company, nevertheless was lavish in its expenditure upon this vital link in its sea communications and the transference of administration to the Crown in 1833 dealt a sad blow to the island's prosperity The opening of the Suez Canal and the gradual disappearance of sailing ships sounded the knell of St Helena's former glories and the island is to day impoverished and neglected

Dr Gosse has supplemented his text with nine most interesting appendices, one of which contains a complete list of Governors from 1657 to the present day Among these is Dr W J J Arnold, colonial surgeon who was acting Governor in 1911 and in 1924 So beloved was Dr Arnold by the community, to which he devoted the best years of life, that a monument was erected to his memory, bearing the inscription, "The best friend St Helena ever had This book, written with scrupulous accuracy and at the same time with sympathy and humour, may deservedly be regarded as the standard work on St Helena The illustrations are numerous and well chosen

FRANCESCO ANTOMMARCHI, 1789-1838

Of all the petty men who walked under the huge legs of the Colossus Napoleon one of the strangest and least attractive was his compatriot Dr Francesco Antommarchi, the centenary of whose death occurs this year Sir Arthur Keith has called him the Malvolio of the drama of St Helena Born at Morsiglia, in Corsica, he studied medicine at Pisa and Florence and in 1812 became prosector to Paolo Mascagni (died 1815), whose beautiful illustrations for an anatomic atlas were entrusted to him for publication These he began issuing in 1819 (*Prodromo della grande anatomia*) but his methods were so questionable that Mascagni's family soon chose other editors

When Napoleon's Irish physician Barry O'Meara was sent home on July 25 1818, Antommarchi, at the request of the Emperor's mother and of her brother, Cardinal Joseph Fesch, went to St Helena in 1819 He was then but 30 years old Though a skilled anatomist and pathologist he was an inexperienced and incompetent physician—excitable, unbalanced, vain, *pretentious, and greedy* Towards the sufferings of his patient he was scarcely sympathetic, believing them to be simulated for political ends Napoleon's dread of having inherited cancer from his father, who died at the age of 39, Antommarchi tried to quiet by asserting that cancer was not inheritable The patient frequently tried to get rid of his doctor, saying 'I would give him my horse to dissect, but I would not trust him with the cure of my own foot' Though he performed the post-mortem examination, Antommarchi refused to sign the official report He is suspected by Sir Arthur Keith of having abstracted the portions of Napoleon's *intestine which are preserved in the Museum of the* Royal College of Surgeons (*British Medical Journal*, 1913, **1**, 53–59)

A Spurious Attribution

Antommarchi's name is illegitimately linked with the so called Antommarchi death-mask of Napoleon, which was really the work of Dr Francis Burton, surgeon to the 66th Regiment of Foot, the face part of the mould having been stolen by the Corsican In 1825 Antommarchi published his worthless and mendacious book *Derniers Moments de Napoleon* in which he gave a fabricated account of how he had moulded the mask Very providentially for his rival, Burton died of pulmonary apoplexy in 1828, when Antommarchi decided that the time was now ripe for reproducing the mask and placing casts upon the market for sale On July 15 1833, he issued a prospectus and invited subscriptions Though the mask was exquisitely beautiful—in its youthfulness it recalled the First Consul rather than the Emperor—with its receding and narrowing forehead and commonplace skull, it was so unlike his conventional head that the response was most disappointing In disgust Antommarchi retired to Cuba and died at Santiago at the age of 49 His fraud was publicly exposed at Dublin in 1835 by Robert James Graves (of Graves's disease fame), a cousin of Burton, some of whose papers he had inherited, and Burton's claim was resurrected in *1900* by Lord Rosebery in his book, *Napoleon The Last Phase* The story of the death-mask was told convincingly with the aid of original documents by G L de St M Watson in 1915 Though Heine calls him an evangelist of the worldly saviour Antommarchi seems to have had scant regard for historical accuracy and truth It was he who invented the theatrical tale—repeated to this day—that when Napoleon lay dying a violent tempest was raging over the island, tearing up every tree which the exiled Emperor had cherished

W R B

While a medical student at the University of Gottingen Arthur Schopenhauer who was born 150 years ago contracted syphilis, which was treated with huge doses of mercury so popular at that time The accompanying wretchedness of *salivation, depression, and internal pain were responsible for* his lifelong syphilophobia and out of his hatred of women—under sized, short legged, long haired creatures whose sole purpose in the world was to spread syphilis—grew his philosophy of pessimism In commemoration of this anniversary Danzig his native city, has recently issued a set of three stamps bearing his likeness

---

Sir Walter Farquhar, Bt, M D, who was born in *Scotland* 200 years ago, served as army surgeon under Lord Howe commander in chief of the British Army in the American Revolution, and was present at the siege of Belleisle in 1761 On his return to England he started practice as an apothecary, was created baronet in 1796 and shortly afterwards became physician in ordinary to the Prince of Wales He died on March 30, 1819

[1] *St Helena 1502–1938* By Philip Gosse (Pp 448, 33 figures 18s net) London Cassell and Co 1938

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY JULY 2 1938

NATIONAL INSURANCE IN AUSTRALIA

In the *Journal* of June 11 last (p 1279) the provisions of the Bill for National Insurance and Pensions in Australia were described The Bill had then received its second reading in the Federal House of Representatives Its subsequent course has not been altogether a smooth one Within the House the Labour Party put up a dogged opposition mainly on the ground that any such scheme should be non-contributory while on the other hand certain of the Government s own followers especially a section of the Country Party, pressed for various extensions of its proposals so that some farmers and employers with small incomes as well as the dependants of insured persons should be provided for Outside Parliament the friendly societies fearing that the Bill might affect adversely their present position expressed their dissatisfaction and the general body of the medical profession attacked a number of its proposals in no uncertain way It was only by the firmness of the Prime Minister and by the application of the 'guillotine that the third reading was secured by a small majority Even so Mr Lyons had to promise to appoint a Royal Commission to consider the capitation fee for medical practitioners giving service and the inclusion of the dependants of certain classes of insured persons and to consider the establishment of a voluntary scheme for small employers with a rebate of the contributions on behalf of their employees The Bill went to the Senate on June 21 and it is understood that it has now been passed without substantial alteration

The conduct of the negotiations between the Australian Government and the Federal Council of the British Medical Association on behalf of the medical profession in the Commonwealth has not been satisfactory No doubt both the Government and the Federal Council were in a difficult position The former understandably but we think unwisely did not wish to make any public disclosure even of its main proposals until the Bill was introduced into Parliament The latter was thus placed in the position of negotiators who were unable to assure themselves of the reaction of the general body of those whom they represented to important points which they were prohibited from disclosing during a vital period

Observations on the position especially as regards details made under the handicaps of distance and of time must necessarily be guarded It is possible that there are factors as to which full information has not been forthcoming but criticisms made as the result of actual experience may be helpful There is no doubt that a considerable number of members of the medical profession in Australia regard any scheme of national health insurance as unnecessary and as likely to be injurious to professional work and traditions Such an attitude comparable to that taken up by many in Great Britain a quarter of a century ago is mainly due to misunderstanding as to the nature and effects of such a scheme in actual working These have proved to be not unsatisfactory in this country and there is no reason to suppose that in Australia if regard is had to that twenty five years experience and to its application to conditions in some respects different a similar scheme will be a social measure other than beneficial alike to the profession and to insured persons Further if uniformly administered throughout the Commonwealth it would seem to offer the best means of relieving the profession and the people of Queensland and of Tasmania from the worst effects of the attitude of the Governments of those States to the medical profession In any case the Australian Government is redeeming promises definitely made during an election from which it emerged with success

The chief differences between the Government and the medical profession now appear to be with regard to the capitation fee and mileage and to the content of the service It would seem that in the original negotiations the decisions arrived at were that the capitation fee for a general practitioner service excluding treatment in respect of a confinement and treatment of an insured person who becomes entitled to the benefits of any Commonwealth or State Workers Compensation Act or Seamen's Compensation Act and excluding major operations and inhalant anaesthetics be eleven shillings and that mileage be payable at the rate of two shillings a mile one way beyond three miles with an increased rate for areas of special difficulty The present demands of the profession are that the capitation fee shall be fourteen shillings with a 25 per cent increase for country areas that mileage shall be 2s 6d a mile beyond two miles sixpence of this to be payable by the patient that there should be an

extra 2s 6d fee payable by the patient for calls between 8 p m and 8 a m , that, in addition to the administration of general anaesthetics, the following should be excluded from the service—attendance for acute alcoholism and acute venereal disease, attendance for miscarriages and abortions and premature births, and attendance for " the more difficult and complicated fractures and dislocations "

A capitation fee of eleven shillings, having regard to differences of exchange, cost of living and other conditions of practice, must be regarded as entirely inadequate A case put forward to the Commission now promised by the Government should certainly be successful in securing a substantial increase upon this It must be remembered that when the lower amount was decided upon medical attendance on workmen's compensation cases was to be excluded from the service Experience here shows that it would be both undesirable and very difficult to exclude this, but that the amount of such attendance is considerable , and the Commonwealth Government should surely recognize that, if it is not now to be excluded, this in itself constitutes a reason for a higher fee Experience tends to show also that it would be unwise and inconvenient to exclude acute alcoholic and acute venereal cases from the contract, and the same applies to miscarriages and abortions, though perhaps less emphatically , but of course the work entailed by these troublesome cases should be reflected in the capitation fee With regard to major fractures and dislocations, it may be that they are excluded as requiring, except for emergency treatment, specialist skill On the other hand there is much to be said, in the conditions of Australia, for a higher mileage fee and for a modest fee for night calls, some portion of which, in both cases should be a liability on the patient It may be suggested however, that the practitioner should be paid these fees not by the patient but from the insurance fund, that fund obtaining payments into the fund by the insured person

Proper pressure on the Government on these points with regard to capitation fee, mileage, and night calls, with the presentation of a well-prepared case to the proposed Royal Commission, is called for, and it is to be hoped that the profession in Australia will be united in presenting reasonable demands upon such points as these The principle upon which the whole matter should be based is that the profession should offer not an unduly restricted service but a full and efficient service, and that the Government in return for this should guarantee such remuneration as will encourage and suitably reward good work and great responsibility

THE VOLUNTARY SYSTEM IN FIGURES

The voluntary hospitals are a long time dying It might be argued that they are no longer voluntary in the sense of the words which are still to be seen over the entrances of many of them—" Supported by voluntary contributions "—for voluntary gifts in the shape of subscriptions, donations, congregational offertories, even including workmen's contributions, Hospital Saturday funds, and contributory schemes, amount in all to much less than half the income available for maintenance But as Mr R H P Orde, editor of *The Hospitals Year-Book*,[1] points out in a foreword to the new edition, the reference to voluntary contributions has largely obscured the picture The really important characteristics of the voluntary system are not the sources of income but the absence of statutory control and of the desire to make any profit out of the treatment of the sick

With that definition in mind it is worth while examining some of the massive statistics presented in the yearbook They relate to 1936, the last year for which complete figures are available During that year 1,378,050 patients were treated in the wards of the voluntary hospitals of Great Britain and Ireland, and 6,216,497 in their out-patient departments These figures show increases over the previous year of 52,614 in-patients and 272,544 out-patients The growth of the out-patient department catches the eye everywhere in the procession of statistics In the London hospitals alone the number of new out-patients in the year was just upon two millions, an increase of 80,000 on the year before At the twelve London hospitals associated with medical schools the new out-patients numbered well over three quarters of a million At two of them (the London and St Thomas's) the number in each case was over 100,000 At this rate the out-patient clinics will vie with the cinema as the place of resort for the British people The same story is repeated at the special hospitals At the four large ophthalmic hospitals in London, for example the new out-patients numbered 72,000 The cost of out-patients is rather difficult to assess, and the disparity of some of the figures in the analyses suggests that different methods are taken by different hospitals At the Birmingham General Hospital for example, the remarkable figure of 6s 8d is returned as the cost per out-patient attendance, but in general at the provincial teaching hospitals the figure works out at something over one shilling, and at the London teaching hospitals it averages just over two shillings

[1] *The Hospitals Year Book 1938* (Central Bureau of Hospital Information, 12, Grosvenor Crescent S W 1)

An interesting section of the report this year deals with hospital nurses In the London hospitals associated with medical schools the number of beds per member of nursing staff varies from 2·46 at St Mary's to 1·34 at Guy's and at similar hospitals elsewhere in the country from 3·05 at Aberdeen Royal Infirmary to 1·97 at Addenbrooke's Hospital, Cambridge Very few hospitals whatever their size, have more than four beds per member of nursing staff The average for the 800 hospitals furnishing complete particulars on this point is 2·36 in the case of the general hospitals and 2·84 in the case of the special the special including such places as the spa hospitals where the number of beds per nurse may be from ten to fifteen On a summary of information from a number of large provincial hospitals the number of hours' duty per week for the day staff (excluding times taken for meals) is about fifty-five and for the night staff very generally over sixty Typical salaries for matrons of large provincial hospitals are £400 for ward sisters £90–£150 for staff nurses £60–£80 and for fourth year probationers £40

The financial position of the voluntary hospitals in 1936 may be summarized by saying that they received £17 680 000 and spent £17 167 000 Returning prosperity to the nation brought the hospitals a welcome increase in voluntary gifts the total of which was £6 071 000 a gain of not far short of £300 000 on the year The only diminution was in Scotland But the cost of running hospitals is generally rising reflecting the rising price level and the fear of a deficit is ever present in the minds of hospital managers An independent view of the whole situation was put forward the other day by Professor Ernest Barker who holds the chair of political science at Cambridge in an address to the British Hospitals Association on 'The State and the Voluntary Hospitals'.[2] The deficits of the hospitals said Professor Barker were in no sense the result of bad management Hospitals had developed into organized co-operative concerns and their problem now was how to meet their deficits The method of setting wards aside for paying patients might vitally affect the very essence of the voluntary hospital and turn it into a quasi-commercial nursing home The only solution now is the way which adds State charity to the resources and achievements of private charity When the community gives as well as private persons, it makes a fairer and more equitable world In answer to the question how aid should be given by the State Professor Barker put forward the analogy of universities The University Grants Committee receives an annual Parliamentary grant of some £2 000 000 and distributes this among the universities attaching no specific conditions A Hospital Grants Committee might receive an annual Parliamentary grant and probably a system of regional hospital councils acting on behalf of the committee in the same way as the central federal authority of the University of London acts on behalf of the University Grants Committee might be a further necessity' He claimed that this idea was in tune with the general English way of doing things So far from defeating self help or drying up the springs of private charity it was likely to stimulate and increase them The grants made by the State to universities have not diminished the private support and the private endowment of universities The plan is an economic one and a good and valid alternative to the other and far more costly method to which we might otherwise be driven—the method by which the State owing to the failure of unassisted voluntary effort to face the gigantic task of maintaining voluntary hospitals would be forced to take them over and to run them at a far greater cost

[2] *Times* May 27 1938

THE CYCLOTRON

Scientific progress depends no less upon the production of new research tools than upon new ways of thinking and the cyclotron in this respect bids fair to rank with the x ray tube the microscope and the magnet Its inventor Professor E O Lawrence wished to produce high speed ions of sufficient energy to penetrate and disrupt atomic nuclei Ions can be accelerated by the application of an electromotive force and a variety of apparatuses have been made—for example the impulse generator or the high voltage x-ray tube—in which about a million volts can be applied to the ion source Difficulties of insulation at present stand in the way of further development of such apparatus and Lawrence therefore thought of repeatedly accelerating the ions by the successive applications of a voltage of the relatively low order of about 40 000 volts An ion can be made to traverse a circular path by the application of a magnetic field at right angles to the plane of the circle and the angular velocity of such a moving ion is constant If now the linear velocity of the ion is increased by the application of a voltage in the plane of the circle the ion will travel in a larger circle and by repeated accelerations its path becomes an ever widening flat spiral In the cyclotron the ions formed near the centre point between two semicircular hollow electrodes spiral around from within one electrode to within the other under the combined influence of a high frequency oscillating field between the electrodes and a magnetic field perpendicular to the plane of the electrodes The frequency of the oscillations and the strength of the magnetic field are so adjusted that the

ions remain in resonance with the oscillator, and after perhaps a hundred revolutions the spiral has opened up to the limit permitted by the size of the accelerating electrodes, and the ions are drawn off their track by about 40,000 volts applied to a deflecting electrode They then strike a beryllium target with an energy approaching six million volts, or they may pass through a very thin platinum window into the air The ions used are as a rule those of heavy hydrogen (deuterons), the cyclotron in steady operation gives 7 micro-amperes of 5-million-volt deuterons, and the neutron emission from a beryllium target bombarded by this deuteron beam is equivalent to that which might be produced by something over 50 kg of radium in a beryllium mixture There are two cyclotrons at present in course of construction in this country (for Cambridge and Liverpool), and one is also in process of installation at McGill University The latter has been made the occasion by J S Foster for a paper[1] showing the contacts of the cyclotron with x-ray and radium therapy The cyclotron makes available a variety of high-speed particles which are not emitted by radio active substances found in nature—protons, deuterons, neutrons —as well as producing particles which also occur naturally (for example, alpha particles) in considerably greater number than from a radium source of average size Such high-speed particles may be used directly for therapeutic purposes (a beginning has already been made with electrons and neutrons), or they may be used to produce artificially radio active substances In a day's bombardment of sodium metal with deuterons an amount of radio-sodium having a gamma-ray activity equivalent to 200 mg of radium is produced, the end-product of radio-sodium is magnesium, and there are a number of artificial radio active elements which similarly lead to harmless end-products It is therefore possible to inject such radio active elements into the blood stream, and J C Hamilton and R S Stone have already administered radio-sodium intravenously in the treatment of leukaemia Lawrence has himself obtained good results up to date in a case of myeloid leukaemia treated by radio-phosphorus When injected into the body phosphorus is to a large extent selectively absorbed into bony tissue it is clear, then, that radio-phosphorus will be brought into close proximity to the proliferating elements of bone marrow, and its use in the treatment of leukaemia should supersede that of radio-sodium There are now more radio-active nuclei known than stable ones, so that the selective absorption of different elements by different tissues opens up wide therapeutic possibilities As Professor John Beattie pointed out in his first Arris and Gale Lecture last week, the discovery of such a selective element for cancer tissue would place a powerful therapeutic agent in our hands The introduction of radio active compounds into an organism also makes manifest the movement and disposal of the element concerned, so that the use of radio active indicators is likely to prove of great value in biochemical research

[1] *Canad med Ass J* 1938 38 222
[2] *Radiology* 1937, 28 178

MILK AND NUTRITION

The first report of the Milk Nutrition Committee, which was published some months ago, dealt with the results of experiments carried out on rats at the National Institute for Research in Dairying at Reading and at the Rowett Institute, Aberdeen Careful comparisons were made between raw and holder-pasteurized milk, and the conclusion was drawn that the total nutritive value of milk for rats was not significantly diminished by this type of heat treatment The second volume,[1] now published by the committee, records a series of observations on the effects of adding milk to the dietary of school children The observations were carried out on an extensive scale in five different areas—Luton, Wolverhampton, Burton-on-Trent, Renfrewshire, and Huddersfield In each area the children were divided into four groups Group 1 received biscuit with a calorie value of 52, Group 2 received one-third of a pint of pasteurized milk, Group 3, two-thirds of a pint of pasteurized milk, and Group 4, two thirds of a pint of raw milk In any one area the raw and pasteurized milk came from the same source of supply The total number of children, who were between 5 and 14 years of age amounted to 2,000 in each group The experiment was conducted over a complete school year Assessment of the state of nutrition was made by physical measurements, clinical examination, and certain functional tests, the children being examined at three monthly intervals The data have not yet been completely analysed, and the present report refers mainly to the increases in height and weight of 6 099 children who attended school regularly and were present at all four medical examinations The general results showed that children on a milk supplement increased both in height and weight to a greater extent than children in the control group on the biscuit supplement, and that the children given two-thirds of a pint of milk reacted more favourably than those given only one third of a pint The absolute differences however, between the average increment of height and weight of the groups given milk and the control group on biscuit were very small Comparing, for example, the extreme groups—namely, those on biscuit and those on two thirds of a pint of milk—they did not amount to more than 0 1 inch in height during the year or to more than two-thirds of a pound to one pound in weight The reasons for this are not known with certainty, but it is thought that the total quantity of milk given as a supplement was too small to produce any considerable increase in growth It may be noted, too, that no control was exercised over the dietary of the children in their homes, and there is some reason to suspect that children receiving biscuit in school may have received extra milk at home and that children receiving milk in school may have had their home ration of milk reduced Particular interest attaches to the behaviour of the children on two-thirds of a pint of raw and those on two thirds of a pint of pasteurized milk

[1] *Milk and Nutrition* Part II The Effects of Dietary Supplements of Pasteurized and Raw Milk on the Growth and Health of School Children National Institute for Research in Dairying Shinfield Reading Price 1s 9d, post free

In the different age sex and place groups the reaction of the children varied but taking all groups together no significant differences in either height or weight increase could be shown between the children on raw and those on pasteurized milk It is pointed out that the absolute increases were so small that a real difference in the nutritional value of raw and pasteurized milk may possibly have been obscured No definite evidence however was obtained to suggest the occurrence of this possibility The findings in fact are similar to those which have emerged from a number of experiments in recent years on both rats and calves and add further support to the conclusion that holder pasteurization has no significant effect on the nutritional value of cow s milk for the human subject

VIEW-DAY AT THE N P L

What is known as the annual inspection of the National Physical Laboratory occurred on June 28 when visitors were received by Sir William Bragg President of the Royal Society and by his son Dr W L Bragg who is director of the Laboratory The reception took place in the immense hall which houses the million volt electrical plant The journalists present before being taken on a Press tour of the many buildings in which the work of the Laboratory is carried out were handed two documents one prepared for the popular press and the other for the technical As the one prepared for the popular press contained such terms as audio frequency modulations iron-cored inductances and 'rotating coil direction finders the terminology of the one prepared for the technical press may be left to the imagination The fact is that such highly specialized work as is done at Teddington can never be popularly described It uses and depends upon a language which is foreign not only to the man in the street but also to workers in scientific fields other than physics Science can never really come down and explain itself in simple gospel those who would learn its language must first learn its grammar At the same time there was a great deal on view which in its applications if not in its process was of general interest The Laboratory is at present carrying out many investigations on noise in particular the noise of aircraft and of tube trains It has also put up a special double walled building to determine the causes and the nature of the noise made by motor-cycles with a view to its analysis and reduction Another interesting exhibit concerned tooth structure Knowledge is still accumulating about the structure of both diseased and sound teeth Photomicrography radiography and crystal analysis are all pressed into this service The exhibits showed how the enamel perhaps a millimetre in thickness has an outer layer which is more highly calcified than the remainder with less calcified regions at the inner and outer boundaries of the dentine The orientation of the constituent crystals which are accessible only to x ray analysis was demonstrated The testing of radium at the Laboratory was as always of interest, also the testing of clinical thermometers to the number of some 1 400 daily One of the pieces of work which attracted most attention has been done for the Meteorological Office and takes the form of a short wave radio transmitter which is sent up in a small balloon The changes of pressure and temperature which it encounters in the upper atmosphere are indicated by changes of frequency in its continuous transmission and these indications are received and measured on the ground Not only so but a parachute is attached to the apparatus so that when the flight is ended by the bursting of the balloon the transmitter is retrieved generally undamaged Heights up to nine miles have been reached with good reception throughout It has always been a matter for surprise that meteorology does not seem to advance to the same extent as other physical sciences As it is we are still at the mercy of the weather and we cannot even forecast its changes with absolute accuracy Perhaps the meteorological balloon with the short wave radio transmitter will usher in a new era but for the time being a cautionary note has to be put in the programme that the demonstration of the balloons must be subject to weather conditions

THE PREVENTION OF INDUSTRIAL EYE INJURIES

An exhibition designed to call attention to the need and possibility of prevention of industrial eye injuries was recently arranged at the Royal Eye Hospital in Southwark Part of the exhibition was staged only for a day or two but another part is intended to be permanent and to form at the hospital a museum of protective devices and graphic instruction The need for caution is brought home by posters and admirable photographic enlargements the different kinds of goggles used in grinding riveting welding and other occupations also the anti glare and anti dust goggles used by air pilots are shown and finally the safety measures adopted in well known factories gasworks and transport undertakings are presented The purpose is to bring home to the public especially the industrial worker the risk of eye injury which many operations entail and the simplicity of the means of protection—such as goggles or safety screens—which may be employed An admirable film by Kodak Ltd has been prepared with the same object in view and was shown at the opening of the exhibition It was made in the wards of the hospital and in adjacent factories It represents a workman who is supposed to have sustained an eye injury through the neglect of a simple precaution and who is taken to the Royal Eye Hospital examined by the surgeon and has a splinter removed from his eye by a giant magnet Mr J Minton of the hospital staff to whom much of this enterprise is due before showing the film referred to the thousands of preventable accidents every year large economic loss and the fact that in many partial or complete blindness resulted Act he said will assist the compensation

and other protective appliances, but only a long and continuous campaign of education of workmen will bring about a real diminution of these injuries Another task to which the hospital is setting itself is the re-education of the workman who has lost an eye A re-education clinic is to be established, so that the workman can be taught to adjust himself to his new visual perceptions and to estimate distances and heights and depths The Earl of Athlone opened the exhibition, and in asking him to perform the ceremony Mr L V Cargill, chairman of the hospital, said that the number of industrial eye accidents to which the hospital had to attend reached 7,700 in 1937 Accordingly an Industrial Eye Injuries Committee had been set up, and one of its first efforts was this exhibition, which was intended to bring home to employers and workpeople in the area of the hospital in South London the usefulness of safety devices The staff of the hospital are to be congratulated on the active steps they have taken Eye hospitals in other localities might follow the example set

LONDON EMERGENCY BED SERVICE

The object of the Voluntary Hospitals Emergency Bed Service, as fully explained in two recent issues of this *Journal*,[1] is to facilitate the admission to voluntary hospitals of emergency and acute cases to the mutual advantage of the patient, the doctor, and the hospital Nearly every voluntary hospital within eleven miles of St Paul's Cathedral is co-operating When a medical man has an emergency or acute case which he wishes admitted to a voluntary hospital he should ring this service (telephone, Metropolitan 8781) He will then be asked to give his name and telephone number, the patient's name, age, and sex, and the diagnosis If he then states to which hospital he wishes the patient admitted the operator will tell him whether there is a bed vacant, and if there is will book it for him If there is not he will be asked to state his next preference, and so on until his requirement is met By this means the practitioner can ascertain whether there is a free bed at any or all of the hospitals which he may think suitable for his patient with the least possible delay In the case of certain hospitals which have undertaken to bear the cost of the ambulance it will be possible for the service to book an ambulance for him and it is hoped to extend this arrangement to cover all hospitals in due course The service started on June 21, and is open every day from 8 a m to 10 p m , Sundays and holidays included There is no charge since the cost is being met by King Edward's Hospital Fund for London Emphasis should be laid on the point that the service is intended to deal with acute and emergency cases only, and that hospitals must preserve the right to refuse to retain in their wards any case admitted thereto under this scheme which does not require immediate medical or surgical treatment The office is at 10 Old Jewry, E C 2 and the secretary is Mr R E Peers

British Medical Journal June 4 p 1221, June 18, p 1325

KEY TO CURRENT MEDICAL LITERATURE

The end of the first volume of the *British Medical Journal* for this year saw the last of the old *Epitome*, which has been a familiar feature to readers for a good many years There was no doubt that the *Epitome* was widely read and also no doubt that during recent years it was read with a certain sense of disappointment, it had not fulfilled the bright promise of its early youth The growing volume of medical journals and the increase of specialism and specialties made it impossible to do justice to these in the limited space of four, or occasionally six, pages of the *Journal* Nor was it possible to do justice to those subjects classified in the *Epitome* The mould in which it was cast was too small and did not allow for expansion In the new "Key to Current Literature," which appears for the first time this week, we have tried to obviate some of these difficulties and to make our weekly survey of medical journalism more comprehensive, and so, we hope, more valuable to both the specialist and the general reader The periodicals received are arranged in two groups—general and special—and under the title of each appears a list of the original articles in it, a translation being given when they are in a foreign language Below the list of titles appear brief abstracts of certain selected articles These abstracts are short and factual, and their purpose is to guide the reader to the original article itself They are not intended to provide hints and tips for practice, nor to serve as a happy hunting ground for the writer of a short paper who wishes to appear learned by adding to it a long list of references to articles he has not read and is never likely to read The new Key is, in fact, meant to be a Key, and as such will, we believe, be of value to a wide circle of readers

A general meeting of Fellows of the Royal Society of Medicine will be held at 1, Wimpole Street, W , on Tuesday, July 19, at 5 30 p m , when the Jenner Medal of the Society will be presented to Sir Arthur Newsholme, K C B , M D

On the afternoon of Tuesday, July 19, Queen Mary will open the new surgical wards and research department of the National Hospital for Diseases of the Nervous System, Queen Square, London

The Corporation of the City of London has appointed Dr Montagu Travers Morgan as medical officer of health for the Port of London Dr Morgan graduated in medicine at the University of Liverpool in 1912, and is at present a medical officer under the Ministry of Health, being associated particularly with port health administration ships sanitation, and the welfare of merchant seamen He was formerly county medical officer for Pembroke and county tuberculosis officer for Herefordshire

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

INJURIES IN THE REGION OF THE SHOULDER-JOINT

I. CAPSULE AND TENDON INJURIES

BY

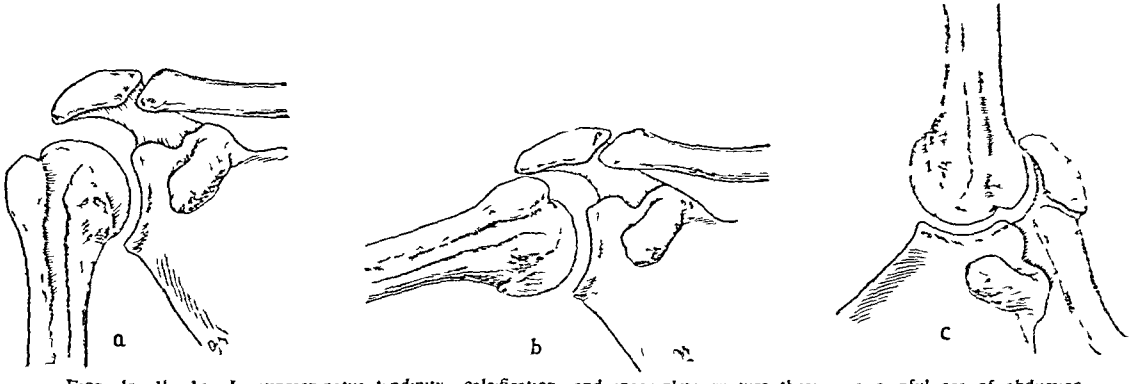
R. WATSON-JONES, M.Ch.Orth., F.R.C.S.

Shoulder injuries other than fractures and dislocations are often misunderstood and indifferently treated because neither the functional importance nor the vulnerability of the supraspinatus tendon is recognized. The majority of the painful shoulders of domestic life are due to minor injury of this tendon and complete rupture though rarely diagnosed is a common and disabling industrial accident. The tendon of the supraspinatus with that of the subscapularis and of the infraspinatus on either side forms a thick continuous fibrous sheet fused with the underlying capsule of the shoulder-joint and separated from the deltoid and the acromion process by the subdeltoid bursa. With every abduction movement of the shoulder, particularly through the range of 60 to 120 degrees there is impingement and friction of the supraspinatus tendon against the acromion process (Figs. 1a, 1b, 1c). It is to minimize this friction that the subdeltoid bursa lies between the two structures. As years go on especially in the case of labouring men accustomed to strenuous shoulder exercise the protection of the bursa becomes inadequate and the constantly repeated trauma gives rise to degenerative changes in the tendon and capsule. The fibres undergo wearing and attrition—*supraspinatus tendinitis*. This degenerative process occurring in a relatively avascular tissue may lead to a calcareous deposit—*supraspinatus calcification*. The worn and necrotic fibres become unusually susceptible to injury a simple fall or a sudden muscular effort may cause incomplete or *complete rupture of the supraspinatus tendon*. In the more severe cases the tendinous and capsular degeneration extends to the bicipital groove and accounts for *spontaneous rupture of the biceps tendon*. Years of latent tendinitis possibly associated with a distant toxic focus may be lighted up by a simple strain to culminate in an attack of periarthritis with *periarticular adhesion formation*.

Supraspinatus Tendinitis

The symptoms are often attributed to a minor strain and the patient complains of pain on the outer aspect of the shoulder and over the deltoid insertion. It does not radiate to the elbow and forearm as in brachial neuritis due to cervical osteo-arthritis. There is tenderness on pressure accurately localized to one spot—the great tuberosity of the humerus where the supraspinatus tendon is inserted. Movement is not limited in any direction but there is an acutely painful arc of abduction between 60 and 120 degrees—the range during which the tender area impinges against the margin of the acromion. Movement of the limb by the side is painless. When the painful arc is passed the tender region lies protected beneath the acromion and not in contact with it and movement is again entirely painless. As the arm is brought down to the side there is once more sharp pain from 120 to 60 degrees of abduction. Radiographic examination shows no abnormality.

Dramatic results may be secured by injecting 5 to 10 c.cm. of 2 per cent. novocain into the painful area. The skin is anaesthetized and the point of the needle is introduced into the tendon and capsule. Pain is at once relieved and for the first time the patient is willing to move his arm freely and without caution in all directions. He must be warned however that within five or six hours as the analgesia passes off pain will recur and may be intensified. Morphine may be necessary. The exacerbation generally subsides within a few days and in many cases the symptoms are permanently relieved. Presumably the infiltration of the tissues is followed by an irritative reaction causing swelling which temporarily increases the effect of impingement against the acromion and hyperaemia by which the degenerated avascular tendon is subsequently revascularized. If the symptoms are incompletely relieved by the injection diathermy and radiant heat are of value in encouraging the necessary revascularization.



FIGS. 1a, 1b, 1c.—In supraspinatus tendinitis calcification and incomplete rupture there is a painful arc of abduction between 60 and 120 degrees due to impingement against the acromion. There is no impingement and therefore no pain when the arm is by the trunk or by the side of the head.

Calcification of the Supraspinatus

The symptoms and clinical signs of supraspinatus calcification are identical with those of tendinitis without calcification and the conditions are to be distinguished radio

graphically The deposit of amorphous calcium carbonate and phosphate is of the consistency of tooth-paste and lies wholly enclosed within the tendon fibres Its volume so increases the degree of impingement against the acromion that abduction movement beyond 60 degrees may be far too painful to be attempted With large deposits the patient sits and stands with the arm hanging from the shoulder, to increase as far as possible the space between the humerus and the acromion, the support of a sling may be intolerable

Whereas simple supraspinatus tendinitis is very common, tendinitis with calcification is rarely seen The source of the calcareous deposit is the impairment of blood supply from preceding tendinitis But the calcareous mass at once produces a secondary irritative hyperaemia in the adjacent tissues, which may not only cause spontaneous absorption of the calcium but also cure the underlying tendinitis Small deposits should therefore be treated conservatively by diathermy, radiant heat, and massage The limb should not be supported in an abduction frame, because abduction is the most painful position of the joint Active exercises are encouraged as soon as possible

Large deposits should be removed through a two-inch incision The mass is usually too inspissated for removal by aspiration The deltoid is split, the subdeltoid bursa is incised, and a greyish-yellow mass is seen enclosed within the tendinous and capsular fibres The fibres are divided in their long axis and the granular paste is evacuated with a small spoon There is immediate and complete relief from the pain, and full active exercises can be practised at once

Complete Rupture of the Supraspinatus

Although there is no doubt that the earlier degenerative changes of supraspinatus tendinitis predispose to rupture of the fibres, complete rupture of the supraspinatus tendon usually follows a definite injury—a fall or a severe muscle strain—in middle-aged hard-working men Occasionally it occurs as a complication of dislocation of the shoulder or fracture of the upper end of the humerus There should be no difficulty in establishing the diagnosis, for active movement of the shoulder is seriously restricted The diagnostic sign is a greater limitation of active than of passive abduction in the presence of a normally contracting deltoid

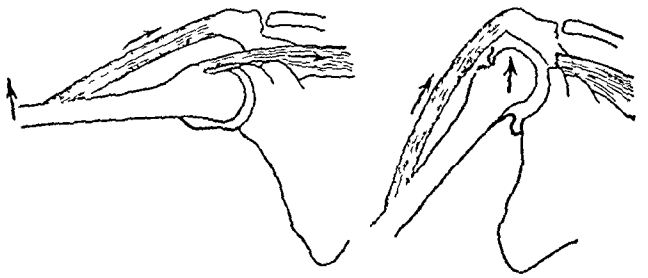


FIG 2.—Active abduction by the deltoid is only possible if the head of the humerus is fixed by the supraspinatus If this tendon is ruptured weak abduction to 60 degrees by scapular movement is all that is possible

The humerus cannot be abducted by the deltoid alone, however powerful it may be, the supraspinatus is an essential synergist Like the workman's mate who stands on the bottom rung of a ladder to prevent sliding while it is elevated to the vertical position, the supraspinatus must anchor the head of the humerus to the glenoid to provide a fulcrum from which leverage can be obtained by the deltoid (Fig 2) If the supraspinatus is inactive strong contraction of the deltoid pushes the head of the humerus up towards the acromion and holds it there while the scapula rotates Weak abduction to about 60 degrees is possible through scapular movement, but there is no true gleno-humeral abduction The more the patient struggles to elevate the limb the more he shrugs his shoulder

Since the deltoid is felt strongly contracting the loss of active abduction cannot be due to circumflex palsy, and since passive movement of the shoulder by the examiner is normal, or at least is possible through a further 30 or 40 degrees, the limitation cannot be due to adhesion formation or arthritis The wince of pain at 90 or 100 degrees abduction as the limb is raised or lowered passively and the tenderness on pressure over the insertion of the supraspinatus clinch the diagnosis

As with any other tendon rupture, if the torn fibres are approximated and immobilized with unfailing constancy satisfactory repair will usually take place Operative treatment is not as inevitable as many recent writers suggest The arm is immobilized in 90 degrees abduction and 60 degrees external rotation in a frame applied very carefully so that the arm cannot ever be lowered below the right angle At least ten or a dozen wide bandages must be used to fix the frame to the trunk and to prevent it sliding down The position is maintained rigorously

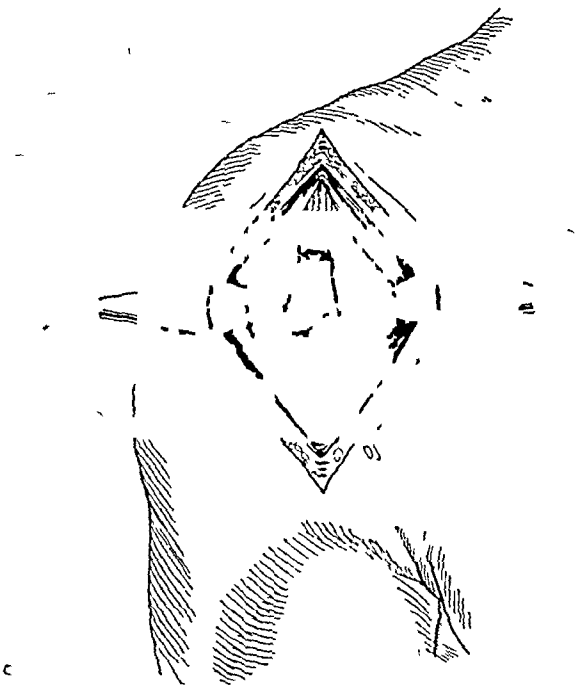


FIG 3.—Complete rupture of supraspinatus tendon and the capsule The articular cartilage of the humerus and the biceps tendon are visible through the rent

for at least eight to ten weeks and until the arm can be raised actively and held 20 or 30 degrees above the right angle Throughout this time active exercises are practised for the fingers and wrist- and elbow-joints

Conservative treatment cannot be really successful unless it is instituted promptly within a few days of the rupture If there has been delay in establishing the diagnosis, or if there is doubt whether the frame treatment will be carried out with absolute efficiency, operation is to be preferred Fairly satisfactory results are possible even many months after injury Through an anterior split deltoid incision the triangular-shaped rent in the tendinous expansion and capsule is exposed, with the articular surface of the head of the humerus visible through it (Fig 3) The apex of the triangle is the

retracted supraspinatus tendon the base is the great tuberosity from which it has been avulsed The humerus is moderately abducted to approximate the torn fibres and several mattress sutures of No 6 chromic gut are employed A ' bone needle should be used and the stitches passed through the tuberosity itself, so that cutting out from the short distal fibres is avoided An abduction frame is worn to prevent early strain on the sutures and is retained for several weeks, until the patient can easily lift the arm and hold it 20 or 30 degrees above the right angle If in addition to the tendinous rupture there is adhesion formation limiting the terminal degrees of abduction, this movement must be regained by the patient s own active exercises, repeated many times during the day

Incomplete Rupture of Supraspinatus

Between the case of simple supraspinatus tendinitis and that of complete rupture of the tendon there is a whole range of cases of varying degree of incomplete rupture of the tendon fibres These are the cases which may present difficulty in diagnosis and treatment Although common they are more often overlooked than diagnosed and there is no doubt that the victim s suffering has frequently been increased by an unjust charge of malingering Evidence of incomplete rupture may be found during routine necropsies in no less than 30 per cent of all cadavers Radiographic examination is negative and the clinical features are all important

There is pain over the shoulder, often referred along the circumflex nerve to the region of the insertion of the deltoid this is increased by active use Tenderness is localized to the insertion of the tendon at the great tuberosity Active abduction is probably possible through a normal range but there is the characteristic catch of pain at 90 or 100 degrees as the torn fibres pass the acromion The movement cannot be sustained against resistance As the rupture becomes more complete active abduction becomes increasingly difficult It may only be possible to abduct the humerus if it is first *fully* externally rotated There is a characteristic reversal of scapulo-humeral rhythm Whereas normally the first half of abduction movement is mainly a movement of the humerus on the scapula and the movement of the scapula on the chest-wall is most pronounced during the second half of the range in the case of incomplete rupture of the supraspinatus the movement is initiated by rotation of the scapula and humero scapular movement is most pronounced in the second half of the range

Conservative measures should usually be given a trial The shoulder is immobilized in abduction and external rotation The frame is retained and no single downward movement of the limb is permitted until full power of abduction is restored and the painful catch at 90 or 100 degrees abduction is relieved This may necessitate fixation for only three or four weeks or in more severe cases for several months If there is no sign of real improvement after six or eight weeks the tendon should be exposed and repaired

If at operation there is no evidence of rupture of the supraspinatus the humerus should be fully rotated inwards and outwards so that the whole of the front outer aspect of the capsule and of the subdeltoid bursa is explored Occasionally thickened hyperaemic fringes are found within the bursa which have accounted for creaking on shoulder movement and because they are nipped between the head of the humerus and the acromion for all of the symptoms and signs of incomplete rupture of the supraspinatus tendon Although subdeltoid bursitis has been a common diagnosis in past years it is actually extremely rare The symptoms are relieved by excision of the thickened fringes and bursal wall followed by regular active exercises and physiotherapy Very exceptionally it is found that there is neither rupture of the tendon nor calcification of the tendon nor subdeltoid bursitis The symptoms have been due to resistant supraspinatus tendinitis without rupture The tendon should be lightly scarified to assist in the revascularization necessary for the relief of symptoms after operation physiotherapy and electrotherapy are employed

Periarthritis of the Shoulder

The symptoms arise spontaneously or after a trivial twist or strain Pain is diffuse and tenderness is not confined to the tuberosity or region of the supraspinatus Movements of the shoulder are guarded by muscle spasm but there is no complete limitation of all scapulo humeral movement such as occurs in tuberculous arthritis It is particularly abduction and external rotation which are limited internal rotation and forward and backward flexion are free The limitation of movement by muscle guard rapidly passes to limitation by adhesion formation varying from a few localized bands to diffuse generalized adhesion of the whole of the capsule— the frozen shoulder

In the early acute stage the worst treatment is manipulation under anaesthesia or frequent passive and forcible stretching by a masseuse Forcible treatment tears the already inflamed tissues and increases the sero fibrinous exudation It the range is actually measured and recorded it is found always to have been reduced by such measures On the other hand the patient must be urged to practise active exercises Massage physiotherapy and hydrotherapy may help the patient to persevere despite discomfort but the one essential treatment is active exercises performed for a few minutes hourly throughout the day The resistance of gravity may be avoided by practising exercises in recumbency and in the stooping position

Periarticular Adhesion Formation

The adhesions may follow periarthritis or a simple strain or contusion of the shoulder or they may arise insidiously when a fracture of the elbow forearm or wrist is treated with the whole limb in a sling Abduction and external rotation movements are limited It is the limitation of external rotation which is of significance The normal shoulder cannot be abducted beyond the right angle if the humerus is held internally rotated and until external rotation movement is regained abduction cannot be regained The range of rotation is tested with the elbow to the side and the forearm and hand pointing forwards Normally it is possible to rotate the limb out through almost 90 degrees so that the forearm and hand now point sideways If this is completely limited it is a waste of time to practise abduction exercises The patient should stand with his back to a wall with his elbows touching it and turn the forearms further and further out until the hands reach the wall He must try to reach the back of his neck and with the fingers clasped move the elbows back into the position of true abduction As external rotation improves he reaches over the top of his head to the opposite ear He may then practise crawling up a wall with his finger tips marking the level reached and trying to attain a higher level every day

The exercises are repeated ten minutes hourly throughout the day There must be encouragement and

tion, but no passive stretching no sudden jerking or forcible movements, and no hanging by the affected arm from overhead beams or bars Manipulation under anaesthesia should not be used except as the last line of treatment, to be applied only when actual measurements show that movement is no longer increasing If a manipulation is unfortunately inevitable, it must be performed as gently as possible and not more than one group of adhesions must be broken at a time If too much is done the reaction is so severe that the movement cannot be retained, and the joint may become stiffer Many shoulders, temporarily stiff after dislocations and minor injuries, have been made permanently stiff by injudicious manipulations, performed too early, repeated too often, and followed by passive and forcible stretching

THE RED CROSS CONFERENCE

CONCLUDING SESSIONS

After the opening proceedings recorded in the last issue (p 1381) the International Red Cross Conference divided itself into four Commissions, which met at the British Medical Association House for sessions lasting for three days At the ensuing plenary session, which was held at St James s Palace on June 24, reports from the Commissions were presented

The first Commission of which Miss Norah Hill (Indian Red Cross) was rapporteur, brought forward a series of resolutions dealing with organization, all of which were passed unanimously by the Conference with one exception —namely, a resolution asking that the needs of the two international bodies, the International Red Cross Committee and the League of Red Cross Societies, should be studied with a view to suggesting the best procedure for raising the funds necessary to meet as far as possible the needs of both bodies The German Red Cross asked that its abstention might be recorded for reasons presumably given in private to the Commission Another resolution which was only carried by a majority in the Commission but unanimously in the Conference declared that no Red Cross delegation, section or committee should be established in foreign territory without the consent of the central committee of the national society of the country concerned, and that such consent should only be asked for in exceptional circumstances, for purposes definitely determined in advance, and for a limited period

Zones of Immunity

After two hours discussion on the form of a resolution it was agreed unanimously, on the motion of Mr Norman Davis, to appeal in the name of humanity to the competent authorities in all countries to prevent or so restrict bombing from the air as to safeguard the lives of helpless women and children and aged civilians and to urge those authorities in all areas where civilian lives are liable to be endangered by any military operations to arrange for the evacuation of women and children into zones of immunity under Red Cross protection This was the unanimous resolution of the fifty-four National Red Cross Societies assembled at the Conference, and was endorsed by the Conference also unanimously at the plenary session

The second Commission which was entrusted with legal considerations, and was reported upon by M Gorge (Switzerland) also brought forward a resolution on the subject of the creation of hospital towns and areas After thanking the committee of the International Congresses of Military Medicine and Pharmacy for the assistance it had given the Commission considered that in any case the creation of hospital towns or areas could not in any way weaken the protection resulting from the rules of international law as a whole and urged the convocation in the near future of a commission of military and legal experts with a view to establishing a draft on the subject for the consideration of a diplomatic conference In the meanwhile it hoped that the Governments would consider as need arose the possibility of concluding mutual agreements providing for hospital towns and areas This was agreed to unanimously by the main conference Another resolution pointed to the satisfactory results obtained during a recent conflict by the creation of an area of immunity for the civil population, and requested the International Committee to bring these satisfactory results to the attention of the Governments concerned at all times when such action might seem expedient Other resolutions related to the protection of women and children against the suffering resulting from armed conflicts, and the role and activity of the Red Cross in civil war

First-aid-Posts on Highways

One resolution of the third Commission, reported on by Dr de Carvalho (Brazilian Red Cross) urged that every effort be made to develop collaboration with automobile clubs and other national and international organizations with a view to providing highways and, more especially, the international trunk roads with standardized types of first-aid posts, the position of which may be shown by standardized road signs It also recommended to the secretariat of the League of Red Cross Societies that the development of first-aid services on highways on a standardized plan should continue to be encouraged and the scope of its activities in the prevention of accidents be widened, in the first place by teaching the rules of the road and first aid to children through the junior Red Cross This Commission also noted the great progress made in the use of aviation to bring relief in cases of disaster to establish communication with isolated populations, to bring supplies of food and medicine to further the transport of doctors, nurses, and relief personnel and to evacuate the sick and wounded It asked that the national societies should attempt to organize courses of training in aerial transport, and that the use of aviation for relief purposes be encouraged

The fourth Commission the work of which was reported by Miss Mabel Boardman (American Red Cross), dealt principally with the educational work of the Red Cross One of its resolutions congratulated the American Red Cross on the splendid organization of its voluntary aids, and recommended that all Red Cross Societies should extend their activity in this field both as a particularly beneficial means of action and as a means of spreading the Red Cross spirit throughout the community

The Next International Conference

It was decided that the next International Conference should be held at Stockholm in 1942 The following were elected a committee to act in the interval between international conferences

Sir Arthur Stanley (British Red Cross Society)
General A Hultkrantz (Swedish Red Cross)
Senator G de Michelis (Italian Red Cross)
Chao Phya Bijayanati (Siamese Red Cross)
Dr Pedro T Vignau (Argentine Red Cross)

A large number of complimentary speeches were made by members of the Siamese, Polish, Japanese, Chilian French and Egyptian delegations among others, and special thanks were accorded to the British Red Cross Society for acting as host A representative of Nationalist Spain congratulated the chairman (Sir Arthur Stanley) on the manner in which he had kept the Conference away from political questions Senator de Michelis (Italian Red Cross) made a long statement on Italian law which, he said, provided for the creation of safety zones for medical services and shelter for the civil population also for prisoners of war to be dealt with according to international regulation even in the case of a country which had not honoured the international Convention

In the course of the week a reception was given by H M Government at Lancaster House another by the Lord Mayor at the Guildhall and an afternoon party at Buckingham Palace The closing event was a thanksgiving service at St Paul s, when the Archbishop of Canterbury gave the address H R H the Princess Royal Commandant-in-Chief British Red Cross Society was present with parties of V A D members representing every country branch in England and Wales and Scotland The Red Cross Colour was escorted by a representative company of commandants and was laid on the altar during the service and afterwards taken to the Chapel of St Michael and St George The Lord Mayor and Sheriffs also attended the service In the course of his sermon the Archbishop said that if he were to choose a motto for the Red Cross movement not only to describe but to inspire its work it would be the injunction of the apostle Honour all men It stood for the honour of humanity

ANTI-EPIDEMIC WORK IN CHINA

The Council of the League of Nations some years ago concluded an agreement with the Chinese Government by which the League technical organizations (health, *transit and communications economic and financial)* could be used to help forward its policies of national reconstruction Political and administrative responsibility of course rested with the Chinese Government in the vast enterprise of trying to reconstruct one quarter of humanity and modernize a 4 000-year-old civilization But under the plan of technical co operation Chinese civil servants, engineers doctors educationists and technicians have been able to gain experience and pursue studies abroad useful for their work Side by side with this the League has put at the disposal of the Chinese Government the services of foreign experts either for consultation in regard to some particular piece of reconstructive work *or for a period of years, to give technical advice for the* framing and application of some long range policy such as road building modernizing silk cultivation, organizing agricultural co operation, and establishing the nucleus of a public health service

Effect of War

With the beginning of the Japanese invasion the Chinese Government s national effort was switched over to putting and *maintaining China on a war footing From the outset of the* military operations one of the most pressing problems was the care of refugees and the danger of epidemics The National Health Ministry and the Central Field Health Station at Nanking were wrecked by air bombing at the beginning of the war China s scanty resources in medical personnel and equipment were strained to the utmost by the needs of the Army At the same time the invasion of large areas of China and the devastation of numerous cities and villages set up great movements of population Immense numbers of refugees destitute and fleeing for their lives became an urgent and grave problem for the Chinese Government, and even for neighbouring territories not least from the point of view of public health

In September last the Chinese Government drew the attention of the Council of the League to this situation and to the resulting danger of widespread epidemics It requested that the plan of technical co-operation between China and the League should be adapted to this situation by concentrating primarily upon co-operation with the National Government and the provincial administrations in the prevention and control of epidemics and the general relief of the civilian population and refugees The Assembly voted 2 000 000 Swiss francs for technical co operation with the Chinese Government in carrying out an anti epidemic campaign Acting on instructions from the Council a special subcommittee of the Health Committee met in October to frame a plan of action

The Health Committee s Plan

At this meeting the Chinese representative Dr Hoo Chi tsai said that the Chinese Government confining its requests within the financial and technical limits of the Assembly resolution asked the Health Organization to make a special effort in five areas preferably in the provinces of Shensi Hupei Kiangsu Kiangsi and Kwang Tung He asked that anti epidemic units should be sent to the areas without delay Each unit should consist of a foreign epidemic commissioner *a foreign bacteriologist* a foreign sanitary engineer an isolation hospital with a foreign doctor a car two ambulances and ten light lorries These units would operate under the orders of the Chinese authorities Dr Hoo emphasized the urgent need for rapid action As a result of the war hundreds of thousands of refugees were streaming inland The distress and the danger of widespread epidemics were great Medical stocks were running low Available supplies from all sources would last barely three months All available health personnel had been mobilized, but there was a shortage of experienced surgeons

The subcommittee had before it a survey of the epidemic situation the probable effects of military operations and the movements of refugees with special reference to the danger of widespread epidemics of plague typhus small pox enteric fever and other infectious diseases The plan adopted was *based on previous experience adapted to suit the special conditions* In view of the financial and technical limitations imposed by the Assembly and Council resolution it was decided that the work must be limited as regards geographical area and methods though not strictly limited to one region The Chinese authorities themselves would assume responsibility for the work being carried out

The technical plan had as its one object the reinforcement of the collaboration already existing in view of the exceptional circumstances of the hour in other words to advise and support the competent Chinese technical services The subcommittee decided to constitute three mobile medical units and to assign an area of action to each These units in *addition to their own resource* would draw upon a central supply of sanitary and medical material This enabled them to secure additional supplies for organizing on the spot the means for the isolation and observation of the sick In this way it was believed a general organization could be set up that would be elastic and mobile in action and around which the Chinese health authorities could in agreement with the units concentrate their own medical and health services as well as any units that might be sent from abroad (Red Cross etc) The whole organization could then work on the basis of a considered plan adapted to the area and to current necessities and concern itself not only with preventive measures but also with combating epidemics that had already started

The League Epidemic Commission

The three medical units—the first under Dr Mooser (Swiss) the second under Dr R C Robertson (British) and the third under Dr (Inspecteur General) Lasnet (French)—arrived in Hong Kong early in January The Epidemic Commission consists of the three *Commissioners together with a repre*sentative of the Chinese Government and Dr Borcic (Yugoslavia) the League of Nations Technical Adviser on public health questions to the Chinese Government

Subsequently the epidemic position in China was discussed The future location of the League units was decided upon and the laboratory and other medical facilities already existing in the areas covered transport budgetary question and details of the liaison to be established with the Chinese Government were all considered No 1 Unit went by rail through Hunan to *Sian Fu capital of Shensi* No 2 Unit to Changsha capital of Hunan and No 3 Unit to Nanning capital of Kwangsi and to Canton Early in February all three units had reached their station established headquarters and were engaged in making official contacts In each case the League unit s Chinese medical and auxiliary staff was incorporated in the local health administration and at the same time carried

close touch with the Central Government through a special Chinese liaison officer In this collaboration every effort has been made to meet present emergencies and also to strengthen and where necessary establish permanent health work particularly in rural districts It is hoped that the present League assistance to China will not simply be of a temporary nature but will serve to continue the medical assistance given prior to hostilities and thus be a permanent contribution to China's welfare

An account of what has been attempted and done in certain areas by the emergency health services appeared in the *British Medical Journal* of June 4 (p 1222)

GUY'S HOSPITAL

OPENING OF NEW PATHOLOGICAL BLOCK

The new Pathological Building of the Medical School of Guy's Hospital was opened on June 23 by the Earl of Athlone, Chancellor of the University of London It is a handsome building of eight floors, housing in addition to pathology, the departments of bacteriology, clinical chemistry, pharmacology and physics To bring about these improvements the School has expended the very large sum of over £85 000 Of this sum it has provided £35,000 out of its own income, £30,000 has been borrowed on easy terms from a friend of the hospital, and £10 000 has been made available by the munificence of the University

The Chancellor was received by the Vice-Chancellor, Sir Robert Pickard, Viscount Goschen, president of the hospital, Viscount Nuffield treasurer, and Mr T J Evans, dean Certain of the governors and medical staff were presented, and a procession was formed to the physiological lecture theatre, where the formal proceedings took place After Lord Nuffield had welcomed the Chancellor, the Dean gave an address in the course of which he said that the School felt that by coming to open this latest extension Lord Athlone was giving his commendation to its attempt to increase the teaching and research strength of the great university of which he was the head

A Teaching Hospital's Great Effort

The teaching hospitals of London (the Dean continued) had grown out of small beginnings, within houses built for the care and cure of a neighbouring population, but they had become the training ground for the medical service of a whole nation To day the small hospital founded by Thomas Guy in 1725 had sons in every corner of the Empire Unhappily now the very existence of teaching hospitals was in imminent danger It was one of the queerest anomalies of British civilization that the training of the most important and devoted of its public services should be hampered at every stage by being committed to an existence of perpetual mendicancy Guy's had accomplished an effort not only to bring to higher efficiency the mechanism for training physicians and surgeons, but also to provide more modern and abundant facilities for skilled researchers into the cause, control, and cure of disease When, in 1923, the present superintendent of the hospital welcomed the then Prince of Wales at an opening ceremony he stated that the occasion marked the completion of a scheme of rebuilding of the medical school In the preceding twenty-five years the School had spent £100 000 on rebuilding Now, after another fourteen years it had again grown dissatisfied and had made a valiant effort to provide itself with an institute of pathology as spacious and up to date as any in the kingdom

Advantages of Concentration

The Chancellor of the University began by recalling the famous names of Bright Hodgkin Wilks and others founders of the great tradition in scientific medicine which the hospital so worthily maintained The University viewed with great satisfaction every effort made by its constituent schools to provide themselves with buildings adequate to the needs of students and teachers It was specially proud of the strength and size of its faculty of medicine Its schools trained nearly half the medical students of Great Britain He congratulated Guy's on concentrating all the departments of the school on one site thereby obtaining that close co operation between departments which was necessary for the best work He was also glad to learn that special accommodation had been provided for the Guy's Hospital Research Fellow and for the Clinical Research Unit of the Medical Research Council The establishment of such research units was the sign of a new age in the scientific study of human disease The University recognized with appreciation that the new building had been financed mainly from the ordinary funds of the school without public appeal, though with some assistance from the Court of the University He hoped that the example of famous benefactors of the past would be followed in the future

School and Hospital

The medical school and the hospital (Lord Athlone continued) were inseparably wedded A medical school without a hospital was useless and impotent The association of a school with a hospital at once placed the hospital in a higher category Not only did it then attract teachers of the highest standing but the presence of a body of students ensured that the teachers, stimulated by constant criticism and observation, gave of their best to both the science and the art of medicine The reputation of the hospital depended on its school and the reputation of the school depended on the financial stability and efficiency of the hospital For the full fruition of the partnership it was therefore essential that both hospital and school should be efficient, progressive, and equipped to the highest standards The charitable public perhaps did not always quite appreciate the exceptional claims of the teaching hospitals Their work went far beyond the mere local treatment of patients They were the training grounds of the medical profession, the homes of research, and the pioneers in benefactions not only to their own patients but to humanity at large

The Chancellor then declared the new building open The chairman of the School council Mr W M Mollison in proposing a vote of thanks, said that for the last six years Lord Athlone had been Chancellor of the University and he was convinced that no university had a more active and hard-working head He devoted a great deal of his time and energies to the interests of the University and was familiar with the medical schools

VICTOR HORSLEY MEMORIAL LECTURE

The Victor Horsley Memorial Fund, which was raised in 1920 to commemorate the services of Sir Victor Horsley to Science and the Empire, is devoted to the giving of a lecture triennially in London entitled the "Victor Horsley Memorial Lecture' By invitation of the Trustees (the Presidents for the time being of the Royal Society, the Royal College of Surgeons of England, and the British Medical Association, the senior physician of the National Hospital for the Paralysed and Epileptic, Queen Square, the senior surgeon of University College Hospital, and Mr Stanley G Robinson, son in-law of Sir Victor Horsley) the sixth lecture will be delivered by Dr Gordon Holmes, C M G, C B E, F R S, F R C P, Physician, National Hospital for Nervous Diseases and Charing Cross Hospital, in the Lecture Theatre of University College Hospital Medical School, Gower Street, W C on Tuesday, July 12, at 5 p m The title of the lecture is "The Cerebral Integration of the Ocular Movements and the chair will be taken by Sir Cuthbert Wallace Bt K C M G, C B, D Sc, D C L, President of the Royal College of Surgeons Admission to the lecture is free on presentation of a visiting card and tea will be served in the Library of the Medical School at 4 30 p m

INTERNATIONAL SOCIETY OF SURGERY

Revised Plans for Congress

For some reason which has not yet been explained the German authorities have cancelled the congress which had been fixed to take place in Vienna from September 19 to 22 and was announced in the *Journal* of June 4 (p 1219)

In order that the material prepared for the discussions which had already been arranged may not be wasted and to diminish disappointment the executive are making plans to hold a congress in Brussels on the same dates Particulars will be circulated to members as soon as possible Travel arrangements will be made by Messrs Thos Cook and Sons

Local News

INDIA

Tuberculosis A Key Problem of India

A lecture under the auspices of the Over seas League and the East India Association was given at Over Seas House, London on June 21 by Major General Sir John Megaw, President India Office Medical Board and Medical Adviser to the Secretary of State The chair was taken by the Marchioness of Linlithgow Vice-Reine of India Sir John Megaw whose subject was 'Tuberculosis in India,' said that nobody could tell, even approximately what was the death rate from tuberculosis in India as a whole or describe the geographical distribution of the disease, or say to what extent it was increasing In the cities and large towns the deaths from tuberculosis were recorded in Cawnpore the latest figure was 4 600 per million of population or much the same as it was in England one hundred years ago in Calcutta it was 2 500 and in Bombay 2,000 These rates probably erred greatly on the side of optimism since many deaths from tuberculosis were returned under the headings of fevers or other respiratory diseases The death rate from tuberculosis among girls and young women who lived in purdah in the large centres of population was appalling being several times higher than that of males of the same age group

INCREASING INCIDENCE OF TUBERCULOSIS

Medical men in India, Sir John Megaw continued were almost unanimous in declaring that the disease was increasing rapidly, and was extending to rural areas formerly free from infection also that when the disease spread to new localities it assumed a more virulent form than in places previously affected A few years ago he had attempted to make a rough and ready survey of the number of cases of tuberculosis and other diseases in the rural areas of India His method was to issue a questionary to a large number of doctors in charge of dispensaries in typical agricultural villages An estimate based on their replies suggested that there were 1½ to 2 million cases in India though not even a moderate degree of accuracy was claimed for this estimate An examination had also been made of the statistics published every year on the health of prisoners From these it appeared that in 1935 the admission rate for tuberculosis of the lung in prisons was 5 per mille as compared with 9·5 forty years ago Not much encouragement was to be derived from this slight reduction for over the same period the general health of prisoners had improved in a striking manner as shown by the fall in the total death rate to between one half and one third of what it was in 1895 During the same period of forty years the number of cases of tuberculosis of the lung in Indian soldiers fell from 2·3 per mille to 1·9 this small reduction again contrasting sharply with a fall in the death rate from all diseases in Indian troops from 11·6 to 2·15 and with the fall in the tuberculosis case rate of British soldiers in India during the same period from 4·8 to 1 per mille

MEASURES FOR PREVENTION

The spread of infection in India could only be prevented by a process of educational persuasion The people must be taught how droplet and alimentary infections were conveyed and how they could be avoided It was important not to lay undue emphasis on the horrific aspects of the disease There was much to be said for directing propaganda against all infectious diseases of the respiratory and alimentary systems rather than against tuberculosis alone Suitable accommodation in a verandah or open lean to could be provided for a patient at trifling cost at any rate in rural areas and a member of the patient's family could be trained to look after him From ten to twenty patients could be treated in their own homes for the cost of a single patient in a modern sanatorium The first essential in preventive measures was to have a sound plan this demanded the co operation of men with practical knowledge of agriculture industry economics hygiene education and above all, of men with a sympathetic understanding of the psychology of the Indian peasant There were encouraging signs that those responsible for the welfare of India realized the nature and gravity of the problem and the responsibility of the Government for initiating action On the subject of medical relief Sir John Megaw added that in India there were very special reasons for supplying medical aid to the victims of the disease the chief being that before any preventive action could have a hope of success the good will of the people must be enlisted by the cure of disease Tuberculosis was a key problem of India and its solution would mean far more than the conquest of one terrible malady He specially praised the efforts made by Lady Linlithgow for the relief of suffering

Population of the Punjab

The continuing increase in the population of the Punjab is giving rise to considerable disquiet Serious economic and public health problems will have to be faced unless the birth rate soon begins to fall In his annual report for 1936 Lieutenant-Colonel C M Nicol Director of Public Health states that for the last five years there has been an average yearly increase in population of 419 275 a figure which is almost certainly an under-estimate of the actual position since in 1926 the figure was 5,68 8— representing a natural increase per 1 000 of population of 21·46 calculated on the estimated population for 1935 this rate of increase is much higher than the corresponding rate for any other Province in India While the birth rate per 1 000 is 43 the highest or record the corresponding death rate is 22 the lowest figure yet recorded It cannot be determined yet whether this state of things is a matter for congratulation or for alarm or how the future will develop since the factors which make for increase in the population are not constant and the estimates of food production probably are too low it is clear however that careful consideration of the whole position is now urgently necessary Wheat rice and maize are the staple foodstuffs in the Punjab and all the crops have increased vast new areas are being brought under cultivation thanks to the extension of irrigation Unfortunately however there is already evidence of physical deterioration of the rising generation in the Province as shown by the examinations of school children and of recruits for the Army Of the total deaths in the Punjab in 1926 30·97 per cent occurred in infants under 1 year 17·1 in children aged between 1 and 5 and 5·43 in children between the ages of 5 and 10—that is to say 53·5 per cent of the total deaths in the Province occurred in persons under 10 years The infantile mortality rate for the year under review was 198·44, slightly higher than the figure for

1935, but well below the average for the last ten years Colonel Nicol remarks that it might be argued that there cannot be a great deal wrong with a community which can show in comparison with past years a record low death rate and high birth rate, a larger annual increase in population than has ever been known previously, and a reduction in the incidence of plague sufficient to suggest that the disease is dying out Yet it still remains true that the odds against any individual born ever reaching the adult state are high, and the damage done by non-fatal illness to the youth of the Province is painfully clear though in these respects there has been an obvious improvement during the last few years

ENGLAND AND WALES

Specialist Services for Bristol Corporation Hospitals

At a meeting of the Bristol City Council on June 14 a scheme was approved whereby teams of specialists in medicine and surgery will be available for the hospitals under the control of the Health Committee The scheme is based upon the fact that Southmead Hospital a corporation institution, is now carrying out work of a standard equal to that of the voluntary hospitals, and it is desired to ensure for it the necessary specialist services As a result of discussions with the Professor of Clinical Medicine and the Professor of Surgery of the University of Bristol (who will be responsible respectively for the medical and the surgical services under the new arrangements) and the committees of the Bristol Royal Infirmary and the General Hospital, the corporation for a fixed yearly payment will be able to call upon the services of the teams The specialist medical service will be provided by three visiting physicians or teams of physicians, who will have entire charge of the medical cases, and so far as the surgical work is concerned there will be four teams, each consisting of two surgeons The whole of the specialist staff will meet regularly to discuss the progress of development at Southmead, and any recommendations from these meetings will be forwarded by the medical superintendent (the convener) to the medical officer of health for submission to the Health Committee Nothing in the scheme is to interfere with the internal administration of Southmead or any of the hospitals of the corporation this remains the medical superintendent's responsibility No hard-and-fast lines are to be laid down with regard to cases admitted to the voluntary or the corporation hospitals In general, as at present the acute cases and emergencies will be admitted to the Royal Infirmary and the General Hospital, while cases requiring more prolonged treatment will go to Southmead from the first but no patient is to be kept waiting if a bed is available at any of these three institutions, and if a patient expresses a strong wish to enter any particular institution this is to be taken into account The payment for these services subject to annual review, has been fixed at £900 for the medical services and £900 for the surgical These payments will meet all the medical and surgical specialist services which the corporation may require with the exception of attendance in court in connexion with workmen's compensation or other litigation It has also been agreed that a physician or team of physicians and a surgeon or team of surgeons shall attend at Southmead each day and that each team shall attend at least twice a week After some experience of the arrangements it will be necessary to appoint house-physicians and house surgeons but at present the number and cost of such appointments cannot be stated As this is an enlargement of the specialist services of the corporation it does not affect physicians or surgeons with existing contracts except the consultant physician for heart cases and the consultant surgeon at Southmead both of whom will be included in the teams of specialists Before the proposals were adopted by the city council the remark was made by a member that much remained to be done before Southmead Hospital became what it ought to be, and that there was a great shortage of hospital beds in Bristol

Institute of Child Psychology

The new premises of the Children's Centre, the Institute of Child Psychology, at 6, Pembridge Villas, W11 were opened on June 23 by the Marchioness of Carisbrooke who expressed herself as being delighted with the building and equipment and took special interest in the play therapy rooms particularly in those rooms where children could play with water and messy materials to their hearts content Professor Winifred Cullis chairman of the Management Committee pleaded for financial support for the work, which she had watched with interest for several years and of which she fully approved Mr Kenneth Lindsay Parliamentary Secretary to the Board of Education said that official education was coming to recognize and be interested in the fact that there were different kinds of children for whom special provision must be made He instanced the special categories already provided for, and looked forward to the moment when provision could be made for nervous and neurotic children to receive such help as they needed He heartily endorsed the work of the Institute of Child Psychology Dr Margaret Lowenfeld in giving the history of the Institute, laid stress on that aspect of its design which emphasized the importance of having a children's centre to which mothers could bring all the children they were troubled about and where a differential diagnosis could be carried out by experts Educationists who came to know the methods of treatment and the results were almost unanimous in their approval The varying activities of the Institute and its relationship to other agencies were touched upon by Dr Ethel Dukes who also spoke of the environmental influences activating the many difficulties from which the children suffered Dr Hazel Chodak Gregory, vice chairman, proposed a vote of thanks to the Marchioness of Carisbrooke for her kindly interest in the work of the Institute Altogether about 300 people inspected premises during the period that the committee the directors, and the staff were "At Home to those who had been invited to the opening ceremony

Research Grant to Maudsley Hospital

The Rockefeller Foundation of New York has offered a grant of £25,000 during a period of five years from July 1 towards the support of psychiatric research at Maudsley Hospital subject to a condition that the amount of grant during any one year shall not exceed £5 000 This grant follows another from the same source of £9 000 in 1935 The offer has been accepted, and an expression of the London County Council's appreciation of the generous gift has been sent to the donors The manner in which the grant shall be spent is under consideration

House Appointments at London County Hospitals

A regulation of the London County Council prescribes that the period of engagement of house-physicians and house surgeons in the hospitals service shall be limited to six months but provided that not more than twelve months are spent at one hospital the engagement may be extended for further periods of six months up to two years when employment ceases unless promotion has been secured It is proposed to vary this condition to provide that a house physician or house surgeon may be employed at one hospital for not exceeding two years on the understanding that he shall not be employed on work of the same type for more than twelve months It is considered that such variation would conform in spirit with the principle that medical practitioners at the outset of their career should not be employed for more than limited periods in any one type of work and the limitations should be based on duties rather than on change of hospital

Reports of Societies

OESTRADIOL BENZOATE TREATMENT OF SENILE VAGINITIS

At a meeting of the Edinburgh Obstetrical Society on *May 11* with the president Professor JAMES HENDRY in the chair Dr T N MACGREGOR read a paper on oestradiol benzoate therapy in senile vaginitis

Dr MacGregor's communication recorded a clinical and photographic study of fifteen cases of senile vaginitis which was described as an inflammatory condition of the vagina characteristically associated with post menopausal life All the patients had had a normal or artificial menopause the symptoms complained of in order of frequency were vulval irritation and vaginal discomfort vaginal bleeding dysuria leucorrhoeal discharge and dyspareunia The diagnosis was based on examination of the vulva and vagina directly and by the speculum the characteristic features were redness round the vaginal introitus areas of petechial haemorrhage scattered over the vagina, and narrowing of the vaginal vault Uterine carcinoma was excluded by curettage when there was a history of bleeding

Results of Treatment

As a result of therapy eight patients were completely cured and had remained symptom free for periods varying from fourteen to twenty one months Seven were relieved in that they were almost symptom free but there was still evidence of some inflammation of these one was a diabetic and two had an associated leukoplakic condition of the vulva The rationale of oestradiol benzoate therapy in senile vaginitis was the restoration of the atrophic vaginal epithelium to that condition which existed during the period of reproductive life The reconstitution of the vaginal epithelium by the oestrogens not only increased the vascularity of the tissue and thus promoted healing but the increase in the cellular structure subjacent to the denuded areas caused shedding of the infected tissue Oestrogenic therapy also stimulated the production and deposition in the vaginal epithelium of nutritive substances necessary for a normal vaginal flora which once re established proved inimical to the invading organisms Cessation of therapy was followed after a time interval by a reversion of the vaginal epithelium to the atrophic condition which normally existed after the menopause The main form of treatment given was the intramuscular injection of oestradiol benzoate supplemented in two cases by vitamin A The dosage varied from 5 mg bi-weekly to 10 mg daily according to the severity of the condition and the response obtained Intramuscular injection was the most successful mode of administration Oestradiol in the form of suppositories though conceivably a practical way of treating this condition had proved disappointing probably on account of the atrophic state of the vagina which would have militated against the absorption of the oestrogens This form of treatment might however constitute a useful adjunct to therapy after the vaginal epithelium had been rejuvenated by intramuscular administration of the oestradiol benzoate

---

The eighth International Congress for the Study of Accidents and Occupational Diseases will be held at Frankfort from September 26 to 30 under the presidency of Professor Marteneck Professor Magnus will be chairman of the Section for the Study of Accidents and Professor Koelsch of the Section for Occupational Diseases Further information can be obtained from Ministerialrat Dr Bauer Unter den Linden 1 Berlin 8

Correspondence

Treatment of Pneumonia

SIR—May I be permitted to make some comment on the valuable leading article in the *Journal* of June 25 (p 1371) I have made some investigations into the action of 2(*p*-aminobenzenesulphonamido) pyridine known shortly as T693 and from these experiments I have come to the conclusion that chemotherapy and immunotherapy in pneumococcal infections are not competitive but complementary I have found that T693 is incapable of killing any pneumococci in human blood from which the leucocytes have been removed every pneumococcus implanted will grow out but there is a certain retardation of growth If however the human blood has its full complement of leucocytes then the presence of T693 in a concentration which ought to be easily attained in the body completely arrests the growth The T693 can retard the growth of the cocci but the natural defences have to do the killing

I have also found that human blood together with T693 and immune serum can deal with a much larger infection than the same blood containing *either* T693 or immune serum This being so the more immune the patient is the better will be the killing of the pneumococci and the ultimate result will depend on whether the patient has sufficient resistance to deal with the pneumococci even after they have been in contact with the drug

For these reasons I suggest that the advent of T693 has made the problem of anti pneumococcal serum of even greater importance In the past serum therapy in pneumonia has suffered from the fact that it has never been possible to make a serum of potency sufficient to ensure with certainty that it would be able to combat a pneumococcal infection, but it would appear that with a combination of T693 and serum the latter is likely to be effective even when the potency of the serum is relatively low It is not difficult to make serums for all the types of pneumococci if one does not aim at very high potency The typing of the pneumococcus is not nowadays a matter of great difficulty nor is it beyond the powers of the younger generation of practitioners to make intravenous injections True it is much easier to prescribe tablets to be taken three or four times a day but from the results I have obtained in the laboratory it seems clear that if the best is to be done for the patient then he should be immunized as well as treated by the drug

Hitherto I have only talked of serum as a means of immunization but we must not forget that it is possible to immunize patients actively by means of vaccines It has been shown that in animals which have received pneumococcal vaccine protective antibodies can be demonstrated within three days and the same thing has been demonstrated in patients suffering from pneumonia This means that the serum of these immunized animals or patients has the power of protecting other animals against otherwise lethal doses of pneumococci and for this to be positive there must be a very considerable degree of immunity present (for the amount of serum in reduced lots to be diluted in the animal's blood) It is reasonable to assume therefore that well within three days the patient who has received vaccine will have responded with an increase of immunity and such increase may well be sufficient to turn the scale when it is aided by a drug like T693

My object in writing this letter is to try to prevent physicians discarding immunological methods entirely in favour of chemotherapy when theoretically it should be so much better to combine the two Pneumonia is a serious disease, and should be treated by all methods which have the effect of increasing the immunity of the patient or which are detrimental to the pneumococcus Hitherto attention has chiefly been given to increasing the patient's immunity, now, however, it seems as if a chemical has been found which is in some way detrimental to the pneumococcus Let us not discard the older methods but supplement them with the new if we are to obtain the best results in the treatment of our patients, which, after all, is our only aim and object—I am, etc,

Inoculation Department, St Mary's Hospital, London, June 27 ALEXANDER FLEMING

The New Chemotherapy

SIR—The objection to the use of sulphur-containing aperients for patients taking sulphanilamide has been stressed recently in the columns of the *Journal* (June 4, p 1236, June 25, p 1392), the reason for the objection being the danger of causing or aggravating the cyanosis due to sulphaemoglobinaemia As the mode of action of the new group of drugs is still so largely a matter of conjecture, it may well be that this fear of sulphaemoglobinaemia is quite misplaced, to say nothing of the chemical difficulty involved in understanding how so stable a substance as, for instance magnesium sulphate can be reduced in the body

Sulphur taken by mouth will diffuse widely, as its excretion through the kidneys, lungs, and skin indicates This property, incidentally, is taken advantage of in some old-fashioned treatments, such as the rectal injection of hydrogen sulphide for phthisis or the eating of onions for acne vulgaris Does the sulphur in the new compounds dissociate easily in the body? The frequent occurrence of sulphaemoglobinaemia suggests that it does, penetrating widely, for it must be remembered that this condition occurs when there is no other possible source of sulphur in diet or drugs Spectroscopic examination of the blood points to its being a common occurrence Perhaps it is an invariable one to some degree, if a sufficient dose is taken and the drug is to be of service so that it is the price that must be paid for effective action It is difficult to understand why so much anxiety has been caused by it Marked cyanosis in patients subsequently making a good recovery must have been seen by all using the new drugs extensively Another toxic sequel has been noted, however, which occasionally leads to a fatal result and is of great theoretical interest—acute agranulocytic anaemia

It is sometimes said that a few years ago the search for a drug with a selective lethal action was regarded by many as a search for a chimera yet such drugs were known and used Benzene (5 to 10 minims) is an official preparation It was used in the treatment of leukaemia and the precaution of counting the white blood cells frequently was taken as its selective poisonous effect on these cells was sometimes very rapid Recently even more specific effects have come to light in a long series of cases of agranulocytic anaemia following the use of amidopyrine a derivative of benzene In these cases the action is principally on the polymorphonuclear leucocytes It is interesting in this connexion to consider the formulae of the new agents There are many of them but so far as I know they are all benzene derivatives with a sulphur-containing group the best known of course being *p* aminobenzenesulphonamide Are we perhaps dealing with a series of which benzene, amidopyrine, and sulphanilamide are members and of which the last, by virtue of its easily dissociated and diffusible sulphur is so modified that it has a specific lethal action on some pathogenic organisms which, after all, can in some respects be compared with the relatively independently existing white blood cells? It is worth pointing out that there is much to suggest that the discovery was an accidental one in the course of a laborious investigation of azo dyes There has been little official information respecting this matter published in this country It would not be the first time that chance has smiled on the Farbenindustrie, and, of course, this would not affect the practical importance of what came to light, but it would certainly help to limit the field of inquiry as to how these drugs work—I am, etc,

London, S W 1, June 27 EDWARD GALLOP

Treatment of Placenta Praevia

SIR—The paper on the treatment of placenta praevia by Drs O Lloyd and J E Giesen (*Journal*, June 11 p 1258) would seem at first sight to show that in hospital practice it is possible to plug the vagina in placenta praevia *without greatly increasing the risk of sepsis for* in their series the morbidity rate was increased by something less than 1 per cent, though the number of cases treated by plugging was more than doubled Probably, however, few who read the article will be convinced that the fall in mortality was due to the plugging It seems much more likely that it is due to the increased use of blood transfusion seeing that in the second series the number of transfusions was thirty-seven, as compared with only ten in the first series

Do the writers really believe that packing the vagina controls haemorrhage from placenta praevia if the membranes are unruptured? One might expect it to do so if the lower uterine segment could be firmly compressed against some unyielding object—usually the foetal head Whatever may be the possibility of doing this if the membranes are ruptured, it is obviously not possible if the foetus is still floating freely in fluid "The condition of the patient was, as a rule, adversely affected by a combination of haemorrhage and *shock resulting from the operation of plugging* (my italics) May it not be that arrest of the haemorrhage was brought about, not by the plugging at all, but by the shock resulting from it? In any case, leaving a pack in the vagina for twenty-four hours or more before performing Caesarean section seems to be inviting trouble sooner or later It will be noticed for example, that of the sixty-five cases plugged in series A the number of morbid cases was twenty-two (33 per cent) Furthermore, of the twenty-two morbid cases in this series no fewer than twenty (91 per cent) had been plugged Of the 121 cases that were treated without plugging only two were morbid (1 6 per cent), and in one of these pyrexia was due to a urinary infection

If the use of blood transfusion in placenta praevia needed any advocacy to day this paper, so excellently and clearly presented, might furnish strong evidence of its value Few, however, will find in it any encouragement to perpetuate the use of the vaginal pack which most obstetricians nowadays believe to be a septic and therefore dangerous appliance—I am etc,

London, W C 1 June 20 F J BROWNE

The Unconscious Mind and Medical Practice

SIR,—The article by Dr Ernest Jones on the unconscious mind and medical practice in the *Journal* of June 25 (p 1354) states the case for a wider application of psychotherapy with an incisive lucidity and a lack of polemic which is as refreshing as it is rare among writers on that specialty. The first reason he gives for the neglect of this all-important side of the healing art is much the most serious. I refer to the difficulty experienced by the general practitioner in obtaining any form of guidance in the technique of this form of therapy. If the parturient woman is in difficulties if the baby suffers from a phimosis or if it later contracts diphtheria and the practitioner needs advice as to the best way of dealing with any of these problems he can find at once in his library full simple and detailed guidance as to the method which he ought to adopt. Certainly he will find that the experts differ as to which treatment is the best in any given case but at all events the technique will be described with such meticulous care that he can at least try out the method of his choice. My examples are of serious conditions which though they might be better treated by a specialist can be and often are, successfully dealt with by the general practitioner.

Now let us take two not uncommon and certainly equally serious functional conditions: impotence in the husband immediately after marriage and functional aphonia in a woman whose living depends on her ability to use her voice. Neither of these is rare and the first is serious enough to lead to suicide. I have read a few text-books and many articles in the journals on psychotherapy but in none of these have I found the instructions which would enable me to set about the treatment of the two cases mentioned. Surely some form of technical guidance capable of being followed by even the dense unconscious ridden mind of the general practitioner can be devised. If the whole body of family practitioners have to wait till they can undergo a period of discipleship in order to learn this art then progress is bound to be very slow indeed. Is there not still hanging about this specialty just a remnant of the dark draperies of the occult which is repellent to that hard core of common sense which has so often saved our profession from the pitfalls of immature doctrines in the past? Something in the nature of a *vade mecum* of psychotherapy for beginners is what one would like to see. We cannot hope to emulate the work of the maestros in the art but the fumblings of our prentice hand might produce results which would inspire us to greater effort and attract attention to and give us a respect for that all powerful but murky basis of our conduct the unconscious.—I am, etc.

Malvern Link, June 27 G. WAUGH SCOTT

Sequelae of War Gas Poisoning

SIR,—In reference to some correspondence that has appeared in the *Journal* in connexion with mortality rates among ex-soldiers particularly those suffering from sequelae to war gas poisoning and the letter which appeared in your issue of April 9 last (p 813) over the signature of Dr W. N. Abbott I raised this matter by question in the House of Commons some weeks ago and your readers may perhaps be interested in a further letter which I have received from Mr H. Ramsbotham Minister of Pensions who has given authority for its publication.

It is evident from the large correspondence I have received on this matter that there are very many cases of serious disability arising from war gas poisoning who have never received any pension from the State and similarly many deaths have been accelerated from the same cause which have never come under the notice of the Ministry.

It seems to be the particular penalty of gas poisoning to show its effects at a much later stage and this has been a real hardship to many an ex-service man in that he could not have made an application for pension at a stage when it could be substantiated by accurate medical certification.—I am, etc.

House of Commons, June 2 HENRY MORRIS JONES

*** The letter of the Minister of Pensions to Sir Henry Morris Jones dated June 1st is as follows:

I have read the items in the *British Medical Journal* issues of the 1st January and 9th April which prompted your supplementary question on 16th May and I am glad of the opportunity it affords me of correcting the erroneous impression which might be formed (as indeed in your own case it would appear to have been) from the statistics in question.

It is true that I said on the Motion for the Christmas adjournment that the mortality rate among pensioners as compared with the civil population was 45 per cent above the civilian population of the same age in this country whereas in the United States the excess was 71 per cent and in South Africa 77 per cent. But these mortality figures referred of course to deaths among all disability pensioners *from all causes and not exclusively to cases of war gas poisoning or respiratory diseases*. Incidentally I may say that the excess death rate for disability pensioners over the average for the population is diminishing. For the year ending 31st March the excess was not more than 38 per cent.

I note the statement over the signature W. N. Abbott in the April issue of the *Journal* but this merely reiterates the above statistics as I gave them and goes on to say: It has been observed in New Zealand that the mortality statistics for respiratory diseases are 30 per cent. above normal in similar groups of ex-soldiers. What this means is not clear. I can only say firstly that we have no statistics of the mortality rate of ex-service men as distinguished from pensioners—indeed I know of no country that has—and secondly that the percentage proportion of deaths from respiratory diseases (including tuberculosis) to deaths from all causes among the general male population between the ages of 35 and 60 in this country is roughly 25 to 30 per cent.—in other words the mortality from this group of diseases is a high one.

Pregnancy and Leprosy

SIR,—I have read with considerable interest the article on The Interaction of Pregnancy and Associated Diseases by Professor R. W. Johnstone (April 9). In this connexion your readers may be interested in the relationship between pregnancy and leprosy. The leper hospital here under my charge has over two thousand patients of varying nationalities. Some six hundred of these are females and there is on an average about one birth per month.

In the interaction of pregnancy and associated pathological conditions leprosy must be I imagine one of the few major systemic diseases where such action is to all one sided. Leprosy does not have the slightest effect on the course of pregnancy pregnancy has a marked effect on leprosy. A slow but progressive spread of the disease is usual first noticeable in the later months of pregnancy and going on long after delivery. A pregnant woman with mild symptoms of leprosy may and often does become an advanced textbook case in a year's time. The primary factor is I think mineral depletion as in my last twenty cases a richer diet with increased calcium

intake appears to check the tendency to leprosy aggravation

Metabolic disturbances of various kinds frequently precipitate an acute febrile dissemination of leprosy (lepra fever) In over seven years experience I have never seen the strain of pregnancy or parturition cause lepra fever, although I have seen very severe attacks after disturbances of a very much lesser nature—dietary indiscretions or a few days constipation, for instance The leprosy aggravation caused by pregnancy is insidious and chronic In these cases which I see both parents are, of course lepers Routine examinations of placenta, cord, and baby are constantly negative for *Mycobacterium leprae* and the child, if removed from the mother at or shortly after birth, remains free from leprosy—I am, etc,

Selangor, F M S GORDON A RYRIE

The Active Principle of Cannabis Indica

SIR—I am indebted to you for drawing my attention to two papers about *Cannabis indica* which have appeared since my retirement from active work I have now read both of them Neither paper, I venture to submit, supports your contention (*Journal*, June 4, p 1233) R S Cahn's paper (*J chem Soc* 1933 p 1400) is the fourth of a series and is an interesting study of a not yet complete synthesis of a substance he terms cannabinol It is not, however, the same substance as that which was first isolated by Wood, Spivey, and Easterfield (*J chem Soc* 1896, **69**, 539) Cahn's substance is stable, is devoid of pharmacological activity, and has the empyric formula $C_{21}H_{30}O$ *Wood Spivey and Easterfield's substance* was relatively unstable, was powerfully active pharmacologically and had the empiric formula $C_{18}H_{24}O$ I showed that passing oxygen through the warmed substance changed it and destroyed its pharmacological action (*J Amer med Ass* 1898 **31** 882)

The note of Bergel, Todd, and Work (*Chemistry and Industry* 1938, **57**, 86) appears to be a search for something active without much success Their pharmacological experiments were made on rabbits by intravenous medication Rabbits are but slightly susceptible to *Cannabis indica* and do not show characteristic symptoms and the intravenous administration of an insoluble (in water) resinous substance probably as a relatively crude emulsion is not in my opinion an admissible procedure in pharmacological research I will try to justify my statement that the active principle of *Cannabis indica* was isolated, but perhaps not in its purest form, over forty years ago by Wood, Spivey, and Easterfield

They worked with charas the resinous exudation of Indian hemp and the most powerful of cannabis products Their first consignment consisted of many hundredweights of the finest charas I have seen The quality of the initial product is of importance as later research showed They isolated a terpene (1 5 per cent) a sesquiterpene (2 per cent) a crystalline paraffin (0 15 per cent) and a so-called red oil (31 5 per cent) which was only such at high temperatures An indistillable pitch and sandy residue were left behind The products were passed on to me for pharmacological investigation The resin (red oil) was powerfully active (*Lancet* 1897 **1** 235) Later consignments of charas were of inferior quality They yielded less red oil meantime termed cannabinol because it contained an alcoholic hydroxyl which again was less active pharmacologically than the resin first examined

About this time I had to devote myself to other lines of research and the close association of chemist and pharmacologist ceased The chemists continued their work and separated from the newer samples a higher homologue which was pharmacologically inactive but to which they unfortunately gave the name of pure cannabinol It will not be further considered in this note

At the beginning of 1898 I was invited to the Annual Meeting of the American Medical Association held in June of that year Unfortunately I was unable to go I was asked to send a communication to be read As the research work in hand was already earmarked I wrote up the work done on *Cannabis indica* and sent it I believe the paper still remains the most comprehensive account of the pharmacology of this drug The addenda which I was allowed to make summarized 144 animal experiments—thirty three on myself Curiously, Sigmund Frankel writing five years later says "Animal experiments with hashish are in literature extraordinarily few His own experiments are much less numerous but he figures a somewhat characteristic attitude often assumed by dogs which I had previously described as 'hyenoid' Rabbits he says are completely refractory

Since these experiments at Cambridge I have made a large number of chemical and pharmacological experiments with *Cannabis indica* Hemp products have been obtained from various parts, chiefly India and an active cannabinol has been prepared from all of them No further publication has been made because apart from experiments directed to standardizing the drug no sufficient advance was felt to have been made on the Cambridge experiments All that need be said now is that the various cannabinols prepared from these various crude products had not quantitatively the same intoxicating power And I may add as of some slight importance that I sealed hermetically in a test tube some of the very active product isolated at Cambridge and kept it for about twenty years without apparent change or loss of activity

Since the cannabinols prepared by myself from different samples of *Cannabis indica* showed some variation in pharmacological action can this substance be regarded as the active principle of the drug? I think it can and in a simple way and as briefly as possible I will try to justify this opinion Let us return to the active red oil isolated from the first batch of charas and let it be conceded that a constant boiling point is generally an indication of tolerable purity unless by chance we have a mixture of two or more substances with boiling points closely similar The red oil distilled over in a moderate vacuum (20 mm Hg) constantly at 265° to 270° C It contains a hydroxyl group and can be converted into acetyl cannabinol and the acetyl cannabinol can be deacetylized and cannabinol re formed But the new product possesses little if any pharmacological action What has happened? Has something disappeared during the transformation? If it had it would be a very remarkable substance such is at present unknown to pharmacology and I think I may add organic chemistry On the other hand a slight rearrangement of intramolecular structure is a common occurrence of less severe reactions, but on the nature of such change I shall not speculate Mr Cahn I gather prepares his cannabinol by the method of acetalization and deacetalization Although not pharmacologically active it is properly allied to the active principle and its complete synthesis may throw some light on possible group migrations and lead to the desired haven But it is no easy task especially as it is difficult to gauge accurately the activity of different products The best way to standardize cannabis preparations is to take them oneself Even then until one becomes expert the percentage error is considerable I merely wish to state the fact without recommending the procedure

One point more and one that may be particularly disturbing The resin in the examples tried did not show the increased pharmacological effect over the crude drug which it should have done if it were the sole active principle The charas containing 32 5 per cent of resin was somewhat more than half as powerful as the resin itself Although owing to the presence of terpenes the crude drug may be slightly more readily absorbed than the purer resin the cause of the difference is more probably due to some degree of oxidation occurring during the fractional distillation Oxidation is slow at ordinary temperatures but rapid at high temperatures It is probable that oxidative changes begin immediately after

harvesting and products which reach this country have undergone change due to varying age and sometimes to unsuitable storage Other changes too of an intramolecular kind possibly occur producing an inactive or less active product which could not be separated from the real active principle by fractional distillation Variations in activity of different cannabinols might thus be explained

An unstable resin with the properties possessed by an active cannabinol explains all the pharmacology of *Cannabis indica* If the active principle is not such a resin it is difficult to conceive what kind of substance it can be Few active principles would survive the heat which an active cannabinol bears with impunity —I am, etc

Tunbridge Wells June 9 C R MARSHALL.

Excision of the Patella

SIR—Mr G O Tippett states (*Journal* June 11 p 1284) that in kneeling which is probably the most simple common trauma the patella takes *no* part This assertion is incorrect In kneeling with the knees flexed to 90 degrees which is the usual position the patella takes the majority of the weight Mr Tippett can easily prove this for himself provided his patellae have not been excised by flexing his knees to 90 degrees outlining the skin over the knee cap with ink and then kneeling on a piece of paper—I am, etc

Norwich June 21 H A BRITTAIN

"Quinsy-Peritonsillar Abscess"

SIR—'Tis an ill wind that blows nobody good and while the physician may think the fates hard when, like Job— a perfect and an upright man one that feareth God and escheweth evil —he suffers from ailments that, frankly, he would prefer to see in his patients rather than in *himself, yet he has this great advantage that* as a patient he may learn more of a disease its symptoms and *its* treatment, than he would as a mere onlooker Part of this meditation is due to the fact that, when scarlet fever attacked me while house surgeon with the late Sir Hector Cameron my transference to Belvedere Fever Hospital and my six weeks residence there taught me more of fevers than *all the books in my library* But the second and more important reflection leads me as a sufferer for half a life time *from acute recurrent* quinsy to disagree formally with almost all the suggestions in the article by Mr R Scott Stevenson in the *Journal* of June 18 (p 1323) on Quinsy and Retropharyngeal Abscess

For about thirty years *from 1887—the* first attack of which I have a clear recollection—to 1917, when I had my tonsils removed by the late Dr Luc of Paris I suffered every year or two from an acute abscess tonsillar or peritonsillar Your author says that in such cases pus forms about the third or fourth day of the illness which lasts from five to fourteen days but should never be allowed to run its course I frankly disagree when he goes on to state that it does good to open a quinsy early rather than late even if only blood and not pus flows from the incision But I fully agree that opening the abscess is not always as easy as it may sound Not only is it not easy but it is often impossible and every attempt is made at the cost of extremely acute pain to the victim It is not uncommon he adds to fail to open the abscess even after several attempts As the wretched patient can with difficulty open his mouth a quarter of an inch and is hypersensitive this is not to be wondered at Even with the efficient 7s 6d battery on the forehead obviating the use of a torch in the unsteady hands of an assistant and the benzo-cocaine lozenge or the 10 per cent cocaine spray the author admits that no local anaesthetic has much effect in quinsy If the abscess fills again after a second incision the author concludes that it will be well to consider whether the tonsil should not be removed

Vous avez commis une grosse imprudence was the emphatic remark I heard Professor Tillaux, thirty years ago make to an assistant who removed a tonsil in a state of acute inflammation and suppuration—a lesson I never forgot My personal experience as a patient and in no way as a throat expert is that quinsies should not be opened till pus has definitely formed that less harm is done by waiting than by early intervention that 10 per cent cocaine *is a dangerous spray and that tonsils should only be removed* when all inflammation has subsided—I am etc

Cannes June 20 A A WARDE M D

The Origin of Cancer

SIR—In your leader in the *Journal* of June 18 (p 1317) the opening statement that the idea has long been abandoned that the cause of cancer will be discovered if taken at its face value seems calculated to act as a knock out blow to some of those engaged in cancer research Although most laboratory work on this subject is now done for the avowed purpose of adding a few more facts to the colossal heap already accumulated there are among these researchers many who are sustained in their efforts by the hope that they may one day chance to stumble upon a clue which leads the way out of the intricate maze that now represents the cancer problem To these latter and still more to those who enter upon this research with the definite object of finding a cause an authoritative statement that cancer has no cause and that they are condemned to wander round and round in never ending if benign circles or segments of circles as they are now doing but without the incitement of hope must be anything but an encouragement

Surely the above mentioned statement does not represent the opinion of oncologists in general? There are in fact many clinicians and pathologists working at this subject who have reason to think differently May I take the liberty of doing my best to present this other side of the case

My object is to show that not only will the causes of cancer be found but that they have already been found and are now being sorted out and investigated Writing as an advocate for the optimists I put my case in the form of propositions as follows

Cancer is not one disease but a vast group of diseases Cancers are primarily of internal origin as contrasted with the bacterial diseases which are primarily of external origin Cancers vary in kind with the nature or species of tissue or of animal so that cancer of one species of tissue differs from that of another species and cancer of one species of animal from that of another species As with the bacterial diseases the causes in general are twofold (*a*) predisposing and (*b*) activating

(*a*) The predisposing or facilitating causes happen before the onset of development and bring on degeneration before it Among these causes are heredity The state of predisposition produced is the connective tissue and the cancer and is common [illegible] cancer

(*b*) The activating causes are agents—chemical or physical—which act impulsively upon the degenerate, dedifferentiated embryonoid cells of pre cancers and cause them to multiply, much as agents of a similar nature activate the eggs of sea urchins or other lowly organisms and cause them to multiply But whereas in the former the cells activated are progressive in the latter they are regressive and therefore incapable of producing other than degenerate parasitic organisms In both cases the activating causes are selective or specific and vary with the species of animal or the species of tissue upon which they act

Let us now choose some one organ as an example, preferably the female breast that being to the clinician what the mouse is to the experimentalist Owing to disuse or inadequate use in suckling, and/or to heredity, the breast may degenerate before its normal time Its dedifferentiated embryonoid cells, instead of quickly passing on to the final stage—that of molecular degeneration—as they should do, are stimulated and kept alive by hormones from the ovary, an organ which has not shared in the premature degeneration of its satellite organ They proliferate to some extent, and are those "pre cancer cells" which fill the ducts and follicles in the fibrocystic predegeneration known as Schimmelbusch's disease If left alone these pre-cancer cells continue their course and disintegrate But should they be stimulated by some adequate and suitable stimulus, such as that of a streptococcal toxin, of radium, of some mechanical injury, or, above all—in the breast—of the luteal hormone, then they may start off on that process of endless multiplication which is cancer

This represents the cause of cancer in its simplest form There are, of course, variants such as when cancer is caused by x rays, when the same agent first brings on a state of premature degeneration and then activates the predegenerate cells

It is with much diffidence that I have ventured to comment in this way on a statement which I recognize as that of an authority And as I am conscious of having presented my case rather awkwardly, perhaps I may be permitted to make it clearer by using a precedent It was not very long ago that it might with truth be said of tuberculosis that it was attributed to such a multitude of causes that of only one thing could we be sure, and that was that its true cause had not been discovered But now we all agree that the cause of tuberculosis is known and that it is twofold—a bacillus which is the actual cause, and a group of causes, all of which can be lumped together as the predisposing cause It is these two—the seed and the soil—which together constitute the cause of tuberculosis My claim is that we now know enough about cancer (and cancers) to be able to say that we know its causes in the same way that we know the causes of the microbial diseases in general and of tuberculosis in particular With cancer as with the diseases of extrinsic origin we have passed from the stage in which the true cause is lost in a multiplicity of causes to that in which the causes are well defined and can be linked together as one

Now the question arises Which of these views is correct—the one which denies that the cause of cancer will ever be discovered, because a malignant neoplasm is the resultant of a number of factors or the one which states that the cause of cancer is already known and that it is duplicate or divisible into two factors?—I am, etc,

Reading June 18 HASTINGS GILFORD

*** Perhaps the word the should have been put between quotation marks and not the words 'cause of cancer"—ED *B M J*

Diphtheria Prophylaxis

SIR,—During 1937 four cases of small-pox were notified in England and Wales with no deaths (*Journal* June 4, p 1243), whereas during only one week of this year 1,110 cases of diphtheria were notified with twenty-six deaths, an increase incidentally of 260 and six, respectively, on the corresponding week of the previous year (*ibid* p 1244) There can be little reasonable doubt that the remarkable position in respect of small-pox is due largely to compulsory vaccination, unless a conscientious objector the father is not allowed to disfigure his child with small-pox, but he may with impunity expose him to the grave risk of diphtheria

About 90 per cent of children between the ages of 6 months and 5 years are said to be Schick-positive Among 3,000 such children in a London borough who were immunized against diphtheria two or three years ago not a single case of the disease has since been reported In view of what has been achieved in small pox surely it is not too much to ask that all children in this country should be immunized The bogy of diphtheria looms larger in the public mind even than that of small pox at the present time

It is well known that Schick-positive nurses, doctors and medical students, whose professional duties take them into contact with sick children, are very liable to contract diphtheria, and this is recognized and guarded against in most hospitals—and should be in all hospitals It seems incredible that there are still hospitals in this country where immunization in such cases is not insisted upon, even where successive residents have taken the disease

Dr W Hilton Parry's communication in the *Journal* of June 11 (p 1264) raises interesting possibilities in the treatment of early cases with severe toxaemia It would be valuable to hear from him whether sulphanilamide given to such cases before removal to hospital may be expected to be beneficial, and whether in fact the whole course in these patients in whom a streptococcal toxaemia is presumed is influenced by the drug—I am, etc

London June 22 A L CRADDOCK

Treatment of Diphtheria

SIR,—I am much interested to see Dr W Hilton Parry's note on the treatment of diphtheria in the *Journal* of June 11 (p 1264) It forestalls to some extent a three year investigation of my own

For some time I have found that cases admitted as diphtheria required a great deal of investigation as to the causation and that swab diagnosis was liable to grave errors It is as well to query all cases of over 17 years of age, even with a positive swab, and many under that age Mixed infections such as Vincent's angina and streptococcal throats with or without the presence of diphtheria bacilli are quite common, very frequently the diphtheria bacilli are avirulent, if treatment is carried out with antitoxin alone the results are often disastrous Fortunately grave cases may be diagnosed clinically and treatment accorded It is my practice here to use anti streptococcal serum or prontosil and, if necessary some arsenical preparation for such cases, with anti diphtheritic serum if required

The cases admitted to hospital as diphtheria, with or without a positive swab have shown that the diagnosis must be revised in about two cases out of three I think the time has come for 'observation throats' requiring hospital treatment to be admitted freely to the infectious

diseases hospital and to be diagnosed there In Sunderland we do admit such cases, and they require hospital treatment more in many instances than diphtheria I often wonder how many cases with a negative swab are left at home unnotified that would have benefited by quick removal to hospital and a dose of anti-streptococcal serum During the past year or two more than half the cases that have been admitted to the Sunderland Infectious Diseases Hospital as diphtheria have actually been streptococcal throats or Vincent's angina and required treatment for these conditions The swab seems useless to diagnose such cases, smears are more helpful but in the former blood culture appears the only useful procedure, if obtained early enough

I hope shortly to publish an article on the differential diagnosis of acute throat conditions based on the cases admitted under my care during the last ten years As it is swab diagnosis leads to an entirely fallacious number of notifications of diphtheria suggesting a much greater prevalence of diphtheria in many districts than actually exists, and this would be prevented by adding a new indefinite throat condition to the notification list Many cases are notified as diphtheria merely because the clinical condition suggests the need for hospital treatment since there are no beds for acute throat conditions other than diphtheria Many practitioners have told me that a notification of diphtheria is the easiest way to get a bad throat into hospital—I am etc,

E THORP
Deputy Medical Officer of Health

Sunderland June 17

Keratoplasty

SIR—Mr T H S Tizzard records in the *Journal* of June 18 (p 1303) an excellent result in a case in which corneal grafting was done by a conjunctival flap An examination of the photographs of this case suggests that the corneal scar was dense and localized to the centre of the cornea the rim of the pupil is seen The operation of corneal grafting is hazardous and entails a high degree of risk, it is a moot point whether in these cases of localized opacity an optical iridectomy is not the better operation to perform from the patient's point of view I have always advocated that a corneal graft should not be carried out unless the vision of the affected eye was reduced to perception of light and the cornea was generally opaque Furthermore a graft may remain comparatively clear for a year and then suddenly become opaque—I am etc,

B W RYCROFT FRCS

London, W1 June 22

Atrophic Rhinitis

SIR—I much appreciate the courtesy of Mr E D D Davis's reply (*Journal* June 18 p 1341) to my letter (June 4 p 1236) May I add that I also appreciate his scepticism as to sinusitis being an essential factor in atrophic rhinitis It is only after an experience of 170 cases over more than thirty years that I have come to this conclusion, treatment accordingly has by its success confirmed my belief The view that atrophic rhinitis is the end stage of a hyperplastic—that is inflammatory—process is proved by the history of the cases and by their histology How a neglected nasal suppuration beginning in childhood and lasting for years could miss the ethmoid has never been explained

The inflammatory process beginning in the mucous membrane and allowed to become chronic affects the bone, just as it does in chronic suppurative otitis media beginning in childhood The latter disease and not otosclerosis is the aural analogue of atrophic rhinitis its history histology and treatment are similar The mastoid process and antrum in the one case the nose and maxillary antrum in the other tend to remain small Thrice I have seen the mastoid antrum obliterated and in one boy the maxillary antrum was almost obliterated Leucocytic infiltration is succeeded by fibrosis and then sclerosis the microscope shows this in both diseases The fibrosis by constricting the vascular supply to the mucoperichondrium of both surfaces of thin bones like the turbinates and ethmoid cells, hinders development and causes sclerosis and atrophy Nature sometimes cures the condition by a gradual atrophy of the ethmoid honeycomb but this takes many years and then the atrophy is extreme it is the rhinologist's job to anticipate this and to deal with the ethmoidal focus which keeps the process going and so to prevent further atrophy of the turbinates The sphenoid also often needs drainage the antrum less often Unlike the ethmoid the antrum has a rich blood supply other than on its nasal wall and the walls thicken even when it contains no pus Like Mr Davis I have often punctured the antrum with negative result but this does not negate sinusitis of the ethmoid or sphenoid Usually there is an offending cell high up and far back in the ethmoid apt to be missed and often leading to the sphenoid Usually also the clearing out of the ethmoidal cells with due attention to neighbouring cavities when necessary will stop the crusting Lack of vitamins is a predisposing factor in these children with dirty noses and for successful treatment must be met Possibly a defective supply of magnesium salts may also be a factor these salts are essential for ciliary function—I am etc

JAMES ADAM

Glasgow June 21

Tuberculin in Diagnosis

SIR—The evidence for my belief that the subcutaneous test is selective may be stated quite shortly A patient with tubercle bacilli in the sputum is obviously suffering from pulmonary tuberculosis When treating such cases with tuberculin my first dose in treatment is 0 0000001 c.cm B E Why? Because patients with active disease may give a febrile reaction even to a dose as small as this In Chapter VI of *The Tuberculin Handbook* I have set out a series of 106 cases in which the diagnostic value of the subcutaneous tuberculin test was compared with the radiographic evidence The cases were those of suspected pulmonary tuberculosis without tubercle bacilli in the sputum If Dr J R Forbes will refer to that work he will I am sure agree that the radiographic evidence was in favour of the subcutaneous test being selective—I am etc

HALLIDAY SUTHERLAND

London W 8 June 24

SIR—I have proved beyond doubt and have certainly convinced the leading ophthalmologists at the Royal Westminster Ophthalmic Hospital—notably Mr Charles Leonard Gimblett Sir Richard Cruise Mr T K Lyle and Mr E Wolff—that tuberculin is the essential key to *the diagnosis* and is also the only safe and certain key to the successful treatment of tuberculous diseases of the eye within range of vision and even in other organs and parts of the body although we cannot observe directly and control with our eyes the phenomena of healing Dr J P Forbes will find my book *Tuberculin in the Diagnosis and Treatment of Tuberculosis* probably at the Library of the Royal Society of Medicine and certainly at the Library

the Royal College of Physicians This and my last book *Tuberculin : its Vindication by Technique* (J and A Churchill) will disclose the truth Clear proof can also be seen any Monday afternoon at my Tuberculin Clinic 36, Nottingham Place—I am, etc,

London, W 1, June 25 W CAMAC WILKINSON

Complications of Gold Therapy

SIR—Referring to the letter of Dr John B Bennett in *the Journal* of June 25 (p 1392) describing a case of gold 'dermatitis,' we are constantly treating considerable numbers of patients at the Charterhouse Clinic with injections of gold with most satisfactory results, and in some cases quite dramatic improvement In our series we have never had any toxic reaction of any kind whatever, nor has any single patient ever developed a dermatitis We are convinced therefore that these complications are entirely unnecessary, and are simply due to the method of administration, and more particularly to the amount of gold given

Gold is most valuable when interposed in a course of vaccine treatment where hyperergy develops The gold is given in minimum doses at as long an interval as possible, depending on the tendency of the symptoms which are allayed by the gold to recur The usual period is a fortnight, but three weeks or even a month may elapse during which period the symptoms are relieved It is true that after the first injection there may be an exacerbation of the rheumatic pains, and if this is found to occur on the next occasion the amount of gold injected is one-tenth of the initial dose In rare cases even one hundredth of the dose is required before relief is obtained The kind of gold salt used does not appear to make very much difference—I am, etc,

London W 1, June 27 H WARREN CROWE

Blood Pressure after Spinal Anaesthetic

SIR—Mr D L Lewis and Dr E G M Palser (*Journal* June 4, p 1202) state that falls in the systolic and diastolic blood pressures after a spinal anaesthetic are regular and begin 2 6 and 2 2 minutes after administration ceasing after 13 and 12½ minutes for the systolic and diastolic pressures respectively They say the recovery is to the extent of 7½ to 10½ per cent of the initial values and occupies eight minutes

Looking back at records taken during the past year of blood-pressure curves following spinal analgesia alone, I find a great variation in the times of onset and recovery In all cases the anaesthetic is the same but some exhibit only a slight fall and others go on falling for fifty minutes This divergence of results is interesting because it points to the fact that spinal analgesia alone is not adequate to protect the patient from shock-producing stimuli except in the case of very low blocks—I am, etc

June 24 R P HARBORD
Demonstrator in Anaesthetics, University of Liverpool

Three professors of the Lyons medical faculty have recently retired—namely Drs Collet (oto rhino laryngology) Cluzet (biological physics radiology and physiotherapy) and Gayet (urological chemistry) A new chair has been founded at the faculty for infectious diseases and its first occupant is Dr Joseph Chalier hitherto professor of medical pathology

Obituary

JOHN V W RUTHERFORD, M B, C M

Consulting Surgeon Newcastle on Tyne Infirmary

The death took place on June 21 of Colonel J V W Rutherford in his eighty-second year John Victor Walton Rutherford was educated at Bedford School, subsequently proceeding to the Royal High School, Edinburgh, and later to Edinburgh University, where he graduated M B C M He was for some time honorary surgeon to the Newcastle Royal Victoria Infirmary Before and during the war he held the position of Assistant Director of Medical Services of the 50th Division and was mentioned in dispatches for his services in France After returning from France he became D M S at Catterick Camp, from 1918 to 1922 he was Honorary Colonel of the R A M C (Northumbrian Division) On his retirement from the Newcastle Infirmary he went to reside in the South of France, but returned to Newcastle last September He had been in indifferent health for the last two years Colonel Rutherford was a keen sportsman and one of the stalwarts of Rugby football and did notable service in the Northern Football Club and the Northumberland Rugby Union Of a kindly nature, he was most popular with all with whom he came in contact, and his death will be regretted by his many friends in the Newcastle-upon-Tyne district He is survived by his wife and one son His first wife was the daughter of the late Sir Walter Scott, she died in 1922

Professor G Grey Turner writes

With his brother, the late Dr Vickerman Rutherford, John Victor Walton Rutherford started in general practice in Newcastle-on-Tyne to carry on the work of their father who was not only a successful practitioner, but a very well known educationist It was, in fact, as a result of the efforts of John Rutherford senior that the College which still flourishes under his name was founded

The subject of this note was educated in Edinburgh where he was well known as a Rugby player He was always attracted to surgery, and when the opportunity arose at the Newcastle Infirmary he sought election In 1897 he became assistant surgeon and for some years was associated in that capacity with Professor Rutherford Morison In 1906 he was appointed to the full staff with charge of wards and continued in that office until 1917, when he retired on reaching the age limit and was made an honorary consulting surgeon John Rutherford had a great knowledge of human nature and was very shrewd and sometimes made striking diagnoses by some process of intuition He was always considerate to his patients and was popular with his colleagues Rutherford had good hands and was a very nice operator but was not attracted to the routine of hospital work or of teaching but he did encourage the junior members of his firm and gave them many opportunities and was always interested in their exploits I was associated with him at the Newcastle-on-Tyne Infirmary during the whole of my hospital service as registrar and as assistant surgeon and am grateful for the encouragement which I received Comparative affluence at that time enabled Rutherford to enjoy those country pursuits at which he was an adept and also allowed him time to take a very active interest in the old volunteers and in the Territorial Army At the outbreak of the late war he was A D M S for the Northumbrian Division of the Territorial Army and served in France in that capacity

'Colonel John,' as he was always known, was immensely attached to his own homeland and to the Newcastle-on-Tyne Infirmary, and when his health began to fail very seriously during the last year or two he returned to Newcastle where he died. He was buried in Benwell Churchyard not far from his old home on June 21, the funeral being attended by some of his old residents.

F. J. BAILDON, M.B., C.M.

Professor R. J. A. Berry writes:

During the now steadily accumulating burden of years in which it has been my weekly task to open the *British Medical Journal* and at least to glance through its pages I have from time to time been saddened by learning of the unexpected death of some old friend or former colleague. That the issue of June 25 should have accidentally opened at the very page recording the totally unexpected death of a life-long and greatly honoured friend, Dr. F. J. Baildon, was as melancholy a coincidence as it was an extraordinarily grievous shock. No man could have known Francis Baildon as long and as intimately as I did without realizing his lovable nature, his high ideals, his sincerity and loyalty as a friend, his scrupulous observance of the highest and best traditions of the profession he loved so well, and his abounding and abiding devotion to his and my Alma Mater—the University of Edinburgh.

Most men if they are honest, at least with themselves, would readily admit their indebtedness in life to some apparently trivial circumstance. Baildon was a very early and lasting influence in my life. He it was who advised me to abandon commerce for medicine, who assured some strangely doubting relatives of my ability to pass the then by no means difficult professional examinations which barred the aspirant's entrance to medicine, and who finally sent me to his own university. It was therefore with a special and peculiar pleasure that only a few months ago I accepted his invitation to attend, under his presidency, the dinner of the Manchester Edinburgh University Club, and to propose, under his kindly dictatorship, the toast of *Alma Mater—his and mine*.

Such were my first and last recollections of Francis Baildon. His friendship meant much to me. Never did we meet in London, whatever the business, without a dinner at his club on the sweet shady side of Pall Mall—and here did Baildon reveal his richly cultured mind, his extensive knowledge of life, love letters and art, and rarely was a man's after-dinner talk more worth the listening to. To him then a man to whom I owe more than to any other of his time and generation of those better things which alone make life the better worth living do I pay this last personal and affectionate tribute.

WILLIAM HUDSON, M.D., D.P.H.

Dr. William Hudson died at the age of 54 at his home in Bedlington, Northumberland, on June 19. He had been in failing health for over two years, but had continued to serve his patients up to within two months of his untimely death. He was born at Bedlington and received his early education at Morpeth Grammar School. His medical training was at Durham University College of Medicine, and he there proceeded to the degrees of M.B., B.S. Subsequently he obtained his M.D. and D.P.H. at the same school. He conducted a large panel and private practice in his native town, and also held the offices of medical officer of health, Poor Law medical officer, and public vaccinator. Dr. Hudson was a most energetic and conscientious practitioner, and was held in very high esteem by colleagues, patients, and friends. He was generous in disposition, and had a great capacity for making and retaining friendships. He was in great demand at all social functions in his neighbourhood, and his quick tongue and ready wit made him exceptionally popular. He had been a member of the British Medical Association since 1915, and had been chairman of the Blyth Division. He is survived by his wife and two sons, one of whom has already embarked on a medical career.

Dr. Wilbur C. Lowry (honorary secretary of the Blyth Division) sends the following appreciation. By Dr. Hudson's untimely death Blyth Division and the British Medical Association have lost a most influential and active member. He was never absent from any meeting of the Association in the district except on urgent business. He could be relied upon to contribute to the value of a scientific meeting by pointed questions or by information or criticism of a practical and pertinent nature. At a medico-political meeting his advice was of that broad-minded nature which enhanced the practitioner's status in the neighbourhood as an individual and as a member of the community, while at the social gatherings he was able to relax and enjoy a song or story to the full. Dr. Hudson was chairman of the Blyth Division on two occasions in recent years and until failing health compelled him to relax was a member of the Executive Committee. He was also a member of the Contract Practice Committee of the North of England Branch. He was a most energetic worker and was reported to have a store of odd jobs on hand on which he could draw if routine demands became slack. As a practitioner Dr. Hudson was cool, detached, and accurate in his observations as befits a scientific mind, shrewd and quick in his deductions which gave him the reputation of being good at diagnosis and as a result efficient and helpful in treatment. And in addition wherever one met him whether at the bedside of a patient, in general discussion or in public service one had the impression that the central object in all this concentration and energy was an individual patient who required treatment as a human being rather than as the medium of some interesting disease. Herein lay Dr. Hudson's success as a general practitioner and as a public administrator, and above all as an individual himself.

We regret to record the death of Dr. LEONARD CHARLES TALBOT DOBSON, latterly of Bournemouth and formerly of Holland Park Avenue, London, where he practised for some years with his son Dr. Eric Dobson, who died in February 1937. Leonard Dobson was born in London in 1864 and received his education at Cranleigh School and St. Bartholomew's Hospital. In 1885 he obtained the diplomas M.R.C.S. and L.S.A., and in the following year the L.R.C.P. when he graduated M.B. Lond., winning the gold medal and first-class honours in obstetrics, and proceeding M.D. in 1888. He had been a member of the British Medical Association for fifty-one years. One of his earliest posts was that of senior clinical assistant in the Throat Department at the West London Hospital; he was also electrical assistant at St. Bartholomew's Hospital from 1905 to 1910, and physician in charge of the electrotherapeutic department of the Freemasons' Hospital. His connexion with the West London Hospital was especially close for a long time, and he was an ex-president of the West London Medico-Chirurgical Society. He contributed to its journal articles on the injection of ether into the abdominal cavity after operations on septic cases, the use of radium in the treatment of lupus erythematosus, and the practical treatment of rheumatoid arthritis. He was a devoted Freemason, and travelled frequently from Bournemouth to attend meetings of the Cavendish Lodge, of which, like his son later, he was for a term W.M. His death is mourned by a large circle of friends and col-

Dr ROYAL SAMUEL COPELAND the only physician serving in the United States Senate, died at Washington on June 17, aged 69 A graduate in medicine of the University of Michigan he had been Director of the Flower Hospital and Health Commissioner for New York City

The following well-known foreign medical men have recently died Dr ALBERT PETERS emeritus professor of ophthalmology at Rostock University, aged 76, and Dr FREDERIC MOUISSET honorary physician to the Lyons hospitals corresponding member of the Academie de Medecine and officer of the Legion of Honour

Medical Notes in Parliament

The Royal Assent was given on June 23 to the Prevention and Treatment of Blindness (Scotland) Act, the Infanticide Act, and the Housing (Rural Workers) Amendment Act

In the House of Lords on June 28 the Criminal Procedure (Scotland) Bill, which has passed the House of Commons, was read a second time

The House of Commons this week completed the Committee stage of the Finance Bill

The Tuberculosis (Attested Herds) Scheme, 1938 was laid on the Table of the House on June 27, as was also the Annual Report on Alkali etc, Works

On June 28, in the House of Commons on the motion of Earl Winterton a return was ordered of licences granted under the Act of Parliament for experiments performed in 1937 and the registered places at which such experiments might be performed

In view of the volume and importance of the work connected with air raid precautions, Mr Geoffrey Lloyd, Parliamentary Under-Secretary of State for the Home Department, will devote practically the whole of his time to assisting the Home Secretary in the conduct of this branch of Home Office business Earl Winterton, Chancellor of the Duchy of Lancaster, will help the Home Secretary with his other work

Assessing Nutrition in School Children

During the debate on the Education Estimates on June 20 Mr KENNETH LINDSAY said there had been criticism of the clinical method recommended by the Board of Education for the assessment of the nutrition of school children There were admittedly inconsistencies between the returns for similar areas showing that different standards had been adopted by school medical officers They would all like to find some index which would accurately measure malnutrition It was not easy when dealing with 5 000 000 children to arrive at a proper method of assessment unless they proposed to give school meals to all on a contributory basis and if they did that they would have to be prepared for the appropriate expenditure He was sure no one would desire such an index more than the Advisory Committee on Nutrition yet they stated that the Board's own method which was being used at the moment was the most promising Various alternatives had been suggested which he as a layman had examined and which experts had long ago worked out but they all had serious limitations They did not apply the test which the Board required and the Board therefore was bound to conclude that the clinical method based on the opinion of an experienced physician was the best at present open to them He did not say they could not discover a better but at present it was the best available and if applied with skill and most of all with understanding it discovered the great majority of children whose nutrition was defective The returns for 1937 showed an increase in the percentage of children with excellent nutrition and a slight fall from 0 7 per cent to 0 6 per cent in the percentage with bad nutrition Deficiencies in diet still existed but there were other causes of subnormal nutrition such as heredity want of sleep bad environment and the effects of illness or infectious disease The past year had shown an increase from 248 to 264 in the number of local education authorities which provided free meals or milk for necessitous undernourished children

Paratyphoid Outbreak in the Isle of Lewis

On June 21 Mr WEDDERBURN replying to Mr M MacMillan said that an official report had been received by the Department of Health for Scotland regarding the outbreak of paratyphoid fever at Aignish, Isle of Lewis The investigation by the county medical authorities suggested that there was *no common source of infection* such as milk or water but indicated the possibility of the outbreak having arisen from the consumption by one of the patients of shell fish on the seashore The Department of Health were advised by the county medical officer on May 18 that there had been no fresh cases for three weeks and that the outbreak might be regarded as over

Mr MACMILLAN asked whether in view of the fact that about two months after the outbreak of the epidemic apparently no investigation had been undertaken and no report made the Under-Secretary would explain at what time the investigation was actually made

Mr WEDDERBURN The Department received from the medical officer on April 27 a report on the outbreak of paratyphoid The first case was brought to the notice of the assistant medical officer of health for Stornoway on April 16 and according to the latest report there had been no further cases since April 27

Legislation on Government's Milk Policy

Dr ELLIOT announced with regret on June 22 that it was impossible for legislation to be introduced and considered this session which would give effect to the Government's proposals on milk policy The Government hoped to introduce such legislation next session and as an interim measure would ask Parliament before the Summer Recess to extend the chief provisions of the Milk Acts until September 30 1939 An extension of Section 11 of the 1934 Act would enable Exchequer contributions to be made towards the cost of schemes for cheap milk for school children and for expectant and nursing mothers and children under school age To facilitate development of these schemes the Government would ask Parliament to provide £250 000 in addition to the £500 000 hitherto made available annually

The Milk (Extension and Amendment) Bill was presented in the House of Commons by Mr W S Morrison supported by Dr Elliot on June 24, and was read a first time Its purpose is to extend certain temporary provisions of the Milk Acts 1934 to 1937 to release milk marketing boards and the Government of Northern Ireland from certain obligations under those Acts and for purposes connected with the matters aforesaid

B M A's National Medical Service Proposals

Mr WALTER GREEN inquired on June 23 whether the Minister of Health had considered the report recently published by the British Medical Association outlining a scheme for a national health service, and whether he intended to take any action in the matter Dr ELLIOT said he was not yet in a position to indicate the attitude of the Government in the matter

Maintenance of Child Health

The Estimates for the Ministry of Labour were discussed in the House of Commons on June 24

Mr L S AMERY said the State should consider at any rate the minimum conditions of health for children The State contributed to the maintenance of a worker's children when he was dead Should it make some allowance for the sustenance of those children while he was alive if his wages

were inadequate to sustain them? The present flat rate wages system meant that the coming of each additional child was a hardship to the rest of the family and to itself. A survey of milk consumption in working-class households showed that the consumption per head fell in the larger families just where the need of it was greatest. The medical officer of a large industrial concern wrote that working class parents could have only one or two children if they were to afford an adequate diet for them. That was a major national catastrophe. All but the most improvident elements in the community were yielding to the inducement to restrict their families.

Dr HADEN GUEST said the Minister of Labour should call for a report on the physical condition of all families on unemployment assistance. A medical report on its condition should be rendered at least once a quarter so long as a family was receiving unemployment assistance. If the Minister received these reports he could not resist the argument for increasing the allowances to an amount adequate to give those children proper food. Dr Guest suggested that Parliament should abandon the effort to find the elusive standard of malnutrition and should say that if a child did not come up to a reasonable standard of health and nutrition it should be treated as undernourished. As an old consultant medical officer of the London County Council he assured the House that this would be an easier way technically. The Minister should consider a scheme to provide cheap milk in the home. In Ulster by administrative measures the price of milk had been reduced by about one-half compared with the price in this country. Why not have a five years plan to improve the nutrition of the children in this country?

Mr ERNEST BROWN said he desired to say a good deal about family allowances and the relation of human need to the wage structure but would do so on another occasion.

A motion to reduce the Ministry of Labour vote was rejected by 200 to 97.

Refugee German and Austrian Doctors

On June 25 Mr PARKER asked the Home Secretary whether refugees from Germany and Austria were allowed to practise as doctors or dentists in this country if suitably qualified and whether the Government in dealing with this question, consulted the principal professional organizations concerned.

Mr LLOYD said that permission had been given in a limited number of cases to refugee doctors and dentists from Germany to practise their profession after admission to the British *Medical* and *Dental Registers*. The question of admitting a further number of refugee doctors and dentists from Austria was under consideration. Before reaching a decision the Home Secretary proposed to consult representatives of the medical and dental professions in this country.

Constitution of Ophthalmic Benefit Committee

On June 28 Major MACNAMARA asked the Minister of Health why the Ophthalmic Benefit Approved Committee which was a statutory committee did not give their names to bona fide persons who had to appear before them or had to have dealings with them and if he would state the names of the Committee. Mr BERNAYS said that the Minister was not aware that the Ophthalmic Benefit Approved Committee had declined or would decline to give the names of the members to any persons with whom they had official relations. The Committee consisted of fourteen representatives of approved societies and an equal number of opticians with Sir Robert Young M.P. as chairman. There were also two official observers with no voting power one from the Ministry of Health and one from the Department of Health for Scotland.

Detention of Mental Defectives

In the House of Lords on June 27 the EARL OF MUNSTER moved the second reading of the Mental Deficiency Bill which has passed the House of Commons. He explained that the Bill adjusted a position of serious difficulty which had arisen from a recent judgment of the Court of Appeal in connexion with the Mental Deficiency Acts. The Board of Control which had to review the position of 7,000 patients each quarter had been advised that they could have a few days after the end of each quarter in which to make an order continuing the period of detention if they thought fit. The Court of Appeal, however expressed the opinion that there was clearly a slip in the drafting of the Mental Deficiency Act of 1913 which ought to be put right by legislation. As the law now stood there were thousands of persons of this kind against whom orders had been made in complete good faith after taking counsel's opinion and exercising every care and at the moment these orders were invalid. It was impossible as the law now stood for the Board of Control at quarter days to examine 6,000 documents and in addition look into certificates and reports to see if they were justified in continuing the orders. The Bill declared that the orders which had been made were valid and that an order made under the Act of 1913 might be continued by an order made by the Board of Control within one month after the date on which but for the Bill the order would be limited to expire. Probably the whole of the month would not be needed but it really was not in the interests of the deficients that the Board should not have time to consider the matter before making the necessary order.

The Bill was read a second time.

Sleeping Sickness Free Treatment in Necessitous Cases.—On June 21 Mr PARKER asked the Minister of Health whether in view of the difficulties and financial burden incurred by any family in which there was a case of sleeping sickness he would consider the provision of free treatment and care for persons suffering from this disease. Mr BERNAYS said no serious difficulty had been experienced in securing suitable accommodation for persons suffering from this disease and where the accommodation was provided by a local authority the authority had power to remit any charges if they were satisfied that the financial circumstances of the patient justified this course.

Malaria Units in British Colonies.—Mr MALCOLM MACDONALD stated on June 22 that in the southern United States full time malaria units consisting of a physician an engineer and an entomologist were now added to the staffs of State health departments and that similar steps had for some years past been taken in most British colonies.

Cleanliness of Milk Containers and Churns.—Answering Sir Joseph Leech on June 23 Dr ELLIOT said the Milk and Dairies Order 1926 required every vessel used for containing milk to be kept at all times in a state of thorough cleanliness and in particular to be washed after use and cleansed and scalded with boiling water or steam before it was used again. Dr Elliot further said that the Milk and Dairies Order 1926 placed a duty on the dealer to clean churns thoroughly before returning them to the producer and on the producer to cleanse and scald with boiling water or steam all vessels used by him for containing milk. Failure to carry out these duties was an offence punishable by fine. He was not satisfied that an attempt at closer definition would assist in the administration of the law.

Superannuation Scheme of Mental Hospital Officers.—Captain ELLISTON asked on June 23 whether as under the Asylum Officers Superannuation Act 1909 an officer dismissed for misconduct might at the discretion of the visiting committee be entitled to a refund of contributions where no refund could be sanctioned in the case of an officer who voluntarily resigned it was proposed to correct such anomaly by amending legislation. Dr ELLIOT in reply said the superannuation scheme applicable to asylum officers was very liberal the benefits being high and the contributions paid by them low. As at present advised he saw no reason to propose the suggested amendment.

Committee on Nursing Service.—The committee [illegible] with the nursing service is still engaged in the [illegible] evidence and Dr Elliot cannot say when [illegible] position to issue a report.

No 24

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended June 18, 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths, and of Deaths recorded under each infectious disease are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 11 principal towns in Eire (e) The 10 principal towns (9 in 1937) in Northern Ireland

A dash — denotes no cases a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929 37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	22	2	12	2	—	18	5	10	—	—		
Deaths		2	2				2	1				
Diphtheria	989	115	167	57	16	1,026	129	189	52	17	877	164
Deaths	29	3	4	—	—	35	6	8	—	—		
Dysentery	37	14	27		—	19	5	10		—		
Deaths				—	—				—	—		
Encephalitis lethargica, acute	3	—	—		—	4	—	—		—		
Deaths		1					—			nil		
Enteric (typhoid and paratyphoid) fever	15	5	1	3	3	24	2	13	5	1	30	—
Deaths	—	—	—	—	—	1	—	1	—	—		
Erysipelas			58	6	2			52	4	3		
Deaths		—					2					
Infective enteritis or diarrhoea under 2 years												
Deaths	48	20	16	7	1	41	10	14	3	2		
Measles			258		7*			126		1		
Deaths	14	5	4	1	1	11	—	1	2	—		
Ophthalmia neonatorum	106	3	31		—	139	21	34		2		
Deaths												
Pneumonia, influenzal §	787	49	2	1	18	574	42	5	1	3	796	52
Deaths (from Influenza)	21	2	1	1	1	7	1	1	1	1		
Pneumonia, primary			205	17				144	5			
Deaths		12		8	11		12		14	10		
Polio encephalitis, acute	—	—				4	—					
Deaths		—					—					
Poliomyelitis, acute	—	—	1		—	12	1	—		—		
Deaths		—					—					
Puerperal fever	2†	2	11	2	2	39	5	9	—	—		
Deaths		—					1‡					
Puerperal pyrexia	174	16	19		2	125	22	18		1		
Deaths												
Relapsing fever	—	—			—	—	—	—		—		
Deaths												
Scarlet fever	1 746	156	383	76	77	1,549	138	356	109	44	1,551	247
Deaths	5	—	—	—	2	—	—	1	2	—		
Small-pox	—	—	—		—	—	—	—		—		
Deaths	—	—		—	—		—		—	—		
Typhus fever	—	—	—	—	—	—	—	—	—	—		
Deaths				—	—				—	—		
Whooping cough			119		34			180		6		
Deaths	15	3	1	1	1	13	3	4	1	1		
Deaths (0-1 year)	310	59	80	24	15	304	45	63	22	19		
Infant mortality rate (per 1,000 live births)	51	48				50	37					
Deaths (excluding stillbirths)	4,172	736	560	181	134	3 768	724	549	176	126		
Annual death rate (per 1 000 persons living)	10 3	9 4	11 4	12 2	11 9	9 3	9 1	11 2	12 0	12 1		
Live births	7 685	1,393	974	393	246	7 165	1 336	979	425	252		
Annual rate per 1 000 persons living	18 9	17 7	19 8	26 5	21 8	17 7	16 8	20 0	29 0	24 1		
Stillbirths	297	55				310	46					
Rate per 1 000 total births (including stillborn)	37	38				41	33					

* 1 case in Belfast

† After October 1 1937 puerperal fever was made notifiable only in the administrative county of London

‡ Death from puerperal sepsis

§ Includes primary form in figures of England and Wales London (administrative county) and Northern Ireland

EPIDEMIOLOGICAL NOTES*

Enteric Fever

During the week under review there were 15 notifications of enteric fever in England and Wales compared with 10 in the previous week of these 5 (2) were in London—2 in Battersea and 1 each in Chelsea Kensington and Woolwich In Scotland there was 1 case of paratyphoid fever in Greenock

Diphtheria and Scarlet Fever

In England and Wales notifications of diphtheria fell in the week under review from 912 to 889 but in London there was an increase of 2—113 to 115 Notifications of diphtheria rose slightly in Scotland and in Eire there was a considerable increase in Northern Ireland however an appreciable drop was noted Deaths in the 126 Great Towns of England and Wales rose from 23 to 29 while in London they fell from 4 to 3 Of the 29 deaths from diphtheria recorded in the 126 Great Towns 3 (1) occurred in South Shields and 2 each in Liverpool (1) and Derby (0) There were 4 deaths from diphtheria in the 16 principal towns of Scotland during the week—3 (0) in Glasgow and 1 (0) in Paisley There was a slight rise in the notifications of scarlet fever in England and Wales during the week under review—1 746 compared with 1 743—and in London where 156 cases were recorded as against 149 in the previous week In England and Wales the figures were in excess of the median value for the last nine years but in London they were considerably less In the Great Towns of England and Wales 5 deaths from scarlet fever were recorded compared with 4 in the previous week there were no deaths from scarlet fever during the week in London Notifications in Scotland fell from 420 to 383 with no deaths while in Eire and Northern Ireland they rose from 74 to 76 and 66 to 77 respectively in Northern Ireland there were 2 deaths —both in Belfast

Primary and Influenzal Pneumonia

Notifications of primary and influenzal pneumonia in England and Wales fell from 801 to 787 during the week under review and in London from 63 to 49 both these figures were well below the median values for the last nine years for England and Wales and for London Fewer deaths from influenza were reported in England and Wales and London during the week also in Scotland where they fell from 2 to 1 In the West Riding (Yorks) 88 (121) cases were notified of which 27 (34) were in Sheffield 21 (38) in the Administrative County 13 (19) in Leeds 7 (10) in Bradford In Warwickshire 48 (49) cases were notified of which 29 (38) were in Birmingham Of the 167 (120) cases reported in Lancashire 42 each occurred in Liverpool (27) and Manchester (19) There were 21 deaths from influenza in the 126 Great Towns of England and Wales during the week of these 3 (4) were in Manchester and 2 each in London (6) Liverpool (1) Birmingham (2) and West Bromwich (1) In Scotland 205 cases of primary pneumonia were notified compared with 210 in the previous week there were only 2 cases of influenzal pneumonia—as against 11 in the previous week—and 1 death which occurred in Glasgow In Eire there were 17 cases of pneumonia and 8 deaths 6 (10) of which occurred in Dublin There were 11 (15) deaths from pneumonia in the ten principal towns of Northern Ireland during the week—10 (11) in Belfast and 1 (2) in Londonderry

Measles and Whooping-cough

In the 126 Great Towns there were 14 deaths from measles compared with 12 in the previous week of these 5 (0) were in London 3 (2) in Leeds 2 (1) in Bury and 1 each in Tottenham (2) Portsmouth (0) Kingston upon Hull (0) Liverpool (0) During the week 680 cases were reported from the L C C elementary schools compared with 660 in the previous week The average daily admissions to the L C C fever hospitals were 24 compared with 33 in the previous week and the number of cases of measles under treatment in these hospitals on Friday June 17 was 971 compared with 1 108 on June 10 On the same day there were under treatment in the L C C fever hospitals 984 (1 014) cases of diphtheria 776 (800) cases of scarlet fever 256 (268) cases of whooping-cough Notifications for the week ended June 18 in the eleven metropolitan boroughs in which measles is notifiable were 326 (458) distributed as follows Battersea 18 (39) Bermondsey 7 (15) Finsbury 27 (24) Fulham 30 (61) Greenwich 107 (67) Hampstead 17 (21) Lambeth 40 (32) St Pancras 25 (57) Shoreditch 6 (11) Southwark 12 (12) Stepney 13 (26) In Scotland 258 cases of measles were notified compared with 209 in the previous week the figures for Glasgow were 50 (76) Lanarkshire County 48 (67) Falkirk 41 (35) Dundee 30 (16) Kirkcaldy 3 (21) Edinburgh 16 (29) During the week there were seven deaths from measles in the 16 principal towns of Scotland of these 1 each occurred in Glasgow (1) Dundee (1) Kirkcaldy (0) Hamilton (0) In Eire there was 1 death from measles in Drogheda and in Northern Ireland there was 1 death (in Belfast)

In England and Wales there were 15 (11) deaths from whooping cough during the week of which 5 (0) occurred in London In Scotland 119 cases of whooping cough were notified compared with 56 in the previous week while there was 1 death—in Glasgow In Northern Ireland 7 (17) cases of whooping cough were recorded with 1 death—in Belfast

Cholera

During the week ended June 18 66 cases of cholera were reported at Shanghai and 2 cases with 1 death at Hong Kong In the same week in Burma 8 cases with 8 deaths were notified in Calcutta 7[illegible] cases with [illegible] deaths in Bombay (Presidency) 20 cases with 9 deaths in Delhi 10 cases with deaths So far there have been 17[illegible]0 deaths in the cholera epidemic in the United Provinces of India and [illegible]000 cases reported During the week under review 28 cases with 12 deaths were notified in Cawnpore in the same week in the Punjab there were 180 cases with 96 deaths in Sind 37 cases with 18 deaths and in the Central Provinces 1[illegible]9 cases with 6[illegible]9 deaths In French Indo China during the same week 225 cases of cholera were reported in Annam 519 cases in Tonkin [illegible] cases in Hanoi

Plague

During the week ended June 18 in Burma [illegible] cases of plague with 7 deaths were reported in British India during the same week 3 cases with 5 deaths were notified in Bombay (Presidency) and 2 cases with 1 death in Madras (Presidency) In Shanghai 66 cases were reported during the week under review compared with 84 in the previous week and in Hong Kong 2 cases with 1 death

Small-pox

During the week ended June 18 there were 2 cases of small pox with 8 deaths in Hong Kong In the same week in Burma 26 cases with 5 deaths were reported in Calcutta 45 cases with 40 deaths in Bombay (Presidency) 179 cases with [illegible] deaths in Madras (Presidency) 29 cases with 3 deaths in the Central Provinces 45 cases with 11 deaths in Sind [illegible] with 5 deaths In the same week in French Indo [illegible] cases of small pox were reported in Tonking and [illegible] Haiphong and Hanoi During the week ended [illegible] cases of small pox were notified in the U S A

Typhus

During the week ended [illegible] [illegible] cases of [illegible] were reported in [illegible] [illegible] and in the [illegible] 85 cases were reported [illegible] week ended [illegible] Morocco 170 cases [illegible] were notified [illegible] tributed as follows [illegible] cases 10 cases [illegible] 34 cases [illegible] 2 deaths [illegible] death Oran [illegible] death [illegible] During the [illegible] were [illegible] [illegible] [illegible]

in Algeria 105 (55) cases were reported, mainly distributed as follows Algiers (department) 29 cases Constantine (department) 57 cases and Southern Territories 7 cases In the week ended June 4 in Yugoslavia there were 8 cases of typhus with 1 death In the U S A during the week ended May 21 28 cases were reported Georgia 14 Texas 5 3 each in Alabama and Florida, 1 each in Connecticut Tennessee and Mississippi

Universities and Colleges

UNIVERSITY OF OXFORD

The Professor of Anatomy has recommended that the Welsh Memorial Prize, 1938 for the best set of drawings illustrative of human anatomy be awarded to J L Boldero (Oriel) The drawings submitted by Q J G Hobson (New College) deserve commendation

At a Congregation held on June 23 the following medical degrees were conferred

D M—D A Robertson, F Bicknell
B M—R G Blackledge, S R Gloyne, F G Ethiraj

In Convocation on June 21 a decree was passed accepting a bequest of £2 500 under the will of the late Miss Annie Harrison Symonds, daughter of a distinguished Oxford surgeon for the foundation of a "Horatio Symonds Studentship in Surgery" Mr H P Symonds died in 1923 aged 72

UNIVERSITY OF CAMBRIDGE

Dr R A McCance University Reader in Medicine, has been elected to a Fellowship at Sidney Sussex College

The following candidates have been approved at the examinations indicated

THIRD M B—*Part I (Surgery Midwifery and Gynaecology)* H St C C Addis, H W Adeney, R S Alexander J T H Butt, D L Caldwell, P L Candler, R I G Coupland A R P Ellis, J Evans, D Foskett G A Fowler, D Garcés, W Goulstone S G Hamilton, J P Henry C H Hoskyn, R D S Jack G B Leyton, A G McPherson, J A R Miles P L Mollison N E Monteuuis M E Moore, A W N Ottway, J S Pratt L M Reid D L Ridout, C J Rooke C C Shaw, I F Smith E W Somerville, T L Stoate N Vere Hodge J D Wade D O Walker W W Wiggins Davies, J M Wilkin, B J O Winfield M C Woodhouse, B M Wright, A Young J D Younghusband *Women* E F Graham Kerr, I T Hinde, M Lloyd, V L Lutwyche *Part II (Principles and Practice of Physic Pathology and Pharmacology)* H W Adeney, E W O Adkins, R S Alexander, C H Bartlett A H Baynes K G Bergin J R Bignall, R D D Birdwood A W Bone R I C Bradford R W W Brown, P L Candler, D M Carding R D Caton A G H Clay M J Clow E Cronin A J Daly T A W Edwards W B Evans D Foskett, A C F Green J E Hardwick Smith R D Hearn, J S Heller, J P Henry L R Holt G N Hunt T G S James R M Johnstone P A Knill Jones J Laughlin, R B Leech G B Leyton G M Little A G McPherson A G Marshall A H Masina, T K Maurice, J A R Miles W A M Miller P L Mollison W E D Moore, J Murray, R O Murray A P Norman, G Oppenheimer, W E Owens R Piper, J G B Platts, J S Pratt B H Price J S Prichard, S R Reynolds E L N Rhodes (Pathology and Pharmacology only) J H B Round J Smith P M Smythe H Stott A M Thomas A J Walton J M Wedderspoon H F Whalley, C F H Wiessner W W Wiggins Davies M M Wilson R R Wilson, B J O Winfield, J W Wood, P J Wormald G M Wright D E Yarrow M D Young J Yudkin

UNIVERSITY OF LONDON

At a meeting of the Senate held on June 22 Dr A M H Gray was appointed Deputy Vice Chancellor for 1938-9

J D Boyd M D M Sc Belf was appointed to the University Chair of Anatomy tenable at the London Hospital Medical College as from the beginning of next session

The degree of D Sc in Anatomy was conferred on Thomas Nicol M D Glas F R C S Ed professor of anatomy and dean of the Medical Faculty at King's College

UNIVERSITY OF WALES

WELSH NATIONAL SCHOOL OF MEDICINE

The following candidates for the degrees of M B Ch B have passed in the subjects indicated

OBSTETRICS AND GYNAECOLOGY—J M Bowen (with distinction) Mary W Bowen Marjorie E Bright G R Davies D B E Foster G E Hosking D G Jarman Elizabeth G Jenkins H V Jones C W D Lewis G O Lewis M Lewis Muir Llewelyn C J Morgan Josephine Parnell, Margaret Parry J L Rees Llury M Williams

SURGERY—D W Abse S W Beswick (with distinction), R T Bevan Alice Davies Miriam E Davies D G Evans D G Jarman W G Miles A H Millard Mary D Owen Lynda B Powell, W L L Rees Emily K Williams (with distinction) Mary Williams

PATHOLOGY AND BACTERIOLOGY—Beryl Badham (with distinction) Doreen M E Cranch C Davies Joan B Davies, G C D Evans I L R Evans, R G Griffiths, Helen C Hodges D D Howell D H Jenkins J V Jones Anne N M Llewhelin H L Lloyd, R M Marshall Brenda M Mead D G Morris R F Packer, Mary G Powell H V Roberts, D C Taylor C Thomas C E Thomas Margaret R Wade

UNIVERSITY OF GLASGOW

The honorary degree of LL D was conferred on Dr Matthew John Stewart, professor of pathology in the University of Leeds on Commemoration Day (June 22)

QUEEN'S UNIVERSITY BELFAST

At the summer graduation to be held on July 8 Sir Robert Johnstone Professor of Gynaecology in the University and President of the British Medical Association is to receive the degree of LL D *hon causa*

The following candidates have been approved at the examinations indicated

M D—*By Thesis* J R Armstrong S L W Erskine *J W McFetters *By Examination* *Muriel J L Frazer, L Herbert E J Sankeralli

M B, B Ch B A O—G F Adams H W C Bailie W S Braidwood J Browne J Bunting J O Y Cole, S D Corry, J I Cunningham W M Davidson D McL Deeny S Dobbin J Elliott June M Fullerton S Gibson W G Gibson J Gilmore J R Graham H G Greeves A G Hawthorn Rosetta Hill S A C Hunter S T Irwin W James W R Johnston J A Lawrence J Lazarus A T Linton J McCabe J K McCabe H A McCaffrey S H McCaughey, Florence M McClelland L McCrory, E McF McKee A Machaine, J McMaster V J McVeigh L F McWilliams †R Magill J Mahood J A Mark Agnes J A Maybin R P Maybin C W Mearns J McI Megaw R A Moorehead W M Morgan, J H O Connell J R Roulston H C Rutherford J P Savage W F Smyth Vera M Sterling J Taylor †W Townsley, F G C Walker H H Weir, R I Wilson R J Wright

*With high commendation †With second class honours

The Services

MEDICAL UNIT, U L O T C

The annual training of the Medical Unit of the University of London Officers Training Corps will take place from July 16 to July 30 at Shorncliffe Camp This unit contains 400 medical students drawn from all the teaching hospitals in London It is from these medical students undergoing training at present that the junior medical officers would be drawn in the event of mobilization The officer commanding the Medical Unit U L O T C is Colonel C Hope Carlton On Saturday July 23, Major General the Earl of Athlone K G Chancellor of the University, will inspect the contingent on parade and H R H Princess Alice, Countess of Athlone will present the challenge cups at the conclusion of the display

M R Caro (*Arch Derm Syph* Chicago, February, 1938) reports the effect in cases of pemphigus of oral administration of sulphanilamide, which was tried in view of the presence of a streptococcus in many such cases Two cases are reported one that of a Jew also suffering from an acute attack of diabetes who improved after the administration of 5 grains four times a day the other that of a Jewess who had suffered from pemphigus for one year and improved after one week's treatment with 10 grains of sulphanilamide followed by 15 grains of sodium bicarbonate six times a day in association with the application of 5 per cent tannic acid jelly locally

Medical News

Mr Aleck W Bourne obstetric surgeon to St Mary s Hospital and consulting obstetric surgeon to Queen Charlotte s Hospital has been summoned by the police on a charge of unlawfully using an instrument with intent to procure a miscarriage The operation was performed at St Mary s Hospital Mr Bourne s defence is being undertaken by the London and Counties Medical Protection Society A report will appear in our next issue

The new isolation block which has been added to the London Fever Hospital Liverpool Road Islington will be opened by H R H the Duke of Kent on July 14

Professor Chevalier Jackson of the University of Pennsylvania with the collaboration of other lecturers will hold a theoretical and practical course in broncho oesophagoscopy at the Hopital Necker in Paris from August 23 to September 1 The fee is 3 000 francs Further information can be obtained from Dr Jean Zha Hopital Necker rue de Sevres Paris

At the meeting of the Society for the Study of Inebriety to be held in the rooms of the Medical Society of London 11 Chandos Street Cavendish Square W on Tuesday July 12 at 4 p m Dr J D Rolleston will read a paper on *August Forel and his Campaign Against Alcoholism*

The Committee of the Privy Council for the Organization and Development of Agricultural Research has appointed the Earl of Radnor and Sir Joseph Barcroft to be members of the Agricultural Research Council with effect from July 1 when Lord Richard Cavendish and Sir Frederick Gowland Hopkins retire from membership

The Minister of Health and the Secretary of State for Scotland have appointed a Departmental Committee to consider whether the Rag Flock Acts and the regulations made under them are adequate to secure proper cleanliness of rag flock used for the manufacture of upholstery bedding etc and whether all or any of the provisions applicable to rag flock should be applied to other materials used in the manufacture of household furniture Lord Merthyr is chairman of the committee and the other members include Dr W S Clark and Dr G H Pearce All communications should be addressed to the secretary of the committee Mr N Hutchinson Ministry of Health Whitehall S W 1

The jubilee of the introduction of antirabic vaccination into Rumania was celebrated in Bucarest on May 6 at the institute named after Professor Victor Babes who was the pioneer in this respect and also the founder of the oldest medical society in Rumania there followed a conference on hydrophobia A jubilee volume will be issued containing the speeches and lectures delivered on this occasion The primary objective of the scientific part of the proceedings was to illuminate a problem which is veterinary as well as of human interest Homage was rendered in this connexion also to Professors Marinesco and Levaditi Excursions were made to the Danube delta and the Carpathians

The King has appointed Dr James Abbey Henderson to be a Member of the Executive Council of the Island of St Vincent

Professor Ferdinand Sauerbruch has succeeded Professor Erich Lexer as editor of *Neue Deutsche Chirurgie* and has been elected an honorary member of the German Surgical Society

Professor R Alexandri has been elected president and Professor C Frugoni vice president of the Royal Academy of Medicine of Rome

Dr Chevassu professor of surgical pathology in the Paris Faculty and Dr Peyton Rous of the Rockefeller Institute of New York have recently been elected members of the Academie de Medecine

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* unless the contrary be stated Correspondents who wish to have to be taken of their communications should authenticate them with their names no necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary B M A House Tavistock Square W C 1 on receipt of proofs Authors overseas should indicate on MSS if reprints are required as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary B M A House Tavistock Square W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are

EDITOR OF THE *BRITISH MEDICAL JOURNAL* Articulate Westcent London

SECRETARY *Medirecta Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24 61 Edinburgh) and of the Office of the Irish Free State Medical Union (I M A and B M A) 18 Kildare Street Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Recurrent Ulcers

BORDERER asks for suggestions for the treatment of a girl aged 20 who has suffered from mucous ulcers intermittently for the past four years At first there were only occasional buccal ulcers Now the ulcers appear sporadically and may be buccal anal or vaginal The Wassermann reaction is negative the girl has had all her teeth extracted and examination by a physician and by an oto rhino laryngologist has proved negative Treatment by means of diets with washes tonics and sulphanilamide has had no effect The patient is a domestic servant in a good household and apart from this trouble enjoys perfect health

Alopecia

D MICHAEL MALK (Johannesburg) writes In reply to R J C (*Journal* May 14 p 1084) I had an identical case of alopecia which responded with dramatic success to treatment with 1 gram thyroid tablets three times a day and

℞
Cruse cod liver oil } aa 1 drachm
Liq picis carb
Vaseline ad 1 oz.
To be rubbed into the scalp twice daily

I may add that all the usual remedies had been tried unsuccessfully over a period of several years After eight months of this treatment my patient has to visit his hairdresser twice a month

Operative Treatment of Ascites

Dr D P O BRIEN (Rockhampton Queensland) writes in reply to Perplexed (February 12 p 370) who inquired about the operative treatment of ascites In the *Medical Journal of Australia* of November 26 1927 (p 574) I published a description of an omentopexy different from previous omentopexies This operation unlike other remains efficient for life and leaves no bands round which bowel may strangulate The article describes one case treated in 1912 a man aged 70 It was one of thrombosis of the inferior vena cava and previous to operation tapping was required every three weeks After operation fluid disappeared from the abdomen and no more returned The patient was seen many times afterwards He had no abdominal troubles but secondary veins are to be seen at the back and both sides of the abdomen as well as on the legs reaching down to the ankles The veins now carry on the circulation instead of the inferior vena cava

Medizinische Klinik

Berlin vol 34 April 22, 1938

Importance of Chronic Injury —G Magnus
Recurrent Fractures of the Carpus —E Schneider
Anæsthesia in War Surgery —R Stich
Treatment of Lupus Vulgaris with Scarifications —W Kranz
Early Diagnosis of Urgent Abdominal Affections in Children —A Loeschke
*Appendicitis in Childhood —A Obermiedermayr
Aetiology and Surgical Treatment of Inflammatory Rectal Stenosis —H Wildegans.
Anti bacterial Properties of Animal and Human Secretions (Cutaneous Nasal Bronchial Oral and Mammary) and of Vegetable Excretions (Honey etc) —H Dold
Possibilities and Limitations of Internal Antiseptics —F H Hornig
Disinfection of the Field of Operation with Sepsotincture —J W Wirtz
Bone Fracture through Strain —W Baetzner
Present Problems of Collapse Therapy —W Fick

Appendicitis —Between 1928 and 1937 1 794 children were sent to the hospital with the diagnosis of appendicitis In 708 cases the diagnosis could not be confirmed on further observation Of the 1,086 cases operated on only 3 per cent showed normal appendices In 350 cases there was a diffuse purulent appendicular peritonitis, and in 104 cases a localized purulent peritonitis

Medizinische Welt

Berlin vol 12 April 23 1938

Feeding by the Jejunal Sound in Gastric Diseases —H Curschmann
Modern Views on Haemophilia —A Fonio (Conclusion)
Age and Operative Risk in Surgical Conditions —F Hollenbach
Pyloric Ulcer and Absence from Work —R Duesberg
Value of Nocturnal Insulin Injections —F Bertram
Therapy of Chronic Amoebiasis —R Boss

Munchener Medizinische Wochenschrift

Munich vol 85 April 22 1938

Organotropism —A Hagentorn
Spontaneous Cure Internal Treatment and Indications for Surgical Intervention in Lung Abscess —K Vosschulte and E Schwarzhoff
Empyema caused by Fusiform Bacteria —P O Süssmann and H Dicker
Estimation of the Sero reactions for Gonorrhoea —M Jentsch and W Zündel
Common Cold and Diseases produced by Cold —A Weber
*Length of Pregnancy and its Estimation —K J Anselmino and L Speitkamp

Pregnancy —No fewer than 15 000 cases were examined by Anselmino and Speitkamp The arithmetic mean of the length of pregnancy in these cases was 283 days Termination of pregnancy should be estimated as three months backwards plus ten days forward from the first day of the last period The length of the menstrual cycle should be borne in mind In cycles of 21 to 28 days pregnancy is shortened by seven days, in those of 28 to 35 days by an average of four days

Nature

London vol 141 April 23 1938

X Ray Study of Thymonucleic Acid —W T Astbury and F O Bell
Biological Synthesis of Amino acids from Atmospheric Nitrogen —A I Virtanen and T Laine
Most Probable Location of the Genes in the Chromonemata —D Kostoff
Tissue Sero reactions for Cancer —F Bergh O M Henriques and J Schousboe
Supplement Social Relation of Science

New England Journal of Medicine

Boston vol 218 April 21 1938

*Aetiology of Lung Abscess —L M Friedman
Lung Abscess and its Relation to Surgery of the Upper Respiratory Tract —H Morrison
General Practitioner and Thoracic Surgery —W E Burnett
Classification and Treatment of Arthritis —D S O Connor

Lung Abscess —Freedman analyses 276 cases of lung abscess occurring at the Boston City Hospital from 1926 to 1935 Medical conditions were responsible for 196 trauma for four and post operative conditions for seventy six Thus the general impression that post operative complications are the predominating factors in aetiology is not borne out by this investigation Tonsillectomy was responsible for a smaller proportion of cases than is generally realized and compared favourably with other post operative conditions and with pneumonia Nearly all the post tonsillectomy lung abscesses were in adults

Nordisk Medicinsk Tidskrift

Stockholm vol 15 April 23 1938

*Asepsis in Surgery especially from the Bacteriological Point of View —O Hartmann
Quantitative Chemical Determination of Carotinoids and Vitamin A in Serum —H Willstaedt and T K With

Asepsis —During the last decade there has been only a slight decrease in the comparatively frequent pyogenic infections of aseptic wounds and it would seem that infection from the hands of the surgeon the skin of the patient instruments sutures, and dressing materials is of relatively little significance The chief danger is droplet infection from the persons engaged in the operation The masks ordinarily used are of limited value The frequency of catgut infections is overestimated

Policlinico

Rome vol 45 April 18 1938 (Sez Prat)

Hydrotherapeutic Treatment of Biliary Calculus —S Pisani
Local Anæsthesia in the Surgery of the Uterus and Adnexa —U Bonoli
Case of Paget's Disease Treated with Calcium and Vitamins —A Terzani

Presse Medicale

Paris vol 46 April 23 1938

Experimental Study of Pain —René Leriche
Hallucinations in Patients with Amputated Limbs —Jean Lhermitte and Zvonimir Susic
Double Face piece for the Administration of Oxygen —L Dautrebande and Edm Dumoulin

Schweizerische Medizinische Wochenschrift

Basle vol 68 April 23 1938

*Boeck's Disease of the Lungs in Brother and Sister —M Dressler
Frequency Form and Position of the Tears in Detachments of the Retina at Zürich Eye Hospital from 1928 to 1936 —G Meyer
Parts Played by Thyroid and Parathyroid in the Production of Arteriosclerosis —H Handovsky
Simplification of the Counting of Blood Corpuscles by the Recording Counter and Metz's Counting Chamber —A Jordi

Boeck's Disease —Boeck's disease is a name preferable to Boeck's sarcoid, in that several organs are often affected There may be rarefaction in the small bones of the foot or hand better known in the later stage as lupus pernio pulmonary changes detected by x rays but not by ordinary physical examination ocular changes splenomegaly superficial enlargement of the lymph glands etc The radiographic findings (suggesting at first hilar gland tuberculosis) are illustrated in a brother and sister diagnosed as suffering from Boeck's disease general symptoms and auscultatory signs were absent and the skin was normal Possible relations of such cases with benign lymphogranulomatosis (of Schaumann) with chronic or healed miliary tubercle and with uveo parotid fever are discussed In similar cases without cutaneous sarcoid the diagnosis appears to have rested largely on histological demonstration in excised lymph glands or intrinsic nodules of epithelioid cell foci without necrosis or caseation and with few or no giant cells Tuberculosis is considered a probable aetiological factor

Science

New York vol 87 April 22 1938

New Locality for Trypanosoma Cruzi Chagas in California —S F Wood
Pyogenic Virus in the Rat —W H Woglom and J Warren
Inhibitory Effect of Oxidized Adrenaline —K Lovtrup
Molecular Weights of Antibodies —E A Kabat and K O Pedersen
Vitamin L —W Nakahara F Inukai and S Ueami

South African Medical Journal

Capetown vol 12 April 23 1938

History of Medicine—P W Laidler
Town-planning Rehousing and Slum-clearance—G H Gunn
Control in Dairies—A J Milne
Milk and the Public Health—F W P Cluver
Strongyloidosis in Natal—H S Osburn
Plague—J H Harvey Pirie and E Gri set
Infection of the Gall bladder by *Schistosoma haematobium*—H B Stein
Myelomatosis with Visceral Metastases in a Native of Southern Rhodesia—V Carlisle
New Chemotherapeutic Agent in Gonorrhoea—C K O Malley

Ulliron in Gonorrhoea—Ulliron is a prontosil derivative—4 benzol sulpho-dimethylamide This is a preliminary report of its use in twenty two cases of gonorrhoea The general impression of the author is that ulliron has a decidedly favourable influence in the majority of cases some failures were noted No serious signs of intoxication were seen even in patients who received over 20 grammes the maximum given in any case was 32 grammes

Ugeskrift for Laeger

Copenhagen vol 100 April 21 1938

Betaxin in the Polyneuritis due to Pregnancy and Other Causes—H Jessen
Colds in Children and Adults Experiences with Vaccine Treatment—V Friis Möller
A Case of Leptospirosis Canicolaris Closely Related to Weil's Disease—E Brammer C Borg Petersen and A Scheel Thomsen
Diagnostic Gland Puncture—A Nyfeldt

Colds—The author who is a police surgeon calculates that about two thirds of his police consultations are to deal with colds or their sequelae Though he still believes that rest in a warm bed is the best cure he has found that preventive treatment with an autogenous or standard vaccine is fairly effective to judge by his experience with about 600 patients

Wiener Klinische Wochenschrift

Vienna vol 51 April 22 1938

Treatment of Thrombopenic Purpura with Strophoran—H Fleischhacker
Urgency of Interference following Injuries of the Skull—R Mailitz
Modern Views on the Clotting of Blood and Styptics—F Schade
Marconitherapy in the Course of Poliomyelitis—A Cozzi
Reason for the Disappearance of Delusions in Paralytics Treated with Malaria—V Vujic
Physical and Bath Therapy in Disturbances of the Peripheral Arteries—A Mladek
Anacultatory Tuberculosis and the Diagnosis of Anacultatory Cavity—J Sorgo

Wiener Medizinische Wochenschrift

Vienna vol 88 April 23 1938

Conservative Treatment of Hypertrophy of the Prostate—R Ubeleis
Treatment of Tuberculosis of the Bladder—K Hutter
Epilepsies in Children—E Wessely
Indications for Operative Treatment of Senile Cataract—I Fischer
Intravaginal Ultraviolet Light and Heat Ray Therapy—H Kanner

Prostatic Hypertrophy—Daily injections of 5 to 20 (Collip) units of testicular hormone for thirty days and repetition after an interval of some weeks are recommended

SPECIAL JOURNALS

Acta Medica Scandinavica

Stockholm vol 94 February 1938

Porphyrin Metabolism in Blood Formation and Destruction—C D de Langen and W Grotepan
Investigation of the Value of the Landis Test of Capillary Permeability—J Bing
Complete Blood Analysis of Heparinized Blood—O Wilander
Endemic Occurrence of Scarlet Fever and Diphtheria—L Acher
Electrocardiogram in Pericarditis (Part II)—M Wintermitz and R Langendorf
Existence of Nerve Centres in the Infundibulum which Regulate the Function of the Thyroid Gland—M Cahane and T Cahane
Rupture of the Ascending Aorta in Two Cases of Aneurysma Dissecans—E Hultin and B E Wählander
Metachromasia and Complement—P Hedenius
Irreversible Allergic Reactions with Non-Bacterial Antigen—M Ehrstroem

Irreversible Allergic Reactions—Changes in glomerulonephritis periarteritis nodosa and rheumatic arthritis are types of allergic manifestations in which bacterial products form the antigen More recently non bacterial antigens such as pollen have been shown to cause similar conditions Two cases of foodstuff allergy are reported one developing joint lung and kidney symptoms with a raised temperature after shock and the other one with fruit allergy and a clinical picture resembling that of diffuse glomerulo nephritis

Acta Paediatrica

Upsala vol 20 March 31 1938

Epidemic of Acute Lymphocytic Meningitis—J H Magnusson
Diabetic Children on Free Diet—K Bojlen
Recurrence of Mono-articular or Bone Infection following Typhoid after Several Years—A Canelli
New Possibilities in the Treatment of Cardiac Complications of Diphtheria—G Goldscheider
Some Ascorbic Acid Saturation Tests on Infants—I Lautin
Acetone and Significance of Nocturnal Teeth Grinding—R Goldmann
Observations on Congenital Tuberculosis—B Harnne and N Geller edit

Nocturnal Teeth Grinding—Goldmann argues that although adenoids are frequently met with in children who grind their teeth at night they are not the only cause Infection of the sinuses through the ear tonsils or lower air passages requires investigation in all cases

Congenital Tuberculosis—Hamne and Gellerstedt describe in full a case of a premature child which died at two months with a typical primary intestinal tuberculosis It was never in contact with its mother who died of phthisis two days after parturition intra uterine infection was the only possible source

American Journal of Hygiene

Baltimore vol 27 March 1938

Studies of Strongyloides II—Homogonic and Heterogonic Progeny of the Single Homosexually Derived *S. ratti* Parasite—George L Grabham
Infection with *Trichomonas foetus* in Heifers—Justin Andrews and Fred W Miller
Survey of Intestinal Protozoa and Effect of Alkarsone on Cuban and Other Intestinal Protozoa of Man—Vernon Arm han and George C Mediary
Incidence and Distribution of *Ascaris lumbricoides Trichocephalus trichiurus Hymenolepis nana Enterobius vermicularis* and *Hymenolepis diminuta* in Seventy Counties in North Carolina—V E Keller W S Leather and J C Knox
Factors influencing the Development and Viability of the Eggs of *Cardiodectes medioplicatus*—George W Luttermoser
Cattle as Reservoir Hosts of *Schistosomatium cotium* in China (Preliminary Report II)—Kuang Wu
Infection of an Abnormal Host (Guinea pig) with *Schistosomatium douthitti*—Sheldon and C F Otto
Further Notes on the Experimental Infection of Dogs with *Dirofilaria immitis*—V N Moorthy and W C Sweet
Test of a Theory of the Origin of Precipitins—K W Goldzieher
Blood Proteins in Hookworm Anemia—J W Lambert
Experimental Study of Cowdria hepatica in the Rat and the Mouse—George W Luttermoser
Cultivation of *Furcocercum cochemerum* from Oncomelania Genetic Significance—Reed Hilton
Immunized Egg and Rabbit Serum—Reed Hilton and
Mosquito Transmission of Avian Malaria—Herman and *P cathemerium*—Clifton Mayne
Transmission to Below Freezing Temperature—Henry Beeuwkes and J Austin Archer

Downloaded from http://bmj.com/ on April 19, 2024 by guest. Protected by copyright.

*Further Studies on Intestinal Emphysema of Swine—D F Eveleth and H E Biester
Complete Revised Technique of Actinic Sunshine Analysis with Modifications for Freezing Weather and Near Meridian Exposures—Fred O Tonney and Paul P Somers
Strain of *Plasmodium relictum* from Doves and Pigeons Infective to Canaries and the Common Fowl—G Robert Coatney
Study of the Therapeutics and Prophylaxis of Malaria by Synthetic Drugs as Compared with Quinine—Malaria Commission of the League of Nations Health Organization
Culicoides of Siam with Descriptions of New Species—O R Causey
Influence of Young Red Cells on Infections of *Plasmodium cathemerium* in Birds—Robert Hegner and Redginal Hewitt
Development of *Dracunculus medinensis* Larvae in Cyclops—V N Moorthy
Forced Calcification with Parathormone in Experimental Trichina (*Trichinella spiralis*) Infections—Th A Brand G F Otto and Evelyn Abrams
Susceptibility of Young Red Cells to the Merozoites of Avian Plasmodia—R Hegner and Lydia Eskridge

Aldarsone and Human Intestinal Protozoa—Aldarsone is a new pentavalent arsenical—3-amino 4 hydroxy-phenyl arsonic acid It is tolerated by rats dogs, and rabbits, and was tried out in thirty cases of intestinal infections amongst 1 075 inmates of a training school Given in capsules it was effective in eliminating from 33 per cent. to 100 per cent of different (named) protozoal infections in man

Helminths in North Carolina—This is an elaborate analysis of the results of examining 37 346 specimens of faeces, of which 9 5 per cent contained eggs of *Ascaris lumbricoides* with lesser proportions of other helminths The incidence of infestation was three times heavier in negroes (22 5 per cent) than in whites (7 0 per cent)

Bacteriophage—Two rival theories concerning the nature of bacteriophage are (1) that it is a living virus which invades the bacterial cell and (2) that it is a non living substance derived from bacterial metabolism The result of experiments on house flies does not support the theory that bacteriophage is produced by the interaction of host and bacteria

Intestinal Emphysema of Swine—A gaseous distension of the lymphatics of the intestinal wall and mesentery of the pig is produced by a diet deficient in the vitamin B complex, 50 per cent skim milk powder in the mixed ration prevents the occurrence of this condition 20 per cent is ineffective

American Journal of Pathology

Boston vol 14 March 1938

*Nesidioblastoma The Islet of the Pancreas—G I Laidlaw
Developmental Defects at the Foramen Ovale—B M Patten
Effect of Syphilis on Local Tuberculous Lesions in Rabbits—J D Aronson and D R Mertinze
Spontaneous Cardiovascular Disease in the Rat I Lesions of the Heart S L Wilens and E E Sproul
Spontaneous Cardiovascular Disease in the Rat II Lesions of the Vascular System—S L Wilens and S S Sproul
Transmission of Chloroleukaemia of Mice—J W Hall and F J Knocke
Distribution of Material following Intracerebral Inoculation into *Macacus rhesus* Monkeys and its Possible Influence upon the *Results of Neutralization* Tests in Experimental Poliomyelitis—M Schaffer and R S Muckenfuss
Modification of Masson Trichrome Technique for Routine Laboratory Purposes—J Goldner
Useful Methods for Routine Examination of Brain Tumours—N C Foot

Nesidioblastoma—This paper is a histological description of nine islet cell pancreatic tumours successfully removed for the relief of hypoglycaemia Since the only existing specific name for these tumours is cumbersome the author proposes the term nesidioblastoma from the Greek νησίδιον—an islet

Annals of Otology, Rhinology and Laryngology

St Louis vol 47 March 1938

Suppuration in the Petrous Pyramid—J R Lindsay
Width of the Basilar Membrane in Man—E G Wever
Deep Infections of the Neck—H B Orton
Mumps Deafness as an Indicator of Disturbances in the Water Metabolism Capillary Function and Body Condition—S H Maygrad and D Dederding
Peripheral Endings of the Cochlear Nerve—W P Covell
Injuries of the Face from an Experimental and Clinical Standpoint—W Hugh Jones
Lateral Sinus Thrombosis Study of Eighty eight Cases with Ten of Venous Thrombosis found at 12 500 Consecutive Necropsies—C W Irish
Management and Treatment of Otogenic Meningitis—S J Kopetzky
*Review of 303 Cases of Cholesteatoma—E M Holmes
Problems in Diagnosis and Treatment of Hyperplastic Sinusitis and Allergy—E R Faulkner
Masker for Bone-conduction Tests—J H Hulka
Experiments on the Conduction of Sound in the Ear—H G Kobrak
Clinical Availability of the Ostium Maxillare—H C Rosenberger
Contour Reconstruction after External Frontal Sinus Operation—G B O Connor
Otomycosis Remarks on its Prevalence Symptomatology and Treatment—W D Gill
Comparative Anatomy of the Tongue—G McGregor
Is the Hearing Aid the Problem of the Otologist or the Layman?—M S Ersner
Blood Cell Response to Sulphanilamide Therapy—J A Bigler
New Operation for the Correction of External Deformities of the Lower End of the Nose—J A Timerin
Roentgenogram as an Aid in the Diagnosis of Surgical Mastoiditis Comparison of Operative and Roentgen Findings in One Hundred Cases of Mastoiditis—D H Bromwell and I J Hauser
Inner Ear Deafness from Tetanus Antitoxin Injection—P B MacCready
Cerebrospinal Rhinorrhoea with Autopsy Report—J J Shea
Tuberculosis of the Petrous Pyramid—L Kleinfeld and G Y Smith

Basilar Membrane—Previous studies of the width of the basilar membrane had shown a progressive increase in the width from the base to the apex of the cochlea Helmholtz's resonance theory is based on this assumption Wever has reinvestigated this point in serial sections of twenty five human cochleae He finds that the increase in width from base to apex shows wide variations The maximum width is not at the apex but about a half turn before the apical end after which there is a rapid decrease in width The maximum width measurements were 498 microns, the minimum 80 microns

Cholesteatoma—In a series of 303 cases of cholesteatoma Holmes found only one case which was definitely proved to be a primary cholesteatoma Primary cholesteatoma is probably of congenital origin secondary cholesteatoma is a complication of chronic middle ear suppuration and is formed by an ingrowth of epithelium from the deeper part of the meatus Some otologists believe that cholesteatoma is primary in many cases of chronic middle ear suppuration especially if the ear discharge has lasted a comparatively short time—that is not long enough to develop by an ingrowth of epithelium Or the perforation may be in such a position that ingrowth of epithelium is unlikely The author favours the view that primary cholesteatoma is present much more frequently than is generally believed

Arbeiten aus dem Reichsgesundheitsamte

Berlin vol 71 February 1938

Knowledge and Skill of Midwives from a Statistical Aspect—Results of American Midwifery Examinations
Guides to the New Annual Statistics of the Midwifery Service in the German Empire
Suicide and Attempted Suicide in Bulgaria—Toma Stefanoff
Statistical Methods as Aids in Formulating Questionaries for Capability Testing
Explanation of the New Questionary of the Annual Health Report Part B (Social Hygiene) according to the Revision of 1936—Kurt Pohlen

Statistical Summaries

(*a*) Statistical Problems of Influenza and Pneumonia
(*b*) The Seasonal Epidemiological Position of Influenza Mortality in the German Large Towns at the End of the Year 1936
(*c*) Incidence of Influenza and Pneumonia amongst Persons in the National Health Insurance Scheme at the End of 1936
(*d*) Mortality of Primary Pneumonia in Various Child Age Groups
(*e*) Sex Proportion in Births after the Great War—W T Russell
(*f*) Development of Sports Standards in Switzerland
(*g*) Frequency of Breast feeding in the District of Holbaek (Denmark)
(*h*) Stillbirth Frequency according to Age of Mother (Denmark)
(*i*) Suicide and Attempted Suicide in Poland

The Significance of the Percentages in Vital Statistics (Denmark)

Basic Problem of Population Balance in Age Groups

Statistics of Frequency and Period of Breast-feeding in Infant Welfare with Guides to the Reply to the Questions on the Frequency in the Annual Health Reports.—Kurt Pohlen

Genetic and Co-ordinative Relationships in Population Statistics On Calculating Mortality and Marital Figures

Problem of Assessing Fatality in Chronic Diseases.—Kurt Pohlen

Child-birth and Maternal Mortality in the New Midwifery Statistics for the German Empire (Results from the Midwives Day-books for the Year 1936)

Organization of Combined Clinical-Anatomical Mortality Statistics in the German Empire

On the Frequency of Syphilis and Syphilitic Sequelae as found Clinically and Pathologically

Danish Mortality Statistics

Stillbirths and Early Death Cases in the New Midwifery Statistics for the German Empire (Results from the Midwives Day-books for the Year 1936)

Archiv für Dermatologie und Syphilis

Berlin vol. 176 April 20 1938

Pathergometric Researches on the Skin by v. Groer's Method in Gonorrhoea.—C. Montag

Heterogenesis of Syringoma.—J. Wendlberger

Results of Abortive Two-Stage Treatment of Syphilis.—R. Brandt and A. Bleier

*Bowen's Disease and Keratoma Senile.—W. L. L. Carol, E. L. J. Mouwen, C. Postma and J. R. Prakken

Rare Injuries of the Skin by Mustard Gas in Physicians and Nurses.—T. Preminger

The Frequency of Herpes Zoster.—J. Lang

*Hydroa Vacciniforms.—J. Wendlberger and A. Klein

Method of Clearly Demonstrating Langerhans Cells in the Human Epidermis and in the Foot of the Guinea-pig and Cat.—F. Schaaf

Cutaneous Symptoms in Myxoedema and Graves's Disease.—H. Schuermann

Deep Blastomycosis of the Skin.—G. Gohring

Culturing Together with a Single Microscopical Examination in Detection of Gonorrhoea in the Female.—C. Erler and J. Schmitz

Human Infection by Foot and Mouth Disease.—W. Richter

*Clinical and Pathological Features of Fox-Fordyce Disease.—S. Tappeiner

Arsenical Poisoning of the Skin as an Occupational Disease in Workers in Vineyards.—A. Matras

Bowen's Disease and Keratoma Senile.—Histological investigation in four cases of Bowen's disease showed in two an infiltrative growth in the deep direction which was absent in nine cases of verrucae seniles and five of keratomata. It is concluded that Bowen's disease is carcinomatous from the beginning (carcinosis cutis multiformis verrucosa in Carol's terminology). Darier's teaching concerning dyskeratoses in general is critically reviewed and the term considered inapplicable to Bowen's disease, Paget's disease or molluscum contagiosum although appropriate for Darier's disease—psorospermosis follicularis.

Hydroa Vacciniformis.—The parts played in pathogenesis by photosensitivity, porphyrinuria and impaired hepatic metabolism are discussed. A case is described in which treatment by insulin and dextrose as well as liver extract was successful. From the urine uroporphyrin was isolated as the methyl ester. Vesicles could not be induced by experimental irradiations but *subcutaneous injection of the patient's urine induced* protosensibility in white mice.

Fox-Fordyce disease.—Tappeiner reviews the conception of Schiefferdecker and others of the apocrine glands as atavistic organs (allied to the scent organs of lower mammals and *like them showing some variation with sexual develop*ments and cycles) represented in the human subject in the axilla, nipple, prepuce and labia minora and perhaps in the lips, eyelids and auditory canals. Three cases of Fox-Fordyce disease in females are described, in one the nipples and in one the labia majora were affected and in all a menstrual variation was noted. Deep x-ray therapy is advocated.

Archiv für Ophthalmologie

Berlin vol. 138 February 1938

Pictures of Albrecht von Graefe.—R. Greef

Hereditary Choroido-retinal Disease.—M. Schmidt-Bleibtreu

Phenomena of Colour Vision after Images.—T. Kikuchi and T. Sasaki

Investigations on the Lens, Blood and Aqueous of Patients Feeding on Gelatine.—T. Sasaki

Follicular Naevus in the Upper Lid in a Case of Tuberous Sclerosis.—Pusch[illegible]er and J. Werdelbe[illegible]ger

Cellulo-chemical Observations on the Different Parts of the Eye with Reference to the Dark- and Light-adapted Pe[illegible].—Y. Sugita and S. Sugita

Variations in the Histo-chemical Reactions of Different Parts of the Le[illegible].—Y. Sugita and S. Sugita

Action of Vitamin C on White Extract of Cultivated Tissues.—P. [illegible]

Further Contributions to the Histology of the Sclerotic Gu[illegible]d.—L. Salzmann

Fungi of the Healthy and the Diseased Eye.—A. Fa[illegible]

Mechanical Functional Structures of the Eye.—W. Kuhnt

Pathological and Therapeutic Actions of Penetrating Ultra-violet Rays on the Eye.—H. Wagner

Hereditary Choroido-retinal Disease.—The literature on choroidoraemia is reviewed and attention drawn to two cases of this type in a family studied over four generations in which other members were affected with a dissimilar lesion of the pepper-and-salt type. The question whether these appearances are different stages of the same [illegible] or distinct entities is discussed. The evidence suggests that they are different entities.

Archives des Maladies de l'Appareil Digestif et des Maladies de la Nutrition

Paris vol. 28 March 1938

Diets Poor in Fats and Rich in Carbohydrates in the Treatment of Diabetes.—M. Labbé

Lamblia Infection and Liver Disease.—M. Gaehtgens

Studies of the Metabolism of Vitamin C. Part I. Ascorbic Acid Content of the Fasting Urine.—M. Vanthey

Choledochoscopy.—Duodeno-transhepatic Feeding.—A. J. Brocq and S. C. Velasco

Diabetic Diet.—A diet rich in carbohydrates and poor in fats in general did not improve the condition of diabetic patients. On the contrary it augmented the glycosuria and raised the hyperglycaemia. Thus the findings of Porge and Adlesberg could not be confirmed.

Beitrage zur Klinik der Tuberkulose

Berlin vol. 91 March 1938

Atelectasis in Tuberculosis of the Hilar Gland.—R. W. Mayer

Congenital Heart Disease and Bilateral Pneumothorax.—H. H. Esbern

Persistent and Recurrent Form of Spontaneous Pneumothorax.—L. R. Krumbhaar

Time Factor in Tuberculosis.—T. Zivanovic

Monocyte-Lymphocyte Ratio in Tuberculosis with Special Reference to its Value in Comparison with the Sedimentation Blood Picture and the Blood Sedimentation Rate.—Ruth Vorwerk

Experimental Contribution to the Gold Therapy of Tuberculosis. II. The Influence of Gold Therapy on the Opsonin Content of the Serum in Animals.—J. Leitner

Case of Late Primary Tuberculous Infection.—A. Wernet-Hasse

Congenital Heart Disease and Pneumothorax.—In spite of definite clinically and electrocardiographically demonstrable weakness of the right heart bilateral pneumothorax treatment for phthisis was successfully carried out.

Brain

London vol. 61 March 1938

Increased Spontaneous Activity produced in Rabbits by Ex[illegible]—C. P. Richter

Spontaneous Haemorrhage Shock Reflex[illegible] Fever in [illegible]—In[illegible] Angioma and Subarachnoid Sp[illegible]—C. C. Rabat[illegible]

Cases.—J. C. Rabat[illegible]

[illegible] Disease—A. J. [illegible]

The Neurological Mechanism[illegible]—L. A. Mayer

Origin of the Fasciculi Proprii of the Cerebral Cortex in Man and Other Mammals (Anthropoid Ape, Dog and Opossum).—T. H. Bo[illegible]

*Vascular Lesions in the Brain Stem and Occipital Lobe occurring in Association with Brain Tumours—M T Moore and K Stern
*Observations on the Pathways transmitting the Sensation of Taste—H G Schwartz and G Weddell
Case of Primary Generalized Amyloid Disease with Involvement of the Nerves—S de Navasquez and H A Treble

Normal Disks in Chiasmal Lesions—A study has been made of the site of tumours producing chiasmal lesions in relation to the occurrence of primary optic atrophy. In six cases in which the optic disks were normal the optic nerves ran straight from the optic foramen to the chiasma. Five of these tumours were retro chiasmal and only one was pre chiasmal. It is concluded that pallor of the optic disks is produced by displacement or stretching of the optic nerves and this is more likely to result from a pre chiasmal than a retro chiasmal lesion.

Vascular Lesions and Brain Tumours—Fourteen cases of vascular lesions of the occipital lobe and brain stem occurring in association with distinct space occupying lesions are described clinically and pathologically. In five ischaemic or haemorrhagic infarction was found in the occipital lobe and in ten cases brain stem haemorrhage and in one case brain-stem softening. The brain stem haemorrhages were from the arteries and histologically resembled the haemorrhages in arterial hypertension, they are considered to have a similar origin. Arterial congestion in the basilar artery causes a predisposition to haemorrhages which are finally brought about by a reflex rise in the systemic blood pressure.

Pathways for Taste—As a result of the study of lesions of the trigeminal facial, chorda tympani and superficial petrosal nerves following trigeminal neuralgia and ear operations the authors conclude that in certain individuals taste sensation from the anterior part of the tongue is conducted to the facial nerve via the distal part of the chorda tympani, the optic ganglion, and the great superficial petrosal nerves.

British Journal of Urology

London vol 10 March 1938

*Malignant Disease of the Testicle with Special Reference to Neoplasms of the Undescended Organ—G Gordon Taylor and A S Fell
Current Urinary Stone Wave in Central Europe—W Grossmann
Two Cases of Hydatid Disease at the Site of the Prostate—N K B Kimball
Remarkable Accident with a Filiform Guide—K H Watkins

Malignant Testicles—This well illustrated article based on a hundred cases, classifies testicular growths as teratomata (average age 28) and seminomata (average age 40). Clinical varieties are the insidious relentless type, the hurricane type the acute type simulating orchitis, the slow latent-period type and that in which metastases dominate the picture causing pulmonary or gastro intestinal symptoms pain in the back glandular enlargement in neck, axilla, etc. The Aschheim-Zondek reaction helps to distinguish neoplasms from other testicular swellings, to determine the response to radiation therapy and to detect early recurrences (the urinary prolan increasing). Ferguson's quantitative modification of the test seems necessary, since one third of his cases secreted less than 2 000 units per litre an amount which the qualitative test is not delicate enough to detect. The article further deals with diagnosis malignant disease of the retained testicle and the results of its treatment malignancy supervening after orchidopexy or abdominal replacement malignant disease of the epididymis prognosis (much worse with teratomata than with seminomata) and treatment orchidectomy and prophylactic radiotherapy being preferred to the radical operation. Of twenty-four cases so treated 37 5 per cent are alive after four years (50 per cent in the case of seminomata).

Cancer

Brussels vol 13 1936 7

Lipocytomata and Lipocytoses (Lipoblastomata and Lipoblastoses) A Contribution to the Study of Deep Liposarcomata—N Goormaghtigh I Vanderlinden and R De Puysseleyr
*Internal Secretion and Heredity as Factors in the Origin of Cancer—L Loeb
Influence of Protein Intoxication on the Excretion and Properties of Blood Serum—R Reding
Summation of Endogenous Factors in Cancer Patients—F Sinek and L Springer
Experimental Production of Malignant Tumours of the Liver in White Rats by o amidoazotoluol—S Zilberszak

Lipocytomata—The term is applied to deeply situated liposarcomata which are characterized by a tendency to recurrence and which, though less benign than subcutaneous lipomata are not rapidly fatal like other sarcomata. The clinical and pathological features are fully described on the basis of four personal cases and a review of the literature to which 119 references are given.

Hormones and Heredity—While containing no new facts this paper provides a good summary of Loeb's views on the causation of cancer.

Journal of Infectious Diseases

Chicago vol 62 March April 1938

Attenuation and Toxin Production of the Diphtheria Bacillus VI Ultrafiltration of Toxin produced in Peptone-digest Mediums—Augustus Wadsworth Mary W Wheeler and Laura Mendez
*Linkage of Phage induced Characters in *E typhi*—Jeanette D Taranik Jane E Snow
Variation in the Haemolytic Streptococci—M H Dawson G L Hobby and Miriam Olmstead
*Comparison of *Bacterium necrophorum* from Ulcerative Colitis in Man with Strains isolated from Animals—G M Dack L R Dragstedt Robert Johnson and N B McCulloch
Studies of Anaerobic Streptococci from Pulmonary Abscesses—Charles Weiss and Dora G Mercado
Haemolytic Streptococci of Human Faeces—F R Smith and J M Sherman
*Haemolytic Streptococci of Milk—J M Sherman and C F Niven
Studies on Bacterial Nutrition The Possible Role of Inorganic Salts and of Alterations in the Culture Medium in providing Growth promoting Effects—Stewart A Koser R D Finkle A Dorfman and Felix Saunders
Studies on Bacterial Nutrition A Comparative Study of the Growth promoting Properties of Various Substances—Stewart A Koser R D Finkle A Dorfman Mary V Gordon and Felix Saunders
Attempt to Assay the Enterotoxic Substance produced by Staphylococci by Parenteral Injection of Monkeys and Kittens—Ellen Davison G M Dack and W E Cary

Linkage of Phage induced Characters in E typhi—The three environmentally induced characters—namely phage resistance haemolytic power, and agglutinability—are apparently independent variables in *E typhi* cultures with no suggestion of physiological immuno chemical or genetic linkage. If the phage resistant variant is considered as a phage immune bacillus this may have a bearing on current theories of heterophile antigens.

B necrophorum—This is a study undertaken to determine whether one or two species of bacteria are associated with necrosis of the mucous membrane in chronic ulcerative colitis. Nineteen strains were isolated. No clear-cut method for separating *B fundiliforme* and *B necrophorum* was discovered. The authors recommend the retention of the latter name.

Haemolytic Streptococci in Milk—Of 245 samples of pasteurized milk 8 5 per cent showed haemolytic streptococci the common types being *Str durans* and *Str zymogenes*. Of sixty eight samples of raw milk eighteen showed streptococci the prevailing types being *Str mastitidis* and the animal pyogenes.

Journal of Tropical Medicine and Hygiene

London vol 41 April 1 1938

Advantages in the Use of Plasma rather than Serum for Certain Immunological Procedures with Special Reference to its Use in Tests for Syphilis—K L Burdon
On a New Species of the Genus Microsporum *Microsporum stillianii* Benedek 1937 N S I with Special Consideration of the Phenomenon of Dissociation in Fungi Imperfecti—Tibor Benedek
Unsuccessful Attempts at curing Schistosomiasis by Oral Tablets—F G Cawston

Medical Clinics of North America

Philadelphia vol 22 March 1938

Symposium on Allergy
Allergy as a Factor in General Medicine—R L Haden
Investigation of the Patient with Allergy—C R K Johnston
Allergy as a Factor in Oto-laryngology—W L Deeton
Ocular Manifestations of Allergy—A D Ruedemann
Allergy as a Factor in Disturbances of the Gastro-intestinal Tract—E V Collins and C P Pritchett
Allergic Bronchitis—H Scott Van Ordstrand and A C Ernstene
Allergy as a Factor in Headache—C L Hartsock and F J McGurl
Atopic Dermatitis—E W Netherton
Bronchial Asthma Causes and Treatment—R S Knowlton
Hay Fever—C R K Johnston
Contact Dermatitis—G H Curtis
Diagnosis of Dyspepsia of Extra gastro-intestinal Origin—C L Hartsock
Chronic Dyspepsia Common Causes and Approach to Treatment—E V Collins
X Ray Examination of the Colon—J C Root
Recent Chemotherapeutic Advances in Treatment of Infections of the Urinary Tract—C C Higgins and F C Schlumberger
Diagnosis and Treatment of Peripheral Vascular Disease—J Tucker
Clinical Significance of Precordial Pain—A C Ernstene
Diagnosis and Treatment of Cerebral Vascular Accidents in Arteriosclerosis—R H McDonald
Indications for the Use of Iodine in the Treatment of Hyperthyroidism—G Crile jun
Medical Treatment of Flaccid Paralysis—W J Zeiter
Diagnosis and Treatment of Hypo-ovarianism—E P McCullagh
Treatment of Sciatica—J I Kendrick
Some Observations on Toxic Psychoses—J Tucker

Allergy.—In the series of articles comprising this symposium the phenomenon of allergy in medicine in general is considered. After indicating the importance of this phenomenon the investigation of an allergic case is outlined and then the manifestations of allergy in oto-laryngology and ophthalmology. Gastro-intestinal disturbances bronchitis headache atopic dermatitis asthma hay fever and contact dermatitis are dealt with by recognized authorities. The details of treatment are precise and lucid.

Radiology of the Colon.—An account with illustrations of the more common abnormalities encountered in the examination of the colon by x rays. The technique and value of the double contrast x ray are described. By injecting air after evacuation of the barium enema the coating of barium which remains adherent to the ulcerated mucosa is rendered apparent and the diagnosis of the causative lesion made possible before the ulceration has progressed to produce a filling defect in the wall of the colon.

Public Health Reports

Washington vol 53 April 22 1938

Frequency of Surgical Procedures among 9 000 Families based on Nation-wide Periodic Canvasses 1928-31—Selwyn D Collins
Maternal Mortality Rates by States 1926-36 and Deaths and Death Rates from all Puerperal Causes 1933-6
Public Health Service Publications—*A list of publications issued during the period July to December 1937*
Statistical Matter Weekly list of deaths including data of claims etc from insurance companies prevalence of certain communicable diseases in the United States Foreign and Insular

Frequency of Surgical Procedures.—Records of all surgical operations—*minor and major—were obtained from 8 758* white families in 130 localities in eighteen States for a period of twelve consecutive months and the results were classified. The general rate worked out at 65 per 1 000 somewhat higher for females than for males and highest in the age periods 5–9 years and 30–34 years. Tonsillectomy constituted nearly *one third of all operations* followed by fractures appendicectomy and removal of benign tumours in that order. The frequency increased with the income level and was higher in cities than in rural districts. Of all operations 61 per cent were done in hospital the rest in the office or clinic or at home. The duration of invalidity is discussed at length.

Revue de la Tuberculose

Paris vol 4 March 10

Thoracoscopic Appearances (Contribution to the Study of the Pathogenesis of Pleurisies associated with Pneumothorax)—D Michetti
Skiagram and the Thoracoscope Picture in a Case of Alternating Spontaneous Pneumothorax—A Brekind
Radiological Control on Admission to Several Large Communities—A Feldmann and A Albert
Fall in the Tuberculosis Mortality—D K Rykels
Retarding Action of the Ethyl Esters and of Certain Saturated Fatty Acids and particularly of Ethyl Palmitate on the Evolution of Experimental Tuberculosis—L Negre A Berthelot and J Brees
Selective Reduction by a Thoracoplasty following Pneumoscopy Examination Marking-out of the Adhesion by Tattooing the Zone of Pleural Insertion—R Monod and Leloup
Contribution to Study of Grave Forms of Tuberculosis The Group of Fatal without Remissions—E Bernard B Kreis and M
Technique of Extrapleural Pneumothorax—E Hutchinson and D Foyer
Is Intrabronchial Injection of Lipiodol Always Without Danger—L Kerr
Lobar Dislocation in the Course of Therapeutic Pneumothorax—F Bezançon P Braun and A Meyer

Thoracoscopy.—The author maintains that adhesions have a traumatic action on the visceral and parietal pleura. This causes various degrees of pleural irritation and favours the extension of pulmonary foci and the development of a tuberculous pleurisy. Thoracoscopy shows that in most cases the pleurisy first develops at the level of the adhesions. These should therefore be sectioned within the first few weeks of the induction of the pneumothorax. Delay may mean that the operation will have to be carried out in a pleural cavity that is no longer healthy.

Radiological Control.—The results are given of routine radiological examination of the chest of those seeking admission in France to an important State railway to the prefecture of police and to the civil service. In the first group 24 827 persons were examined and 1·2 per cent rejected. Of *2 066 candidates for the prefecture 0·9 per cent were rejected* but this group consisted of men who had already been police men who had all done military service and who had all been examined previously by *the physician to the prefecture*. Of the 1 891 candidates seeking admission to the civil service 1·6 per cent were rejected. The authors analyse their *findings in detail and discuss the problems that present themselves* in deciding when to reject a candidate on the basis of the radiological appearance of the chest.

Rivista di Patologia Nervosa e Mentale

Florence vol 51 January-February 1938

Contribution to the Knowledge of Experimental Reflex Epilepsy and on the Luminous Stimuli—E Fuchi gnoni
Two Cases of Cerebral Cysticercosis diagnosed during Life—G Canziani and A Nobile
Use of the Centrifuge in the Carrying-out of the Colloid Benzoine Reaction—R Bozzi
Syndrome of Acute Anterior Poliomyelitis in Medullary Syphilis—E. Ferga
Type of Hereditary Tremor—Macrobotulus Multiplex—G Perrus
Observations on a New Method for the Study of the Vascular Network in the Nervous System in Normal and Pathological States—C F zie
Meningiomata of the Anterior Cranial Fossa and their Correspondence with the Median Line A Contribution to the Study as to how far the Determination of the Side of the Lesion is of Precise Diagnostic Value—P Ottonello

Cerebral Cysticercosis.—The authors describe two cases in which the diagnosis was made during life by the discovery of a marked *eosinophilia in the cerebrospinal fluid*. They insist that if a diagnosis is to be made with any confidence the proportion of granular eosinophils should not be less than 1 per cent. The value of this finding is great but is perhaps somewhat lessened by the fact that on rare occasions cerebral cysticercosis may be met with without changes in *the fluid* while very exceptionally eosinophilia may be noted in the cerebrospinal fluid in cases of cerebral syphilis.

Anterior Fossa Meningiomata.—These tumours are of special importance since they lie outside the cerebral tissues exerting their effects by pressure and being essentially amenable to surgical treatment. The occurrence of a bilateral

malignant olfactory meningioma which clinically appeared to be situated in the left half of the anterior cranial fossa gives the author an opportunity to discuss some aspects of the diagnostic problem He stresses the importance of tremor of alterations in the fundus, of the radiographic findings and above all, the most careful study of the encephalograms In the case of the meningiomata of the anterior fossa it may be very difficult to determine whether the tumour is strictly unilateral or implanted on the middle line this should be borne in mind in determining the surgical approach

Strahlentherapie

Berlin vol 61 April 1938

Importance of Spectroscopic Analysis in Biological and Medical Problems—W Gerlach and W Gerlach
Biophysical Explanation of the Action of Light—B Rajewsky
Action of the Visible and Infra red Light on the Skin—G Miescher
Clinical Experience with Carbon arc Light—E Hofmann
Treatment of Non Tuberculous Skin Affection with Concentrated Carbon arc Light—S Lomholt
Heat ray Emission of Several Therapeutic Heat Emitters—W Morikofer
Carbon and Impregnated carbon arc Lights—H M Hansen
Erythema produced by Sun and Sky Radiation—K Buttner
*Light and Esophylactic Function of the Skin with Particular Reference to the Reticulo endothelium—A M Memmesheimer
New Botanical Investigations on the Relation between the Mutability of the Gene and Quantity and Quality of Short wave Radiation—W Noethling
Wave length of the Ultra violet Light capable of Producing Mutations. Experiments on *Drosophila melanogaster*—A Reuss
Hereditary Transmission of Affections produced by Light—K Hoede
Formation of Light sensitizing Substances by Micro organisms—A Mallinckrodt Haupt
Investigations into the Sensitivity of the Skin to Ultra violet Radiation in Two Patients suffering from Xeroderma Pigmentosum—J J Zoon
Further Actino-biological Investigation of Hutchinson's Summer Prurigo—J Schaumann and F Lindholm
Porphyry and Pathological Symptoms produced by Porphyrins (Porphyrino pathy)—H Th Schreus
Structure of Several Natural Sensitizing Dyes—A Treibs
Use of Fluorescence Spectroscopy for Clinical Determination of Porphyrins—F Bandow
Death through Exposure to Light—E Merker
Sun and Sky Radiation considered as Climatic Factors—O Hoelper
New Methods of Calculation and Determination of Exposures to Light for Biochimatic Purposes—*W Schmidt*
Dosage of Climatic Remedies—H Pfeiderer
Importance of the Micro-climate for Climatic Dosage—K Buttner
High Atmospheric Layers as Light Filters and Light Emitters—F W P Götz

Esophylactic Skin Function—Histamine like substances are produced in the skin under the influence of light and they produce a vasodilatation either directly or through the intermediary of the nervous system, the papillary and subpapillary vessels are mainly affected In the presence of foreign substances in the skin there is a more rapid appearance of micro phages and macrophages which attack the foreign bodies and digest them the disintegration products are carried away and eliminated In the irradiated animals the elimination is more rapid than in control animals the process in man does not differ from that in animals

Virchows Archiv fur Pathologische Anatomie und Physiologie und fur Klinische Medizin

Berlin vol 301 March 3 1938

Incomplete Dorso ventral Duplication of the Spinal Cord—W Schneiderling
New Spindle Corpuscle containing an Acid resistant in Human Lymphatic Glands—*I Hamazaki*
Relations between Vitamins and the Reticulo-endothelial System—U Uotila and P F Simola
Changes in the Thyroid Gland in Cases of A B C and D Avitaminosis—U Uotila
Role of Vascular Malformations in the Pathogenesis of Internal Haemorrhagic Pachymeningitis—P Heimann
Causes of Swelling of Collagenous Fibres during Hyperergic Inflammation (Arthus's Phenomenon)—M Wernet
Duodenal Stenosis Problem of Situs Inversus Partialis in Man—G Tondury and H Wissler
Progress in the Technique of Investigation of Medicinal Preparations by Spectrum Analysis—W Gerlach W Rollwagen and R Intonti
Cancer of the Prostate—E P Gaynor
Is there a Twenty seventy Period of Mortality (That is Is there a Relation hip between Mortality and the Activity of the Sun)—*S Belak*
Hyperplasia of the Thymus in Endocrine Disturbances—R Wasser
Two Further Cases of Cardiac Malformations A Contribution to Spitzer's Phylogenetic Theory (1) Transposition of the Aorta with Pulmonary Stenosis (2) Transposition of the Large Arteries with Development of an Apparent Third Ventricle—W Doerr
Proportion Studies in Dwarfs I Chondrodystrophia—H Gunther
Narcosis and Allergic hypergic Inflammation II—W Eickhoff
Centres of Origin and Forms of Development of Thrombosis of the Heart—R Neumann
Congenital Bronchiectasis—S Chodkowska
Presence of Spirochetes in Organs after Death in Cases of Infectious Jaundice—H Essbach
Relation of the Skull to the Brain under Normal and Pathological Conditions—J Erdheim

Zeitschrift fur Hals-, Nasen- und Ohrenheilkunde

Berlin vol 44 April 30 1938

*What should Ear Nose and Throat Specialists Know of Speech and Voice Therapy?—M Nadoleczny

Vocal Therapy—In a lengthy article which occupies the whole of this issue Nadoleczny surveys the entire field of vocal therapy under various headings development of the voice and speech *mutation disturbances* of the voice at puberty voice defects found in public speakers and singers *laying particular emphasis on* the psychoneurotic element in aetiology, the speech of deaf-mutes and severely deafened persons Nadoleczny describes a method of testing the hearing in very small children—a feat usually considered impossible This is done by means of a musical box and one approaches the child who is occupied with his toys from the back and notes when he turns round to listen to the tune Special chapters are devoted to stuttering and speech defects such as *sigmatism* and nasal speech The article serves as an introduction to a discussion on these subjects at the annual meeting of the German Laryngological Society in June 1938

Zeitschrift fur Orthopadie und ihre Grenzgebiete

Berlin vol 67 March 18 1938

Functional Structure and Functional Accommodation of Gliding Tendons—E Ploetz
Investigations of Permanent Results of Non operative Reduction of Congenital Dislocation of the Hip—H Gickler and J Meurer
*Early Diagnosis and Early Treatment of So called Congenital Dislocation of the Hip—R Kickelhayn
*Treatment of Flexion Contracture with Subluxation of the Knee joint—E Spira
Para articular Graft Arthrodesis in Tuberculosis of the Ankle joint—J Meurer

Treatment of Congenital Dislocation of the Hip—The German literature dealing with this question is discussed at great length and early treatment is advised The fact that congenital dislocation occurs with much greater frequency in certain German districts than in others is attributed to racial factors Changes in the superior rim of the acetabulum are taken as evidence of a favourable progress after reduction Apposition of bone in that region can occur in the first few *months after reduction* and can be shown radiologically The results of early treatment and possible complications are discussed

Flexion Contracture and Subluxation of the Knee—It is suggested that division of the cruciate ligaments may facilitate correction of this deformity In one case of bilateral subluxation the cruciate ligaments were found to be shortened at operation after division of the ligaments the subluxation could easily be corrected

Zeitschrift fur Urologie

Leipzig vol 32 1938 Heft 4

Rapid Evacuation of the Bladder in Chronic Urinary Retention and its Consequences—R Ubelhor
Pathogeneses of Renal Insufficiency in the Course of Disorders affecting the Emptying of the Bladder—N Hortolomei M Streja and Th Burghele
Dietetic Treatment of Oxalate Calculi in the Urinary Passages—F Jungmann
Treatment of Prostatic Hypertrophy with Hombreol—A Babics
Treatment of Urogenital Tuberculosis with Gold—N Vondra
Limit of Pyelography—F Lichtenauer
Is Nephropexy Obsolete?—F Lichtenauer
Hammock after Pfannenstiel for Kidney Operations—Friedrich

B 30

'Elastoplast' and Post-Operative Dressings (Abdominal)

(excerpts from the film "The Use of 'Elastoplast' in Modern Surgery")

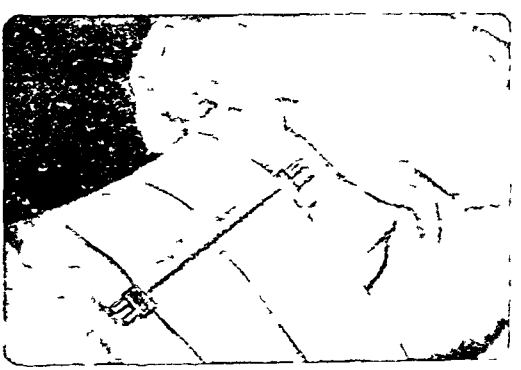


Method of fixing a dressing which requires frequent changing strips of 'Elastoplast' folded round glass rods

SURGEONS and General Practitioners who may be interested to see this sectionalised film are invited to communicate with *T J Smith & Nephew, Ltd., Dept B 9, Hull*, for details regarding its exhibition

B M A BRANCH Secretaries are invited to write for available dates for projections

A NEW edition of "Elastoplast Technique" has recently been published, and a complimentary copy will be sent on application to address above



The dressing completed and secured by rubber bands

Elastoplast THE MODERN SURGICAL DRESSING

ELASTIC ADHESIVE BANDAGES PLASTERS DRESSINGS

British Medical Association
Publications

A General Medical Service for the Nation
50 pp 8vo FREE ON APPLICATION TO THE SECRETARY

Medical Insurance Practice
By R W Harris and Leonard Shoeten Sick
Fourth Edition January 1937
Price 2s post free

Medical Practitioners' Handbook
232 pp 8vo Price 3s 10d post free

Report of Committee on Nutrition
18 pp 8vo Price 6d post free

The Doctors' Cookery Book
50 pp 8vo Price 4d post free

Facts about Small-Pox and Vaccination
(Revised Edition 1924)
34 pp Price 7d post free

Report of Committee on Immunization, including Vaccination
38 pp 8vo Price 6d post free

Report of Committee on Tests for Drunkenness
20 pp 8vo Price 2d post free

Report of Special Committee on the Relation of Alcohol to Road Accidents
10 pp 8vo Price 2d post free

Relationship of the Private Practitioner to the Treatment of Mental Disability
22 pp 8vo Price 6d post free

Report of Mental Deficiency Committee
62 pp 8vo Price 1s post free

The Essentials of a National Medical Service
16 pp 8vo Price 2d post free

Hospital Policy
40 pp 8vo Price 3d post free

Problem of the Out-Patient
10 pp 8vo Price 2d post free

Report of Committee on the Diagnosis and Certification of Miners' Nystagmus
16 pp 8vo 3d or 2s 6d per doz post free

Report of Committee on Fractures
32 pp 8vo 4d or 3s 6d per doz post free

The Osteopaths Bill
Report of the Proceedings before a Select Committee of the House of Lords
156 pp 8vo Price 1s 3d post free

Report of the Psycho Analysis Committee, July, 1929
24 pp 8vo Price 3d post free

Report of Committee on Medical Education
32 pp 8vo Price 6d post free

Report of Committee on Physical Education
62 pp 8vo 6d or 5s 6d per doz post free

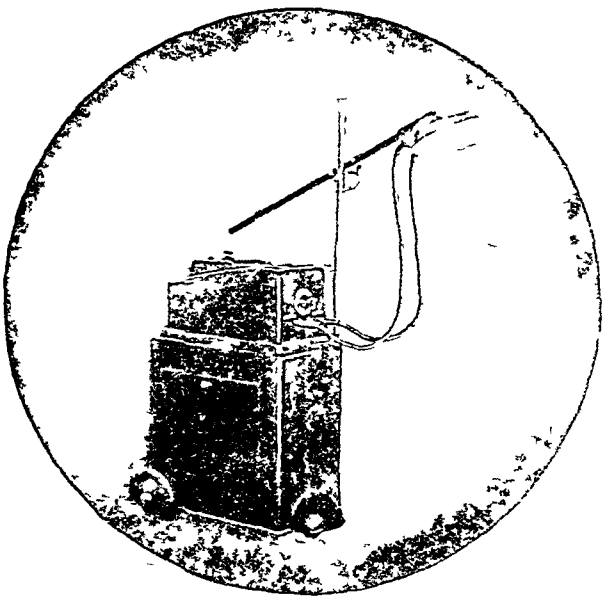
National Maternity Service Scheme for England and Wales
18 pp 8vo Price 3d post free

B M A Model Forms (No 1) for Doctors' use when sending a Patient to Hospital
Price 1s per 100 post free

B M A Model Forms (No 2) for use of Hospital when Patient attends without a Doctor's Letter
Price 6d per book of 50 forms

British Medical Association
B·M·A· House, Tavistock Square, W.C.1

What More Can You Ask in Heat Therapy?



EVERY comparative test so far published shows that Inductotherm users possess the means of producing more therapeutic heat at greater depth in less time, with greater patient comfort, than those who employ any other form of short-wave therapy. Patients too appreciate Inductothermy because its soothing gentle heat relieves pain quickly. Then in most cases further treatments permanently remove the cause of pain.

The authors of these tests also agree that no other agent gives you Inductothermy's proved high efficiency, safety, power versatility and ease of use. Since both first and afterward these advantages cost no more often less, the question naturally arises: What more can you ask for in heat therapy?

If you want an apparatus for the application of heat wherever it is indicated one whose design is physiologically correct, which operates silently is of distinctive appearance and yet costs less per treatment—*investigate Inductothermy*. We will make this easy to do. Start now by examining the literature. The coupon will bring you that and other important facts about Inductothermy—without obligation.

VICTOR
X-RAY CORPORATION
LIMITED
15 19 CAVENDISH PLACE LONDON W1
and at BELFAST BRISTOL BIRMINGHAM CARDIFF DUBLIN EDINBURGH GLASGOW LIVERPOOL LEEDS MANCHESTER NEWCASTLE NOTTINGHAM

Without any obligation on my part please send me reprints and other literature on the value of heat therapy with the Inductotherm

Name

Address

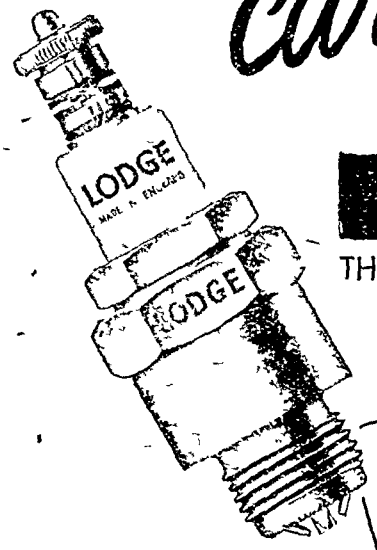
VICTOR XRAY CORPORATION LIMITED 15 19 CAVENDISH PLACE LONDON W1

For car fitness

fit a new set of

LODGE

THE BEST PLUG IN THE WORLD

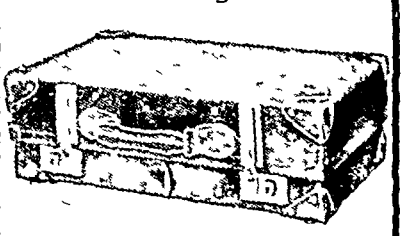


WORLD'S LAND SPEED RECORD
312 miles per hour
Cap. Eyston used Lodge plugs in the Rolls Royce engines of "Thunderbolt"

Obtainable everywhere, from 5/- each. Lodge plugs are made completely in England by Lodge Plugs Ltd. Rugby

TRAVEL with LUXURY COMFORT and DIGNITY

At Trifling Cost



No medical man who has once enjoyed the comfort of the Superb Expanding Suitcase would ever use any other. Always room for everything, from a week-end to a month. Feather weight made from specially toughened fibre of great strength. Lined best drill with containing straps. Tested expansion spring and Superior Lever Lock. Superior Chromium Plating. Eight Leather corners. Weighs no more fully packed than the old style leather cases empty! In Rosa Feather finish for gentlemen. Navy Blue for ladies. The latest and finest Expanding Suitcases yet produced.

24in (7in normal depth expanding to 10" in) 30/-, 26in 35/, 28in 38/6

Supplied to medical men under the Manufacturers Combine Scheme at Trade Price. Terms upon application.

Submitted for approval upon receipt of customary reference.

Lists of Watches, Diamonds, Silver, Billiard Tables, Cane Cabinets, Golf Outfits on application mentioning B.M.J.

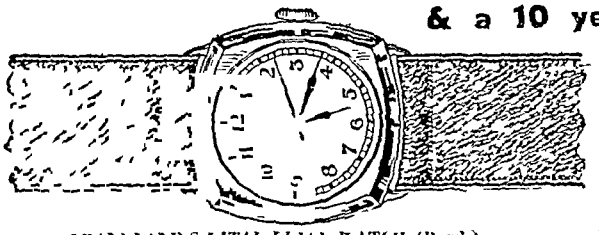
Under the New Trading Scheme Special Trade prices quoted to Medical Men by the

ALLIED MANUFACTURERS

Sole Distributing Agents
H. WHITE MANUFACTURING CO. LTD.,
104, Market St., Manchester, 1

OUR 50 YEARS' REPUTATION

& a 10 years' guarantee



stand behind the excellence. Offered to Doctor and Nurses for immediate possession without displacement of capital they represent the highest possible value and perfection of workmanship and are made especially for your professional need.

FRANKLAND'S VITAL PULSE WATCH (Regd.)
(For Doctors) Fully jewelled lever movement
Silver chrome 60/- or 12 payments of 5/- Gold £5 17 6 or 16 down and 11 payments of 10/- 10 YEARS GUARANTEE

Visit our showroom or Selection sent on Approval

DEPARTMENTS—Furs, Fur Coats, Jewellery, Plate, Cutlery, Furniture, etc. *Write for Catalogue*

PROTECTIVE MONTHLY PAYMENT TERMS

E. J. FRANKLAND & Co., Ltd. (Dept. M.) 1-2 Imperial Building, Ludgate Circus, London, E.C.4
Estd. 1885 *Phone Central 2188*

FINANCE

for the acquisition by

PAYMENTS OUT-OF-INCOME

of

Surgery and Other Furniture
Surgical Instruments
Medical Text Books
X-Ray Apparatus
Laboratory Equipment

The above list is illustrative only. Under its Equipment Purchase Plan the Company is prepared to assist doctors to acquire ANY article and spread the cost over a period.

BRITISH MEDICAL FINANCE LTD.
Tavistock House South,
Tavistock Square,
London, W.C.1

BMF

WHOLEMEAL & BUTTERMILK
for Roughage and Nutriment

"Healthy Life"
BISCUITS, WAFERS

WRITE FOR SAMPLE
Dept. M. MITCHELHILL'S "Healthy Life" BISCUIT FACTORY, EDINBURGH

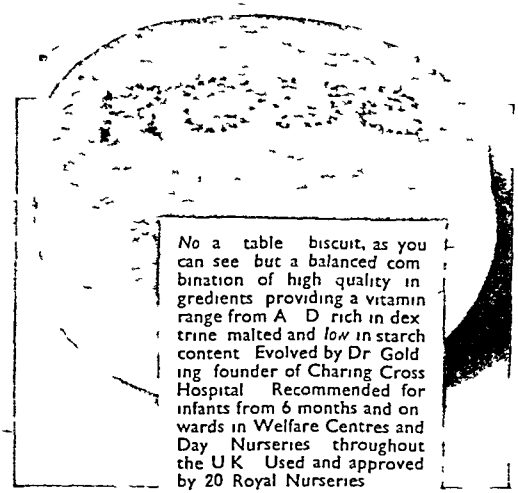
GO *Motor Boating*



Do you know that motor boating costs very little? Surprisingly little! And of all pastimes it is the healthiest and most exhilarating.
FREE MAGAZINE. *Send post card for free copy of our motor boating magazine "Pleasures Afloat"*
BRITISH MOTOR BOAT MFG. CO. LTD.
Dept. 3 Britannia House, Ampton St., London, W.C.1

BRITAIN'S LEADING MOTOR BOAT HOUSE

What is a Robb's Biscuit?



No a table biscuit, as you can see but a balanced combination of high quality ingredients providing a vitamin range from A D rich in dextrine malted and *low* in starch content Evolved by Dr Golding founder of Charing Cross Hospital Recommended for infants from 6 months and on wards in Welfare Centres and Day Nurseries throughout the U K Used and approved by 20 Royal Nurseries

Robb's
NURSERY BISCUITS

Testing samples gladly sent on receipt of professional card
Alex Robb & Co Ltd (Dept 6) 145 Atkins Road London S W 12

Take THE BURBERRY *With You*



Then if the brightness does turn out to be drenching afternoon or a warm breeze change to biting Nor east wind you're certain of being dry and comfortable

Under its protective cover there is comforting warmth on cold days complete security from penetrating rain airylight freedom on the closest day

The Burberry therefore has the virtues of three coats in one —

DUSTCOAT when fine
WEATHERPROOF in wet
OVERCOAT when cold

Patterns prices and illustrated models on mention of the "British Medical Journal

BURBERRYS LTD
HAYMARKET, LONDON, S W 1

ARCHIVES OF DISEASE IN CHILDHOOD

JUNE 1938

CONTENTS

Intracranial Haemorrhage in the New-born By W S Craig, M D, F R C P Ed

Vitamin C Excretion in Children, with Particular Reference to Rheumatic Fever By J D Keith, M D, and Evelyn M Hickmans, Ph D, M Sc.

Otitis Media and Mastoiditis in Infancy By Grace McConkey M B B Ch, B A O, D C H, and Edward C Ross Couper, M B Ch B, F R F P S

Radiology in the Diagnosis of Hypertrophic Pyloric Stenosis By Leonard Findlay, D Sc, M D, F R C P

The Blood Phosphorus in Egyptian Infants By I A Sabri, M R C P D T M and H, and M A Abboud, M R C P, D C H

Osteopetrosis By A M Nussey, M D, M R C P

The Cooley Syndrome in an English Child By E G L Rowe[illegible] M S, B S, M R C P

Case Report A Case of Diabetes Mellitus in a Young [illegible] By John Devine, M B, Ch B

PUBLISHED QUARTERLY

Yearly subscription (4 numbers) 25/ To members, 20/-
Single Number, 7/6

Issued by the British Medical Association Tavistock Square [illegible]

HEALTH BREAD
ROLLS
CRACKNELS
HYGIENIC PACKING
PROTEIN 42 00%
CARBOHYDRATES 49 10%
POLLEY AND COMPANY LIMITED

EDGO
REGD TRADE MARK

WIDELY USED IN DIETS FOR
DIABETES,
GASTRIC ULCER,
INDIGESTION & OBESITY
Sample, Diet Plans & Analysis Free on request
(Dept B), PLYMOUTH RD, LONDON, E 16

BROCHURE, SKETCH & ESTIMATE FREE
CANonbury 3077
NAMEPLATES
BRONZE STAINLESS STEEL ALUMINIUM
COOKE'S (FINSBURY) LTD
FINSBURY PAVEMENT HOUSE
MOORGATE, LONDON E C 2
Est 1877

In the treatment of Varicose Veins where leg support is prescribed, Compri-Vena give meticulous attention to instructions
They will gladly supply particulars of
RUBBERLESS SURGICAL STOCKINGS
and the service they provide
Compri-Vena (1937) LTD
38, SOUTH MOLTON ST W 1 Mayfair 0732

FREQUENT MICTURITION
"WETT" ABSORBENT BAGS
Male day pattern 5/
New Model Female day pattern 4/-
"DUPLEX" BAGS
Male or Female day and night 7/6
"SANITUBE"
For helpless bedridden patients 7/6
Our bags catch all leakage easing mind and body Invisible under clothing and easily emptied Now worn world wide Special patterns for motorists and visitors
Diagrams etc, on request from
HILLIARD 123 Douglas Street Glasgow C 2

Addmeter Money ADDING MACHINES 77 6 p t
TAYLOR'S TYPEWRITERS
SELL HIRE HIRE PURCHASE EXCHANGE BUY and REPAIR ALL MAKES of Typewriters Duplicators and Calculating Machines
Desks Tables and Chairs
Est 1884

THE QUIET BIJOU
The best Portable Writer Complete in Travelling Case £14 14s
Write for Bargain List 2 or Phone—Holborn 3793
BUY A BIJOU FOR 15 a Month
74 CHANCERY LANE (Holborn End) W C 2

A GENTLEMAN ALWAYS LOOKS WELL DRESSED IN SAVILE ROW CLOTHES

NEW LIGHT OVERCOATS LOUNGE DRESS SPORTS SUITS etc by all eminent tailors viz Scholte Lesley & Robert Kilgour &c OUR PRICES 3 to 5 Gns
Alterations on Premises
REGENT DRESS CO
2nd Floor Piccadilly Mansions Shaftesbury Av Piccadilly Circus W 1 (Next Cafe Monico) GER 7160
LADIES DEPT ON 1ST FLOOR

X-RAY CAR SERVICE
PORTABLE X RAYS LTD
POWER ROAD, CHISWICK
TELEPHONE CHISWICK 4006
¼ HOUR ANY DAY ANY NIGHT
ANYWHERE

NAME PLATES
in BRONZE or BRASS
Estimates and Sketches sent free
H K. LEWIS & Co Ltd
Medical and Scientific Stationers,
136 Gower St, London W C 1

NAME PLATES
IN BRONZE ENAMEL OR BRASS
Phone Clerkenwell 2441
Free Sketch and Booklet will be sent on receipt of details
S J & A Herd, 30 Clerkenwell Rd E C 1
PLATES

NAMEPLATES Brass Bronze Stainless Steel
REDUCED PRICES
Send for List 18 to the actual Maker
F OSBORNE & Co, Ltd Tel Euston 4824
117 Gower Street, London, W C 1

NAME PLATES in Bronze and Enamel
Stainless Steel Brass or Chromium
Actual Makers Quick Delivery Low Price
The WHITE BRONZE Co 196 London Rd CROYDON

NAMEPLATES of character in Brass & Bronze
Send for Illustrated Brochure and Price List
F B HALL & CO 445 New Cross Rd S E 14 TIDeway 3818

THE GRANGE,
near ROTHERHAM
A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental disorders Both certified and voluntary patients received Approved for temporary patients This is a large country house with beautiful grounds and park five miles from Sheffield Tel No 40030 Ecclesfield Res Phys CHERRY E MOULD L R C P M R C S Station Grange Lane L & N E Rly

CHISWICK HOUSE,
PINNER, MIDDLESEX
Telephone PINNER 234
A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes
A modern country house 12 miles from Marble Arch in beautiful secluded grounds
Fees from 10 guineas per week inclusive Cases under Certificate Voluntary and Temporary patients received for treatment
Douglas Macaulay M D, D P M

HALLIFORD HOUSE, UPPER HALLIFORD SHEPPERTON Established in 1841
This handsome secluded residence standing in a park of 36 acres situated 16 miles from London is licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections
Voluntary or certified cases received Terms moderate Patients are under the constant personal care of the Resident Medical Superintendent Dr R A Stewart from whom full particulars can be obtained Tel Sunbury on Thames 70

ASHWOOD HOUSE,
KINGSWINFORD, STAFFORDSHIRE
An old established PRIVATE HOME for the care and treatment of Ladies and Gentlemen mentally afflicted Probationary cases and non certified patients are received as well as those regularly certified
The home is beautifully situated in its own grounds of 40 acres
Full particulars as to reception terms etc may be obtained from the Resident Medical Officer

"LECKLESFIELD," Staplehurst, Kent
(Removed from Ashford Middlesex)
PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large mansion beautifully situated in 100 acres of park land Extensive views Home farm R C Chapel Under the management of the Sisters of the Good Shepherd Apply Rev Mother Tel Staplehurst 61

SPRINGFIELD HOUSE,
Near BEDFORD ('Phone 3417)
For Mental Disorders with or without Certificates
Resident Physician CEDRIC W BOWER
Ordinary Terms Five Guineas per week (Including Separate Bedrooms where suitable)
Interviews in London by Appointment

WYE HOUSE, BUXTON
For the treatment of Ladies and Gentlemen mentally afflicted Voluntary Boarders received Situated 1,200 ft above sea level facing S 14 acres of grounds —For terms apply to the Resident Medical Sup W W HORTON M D Nat Tel 130

THE GROVE HOUSE
CHURCH STRETTON SHROPSHIRE
A private Home for the care of and treatment of a limited number of Ladies mentally afflicted
Voluntary and Temporary Patients received under the new Mental Treatment Act 1930
Medical Superintendent Dr McCLINTOCK

CITY OF LONDON MENTAL HOSPITAL
DARTFORD KENT
Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upwards

TYKEFORD ABBEY,
NEWPORT PAGNELL BUCKS
FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest standing in 15 acres of garden and grounds and is situated 14 miles from Northampton and 12 miles from Bedford on the main London to Northampton Road fifty miles from London Both sexes are accommodated Psycho-therapeutic Treatment is used extensively in suitable cases Radiant Heat, X-ray and Ultra Violet Light Diathermy and Foam Baths Billiard Tennis etc

Apply Dr D E M DOUGLAS-MORRIS
Telephon Newport Pagnell 141

HILL END HOSPITAL AND CLINIC
FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS
(20 mile from London)

Ladies suffering from all form of MENTAL ILLNESS are received for treatment on modern lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital Convalescent or mild cases can be treated in a delightful country mansion with extensive grounds known as

HIGHFIELD HALL,

situate about a mile away from the Hospital FEES TWO TO THREE GUINEAS PER WEEK
For further particulars apply to the Medical Supt W J T KIMBER L.R.C.P D.P.M

ST ALBANS HERTS

BARNWOOD HOUSE
GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS Within two miles of the G W Railway and L M & S Railway Stations at Gloucester the Hospital is easily accessible by rail from London and all part of the United Kingdom It is beautifully situated at the foot of the Cotswold Hills and stand in its own grounds of over 300 acres Voluntary Patients of both sexes are also received for treatment Special accommodation for Lady Voluntary Patients is also provided at the MANOR HOUSE which has its own private grounds and is entirely separate from the Main Hospital For particulars as to terms etc apply to G W T H FLEMING M.R.C.S L.R.C.P D.P.M Medical Supt.
Telephone No 6 07 Barnwood

STRETTON HOUSE,
Church Stretton Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provision of the Mental Treatment Act 1930 Bracing hill country See *Medical Directory* p 2348—Apply to the Medical Superintendent Phone 10 P O Church Stretton

FENSTANTON,
CHRISTCHURCH ROAD
Streatham Hill S.W.2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders Certified Voluntary and Temporary Patients received Large Mansion with 1½ acres of ground (See *Medical Directory* p 2351.) Apply Resident Physician *Telephone* Tulse Hill 7181

BAILBROOK HOUSE, BATH

For sufferers from Nervous and Mental Disorders with or without certificates
This house is gloriously situated in wooded ground of 20 acres with magnificent views of the City and the Avon Valley (See *Medical Directory* page 2351.)
For terms apply A GUERDHAM M.A D.M B.Ch D.P.M Resident Physician
Telephone Bathea ton 3189

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded ground For Ladies and Gentlemen suffering from Nervous or Mental Illness Voluntary Patients Temporary Patients and Patients under Certificate are admitted for treatment Fees from 4 guineas a week upwards according to requirement A few vacancies exist for Ladies and Gentlemen at reduced fees on the recommendation of the Patient own Physician Apply to Dr J A SMART Telephone 0 Norwich Telegram Small 80 Norwich

ST. ANDREW'S HOSPITAL
FOR MENTAL DISORDERS
NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

President THE MOST HON THE MARQUESS OF EXETER C.M.G A.D.C.

Medical Superintendent THOMAS TENNENT M.D M.R.C.P D.P.H D.P.M

This Registered Hospital is situated in 120 acres of park and pleasure ground Voluntary patients who are suffering from incipient mental disorder or wish to prevent recurrent attacks of mental trouble temporary patients and certified patients of both sexes are received For treatment the Clinical biochemical bacteriological and pathological examinations Private rooms with personal service male or female in the Hospital or in one of the numerous villas in the grounds of the various branches can be provided

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders It contains special departments for hydrotherapy by various methods including Turkish and Russian baths the prolonged immersion bath Vichy Douche Scotch Douche Electrical bath Floribieres treatment etc There is an Operation Theatre a Dental Surgery an X-ray room an Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment It also contains Laboratories for biochemical bacteriological and pathological research.

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres Milk meat fruit and vegetables are supplied to the Hospital from the farm gardens and orchards of Moulton Park Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves in farming gardening and fruit growing

BRYN-Y-NEUADD HALL

The seaside house of St Andrew's Hospital is beautifully situated in a park of 330 acres Llandudno amidst the finest scenery in North Wales On the North West side of the Estate a range of mountains form the boundary Patients may visit this Branch for a short seaside change or for longer periods The Hospital has its own private bathing house on the seashore There is tennis-court in the park
At all the branches of the Hospital there are cricket grounds football and hockey grounds lawn tennis courts (grass and hard courts) croquet grounds golf courses and bowling greens Ladies and gentlemen have their own gardens and facilities are provided for hand-crafts such as carpentry etc
For terms and further particulars apply to the Medical Superintendent (Telephone Nos 4 and 35 Northampton) who can be seen in London by appointment.

COURT HALL, KENTON, near EXETER,
for the treatment of eight Ladies voluntary temporary or certified patients Large gardens and own dairy

CLIFFDEN TEIGNMOUTH for early and convalescent cases A well appointed house with spacious balconies and extensive views of the South Devon coast Sub tropical gardens own dairy in 25 acres Private road to beach

		Telephones
Resident Physicians	BERTHA M MULES M.D B.S	Starcross 59
	ANNE S MULES M.R.C.S., L.R.C.P	Teignmouth 289

THE COPPICE, NOTTINGHAM
HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted Occupational Therapy Voluntary and Temporary Patients received
Tel 6-11 *For terms etc apply to the Medical Superintendent*

HAYDOCK LODGE
NEWTON-LE-WILLOWS LANCASHIRE

Telegraphic Address Street Ashton-in-Makerfield *Telephone* Ashton-in-Makerfield 11

For the reception and treatment of PRIVATE PATIENTS of both sexes suffering from UPPER AND MIDDLE CLASSES suffering from incipient and certain chronic mental disorders voluntary temporary and certified Patients are received in separate buildings and grounds for the mentally defective and epileptic Situated in park and grounds of 200 acres Specially planned villas and gardens in which patients are encouraged to occupy themselves Every facility for sports and recreation For terms prospectus etc apply MEDICAL SUPERINTENDENT

NORTHUMBERLAND HOUSE,
GREEN LANES FINSBURY PARK N.4

A PRIVATE HOSPITAL for the treatment of mental and nervous illness Centrally situated and easy of access from all parts Six acres of ground highly laid out in Finsbury Park Voluntary and Temporary Patients received who have the benefit of Occupational Therapy Psychotherapy and other modern forms of treatment
Telegrams STAMFORD HILL *Telephone* SUPERINTENDENT LONDON
Convalescent Home KEARSNEY COURT DOVER For further particulars

CAMBERWELL HOUSE, 33, Peckham Road, London, S.E.5.

Telegrams PSYCHOLIA LONDON

FOR THE TREATMENT OF MENTAL DISORDERS

Telephone RODNEY 4-42 (2 lines)

Also completely detached villas for mild cases with private suites if desired Voluntary patients received Twenty acres of grounds Hard and Grass Tennis Courts Putting Greens Bowls, Croquet, Squash Rackets Recreation Hall with Badminton Court and all indoor amusements including Wireless and other Concerts Occupational Therapy Callisthenics and Dancing Classes X-ray and Actino therapy Prolonged Immersion Baths Operating Theatre Pathological Laboratory Dental Surgery and Ophthalmic Dept Chapel Senior Physician Dr HUBERT JAMES NORMAN assisted by three Medical Officers also resident and visiting Consultants

An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary

The Convalescent Branch is HOVE VILLA, BRIGHTON, and is *200 feet above sea level*

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date Lovely house and grounds (18 acres) Certified and uncertified cases taken Facilities for going to the seaside

ESTABLISHED OVER 200 YEARS

Apply to Med Supt for illustrated brochure Tel SALISBURY 2612

CHEADLE ROYAL HOSPITAL

CHEADLE, CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay N Wales is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES

The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary

In addition to the Main Building there are separate villas Extensive grounds Hard and grass tennis courts cricket and croquet ground and a court for badminton There are also wireless installations Golf may be had within easy distance Occupational therapy

VOLUNTARY TEMPORARY AND CERTIFIED PATIENTS received

The Hospital is nine miles from Manchester 50 minutes by rail from Liverpool and 3 hours from London

For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT

Telephone GATLEY 22 1 (lines)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds Detached Villas Chapel Garden and dairy produce from own farm Terms very moderate

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds with tennis courts etc which Voluntary Temporary or Certified Patients may visit by arrangement for long or short periods

Illustrated Brochure on application to the Medical Superintendent, The Old Manor, Salisbury 'Phone Salisbury 2251

CALDECOTE HALL

NUNEATON

WARWICKSHIRE

(Phone Nuneaton 241)

Residential treatment of

FUNCTIONAL NERVOUS DISORDERS

Including Alcoholism and other Addictions

(Certifiable Cases are not received)

This beautiful mansion situated in the heart of the country (less than two hours from London by L M S R) and surrounded by charming pleasure grounds in which games and outdoor occupational therapy are available is devoted to the treatment of Functional Nervous Disorders by psychotherapeutic and ancillary methods

Illustrated brochure and particulars obtainable from A E CARTER M D D P M Resident Medical Superintendent

CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy Cases of alcoholism and drug addiction are admitted The Physiotherapy Department has separate units fully equipped for X ray work heliotherapy short wave therapy electro-therapy and hydrotherapy (swimming bath prolonged baths Scotch and Vichy douches Plombières treatment electric and Turkish bath cabinets etc) There is a fully equipped gymnasium under qualified instructors Facilities are provided under special recreational therapists for all indoor and outdoor games including golf course cricket football and hockey grounds lawn tennis and squash courts croquet and bowling green

The Hospital has its own Cinema Library and Hairdressing Saloon Terms include regular motor drives

Private rooms suites or villas are available and special nurses can be provided

The Hospital grounds extending to nearly 1 000 acres are situated in delightful country and include an extensive farm (T T herd) gardens and orchards

As the Hospital is well endowed terms are exceptionally moderate e g First Department 3 to 30 guineas per week Second Department 2 and 2½ guineas per week Voluntary and certified patients are received Medical Certificates given anywhere in the British Isles are valid for admission of patients For prospectus necessary form and further information apply to

Physician Superintendent P K McCOWAN M D F R C P D P M Barrister at Law Tel Dumfries 1119

July 1st

THE ROYAL EARLSWOOD INSTITUTION

FOR MENTAL DEFECTIVES, REDHILL SURREY

(Formerly the EARLSWOOD ASYLUM)

PATRON H M THE KING

FOR THOSE REQUIRING CONTROL with EXPERT SUPERVISION and needing SPECIAL TRAINING in useful occupations *SCHOOLS FARMING and various TRADE WORKSHOPS*

In Lower fees from £110 p a *THOSE UNABLE TO PAY FULL FEES* admitted by votes of subscribers with part payment towards cost

RECREATIONS Outdoor games MALE STAFF BAND for Concerts Dancing etc

Apply THE MEDICAL SUPERINTENDENT Earlswood Redhill Surrey *Phone* REDHILL 344

or to the Secretary Mr H STEPHENS 15 16 Ludgate Hill E C 4 *Phone* City 4697

THE MAUDSLEY HOSPITAL,

DENMARK HILL, S E 5

Telephone RODney 3841

A CLINIC instituted by the London County Council for treatment of Nervous and Curable Mental Disorder Voluntary patients only received

New Out patients—MEN Mondays and Thursdays 2 p m WOMEN Tuesdays and Fridays 2 p m CHILDREN Mondays and Fridays 10 a m

In patients (a) 235 beds (both sexes) in wards or separate rooms including 35 beds in a ward of King's College Hospital which is in use as a temporary annexe of the Maudsley Hospital (b) a special ward (including some private rooms) for those patients of each sex who are paying the full cost and are otherwise suitable TERMS £5 a week but in case of patients with a legal settlement in the County of London a less sum may be charged according to means

Terms include (with rare exceptions) all forms of treatment for which there are exceptional facilities as there is a staff of Consultant Specialists and the Central Laboratory of London County Mental Hospitals is attached to the hospital Inquiries of EDWARD MAPOTHER M D F R C P F R C S Medical Superintendent

RUSSELLS

HEMEL HEMPSTEAD RD WATFORD

Telephone WATFORD 3917

A convalescent home for the care and treatment of mild and recoverable nervous conditions in both sexes The house is situated high up in 40 acres of grounds 17 miles from London at the terminus of the Watford by pass *One Medical Officer* is in residence and two others are in daily attendance Fees from ten guineas a week inclusive

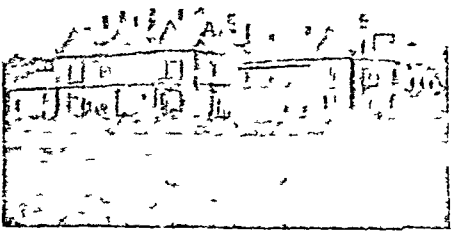
Apply RESIDENT MEDICAL OFFICER

THE RESIDENTIAL TREATMENT OF ALCOHOLIC & DRUG ADDICTION

RENDLESHAM HALL

(Postal Address) — **WOODBRIDGE, SUFFOLK**

Rendlesham Hall, which is open to receive patients, is essentially a Sanatorium Its daily life and routine are that of an ordinary comfortable holiday or health resort or of a large country house Each patient has all the privileges of a guest consistent with the prescribed medical treatment



RENDLESHAM HALL—SOUTH VIEW

Rendlesham Hall has 45 bedrooms and about 450 acres of gardens and park It has also a private nine-hole golf course tennis and croquet lawns and bowling green

Illustrated booklet giving particulars as to terms etc can be had on application to the

RESIDENT MEDICAL SUPERINTENDENT

Telegrams and Telephone WICKHAM MARKET 216 (*Toll Call from London*)

Proprietors The Norwood Sanatorium Limited

RUTHIN CASTLE, NORTH WALES

A Private Hospital or Clinic for the diagnosis and treatment of Internal Diseases (except Mental or Infectious Diseases) The Clinic is provided with a full staff of doctors bacteriologists chemists radiologists dietists nurse masseurs and masseuses

The surroundings are beautiful The climate is mild There is central heating throughout The annual rainfall is 30·5 inches that is less than the average for England

The inclusive weekly fees are from 15 guineas a week according to the room occupied rooms with bathroom are from 21 guineas The charges include all chemical bacteriological X ray or other examination advised by the doctors and all the usual forms of treatment in addition to board and lodging There are no extra charges except for alcohol (when ordered) and laundry An examination and consultation fee of 15 guineas is charged on the first visit

Address THE SECRETARY Ruthin Castle North Wales *Telegrams* Castle Ruthin *Telephone* Ruthin 66

BETHLEM ROYAL HOSPITAL, for Nervous and Mental Disorders,

Monks Orchard, Monks Orchard Road, Eden Park, Beckenham, Kent

Post Tel Address Bethlem Beckenham *Station* Eden Park (Southern Railway) *Telephone* Sec[illegible]

About the Harrogate CURE

Harrogate specialises in the Treatment of—Disorders of the Liver—congestion cirrhosis, jaundice, cholecystitis, cholelithiasis, and tropical liver Also in Diseases of the Skin—eczema, psoriasis the coccal infections of the skin etc The C[illegible] P[illegible] D[illegible] Arthritis Fibrositis Neuritis, [illegible] Colitis, Functional Disorders [illegible] orders of Women, Convalescence from acute illness

A wide range of Sulphur and Iron waters is available for dealing with the large group of disorders amenable to Spa treatment Prescribed diets for Spa patients can be obtained at hotels and boarding houses without extra charge Complimentary and reduced price facilities for the Cure Accommodation and Amuse ments are available for Members of the Medical Profession

Full details of Harrogate for Cure and Holiday will be sent free upon application to Spa Manager, Information Bureau, Harrogate, 1 (State if a medical enquiry)

HARROGATE

"IT'S QUICKER BY RAIL"

Cheap monthly return tickets to Harrogate from all stations Any train any day

PECKHAM HOUSE, 112, Peckham Road, London, S.E. 15.

Telegrams "Alleviated, London" Telephones Rodney 2641-2642

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders Certified voluntary and temporary patients are received Separate houses for treatment and accommodation of special cases adjoin the Institution Occupational therapy physical drill and other forms of modern treatment There is a seaside branch, Kearsney Court near Dover, to which patients may be sent for treatment or on holiday Motor drives are arranged when required Tennis courts Entertainments dances and indoor amusements held throughout the year Terms from £3 3s per week Illustrated prospectus and further particulars can be obtained from the Medical Superintendent

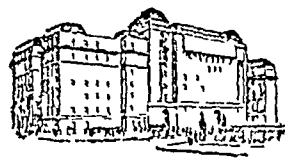
THE CLINIC

20 Devonshire Place
London, W.1

Tel Welbeck 4444 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns to 18 gns per week (Average—14 gns) 150 State Registered Nurses 2 Resident Medical Officers (for emergencies)
8 Operating Theatres
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary



The MUNDESLEY SANATORIUM

The central building makes the Mundesley Sanatorium the best equipped building in England for the cure of Tuberculosis All the bed rooms have hot and cold running water electric light and wireless headphones The public rooms are spacious and comfortable

Resident Physicians
S VERE PEARSON, M D (Cantab), M R C P (Lond)
E C WYNNE-EDWARDS, M B (Cantab), F R C S (Edin),
GEORGE H DAY M D (Cantab)

For all information apply The Secretary
THE SANATORIUM MUNDESLEY NORFOLK
Telephone Mundesley 94 and 95 (2 lines)

The buildings face S S W and are sheltered from the sea by a pine clad ridge The sunshine record and dry air complete a perfect site The medical equipment is of the latest kind, and there is a day *and night* nursing staff

TERMS FROM 7½ GUINEAS WEEKLY

THE CORNISH RIVIERA SANATORIUM

ROSEHILL, PENZANCE

For the treatment of patients suffering from tuberculosis

The Sanatorium stands in its own grounds of 13 acres of garden, lawn, and woodland and is well sheltered from cold winds The climate is mild in winter cool in summer Artificial pneumothorax and other modern forms of treatment are available Day and night nursing staff Electric light Wireless in all rooms

Medical Supt **Francis Chown**, M B Lond D P H Consulting Physician (late Med Supt) Cornwall County Sanatorium

Terms 5 to 7 guineas weekly 'Phone Penzance 398

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S S W, sheltered from North and East, elevation 800 feet Pure bracing air Special Treatment by Artificial Pneumothorax (X ray controlled) Tuberculins and Ultra-violet Rays are available when necessary without extra charge X-ray plant Fully equipped Dental Department Electric light Radiators, hot and cold basins and Wireless in all rooms Up to date main drainage

Full day and night Nursing Staff Terms [illegible] gns to [illegible] gns a week inclusive
Med Supt GEOFFREY A HOFFMAN B A M B T C Dub *Asst Phys* MARGARET A HARRISON M B B S Lond *Pathologist* EDGAR DAVEY M B B Ch *Consult Laryngologist* CASSIDY DE W GIBB F R C S Edin *Consulting Dental Surg* GEORGE V SAUNDERS L D S R C S Lond Apply Secretary The Cotswold Sanatorium Cranham Gloucester *Tel* 81 and 82 WITCOMBE *Grams* HOFFMAN *Birdlip*

Choose a Spa in

Czechoslovakia

The Spas and Health Resorts of Czechoslovakia with their centuries old tradition of healing reinforced by the experience and researches of local specialists invite your serious consideration

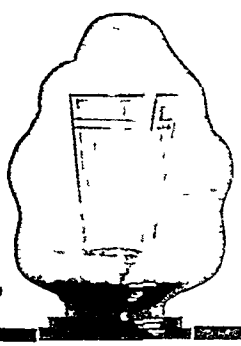
In addition to places of world wide repute such as

PISTANY (Piestany) **CARLSBAD** (Karlovy Vary) **MARIENBAD** (Marianske Lazne) **FRANZENSBAD** (Frantiskovy Lazne)

ST JOACHIMSTHAL (Jáchymov) **TEPLICE-SANOV** (Teplitz Schonau) **LUHACOVICE SLIAC TRENCIANSKE-TEPLICE**

with their medicinal springs and mud baths there are numerous smaller spas and health resorts admirably equipped for the treatment of many diseases including those in the following groups

Anaemia and Chlorosis Basedow's Disease Bronchial Catarrh Constitutional Diseases Scrofula Rickets Digestive Diseases Diseases of the Bladder and Urinary Organs Diseases of the Kidneys Diseases of the Nose and Throat Diseases of Women Disorders of Bones Muscles, and Joints Disorders of the Heart Disorders of Metabolism and Gout Gallstones Leucaemia Nervous Diseases and Post Hemiplegic Conditions Tuberculosis of the Lungs



The arrangements in the bath establishments are up to date in every way the cleanliness and neatness proverbial the service attentive and courteous

It is accepted that a spa cure to be fully beneficial should provide a complete change of surroundings and a break with the patient's normal everyday life

The Czechoslovak Spas fulfil this purpose admirably comfortable hotels first class orchestras and dance bands every facility for sport—tennis golf swimming riding fishing etc

There are also numerous fully up to date homes for convalescence and rest cures

Further information from any Office of

THOS COOK & SON, LTD,

and other leading Tourist Agencies

at

CZECHOSLOVAK TOURIST INFORMATION OFFICES

—in London 21 Regent Street S W 1

DOCTORS OWN SPA for RHEUMATISM

Sunny Pistany

Mud from Pistany in packs ready for home use Simplest safest and most economical treatment may be entrusted to any patient. Cost 20s for 20 treatments Literature on request from Pistany Agency

SEND YOUR PATIENT BY AIR

has been specially founded to facilitate the transport of invalids equipped planes Apply for special folder

The smoothest most restful way of travelling is a modern Air Liner The K L M Medical Service either on their regular services or in especially

VOLCANIC-SULPHURIC MUD SPRINGS

in delightful surroundings

21 DAYS

INCLUSIVE CURE

Special facilities for doctors and their wives

Fly there by the

BLUE DANUBE AIR EXPRESS

London to Pistany £1 10 0 single 70 **REDUCTION** return fares *under AL4 scheme*

K L M ROYAL DUTCH AIR LINES and C L S CESKOSLOVENSKA LETECKA SPOLECNOST

Particulars from

PISTANY AGENCY LTD 310 Regent Street London W 1 *Tel* LANgham 4214 or PISTANY SPA BUREAU 25 Cockspur Street S W 1 *Tel* WHitehall 7274

WOODHALL SPA

is Unique among British Spas

in having a Bromo-Iodine Water (for all forms of Rheumatism, etc), an INHALARIUM with FOG-ROOM for the treatment of Catarrhs of the Respiratory Tract, and an entirely RURAL and therefore, RESTFUL Quality Sheltered dry and sunny, with a gravel sub-soil

Information and Literature on application to the Spa Director Woodhall Spa Lincs

THE

HOTEL GREAT CENTRAL

Marylebone Road, N W 1

The Hotel Great Central is within a few minutes walk of the London Clinic and Harley Street

Special terms for friends visiting Nursing Homes in vicinity

Apply Manager Telephone Padd 1220

Tel and Telegrams Hayres Brentwood LITTLETON HALL, BRENTWOOD ESSEX

Large grounds 400 ft. above sea. HOME for ladies Mentally afflicted. Voluntary Boarders received Station Brentwood and Shenfield 1 mile Liverpool St 26 min Apply Dr HAYNES.

Smedley's

Great Britain's Greatest Hydro

Matlock

Terms 13/ to 18 6 per day inclusive Illustrated Brochure LJ on request.

G C R HARRISON MB FRCP DPH (R.U.I.) R. McLELLAND MD CM

HOLIDAYS ON THE NORFOLK BROADS OR NORFOLK COAST

BRITAIN'S DRIEST CLIMATE

Mr J R E Draper Land Agent Wroxham Norfolk (*Life Governor Norfolk and Norwich Hospital*) will send free on application Illustrated Book of Furnished Houses and Riverside Bungalows to Let for the Holiday Season Also a selection of Houses and Bungalows for Sale Grams Draper Wroxham Phone Wroxham 35

TORQUAY
GRESHAM COURT HOTEL

RECENTLY OPENED Luxurious comfort combined with an earnest desire to please

The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure M ' Tel 3658

EPILEPSY

Attendance at school is a necessary part of the satisfactory treatment of Epilepsy in Children

COLTHURST HOUSE SCHOOL

meets all the requirements of children of middle class parentage Extensions made necessary by the success of the school have created several vacancies

Only bright and intelligent boys and girls are eligible for admission

Apply to the **Director, Colthurst House School, Warford, Alderley Edge**

PRIVATE NERVOUS AND MENTAL PATIENTS

LONDON COUNTY COUNCIL Accommodation for Male patients suffering from Nervous and mental disorder (voluntary temporary or certified) is provided in the private section of CLAYBURY HOSPITAL, Woodford Bridge Essex Terms exclusive of clothing and special luxuries 49/ a week for London cases 53/1 a week for others

For particulars apply to the Medical Superintendent at the Hospital or to the Chief Officer Mental Hospitals Department Shell Mex House Strand W C 2

NORMANSFIELD

For Mental Defectives of either sex

Unedr private management

Apply to Dr Langdon-Down,

Normansfield Teddington

HOME FOR EPILEPTICS

MAGHULL (near LIVERPOOL)

FARMING and OPEN AIR OCCUPATION for PATIENTS

A few vacancies in 1 st and 2nd Class House FEES 1st Class (men only) from £3 p w upward 2nd Class (men and women) 32/ p w

For further particulars apply

C EDGAR GRISEWOOD, A C A,

Secretary 20 Exchange Street East Liverpool 2

HERMOSA, TEIGNMOUTH, S DEVON PAYING GUESTS

Highly recommended Restful home Good garden tennis courts Hot and cold in bedrooms South aspect Terms from 3 guineas weekly Phone 84

BISHOPSTONE HOUSE, BEDFORD

A select Private Mental Home for Ladies Certified and Voluntary with separate House and Gardens for Voluntary Boarders Under personal supervision of a Resident Mental Specialist and Psychiatrist—Medical Staff Dr J LANGHAM MACAULAY Tel Pedford 2702

KENWORTHY'S HYDRO HOTEL, SOUTHPORT

SEPARATE SUITES OF LADIES' AND GENTLEMEN'S HYDROPATHIC BATHS, RECENTLY MODERNISED AND REDECORATED

All Hydropathic Treatments including Turkish Russian Vichy Air Scotch Plombiere Nauheim Soapless Foam and other remedial Baths

A fully equipped Massage and Electrical Department with Certificated Attendants

Diets under special supervision

Resident Physician R G CLEMENTS M D D P H F R C S

Terms from 12/ to 18/6 per day—inclusive of board Special Terms for long period Residents

Apply The Manageress Tel Southport 3132

MONTANA HALL, Montana, Switzerland

OPEN ALL THE YEAR

THE ONLY SANATORIUM IN SWITZERLAND UNDER BRITISH OWNERSHIP AND CONTROL AND WITH A DAY AND NIGHT STAFF OF BRITISH TRAINED NURSING SISTERS

INCLUSIVE TERMS—from 7 guineas (sterling) per week

Med Supt HILARY ROCHE M D (Melb) M R C P (Lond) Tuberculous Dis Dip (Wales)

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)

CITY ROAD, E C 1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Dental Clinics and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Residential) Nearly 2 000 patients annually

RALPH B CANNINGS Secretary

QUEEN CHARLOTTE'S MATERNITY HOSPITAL

MARYLEBONE ROAD, N W 1

Medical Students and Qualified Practitioners admitted to the Practice of this Hospital Unusual opportunities are afforded of seeing Obstetrical Complications and Operative Midwifery (about one half of the total admission being primiparous cases) Over 2 700 patients are admitted to the Wards annually and in the Antenatal department there are over 20 000 attendances per annum Clinical demonstrations are given by the Staff daily

For rules fees etc apply H B STOKES Secretary Superintendent

UNIVERSITY COLLEGE HOSPITAL MEDICAL SCHOOL

RADCLIFFE CROCKER TRAVELLING SCHOLARSHIP IN DERMATOLOGY

The Committee of UNIVERSITY COLLEGE HOSPITAL invite applications for the Radcliffe Crocker Travelling Scholarship in Dermatology

The Scholarship is of the approximate value of £250 tenable for a period of twelve months to be spent at some place of study named by the School Committee outside of the United Kingdom

Candidates must be British subjects students of a London Medical School and graduates of a University in the United Kingdom

Applications must be submitted on or before Tuesday July 12th 1938

For further particulars apply to the Dean R SLOLEY Secretary

DIPLOMA IN ANAESTHETICS—D A

DIPLOMA IN CHILD HEALTH—D C H

Courses of Postal and Oral preparation for these examinations may now be commenced

For full details write to the SECRETARY Medical Correspondence College 19 Welbeck Street London W 1

DIPLOMA IN PUBLIC HEALTH

The Royal Institute of Public Health and Hygiene

The Course of Instruction can be commenced at any time Special provision is made for students who can give only part time to the work

A prospectus and further particulars can be obtained from the Secretary

Telephone Langham 2731/2

28 Portland Place London W 1

F R C S (Edin)

EDINBURGH POSTAL COURSES

Full details of above and Oral Classes—H C ORRIN F R C S Surgeon's Hall Edinburgh

THE LONDON SCHOOL OF DERMATOLOGY

St John's Hospital for Diseases of the Skin,

5 Lisle Street Leicester Square W C 2

Conducted by the Honorary Staff of the Hospital together with the Physicians in charge of the Dermatological Departments of the London Teaching Hospitals Lectures and Demonstrations twice weekly during October and November and again during January and February and four times weekly during May General Practitioners desiring to attend any particular course or occasional lectures can do so without paying a fee Clinics daily at 2 p m and 6 p m Saturdays 2 p m only The Laboratory is particularly well equipped and arrangements can be made for classes individual instruction or for research work Enquiries The Dean or Secretary of the School

FELLOWSHIP

The EUGENICS SOCIETY offers a LEONARD DARWIN FELLOWSHIP of £250 for one year from October 1st 1938 renewable for a second year tenable in any approved Institution in the United Kingdom for Research on subjects bearing on Eugenics such as the quantitative study of genetics and evolution human heredity vital statistics fertility the eugenic effects of economic conditions and legislation etc Forms may be obtained from the Business Secretary The Eugenics Society 69 Eccleston Square London S W 1 to whom applications for the Fellowship should be sent on or before July 31st 1938

GLASGOW POST GRADUATE MEDICAL ASSOCIATION

CLINICAL OBSTETRICS

Special facilities are offered at the Royal Maternity and Women's Hospital for the study of Clinical Obstetrics including Antenatal work during the months of August and September

Particulars may be obtained from the House Superintendent Royal Maternity and Womens Hospital Rottenrow Glasgow

Preliminary Examinations

The COLLEGE OF PRECEPTORS holds Preliminary Examinations for Medical and Dental Students in London and at Provincial Centres in March June September and December For Regulations apply to the Secretary College of Preceptors Bloomsbury Square London W C 1

UNIVERSITY OF LONDON

BRITISH POSTGRADUATE MEDICAL SCHOOL

DEPARTMENT OF PATHOLOGY

DIPLOMA IN CLINICAL PATHOLOGY

A COURSE OF STUDY in the academic year 1938-39 will be held for this Diploma commencing on October 3rd. The Course will occupy twelve calendar months. The subjects embraced will be —

HAEMATOLOGY AND CLINICAL PATHOLOGY
PATHOLOGICAL CHEMISTRY
BACTERIOLOGY
MORBID ANATOMY AND HISTOLOGY

The Course will commence with Haematology and Clinical Pathology which will occupy about six weeks and will be followed by the Course in Pathological Chemistry which will occupy about the same time. The Courses in Bacteriology and Morbid Anatomy and Histology will run concurrently and occupy about six months. For the last three months of the Course students will be occupied in the practice of routine work in the laboratories of the Department and in research work. The number of places in the Course is limited and students will be selected shortly before the Course is due to commence.

Fee forty guineas.

In addition to the full Course it will probably be possible to enrol a limited number of students for the subjects of Pathological Chemistry and Clinical Pathology and Haematology separately, the Course in each subject lasting about six weeks. Fee for either Course nine guineas.

Further particulars may be obtained from the Dean, British Postgraduate Medical School, Ducane Road, Shepherd's Bush, London, W.12.

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17 RED LION SQ., LONDON, W.C.1

FOUNDED IN 1887
by E. S. WEYMOUTH, M.A. (Lond.)

POSTAL OR ORAL PREPARATIONS FOR ALL MEDICAL EXAMINATIONS

M.R.C.P. LONDON

October examination

SPECIAL CLASSES

commencing

Aug. 2nd — Medicine
Aug. 10th — Microscope Demonstrations
Aug. 11th — Physiology
Sept. 5th — Museum Demonstrations

Special attention is paid to recent work

Further particulars can be obtained from the Principal

MEDICAL PROSPECTUS (47 pp.)

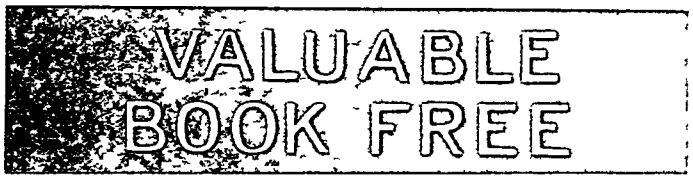
CONTENTS: The method and the cost of entering the Medical Profession. *Particulars of all Medical Examinations.* Postal Courses and Oral Classes. Suggestions for the Higher Medical Examinations. Suggestions for the Higher Surgical Examination. Suggestions for the Special Diploma Examination. Refresher Courses. Openings for Women. Hints for writing theses.

Medical Prospectus gratis, along with list of Tutors, etc., on application to the Principal, 17 Red Lion Sq., London, W.C.1. (Telephone: Holborn 6141.)

STAMMERING SPEECH DEFECTS

BEHNKE METHOD. Estab. 1880. Can be taken non-resident, treated at 39 Earl's Court Sq., S.W.5, and in residence in the Summer holidays at Miss BEHNKE's house on the Chilterns. "The pre-eminent success in education and treatment of stammering and other speech defects." — Times. "Thoroughly physiological principles." — Lancet. "The method is essentially correct and perfect in effective." — Guy's Hospital Gazette.

Stammering, Cleft Palate Speech, Lisping. 3/9 of Miss BEHNKE, 39 Earl's Court Sq., S.W.5.



Are you preparing for any Medical or Surgical Examination?

Do you wish to specialise in any Branch of Medicine or Surgery?

Send Coupon below for our valuable publications

"Guide to Medical Examinations"
"The M.R.C.P., and How to Obtain It"
"The F.R.C.S.Eng., and Other Higher Surgical Examinations"
"How to Write a Thesis for the M.D. Degree"
"Guide to the M.D. (London)"
"Guide to the D.P.M. Examinations"
"Guide to Dental Examinations"
"Guide to Higher Examinations for Nurses"

Any of the above will be sent post free on application

Leaflets dealing with the following examinations have also been prepared and will be sent post free on application

"Diploma in Child Health"
"Diploma in Anaesthetics"
"Diploma in Radiology"
"Diploma in Laryngology"
"Diploma in Ophthalmology"
"Diploma in Bacteriology"

We specialise in COACHING for ALL MEDICAL EXAMINATIONS

Send Coupon below for any booklet and all information relating to your Examination

The Secretary, MEDICAL CORRESPONDENCE COLLEGE
19 Welbeck Street, London, W.1

Sir,—Please send me the publications marked

Name
Address
Examination in view
Publications required

UNIVERSITY COLLEGE, LONDON FACULTY OF MEDICAL SCIENCES

SPECIAL COURSE FOR THE PRIMARY FELLOWSHIP EXAMINATION OF THE ROYAL COLLEGE OF SURGEONS

Special Short Courses in ANATOMY and PHYSIOLOGY will commence on TUESDAY SEPTEMBER 6th 1938 in preparation for the December Examination

ANATOMY Professor H H WOOLLARD M D D Sc F R S

PHYSIOLOGY PHYLLIS M TOOKEY KER RIDGE M Sc Ph D M R C S L R C P

The course in Anatomy (including Embryology) will comprise lectures demonstrations practical dissection and oral examination Each week papers will be set corrected and discussed Members of the class are invited to use the facilities of the Dissecting Room the Anatomical Museum the Radiographic Department and the Reading Room of the Medical Sciences Library

The Course in Physiology includes Biochemistry and Histology and is made up of lectures demonstrations and viva voce classes held daily at 9 a m (Saturday excepted) beginning on September 6th

Full particulars may be obtained on application to

C O G DOUIE
Secretary

University College London (Gower Street W C 1)

THE ROYAL CANCER HOSPITAL (FREE)

(Incorporated under Royal Charter)

Fulham Road, London, S W 3

A COURSE of STUDY in PHYSICS and MEDICAL RADIOLOGY qualifying for the Diploma in Medical Radiology of the University of London and the Royal Colleges of Physicians and Surgeons will begin on MONDAY OCTOBER 3rd 1938 at The Royal Cancer Hospital Fulham Road London S W 3 Full particulars can be obtained on application at the above address to the Secretary

CLEMENT COBBOLD Secretary

ADMINISTRATIVE COUNTY OF ESSEX

ESSEX COUNTY HOSPITAL
Warstead

APPOINTMENT OF RESIDENT MEDICAL OFFICER

The County Council of the Administrative County of Essex invite applications from Registered Medical Practitioners not over 45 years of age for appointment as Resident Medical Officer at the above Hospital which will shortly be opened as a County Hospital for the accommodation of approximately 200 chronic and infirm patients

The salary will be at the rate of £350 per annum and will rise subject to satisfactory service by annual increments of £25 to £550 per annum together with residence board laundry and attendance valued for superannuation purposes at £150 per annum

The person appointed will be required to devote his whole time to the services of the Council to perform such duties and to furnish such advice and assistance appertaining to his office as may be required and to reside in the quarters provided at the Hospital The appointment will be held by the successful candidate during the pleasure of the Council and will be determinable by the officer by three months notice in writing

The person appointed will be required to pass a medical examination and to contribute five per cent of his salary to the fund established by the County Council under the Local Government and Other Officers Superannuation Act 1922

The appointment will be subject to the Council's Sick Pay Rules and Regulations a copy of which will be forwarded on application

Applications on the prescribed form obtainable from the undersigned and accompanied by copies of not more than three testimonials which will not be returned should be addressed to me and delivered at the County Hall Chelmsford not later than 10 a m on Wednesday July 6th 1938

County Hall L S HOLCROFT
Chelmsford Clerk of the County Council
June 21st 1938

BRITISH POSTGRADUATE MEDICAL SCHOOL

There will be a vacancy for a GYNAECOLOGICAL HOUSE SURGEON to commence duty on August 1st 1938

Salary at the rate of £105 per annum with board lodging and laundry

Applications accompanied by copies of testimonials should be addressed to the Dean British Postgraduate Medical School Devonshire Road Shepherd's Bush London W 12 and arrive not later than the first post on Monday July 11th 1938

CITY OF BIRMINGHAM

CITY MENTAL HOSPITAL
WINSON GREEN DIVISION

MEDICAL SUPERINTENDENT

The Committee of Visitors invite applications from duly qualified medical men for the position of Medical Superintendent of the Winson Green Division of the City Mental Hospital at a commencing salary of £1 100 per annum plus emoluments valued for superannuation purposes at £300 per annum

Applicants must be not more than 45 years of age must possess a recognized degree or diploma in psychological medicine and preference will be given to a holder of one or both of the following qualifications —Doctor of Medicine of a British University or a Member of a Royal College of Physicians experience in the treatment of mental disorders and in the administration of a Mental Hospital is essential

The candidate appointed will be required to pass a medical examination and to contribute under the Asylums Officers Superannuation Act 1909 He must also devote the whole of his time to the duties of the office and must not engage either directly or indirectly in private or consulting practice

All fees received in connexion with panel work will be required to be paid into the Borough funds but for making insurance reports reports on compensation cases and coroners inquests the fees can be retained

The appointment is subject to one month's notice on either side

There is a Chief Medical Officer of the City Hospital who is also the of the Rubery Hill and

Medical Superintendent

Winson Green stating age full particulars of qualifications experience and appointments held accompanied by copies of three recent testimonials must be addressed to the undersigned so as to be received not later than Friday July 8th 1938

Canvassing either directly or indirectly will be a disqualification

F H C WILTSHIRE
Clerk to the Committee of Visitors

Town Clerk's Office
Birmingham 1 June 10th 1938

CITY OF BIRMINGHAM

MATERNITY AND CHILD WELFARE DEPARTMENT

The Public Health Committee invite applications from qualified medical women to act as MEDICAL OFFICER in the above Department (two vacancies)

The duties include attendance at maternity and child welfare centres and practical obstetrics

Applicants should have had a six months resident appointment in a children's hospital and in a maternity hospital The D P H will be considered an additional qualification

The salary scale is £500 rising by £25 annually to £700 per annum the commencing salary within that scale depends on the medical officer's obstetrical experience A car allowance is made It will be necessary to reside in close proximity to one of the City maternity homes

The appointment will be subject to membership of the Birmingham Corporation Superannuation Scheme and to the candidate passing a medical examination and will be subject to three months notice on either side

Applications endorsed Medical Officer for Maternity and Child Welfare and accompanied by copies of three recent testimonials to be made on a form obtainable from the Medical Officer of Health Council House Birmingham 3 and returned to him on or before July 9th 1938

ROYAL N Z SOCIETY FOR THE HEALTH OF WOMEN AND CHILDREN (INC) (PLUNKET SOCIETY)

APPOINTMENT OF MEDICAL ADVISER TO THE DOMINION COUNCIL OF THE SOCIETY

The Dominion Council of the Royal N Z Society for the Health of Women and Children (Inc) (Plunket Society) invites applications from members of the British Medical Association for the appointment of a Medical Adviser to the Society

The successful applicant will require to reside at Dunedin New Zealand to enter into a contract for a period of five years and to devote his whole time to the work

Salary £1 200 per annum New Zealand currency

Further particulars may be obtained from Dr R C JEWESBERY M D F R C P 5 Wimpole Street Cavendish Square London W or from the HIGH COMMISSIONER FOR NEW ZEALAND New Zealand House 415 Strand London W C 2

The successful applicant will be required to take up duty early in 1939

Applications giving full particulars as to age experience and qualifications together with copies of recent testimonial will be received not later than September 30th 1938 and should be addressed to the DOMINION PRESIDENT Plunket Society Queen's Buildings Princes Street Dunedin New Zealand

LANCASHIRE COUNTY COUNCIL

PUBLIC ASSISTANCE COMMITTEE

LAKE HOSPITAL AND DARNTON HOUSE INSTITUTION
Ashton under Lyne near Manchester

APPOINTMENT OF SENIOR RESIDENT MEDICAL OFFICER

Salary £300 per annum together with the usual residential emoluments The person appointed will be required to take up duty on September 1st 1938

Applications are invited from Registered Medical Practitioners for the above appointment at the Lake Hospital and Darnton House Institution Ashton under Lyne comprising 300 and 525 beds respectively The Hospital is recognized as a complete Training School for Nurses

Candidates must be unmarried Preference will be given to candidates having previous hospital experience especially in the administration of anaesthetics

The appointment will in the first instance be for a period of six months the successful candidate being eligible for reappointment for a further period of six months at the end of that period

Forms of application may be obtained from the *County Medical Officer of Health Public Assistance (Hospital and Medical) Department County Offices Preston* to whom all applications accompanied by copies of not more than two recent testimonials must be forwarded not later than *Saturday July 16th 1938*

County Offices GEORGE ETHERTON
Preston Clerk of the County Council
June 24th 1938

LANCASHIRE COUNTY COUNCIL

PUBLIC ASSISTANCE COMMITTEE

WHISTON COUNTY HOSPITAL
Near Prescot

RESIDENT MEDICAL OFFICER

Applications are invited from Registered Medical Practitioners for the appointment of Resident Medical Officer at the above Institution (500 Beds) Candidates must be unmarried

Preference will be given to candidates having previous Hospital experience particularly in Midwifery

Salary at the rate of £350 per annum together with the usual residential emoluments

The appointment will in the first instance be for a period of six months the successful applicant being eligible for reappointment for a further period of six months at the end of that period

Forms of application may be obtained from the *County Medical Officer of Health Public Assistance (Hospital and Medical) Department County Offices Preston* to whom all applications accompanied by copies of not more than two recent testimonial must be forwarded so as to be received not later than *Saturday July 16th 1938*

County Offices GEORGE ETHERTON
Preston Clerk of the County Council
June 27th 1938

CITY OF MANCHESTER

BOOTH HALL HOSPITAL FOR CHILDREN
(760 Beds)

The Public Health Committee invites applications from registered medical men for the post of RESIDENT ASSISTANT MEDICAL OFFICER at the above named hospital

The salary for the appointment is £200 per annum with board residence and laundry in addition subject to the Manchester Corporation conditions of service

The appointment will be made in the first instance for a period of six months renewable for a further six months but not renewable thereafter

Full information and forms of application may be obtained from the Medical Officer of Health Town Hall Manchester 2 and applications for the post must be received by him not later than July 9th 1938

F E WARBRICK HOWELL
Town Clerk

Town Hall
Manchester 2
June 17th 1938

CITY OF BIRMINGHAM

DUDLEY ROAD HOSPITAL
(976 Beds)

Applications are invited from fully qualified Medical Practitioners for whole time appointment as JUNIOR MEDICAL OFFICER (male) at the Dudley Road Hospital Birmingham The appointment will be for a period of six months but may be extended for a further period of not exceeding six months Salary at the rate of £ 00 per annum and full residential emoluments

Further particulars may be obtained from the Medical Superintendent at Dudley Road Hospital to whom applications stating age experience and qualifications with copies of recent testimonial should be forwarded not later than Thursday July 7th 1938

INDIAN MEDICAL SERVICE

RECRUITMENT OF EUROPEAN OFFICERS

Applications are invited from Medical Men for Permanent Commissions in His Majesty's Indian Medical Service. The terms offered include a gratuity of £1,000 on retirement after six years' service, or of £2,500 after 12 years' service together with free return passages for those who no longer desire to remain in the Service. In other respects the terms will be as detailed below.

British subjects of pure European descent who are under 32 years of age who are registered under the Medical Acts in force in Great Britain and Northern Ireland are eligible to apply.

CAREERS

The Indian Medical Service offers a permanent career with wide opportunities of medical experience including clinical preventive specialist and research work. At the beginning of his career an officer is employed on the military side which has medical charge of the Indian Army. Promotion is on a time scale up to the rank of Lieutenant-Colonel and by selection to the ranks of Colonel and Major-General. An officer may apply after one year's Indian Service to have his name registered for transfer to the civil side from which appointments are made to Civil Surgeoncies which are established at the principal civil centres to provide for the medical needs of Civil Officials and for general medical administrative purposes, to specialist (for example public health and bacteriological) services, to research posts and to professorships at the Medical Schools.

RATES OF PAY

Years of Service	Rank	Basic Pay Rs. per mensem	Overseas Pay £ per month	Total £ per annum
1	Lieutenant	450	15	585
2	Captain	500	25	750
3	"	550	25	795
4	"	550	25	795
5	"	600	25	840
6	"	600	30	900
7	"	700	30	990
8	"	700	30	990
9	"	700	35	1050
10	"	700	35	1050
11	Major	800	35	1140
12	"	800	40	1200
13	"	800	40	1200
14	"	800	40	1200
15	"	800	40	1200
16	"	950	40	1335
17	"	950	40	1335
18	"	950	40	1335
19	"	1100	40	1470
20	"	1100	40	1470
21	Lieut.-Col.	1350	40	1695
22	"	1350	40	1695
23	"	1350	40	1695
24	"	1500	40	1800
25	"	1500	40	1800

Note.—(1) The rupee is at present stabilized at a rate equivalent to 1s. 6d.

(2) An officer promoted to the rank of Lieut.-Colonel before completion of 20 years' service will receive pay at the rate of Rs. 1200 per mensem (basic) plus £40 per month overseas pay.

Extra.—In addition to the above rates various allowances are admissible to a large number of special appointments on both the military and the civil side which may be held by members of the Indian Medical Service. Special high rates of pay are also attached to the numerous administrative appointments open to officers in both branches of the Service.

ANTEDATES IN COMMISSION

Candidates possessing certain higher medical qualifications or holding the Diploma in Public Health may be granted an antedate in their commissions. Past service in certain hospital appointments may also render candidates eligible for an antedate. Persons holding or about to hold resident posts at recognized hospitals may be seconded in those posts for a period. The maximum period of antedate, secondment or antedate and secondment combined admissible under this paragraph is limited to 18 months.

OUTFIT ALLOWANCE.

Officers on appointment will receive an allowance of £70 towards the cost of outfit.

PRIVATE PRACTICE.

With the exception of Administrative Officers, military and civil, and officers holding certain special appointments, officers are not debarred from taking private practice so long as it does not interfere with their proper duties.

LEAVE.

Leave can be taken at reasonable intervals and deductible rates of leave pay are provided. Extra leave (known as study leave) which may not exceed twelve months in all during an officer's service may be granted to officers desirous of pursuing special courses of study of a postgraduate nature. During such leave a study allowance at present fixed at the rate of £1 a day in the United Kingdom, £1 a day on the Continent of Europe and £1 10s. a day in the United States of America and Canada is granted to an officer in addition to ordinary rates of leave pay.

PENSIONS

The rates of pension are as follows:—

	Per annum
After 17 years' service for pension	£372 0s.
" 18 " " "	£400 0s.
" 19 " " "	£428 0s.
" 20 " " "	£465 0
" 21 " " "	£502 0s.
" 22 " " "	£579 10s.
" 23 " " "	£576 10
" 24 " " "	£614 0
" 25 " " "	£651 0s.
" 26 " " "	£697 10s.
" 27 " " "	£744 0

There are additional pensions ranging from £65 to £250 per annum for officers who have held administrative appointments.

PASSAGES

An officer on appointment is provided with free passage to India. The families of officers who are married prior to the date of the officer's embarkation on first appointment will also be provided with free passage to India subject to the payment of messing charge. Officers and their families are also eligible for passage concessions under which they are granted a certain number of return passages home at Government expense during their service.

INSTRUCTION PRIOR TO EMBARKATION

Officers are required to undergo courses of instruction at the Royal Army Medical College and at Aldershot during approximately three months prior to their embarkation for India on first appointment. Information as to the rates of pay admissible during this period and subsequently up to arrival in India is contained in the memorandum referred to below.

A memorandum giving full details regarding these appointments and forms of application may be obtained from the UNDER SECRETARY OF STATE FOR INDIA, MILITARY DEPARTMENT, INDIA OFFICE, LONDON, S.W.1. The Selection Committee will meet at the India Office about July 26th next, and the selected candidates, unless seconded for hospital appointments, will be required to proceed on commencing about September 1st prior to sailing for India in December 1938. Applications should reach the India Office as soon as possible.

INDIA OFFICE, JUNE, 1938.

HIS MAJESTY'S COLONIAL SERVICE

COLONIAL MEDICAL SERVICE.

During 1938, the Secretary of State for the Colonies proposes to select a number of Medical Officers to fill vacancies the majority of which will occur in Tropical Africa and Malaya

QUALIFICATIONS—Candidates must be British subjects of European parentage under 35 years of age and must possess a medical qualification registrable in the United Kingdom Preference will be given to candidates who have held Hospital or Public Health appointments, or who have special knowledge of anaesthetics, radiology, surgery medicine, ophthalmology, gynaecology and midwifery, diseases of the ear, nose and throat venereal diseases, etc

SALARY—Initial salaries vary from £600 to £700 and rise by increments to a maximum of between £1 000 and £1,200

PRIVATE PRACTICE—Private practice is not allowed as of right, but in the case of some appointments it is permitted on certain conditions

QUARTERS—In Tropical Africa free quarters, or an allowance in lieu, are provided In Malaya quarters are provided at an annual rental not exceeding 6% of the officer s salary

PASSAGES—Free first-class passages are provided on first appointment and when proceeding on and returning from leave Assistance is also given towards family passages

TERMS OF APPOINTMENT—The appointments are pensionable, subject to a probationary period which varies from two to three years

COURSES OF INSTRUCTION IN TROPICAL MEDICINE AND HYGIENE.—Selected candidates will normally be required to attend a course of instruction leading to the Diploma in Tropical Medicine and Hygiene before proceeding overseas

DUTIES—Although Medical Officers are appointed in the first instance for general service there are opportunities for work in special branches of medicine and surgery, in public health and in medical research

Further particulars and forms of application may be obtained from the **Director of Recruitment (Colonial Service), 8, Buckingham Gate, London, S W 1**

ROYAL NAVAL MEDICAL SERVICE.

Vacancies exist for Medical Officers in the Royal Navy, and applications are invited for entry in September, 1938

Candidates below the age of 28 years are preferred, and they must be registered under the Medical Acts No examination in professional subjects will be held, but candidates will be required to attend for interview by a Selection Board

Selected candidates will be entered for Service for a period of three years, which if desired is usually extended to five years at the discretion of the Admiralty

At the end of three years' service, officers may retire with a gratuity of £400, but those who serve for five years will receive £1 000

At the end of five years' Short Service, permanent commissions will be given to selected officers who wish to make the Naval Medical Service their permanent career Officers transferred to the permanent list will receive a gratuity of £1,000 (less Income Tax)

Full opportunities exist for transfer to the permanent list, and periods of unemployed or half pay are very rare The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Opportunities are available for officers on the permanent list for post-graduate study, to specialise, to take higher examinations and to obtain further qualifications

Naval Medical Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers

Copies of the regulations for entry and conditions of service, including rates of pay, allowances and retired pay, may be obtained from the Medical Director-General of the Navy, Admiralty, S W 1, and from the Deans of all Medical Schools

Applications for entry from intending candidates must be received not later than 31st August, 1938

Appointments for Medical Officers in the ROYAL AIR FORCE

Medical men are invited to apply for Short Service Commissions in the Royal Air Force. Candidates must be registered under the Medical Acts and be not more than 31 years of age on entry.

The period of service is 3 years—extendible to 5 years. A gratuity of £400 or £1,000 is payable at the termination of 3 or 5 years respectively. Permanent commissions are awarded in a number of cases. There is a pensionable career with the opportunity of extra leave on full pay for specialised study. Applicants who hold—or are likely to hold—post-graduate appointments in civil hospitals may on joining the Royal Air Force be seconded until the termination of their appointments (for a period not exceeding one year). An antedate of commission up to twelve months is allowed for appointments held at approved hospitals.

Fuller information can be obtained from The Director of Medical Services, Air Ministry, Kingsway, London.

COUNTY BOROUGH OF WEST BROMWICH

HALLAM HOSPITAL. (472 Beds.)

(1) RESIDENT OBSTETRICAL OFFICER (2) RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from duly qualified (unmarried) male Registered Practitioners for the above appointments.

(1) Candidates for the Obstetrical Officer's post must have had previous resident hospital experience in both general and maternity work. The duties will include conduction of certain ante-natal clinics.

The appointment will be for 12 months at a salary of £100 plus usual resident emoluments.

The appointment is determinable by either party giving two months' notice.

(2) Resident Assistant Medical Officer—for general duties. Salary £100 together with usual resident emoluments. Appointment is for six months and renewable for a further six months but can be terminated by either party giving six weeks' notice.

All fees received by the persons appointed will be payable into the fund of the Council.

Applications stating age, experience and qualifications, *together with copies of three recent testimonials* must be forwarded to the Medical Officer of Health, Lodge Road, West Bromwich, so as to arrive not later than by first post on Wednesday, July 6th, 1938.

Town Hall, West Bromwich. June 16th, 1938.

G. F. DARLOW, Town Clerk.

COUNTY BOROUGH OF BLACKPOOL

APPOINTMENT OF MALE ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from duly qualified and registered *medical gentlemen* for the above appointment.

The salary offered is at the rate of £500 per annum rising by annual increments of £25 to a maximum of £700.

Details of the conditions of appointment, duties and form of application may be obtained on application to the Medical Officer of Health, Municipal Health Centre, Blackpool.

Canvassing of any description will be deemed a disqualification.

TREVOR T. JONES, Town Clerk.

Town Hall, Blackpool. June 1938.

BOROUGH OF CHESTERFIELD

ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER (Male)

Applications are invited from duly qualified and registered male medical practitioners for the above appointment.

The salary will be £600 per annum rising by annual increments of £25 to £700 per annum.

The appointment will be subject to the provisions of the *Local Government and Other Officers' Superannuation Act, 1922* and the successful candidate will be required to pass the necessary medical examination.

The duties of the post include work in connection with the School Medical and Maternity and Child Welfare Services and such other duties as may be required by the Council.

Further details of the appointment and special application forms can be obtained from the Medical Officer of Health, Health Department, Town Hall, Chesterfield, to whom all applications should be submitted together with three recent testimonials not later than Thursday, July 14th, 1938.

Town Hall, Chesterfield. T. M. JORDAN, Acting Town Clerk.

CITY OF SHEFFIELD

NETHER EDGE HOSPITAL

Applications are invited from duly qualified medical women for the appointment of ASSISTANT MEDICAL OFFICER at the above hospital.

The Medical Officer appointed will be required to reside in the hospital and assist in the medical and maternity sections. She will also take part in the Maternity and Child Welfare work of the Corporation, taking Ante-Natal, Post-Natal, Child Welfare Clinics and at the Maternity and Child Welfare Centre.

Candidates should have previous hospital experience and post-graduate experience in Midwifery and Ante-Natal work is essential.

The salary offered is £200 per annum, rising by £25 to £250 with the usual resident medical allowances. The appointment will be subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1922, and deductions will be made under this Act.

Applications, stating age, qualifications and experience, accompanied by three recent testimonials, should be sent to the Medical Superintendent, City General Hospital, Sheffield, not later than July 6th, 1938.

SURREY COUNTY COUNCIL

PUBLIC ASSISTANCE DEPARTMENT

RICHMOND INSTITUTION (450 Beds)

APPOINTMENT OF RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the appointment of Resident Assistant Medical Officer at the Grade I Poor Law Institution, Richmond. The Institution is administered by the Public Assistance Committee of the Council.

Applicants should have had experience as a House Surgeon or Physician. The appointment is for a period of six months, renewable for a further period of six months, and the salary is at the rate of £200 per annum, together with full residential emoluments, value at £45 per annum.

Applications, stating qualifications, experience and enclosing copies of not more than three testimonials, should be sent to the Resident Assistant Medical Officer, Poor Law Offices, Kingston Hill, Kingston-on-Thames, so as to reach him not later than July 14th, 1938.

County Hall, Kingston-on-Thames. June 24th, 1938.

DUDLEY AUKLAND, Clerk of the Council.

LANCASHIRE (MENTAL DEFICIENCY ACTS) COMMITTEE.

An ADDITIONAL ASSISTANT MEDICAL OFFICER [illegible] required by the above Committee [illegible] Mental Deficiency Acts [illegible] County of Lancaster [illegible] Training Centres, and the early [illegible] duties [illegible] Committee may [illegible] time require.

Salary [illegible] per annum [illegible] a Diploma in Psychological Medicine [illegible] Universities Bureau of Education [illegible] Medical Psychology [illegible] Medical Practitioners [illegible]

The appointment [illegible]

Forms of application [illegible] duties [illegible] and conditions of appointment [illegible] must be returned [illegible] later than July [illegible]

County Offices, Preston. GLOVER ETHELL, Clerk of the County Council.

WEST SUSSEX COUNTY COUNCIL

JOINT COMMITTEE OF HORSHAM URBAN AND HORSHAM AND PETWORTH RURAL DISTRICTS

ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH AND MEDICAL OFFICER OF HEALTH

Applications are invited for the joint whole time appointment of an Assistant County Medical Officer of Health for the Administrative County of West Sussex (salary £340 per annum rising by annual increments of £50 to £540 per annum) and Medical Officer of Health for the Horsham Urban District and the Horsham and Petworth Rural Districts (salary £460 per annum)

Applicants who should not be over 45 years of age must be duly qualified medical men with experience in Public Health duties and must hold the Diploma in Public Health or its equivalent The officer appointed will be required to reside in Horsham or such other place as may be approved As regards his duties as Assistant County Medical Officer of Health the officer will act under the general control of the County Medical Officer of Health and will be required to perform such duties as may be from time to time prescribed and as regards his duties as District Medical Officer of Health the officer will be subject to the sole control and direction of the Local Sanitary Authority

Office accommodation and clerical assistance will be provided by arrangements to be agreed upon by the appointing authorities and an allowance will be made for travelling The joint appointment is subject to the approval of the Minister of Health and the Board of Education and also so far as the office of District Medical Officer of Health is concerned to the provisions of the Sanitary Officers (Outside London) Regulations 1935 The joint appointment is designated under the Local Government and Other Officers Superannuation Act 1922 and the selected candidate will be required to pass a satisfactory medical examination

The joint appointment will be determinable by three months notice on either side subject so far as the office of the District Medical Officer of Health is concerned to the consent of the Minister of Health

Forms of applications together with a list of duties and conditions of appointment may be obtained from the undersigned A D ROBINSON and accompanied by copies of not more than three recent testimonials should be returned to him in the envelope provided not later than July 12th 1938

A D ROBINSON
Deputy Clerk of the West Sussex County Council
F FRASER HADDOCK
Clerk to the Joint Committee of the Horsham Urban and Horsham and Petworth Rural Districts
County Hall Chichester
June 20th 1938

SALOP COUNTY COUNCIL

(a) DEPUTY COUNTY MEDICAL OFFICER OF HEALTH AND DEPUTY SCHOOL MEDICAL OFFICER (Male)

(b) ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER (Male)

Applications for the above posts are invited from duly registered medical practitioners who possess a recognized qualification in Public Health and have had at least three years experience in the practice of their profession

For the position of Deputy previous experience is essential in Maternity and Child Welfare and School Medical Inspection work and very desirable in the administrative work of a Public Health Department The commencing salary will be at the rate of £700 per annum rising by annual increments of £25 to £750 (together with a travelling allowance in accordance with the County scale)

The duties of Assistant Medical Officer will include medical inspection of school children Maternity and Child Welfare work and attendances at associated clinics The salary will be at the rate of £600 per annum rising by annual increments of £25 to £700 per annum (together with a travelling allowance in accordance with the County scale)

Both appointments will be determinable by three months notice on either side and each officer appointed will be required to devote the whole of his time to the performance of the duties assigned to him by the County Medical Officer

Both appointments are designated post for the purposes of the Local Government etc Officers Superannuation Act 19

Applications accompanied by a copy of three recent testimonials should be submitted not later than Tuesday July 12th to the County Medical Officer County Health Offices Shrewsbury from whom the necessary form and conditions of service can be obtained

W L EDGE
Clerk of the Council
Shirehall Shrewsbury
June 20th 1938

NORTHAMPTONSHIRE COUNTY COUNCIL

Appointment of Assistant County Medical Officer and District Medical Officer of Health

Applications are invited from registered medical practitioners holding a diploma in public health or similar qualification for the appointment of Assistant County Medical Officer of Health under the above County Council and District Medical Officer for the Borough and Rural District of Brackley The officer appointed will also act as temporary District Medical Officer of Health for the Brixworth Rural District but ultimately he will vacate this appointment and will take over other districts adjacent to the Brackley area

The inclusive salary will be at the rate of £800 per annum with a travelling allowance on the scale from time to time approved by the County Council Office accommodation and clerical assistance will be provided The present allocation of the annual salary is County Council £520 Brixworth Rural District £175 Brackley Borough £30 and Brackley Rural District £75

The appointments under the County Council and the Brixworth and Brackley Rural District Councils are designated posts for purposes of the Local Government and Other Officers Superannuation Act 1922 and the salary attaching to those appointments will be subject to a deduction of 5 per cent per annum for superannuation in accordance with the provisions of that Act

The officer appointed will act under the Sanitary Officers (Outside London) Regulations 1935 and the Local Government Act 1933 and the officer appointed will be required to perform in the districts of the Local Sanitary Authorities referred to all the duties imposed on a District Medical Officer of Health by the relevant Acts Orders and Regulations

The officer will be required to devote his whole time to the duties of the office and to reside in a place approved by the Authorities

The candidate appointed will be required to pass a medical examination

The appointment will be determinable (subject to the relevant provisions of the Local Government Act 1933) upon three months notice on either side

Applications stating age qualifications and experience together with copies of not more than three recent testimonials should reach the undersigned not later than July 11th 1938

Canvassing will disqualify

H S MARTIN
Clerk of the County Council
County Hall Northampton
June 21st 1938

COUNTY BOROUGH OF CROYDON

WARLINGHAM PARK HOSPITAL (for Nervous and Mental Disorders) Warlingham Surrey

APPOINTMENT OF JUNIOR ASSISTANT MEDICAL OFFICER

The Visiting Committee of the Warlingham Park Hospital are prepared to receive applications from medical men for the appointment of Junior Assistant Medical Officer No married quarters are provided Age should not exceed 35 years

The salary will be at the rate of £400 per annum rising by annual increments of £25 each to a maximum of £500 per annum A further £50 per annum will be paid if in possession of the D P M Furnished apartments will be provided with board and laundry and for the purpose of superannuation will be valued at £150 per annum

Candidates must be registered under the Medical Act and preference will be given to those candidates who have held the post of House Surgeon or House Physician at a General Hospital Previous experience in a Mental Hospital is not essential The appointment will be subject to the provisions of the Asylum Officers Superannuation Act 1909

Forms of application may be obtained from me by sending a stamped addressed foolscap envelope to be returned not later than 10 o'clock in the forenoon of Thursday July 14th 1938 Canvassing in any form is prohibited

Town Hall F TABERNER
Croydon Clerk to the Visiting Committee
June 25th 1938

CITY OF WESTMINSTER

ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners preferably holding a Public Health qualification under 40 years of age for the above appointment The post is of a temporary nature and the successful candidate will have to devote part of his time to duties connected with Air Raid Precautions The salary will be £600 per annum

Applications on forms to be obtained from the undersigned together with copies of not more than three testimonials should reach the undersigned not later than July 9th 1938 Canvassing either directly or indirectly disqualifies

City Hall PARKER MORRIS
Westminster Town Clerk
June 28th 1938

LONDON COUNTY COUNCIL

Applications invited from MEDICAL PRACTITIONERS of at least one year's standing to undermentioned positions Candidates must have held resident appointment in a general hospital for at least six months Married quarters not available

ASSISTANT MEDICAL OFFICERS (Grade I) —Salary £350-£425 with board lodging and washing

(a) HACKNEY HOSPITAL Homerton High Street E 9 Duties mainly medical

(b) HIGHGATE HOSPITAL Dartmouth Park Hill N 19 Duties mainly medical experience in anæsthetics desirable

(c) LEWISHAM HOSPITAL Lewisham S E 13 Mainly anæsthetics with medical duties

(d) MILE END HOSPITAL Bancroft Road Mile End E 1 Duties mainly surgical

(e) ST GEORGE IN THE EAST HOSPITAL Raine Street Wapping E 1 Duties obstetrical gynæcological operative surgical experience essential

ASSISTANT MEDICAL OFFICERS (Grade II) —Salary £250 together with board lodging and washing Appointment for one year only in first instance (renewable for a second year under certain conditions)

(f) MILE END HOSPITAL Bancroft Road Mile End E 1 General medical duties experience in anæsthetics desirable

(g) ST CHARLES HOSPITAL St Charles Square Ladbroke Grove W 10 Medical duties and male tuberculosis wards

*(h) ST PANCRAS HOSPITAL Pancras Road N W 1 General duties experience in anæsthetics essential

** Male candidates only*

Application forms obtainable (stamped addressed foolscap envelope necessary) from Medical Officer of Health Staff Division 2a County Hall S E 1 returnable by July 11th Canvassing disqualifies

LONDON COUNTY COUNCIL

CONSULTANT AND SPECIALIST SERVICES

Application invited for appointment as PART TIME EAR NOSE AND THROAT SPECIALIST for one session a week for duty at St Andrew's Hospital Bow

Salary £125 (£75 a year if already employed as a part time consultant or specialist in hospital service) and additional remuneration at rate of £2 12s 6d a visit for emergency visits made in excess of number of routine sessions

Application forms containing full particulars obtainable (stamped addressed foolscap envelope necessary) from Medical Officer of Health (6) County Hall S E 1 returnable by July 9th Women eligible Canvassing disqualifies

MIDDLESEX COUNTY COUNCIL

NORTH MIDDLESEX COUNTY HOSPITAL Silver Street Edmonton N 18

ASSISTANT MEDICAL OFFICER required for Casualty and Receiving Room duties Candidates must be registered medical practitioners have held posts as House Physicians and House Surgeons and with considerable general experience

Salary £350 p a with board lodging and laundry or cash allowance of £100 p a in lieu of residential emoluments Appointment non pensionable but subject to medical examination is for period of six months with possibility of extension for further six months and is terminable by one month's notice on either side

Whole time services required under direction of Medical Superintendent Hours of duty 10 a m to 6 p m daily with Saturday afternoons and Sundays free

Application forms not provided Applications stating age qualifications and experience together with copies of not more than three recent testimonials must be received by the undersigned not later than July 16th in envelopes endorsed C M D North Middlesex Relationship to any member or officer of the Council must be disclosed in the application and canvassing directly or indirectly a disqualification

C W RADCLIFFE Z
Clerk of the County Council
Middlesex Guildhall
Westminster S W 1
June 20th 1938

BOROUGH OF WORTHING

DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited for the above appointment from duly registered medical practitioners possessing a diploma in Sanitary Science Public Health or State Medicine Salary £650 per annum rising by annual increments of £25 to a maximum of £700 per annum

Terms and conditions of appointment and form of application will be supplied on receipt of a stamped and addressed foolscap envelope

Applications with not more than three recent testimonials must be received by the undersigned not later than July 16th 1938

Town Hall J KENNEDY MEERTON
Worthing Town Clerk
June 1938

CITY OF PORTSMOUTH

SAINT MARY'S MUNICIPAL HOSPITAL (1050 Beds)

Applications are invited for the following appointments at the above Hospital

1 SENIOR ASSISTANT RESIDENT MEDICAL OFFICER Applicants must be male duly qualified and registered not exceeding 30 years and must have had two years hospital experience Preference will be given to those having a knowledge of and experience in general medical work The appointment is limited to a term of not exceeding two years Salary for the first year £350 and for the second £375

2 JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER Applicants must be single duly qualified and registered not exceeding 30 years and must have had at least one year's experience of hospital work Experience in anaesthetics will be an additional qualification The appointment is limited to a term of one year and the salary will be £250 per annum

The above appointments include residence at any institution belonging to the City Council that may be required The residential emoluments are valued at £125 per annum and the appointments will be subject to termination by one month's notice on either side

A resident Medical Superintendent is in attendance

Application forms may be obtained from and must be returned to the Medical Officer of Health The Guildhall Portsmouth not later than 10 a.m. on Thursday July 14th 1938

Canvassing either directly or indirectly will be deemed a disqualification.

The Guildhall F. J. SPARKS
Portsmouth Town Clerk.
June 0th 1938

CITY AND COUNTY OF NEWCASTLE UPON TYNE

APPOINTMENT OF ASSISTANT CHILD WELFARE MEDICAL OFFICER (MALE OR FEMALE)

Applications are invited from duly registered Medical Practitioners for the post of Assistant Child Welfare Medical Officer The person appointed will take part in the ordinary routine work of the child welfare centres but will not be required to assist in the working of the maternity services

Applicants will be required to have held a post as House Physician in a recognized teaching hospital (General or Children) and some experience of methods of medical or pathological research is desirable. The possession of the Diploma in Child Health granted jointly by the Royal College of Physicians and the Royal College of Surgeons will be regarded as an additional qualification Salary £500 rising to £700 per annum by annual increments of £25

The appointment will be subject to the provisions of the Local Government and Other Officers' Superannuation Act 19— and the successful candidate will be required to pass the necessary medical examination

Application on the prescribed form which can be obtained on application to the MEDICAL OFFICER OF HEALTH Health Department Town Hall Newcastle-upon-Tyne 1 must be submitted not later than Saturday July 16th 1938

CITY OF LIVERPOOL

ASSISTANT RESIDENT MEDICAL OFFICER CITY INFECTIOUS DISEASES HOSPITALS

Applications are invited for the above appointment for a period of one year at a salary of £— per annum together with the usual residential allowances The person appointed will not be allowed to engage in private practice and will be required to devote whole-time service to the duties of the office

Candidates will be required to possess a registered Medical and Surgical qualification and should have a knowledge of Bacteriological method

Application to be made upon form obtainable from the Medical Officer of Health Hospital Department Municipal Annexe Dale Street Liverpool to be endorsed "Assistant Resident Medical Officer" and returned to the undersigned so as to be received not later than Wednesday July 13th 1938

Municipal Buildings W. H. BAINES
Dale Street Liverpool 2 Town Clerk
July 19 8

CORPORATION OF GLASGOW SERVICE

JUNIOR ASSISTANT MEDICAL OFFICER

(male) wanted for the Hawkhead Mental Hospital previous mental hospital experience essential but preference will be given to one who has engaged in pathological work or has been house physician ample opportunity afforded for research salary to commence at £100 per annum with board lodging and laundry

Full particulars on application to the Medical Superintendent Hawkhead Mental Hospital 810 Crookston Road Glasgow S.W.

COUNTY BOROUGH OF ST HELENS

ASSISTANT MEDICAL OFFICER OF HEALTH (Female)

Applications are invited for the post of Assistant Medical Officer of Health (female)

The duties will be mainly in connection with Maternity and Child Welfare and the School Medical Service together with such other duties as the Medical Officer of Health may direct. Candidates must have special experience in Midwifery and in the diseases of children

The salary will be at the rate of £500 per annum plus travelling expenses rising by annual increments of £25 to a maximum of £700 per annum and in the case of a candidate now in the service of another Authority on a higher scale recruitment may be given to past service with such Authority in fixing the commencing salary.

The appointment is subject to the provisions of the Local Government and Other Officers' Superannuation Act 19— and to the successful candidate passing the necessary medical examination

Forms of application may be obtained from the Medical Officer of Health Town Hall St Helens and completed application accompanied by copies of not more than three recent testimonials should reach him not later than July 14th 19

Canvassing members of the Council or Committees of the Corporation will be a disqualification

Town Hall FRANK HALLWELL
St Helens Medical Officer of Health
June 24th 1938

SURREY COUNTY COUNCIL

PUBLIC HEALTH DEPARTMENT

REDHILL COUNTY HOSPITAL (350 Beds)

RESIDENT ASSISTANT MEDICAL OFFICER

Application are invited from registered Medical Practitioners for the appointment of Resident Assistant Medical Officer at the Redhill County Hospital Earlswood Common Redhill

The Medical Officer appointed must have had previous experience as House Surgeon

The appointment is for a period of six months renewable for a further period of six months and the salary is at the rate of £—0 per annum together with full residential emoluments valued at £125 per annum

Applications stating age qualifications and experience and enclosing copies of not more than three recent testimonials should be addressed to the Medical Superintendent Redhill County Hospital Earlswood Common Redhill so as to be received not later than July 13th 193

DUDLEY AUKLAND
County Hall Clerk of the Council
Kingston-upon-Thames
June —th 1938

COUNTY BOROUGH OF SOUTHAMPTON

APPOINTMENT OF ASSISTANT SCHOOL DENTIST

Application are invited from full qualified gentlemen for the above position

The Local Government and Other Officers Superannuation Act 19— will be applicable to the appointment and the successful candidate will be required to pass a medical examination.

Salary £450 per annum

Applications on the prescribed form to be obtained from the Medical Officer of Health Civic Centre Southampton and endorsed "Assistant School Dentist" must be delivered at the Town Clerk's Office Civic Centre Southampton on or before July 10th 1938

R. RONALD H. MEGGESON
June —th 19 Town Clerk

BRISTOL ROYAL INFIRMARY

Application are invited for the post of HOUSE SURGEON to the Fracture Department Salary at the rate of £50 per annum Candidates who must be registered Medical Practitioners to send in their applications stating age and accompanied by not more than three testimonials to the undersigned

The elected candidate must become a member of the Medical Defence Union before taking up his appointment

ELLIS C. SMITH FCIS
Secretary and House Governor

CITY HOSPITAL CHESTER

JUNIOR RESIDENT MEDICAL OFFICER

(male) required for the above general hospital

Salary will be £140 per annum plus residential emolument The appointment will be for a period of one month only and will be terminable at any time by one month's notice on either side

Applications stating age qualifications and previous experience together with names of three recent testimonials should be sent to the Medical Officer of Health Town Hall Chester by Wednesday July 13th 19

J. H. DICKSON
Town Clerk

BARRY URBAN DISTRICT COUNCIL

ACCIDENT AND SURGICAL HOSPITAL

Applications are invited for the post of RESIDENT SURGICAL OFFICER to commence duties in October next Salary at the rate of £— per annum for the two increments Applications to be sent to the undersigned and the appointment to be terminated by one month's notice on either side

Candidates required to be of sound health and must be examined by the Medical Officer of Health before appointment Preference will be given to those possessing a knowledge of Midwifery but this is not essential Hospital The appointment is subject to the provisions of the Local Government and Other Officers' Superannuation Act 19— and to the successful candidate passing the necessary medical examination

The successful candidate will be required to undertake the duties of Medical Superintendent of the Hospital

Applications must be received not later than July 16th 19 and endorsed "Resident Surgical Officer"

Canvassing directly or indirectly will be deemed a disqualification

Council Offices T. D. HOWELLS
Barry Clerk to the Council
June 27th 19

CITY OF MANCHESTER

CRUMPSALL HOSPITAL (1,4 Beds)

The Public Health Committee invite applications from registered medical practitioners for the post of RESIDENT SURGICAL OFFICER at the above named hospital

The salary for the appointment is £— per annum rising by £— annually to a maximum of £— per annum with board residence and laundry in addition subject to the Manchester Corporation (Superannuation) Act 1909

Applicants must be single and must have had urgent and must have had at least one year's experience in residential hospital work

Full information and forms of application may be obtained from the Medical Officer of Health Town Hall Manchester and must be returned to the Town Clerk Town Hall Manchester not later than July 16th 19

Town Hall F. E. WARBRECK HOWELL
Manchester Town Clerk.
June —th 19

COUNTY BOROUGH OF WALLASEY

HIGHFIELD MATERNITY HOSPITAL

CONSULTING OBSTETRICIAN

Applications are invited for the honorary post from gentlemen of recognized Consultant rank The gentleman appointed will be required to attend the hospital every other week The salary will be £— per annum

Full particulars may be obtained from the Medical Officer of Health Town Hall Wallasey

Applications stating qualifications and experience and enclosing copies of testimonials must be forwarded to the undersigned not later than July 14th 19

Town Hall EMRYS EVANS
Wallasey Town Clerk

HOVE GENERAL HOSPITAL HOVE

Applications are invited for the appointment of HONORARY GYNAECOLOGICAL SURGEON Applicants must be Members of the degree of Master of Surgery or be Fellows of one of the Royal Colleges of Surgeons

Applicants must forward with copies of three recent testimonials must reach the undersigned not later than Monday July 18th 19 Canvassing prohibited

K. C. BOOKER
Secretary Superintendent

DONCASTER ROYAL INFIRMARY

(150 Beds)

(Recognized for the training of the D.O. and D.L.O.)

HOUSE SURGEON (male) to Ear Nose and Throat Department to reside

Salary at the rate of £100 per annum with board residence and laundry

Applications by letter stating age qualifications and experience to be sent to

P. LANCASTER
Secretary

CAERNARVONSHIRE AND ANGLESEY INFIRMARY BANGOR

(Recognized by the Royal College of Surgeons)

SENIOR HOUSE SURGEON required for [illegible] Salary £— per annum [illegible] Duties to commence [illegible] Applications [illegible] the Secretary not later [illegible]

DEWSBURY AND DISTRICT GENERAL INFIRMARY
Dewsbury (100 Beds)

The Senior Post is recognized by the Royal College of Surgeons (England)

Applications are invited for the post of SENIOR HOUSE SURGEON (male) vacant September 1st next Salary £200 per annum with board residence and laundry

Also for the post of SECOND HOUSE SURGEON (male) vacant August 1st next Salary £150 per annum with similar emoluments The duties are principally those of a House Physician and Casualty Officer

The Infirmary is a modern Voluntary Hospital and has the usual Special Departments with Visiting Consulting Specialists in attendance

Applications stating for which post age and hospital experience together with copies of recent testimonials to be sent as immediately as possible to my office

FRED SMITH
Secretary Superintendent

CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE
Withington Manchester 20

Applications are invited for the post of RESIDENT SURGICAL OFFICER at the above Hospital to commence duties on September 1st 1938

The appointment is for a period of six months but will be renewable Previous Resident Appointments essential

Salary at the rate of £150 per annum plus residence board and laundry

Applications with full details of previous experience together with copies of testimonials should be sent to the undersigned immediately

PERCY N GLASS
Superintendent and Secretary

ROYAL BUCKINGHAMSHIRE HOSPITAL
Aylesbury (115 Beds)

Applications are invited from qualified and registered candidates for the post of
JUNIOR RESIDENT MEDICAL OFFICER
Salary £150 per annum with quarters in newly built flat board and laundry provided

The post will be for a period of five months commencing September 1st 1938 after which it will be permissible to apply for the Senior post

Applications stating age qualifications and experience with copies of three testimonials should be sent to the undersigned by July 6th 1938

I G DAWES
Secretary

COSSHAM MEMORIAL HOSPITAL
Kingswood Bristol

A vacancy will appear at the end of July for a JUNIOR RESIDENT MEDICAL OFFICER Salary £120 per annum with board and laundry to remain for six months in the first instance Applicants (male) should be British nationality fully qualified and registered

Applications with copies of recent testimonials to be sent to the Secretary

COSSHAM MEMORIAL HOSPITAL
Kingswood Bristol

Wanted an additional HONORARY SURGEON for general surgical work

Apply with full particulars to the Secretary

BARNWOOD HOUSE HOSPITAL FOR MENTAL AND NERVOUS DISORDERS
Near Gloucester

Required SECOND ASSISTANT MEDICAL OFFICER (male single) Commencing salary £500 per annum with board residence and laundry Experience in Psychotherapy a recommendation Applicants must possess the D P M The hospital has its own non-contributory Pensions Scheme

Applications with copies of three recent testimonials to reach the Medical Superintendent not later than July 15th 1938

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (152 Beds)

Applications are invited for the post of (a) RESIDENT SURGICAL OFFICER (male) (b) HOUSE PHYSICIAN (male) Salary at the rate of £150 and £100 respectively per annum with board residence and laundry

Applications stating age and qualifications together with copies of three recent testimonials should be sent to the undersigned on or before July 9th

T W UPTON Secretary

DURHAM COUNTY AND SUNDERLAND EYE INFIRMARY

HOUSE SURGEON required immediately Must have Ophthalmic experience Salary £50 per annum rising by two annual increments of £50 Non-resident Medical assistance will be given to the duties of the Institution Applications with copies of recent testimonials will be sent to John Bell Third Eye Infirmary Sea View Road Sunderland

HULL CORPORATION HEALTH DEPARTMENT

BEVERLEY ROAD INSTITUTION (HOSPITAL)
(400 Beds)

ASSISTANT MEDICAL OFFICER (WOMAN)

Applications are invited from unmarried or widowed Women Medical Practitioners for the above appointment for a period of one year

Salary £350 per annum together with board residence and laundry

The Hospital is equipped with X ray and Ultra Violet Light Departments

Application forms etc may be obtained from and should be returned duly completed to the undersigned not later than 10 a m on Monday July 18th 1938

NICOLAS GEBBIE M D
Medical Officer of Health

Health Department
Guildhall Hull
June 27th 1938

GLASGOW ROYAL INFIRMARY

RESIDENT MEDICAL OFFICER required at Cunningburn Auxiliary Hospital Salary £200 per annum with board lodging and washing Applicant with previous Hospital resident experience preferred

Particulars as to duties etc may be obtained from the Superintendent Glasgow Royal Infirmary Castle Street Glasgow C 4 Candidates are requested to lodge applications and three relative testimonials with the undersigned not later than July 9th 1938 No canvassing either directly or indirectly

R MORRISON SMITH C A
Secretary and Cashier

Royal Infirmary Office
136 Buchanan Street Glasgow C 1

LIVERPOOL OPEN-AIR HOSPITAL FOR CHILDREN
Leasowe Cheshire

Applications are invited for the post of JUNIOR RESIDENT MEDICAL OFFICER at the above hospital for a period of six months commencing August 1st next Salary at the rate of £200 per annum plus board residence and laundry

The hospital has 240 beds for treatment of Surgical Tuberculosis and orthopaedic conditions and has one ward for adult patients

Applications stating age sex nationality qualifications and experience together with copies of three recent testimonials to be addressed to the SECRETARY not later than July 16th next

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL

Applications are invited from duly registered candidates (male and unmarried) for
a HOUSE SURGEON salary £150 per annum from August 1st
a HOUSE PHYSICIAN salary £125 per annum from July 1st

The appointments are for six months and include apartments board and laundry The House Surgeon must be an experienced anaesthetist

All applications stating age etc with copies of testimonials to be sent to me at once

FRANK H TOONE
Secretary

9 Leicester Road
Loughborough

PETERBOROUGH AND DISTRICT MEMORIAL HOSPITAL
(154 Beds)

APPOINTMENT OF HONORARY ASSISTANT PHYSICIAN

Applications are invited from registered Medical Practitioners for the above post The successful applicant must reside within a radius of seven miles of Peterborough and be prepared to commence duty on August 1st 1938

Applications stating age qualifications etc and accompanied by copies of three recent testimonials must reach the undersigned on or before July 15th next

FRANK V C TAYLOR
Secretary Superintendent

NEW SUSSEX HOSPITAL FOR WOMEN
Windlesham Road Brighton
(60 Beds)

Applications are invited from qualified Medical Women for the post of HOUSE PHYSICIAN for a period of six months Salary at the rate of £100 per annum Duties to commence immediately

Application together with copies of recent testimonials to be sent to the SECRETARY New Sussex Hospital Windlesham Road Brighton

June 24th 1938

MAPPERLEY HOSPITAL NOTTINGHAM

LOCUM TENENS MEDICAL OFFICER (male single) required at once Salary seven guineas per week all found

Application immediately to the Medical Superintendent Mapperley Hospital Nottingham

KENT AND SUSSEX HOSPITAL
Tunbridge Wells (210 Beds)

Applications are invited for the post of HOUSE SURGEON AND CASUALTY OFFICER Salary £150 per annum with board residence and laundry in the Hospital

The Hospital includes the following Departments —Medical Surgical Ear Nose and Throat Ophthalmic Orthopaedic Gynaecological X ray and Electro-therapeutic Massage Pathological Venereal Diseases etc

Applications stating qualifications together with Certificate of Registration and copies of not more than three recent testimonials should be sent to the undersigned as soon as possible

TOM B HARRISON
June 27th 1938 Superintendent-Secretary

ROYAL DEVON AND EXETER HOSPITAL
Exeter

HOUSE SURGEON (MALE) TO THE EAR NOSE AND THROAT DEPARTMENT

Applications are invited for this post which is shortly becoming vacant The appointment is for six months but candidates are eligible for re election Salary at the rate of £150 per annum with board lodging and washing

Applications giving particulars as to age and qualifications together with copies of three recent testimonials should be sent to the undersigned on or before Monday July 4th

S S COLE
Secretary and Manager

ROYAL INFIRMARY BRADFORD

RESIDENT SURGICAL OFFICER (male) required to supervise the work of six House Surgeons and be generally responsible for the surgical work of the hospital Candidates must be single have had previous hospital experience and a special surgical qualification Salary £250 per annum with board residence and washing There are 345 beds and ten resident officers

Applications stating age qualifications and previous experience with copies of not more than three recent testimonials to be received by the undersigned at once

H TRUSSON
June 14th 1938 House Governor and Secretary

ROYAL EAST SUSSEX HOSPITAL

Applications are invited for the post of HONORARY JUNIOR SURGEON to the above Institution

Candidates must be Fellow of the Royal College of Surgeons of England Edinburgh or Ireland or a Graduate in Surgery of one of the Universities of the United Kingdom or Ireland and also be duly registered under the Medical Acts

Applications accompanied by copies of three recent testimonials should reach the Secretary not later than Friday July 15th 1938

WILFRID G KEMSLEY Secretary

MONTAGU HOSPITAL MEXBOROUGH
(113 Beds) (3 Residents)

Applications are invited for the post of RESIDENT HOUSE PHYSICIAN (Lady) Commencing salary £125 per annum with the usual residential emoluments The appointment is for six months and is subject to renewal

Applications stating age nationality qualifications and experience accompanied with copy testimonials to be sent to the undersigned

JOHN N DRAKE
Secretary Superintendent

MIDLAND HOSPITAL
Easy Row Birmingham (50 Beds)

Applications are invited for the post of HOUSE SURGEON Duties to commence August 1st Salary £200 per annum with board residence and laundry

Applications stating when at liberty age qualifications together with copies of recent testimonials to be addressed to the undersigned

OLIVE FURNIAUX Secretary

MAIDENHEAD HOSPITAL BERKSHIRE
(56 Beds)

Application are invited for the post of RESIDENT MEDICAL OFFICER (female) vacant August 1st for a period of six months Salary £150 per annum with board residence and laundry

Applications with copies of testimonials should be received by the undersigned by July 16th 1938

R J FANNING
June 30th 1938 Superintendent Secretary

KENT AND CANTERBURY HOSPITAL
(183 Beds 4 R M O s)

HOUSE PHYSICIAN required male unmarried Six months appointment commencing July 28th 1938 Salary £1–5 per annum with board residence and laundry

Applications together with copies of testimonials should be sent to the undersigned

J F KENT
Superintendent and Secretary

ROYAL UNITED HOSPITAL, BATH

HONORARY STAFF APPOINTMENTS

The Board of Management invite applications for the undermentioned honorary posts
ASSISTANT DERMATOLOGIST
PHYSICIAN FOR MENTAL DISEASES
MEDICAL REGISTRAR
Applicants must be graduates in medicine of a University of the British Empire or a Fellow or Member of the Royal College of Physicians or a Licentiate of the Royal College of Physician London
Applications stating age qualifications and experience together with three testimonials to be addressed to the undersigned by first post July 14th 1938
Canvassing will be deemed a disqualification
The names and addresses of members of the Board of Management will be sent to applicant in order that they may send a copy of their application and testimonials to each member

J LAWRENCE MEARS
Secretary Superintendent

June 18th 1938

ROYAL VICTORIA AND WEST HANTS HOSPITAL Bournemouth

CASUALTY OFFICER (with some House Surgeon duty) *male British nationality required* to commence duty immediately Salary £140 per annum and additional fees with board lodging and washing The appointment is tenable for six months and candidates must be registered according to the provisions of the Medical Act
Applications stating place of birth and age with copies of three testimonial to be sent immediately to the undersigned Women and married men are ineligible The appointment is recognized by the Council of the Royal College of Surgeons of England in connection with the Final Fellowship Examination

GORDON M SAUL
June 24th 1938 Secretary

ROCHDALE INFIRMARY AND DISPENSARY

(110 Beds Three Residents)

The Board of Management invite application from gentlemen for the appointment of SECOND HOUSE SURGEON
The salary attached to the appointment is at the rate of £150 per annum including board residence and laundry
Applications stating age nationality etc *together with copies of three recent testimonials* to be sent to the Secretary endorsed House Surgeon
Conditions of the appointment may be had on application to the Secretary

Infirmary Office W WYNNE
Rochdale Lanes Secretary

ROYAL SURREY COUNTY HOSPITAL GUILDFORD

Wanted August 1st
HOUSE SURGEON (MALE)

General Surgery Orthopaedics and Casualty Six months appointment recognized for the F R C S Salary £150 per annum with board residence and laundry Applications stating age and essential particulars with copies of not more than three testimonial to reach the Secretary Superintendent not later than July 5th

ROYAL BERKSHIRE HOSPITAL READING

Applications are invited for the post of CASUALTY OFFICER (male) which falls vacant on August 1st 1938
The appointment is for six months and candidates must be fully qualified and registered
Remuneration at the rate of £150 per annum with board residence and laundry
Applications stating age and experience with copies of testimonial to be sent to the undersigned immediately

H E RYAN
Secretary and House Governor

THE CHILDREN'S HOSPITAL SUNDERLAND

(70 Beds)

Applications are invited for the following posts and should be addressed to the undersigned together with copies of testimonial
1 HOUSE PHYSICIAN (female) for six months from July 31st
1 *HOUSE SURGEON* (female) for six months from August 5th
Salary in each case £1.0 per annum with board residence laundry etc

W J HUNTLEY
House Governor and Secretary

ROTHERHAM HOSPITAL

Wanted CASUALTY HOUSE SURGEON (male) qualified Salary £1 0 per annum with board residence and laundry To have charge of Out-patients (130 beds.)
Applications with copies of recent testimonials to be sent to the Secretary G W ROBERTS 5 Moorgate Street, Rotherham

THE GLOUCESTERSHIRE ROYAL INFIRMARY AND EYE INSTITUTION GLOUCESTER

(230 Beds Six Residents)

Applications are invited for the post of CASUALTY OFFICER (male) Salary at the rate of £150 per annum with board residence and laundry
The appointment is for six months which may be extended for similar periods by re-election from time to time
Applicants must have had a resident appointment and have had experience in fracture work The elected candidate will also be required to deputize for the Resident Surgical Officer during his absence
Application stating age qualifications experience and nationality with copies of not less than three recent testimonials should be sent to the undersigned not later than Tuesday July 5th
The elected candidate will be required to enter upon his duties at once

F J SYMONS
June 23rd 1938 Secretary

THE RETREAT YORK

A REGISTERED MENTAL HOSPITAL
under the Management of a Committee of the Society of Friends

A MEDICAL SUPERINTENDENT will shortly be required at the above Hospital and applications are invited for the position
The initial salary will not be less than £1 000 per annum with a house and other emoluments valued at £.00 per annum for Pension purposes
Facilities will be given if desired for obtaining some special experience prior to taking up the appointment. The doctor appointed will be expected to work in sympathy with the ideal of the Society of Friends
Applications with not more than three testimonials should be sent before August 12th to the Chairman of the Committee The Retreat York

SOUTHEND-ON-SEA GENERAL HOSPITAL

(235 Beds) Eight Residents
Hon Specialist Staff of 20 Members

Applications are invited for the posts of
(1) RESIDENT ANAESTHETIST (male) Salary £120 p.a with board residence and laundry Previous experience in administration of anaesthetics essential
(2) FIRST HOUSE SURGEON (male) Salary £100 p.a with board residence and laundry The Hospital is recognized by the Royal College of Surgeons in respect of this post
The appointments are for six month from August 1st, 1938
Applications with copies of two recent testimonial should be sent to the undersigned not later than July 8th

P H CONSTABLE Secretary

THE ROYAL INFIRMARY SHEFFIELD

(700 Beds)

Applications are invited for the post of CLINICAL ASSISTANT to the Ophthalmic Department (male or female) The Ophthalmic Department contains 60 Beds and an Out Patient Department which is open daily
Salary £300 per annum
The appointment will be for one year subject to two months notice and the officer elected will be eligible for reappointment Letters stating age and giving full qualifications previous hospital experience etc to be forwarded to the General Superintendent and Secretary immediately
June 14th 1938

THE BABIES HOSPITAL Newcastle-on-Tyne.

NON RESIDENT MEDICAL OFFICER required August 1st The duties are those of a House Physician with time and opportunities for research work The appointment is for six months subject to reappointment Salary £1 0 per annum
Applications with two testimonials and particulars of previous appointments held to be lodged by July 8th with the Secretary The Babies Hospital 3 West Parade Newcastle-on-Tyne 4

THE STAFFORDSHIRE GENERAL INFIRMARY STAFFORD

(140 Beds in Ludington Private Wards Three Residents)

HOUSE SURGEON required Salary £ per annum with board residence
Application stating age and experience accompanied by copies of three recent testimonials should be sent to me forthwith

A E COLLINS
Stafford Secretary
June 7th 1938

THE HON MEDICAL STAFF INVITE APPLICATIONS for the posts of HON CONSULTANT PHYSICIAN and HON CONSULTANT SURGEON to the Mayfield Memorial Cottage Hospital Applications to be forwarded to the Hon Secretary F J BRODRIBB 6 Crest House Mayfield Sussex

THE ROYAL LIVERPOOL CHILDREN'S HOSPITAL Myrtle Street

There will be vacancies on October 1st next for
Two RESIDENT HOUSE PHYSICIANS and Two RESIDENT HOUSE SURGEONS at the Royal Liverpool Children's Hospital Myrtle Street These appointments are for a period of six months at the rate of £100 per annum Applications with copies of recent testimonials to be sent to the Secretary Royal Liverpool Children's Hospital Myrtle Street Liverpool 7 from whom further particulars may be obtained

July 11th 1938

THE ROYAL LIVERPOOL CHILDREN'S HOSPITAL Myrtle Street

There will be vacancies on October 1st next for
One RESIDENT MEDICAL OFFICER and One RESIDENT SURGICAL OFFICER at the Royal Liverpool Children's Hospital Myrtle Street Liverpool 7 which will be for a period of six months Salary £100 per annum each Applications with copies of recent testimonials to be sent to the Secretary Royal Liverpool Children's Hospital Myrtle Street Liverpool 7 from whom further particulars may be obtained

July 11th 1938

THE ROYAL LIVERPOOL CHILDREN'S HOSPITAL Myrtle Street

The Committee invite applications for the post of Graduate with previous Hospital experience for the appointment of RESIDENT CASUALTY OFFICER (male) The appointment will be for a period of six months from October 1st 1938 At the end of that time the holder of the post will be eligible to apply for re-election for a further term of office Salary at the rate of £ per annum Further particulars may be obtained from the Secretary Royal Liverpool Children's Hospital Myrtle Street Liverpool 7 to whom applications should be sent *with copies of recent testimonials*

July 11th 1938

THE SUSSEX MATERNITY AND WOMEN'S HOSPITAL Brighton (Founded 1840)

The Committee of Management of the above Hospital give notice that a meeting to be held at the Hospital 50 Buckingham Road Brighton on July 7th 1938 at 11.30 a.m. they will proceed to the election of a HONORARY OBSTETRIC AND GYNAECOLOGICAL SURGEON Candidates must be duly registered under the Medical Acts
Application with copies of testimonials should be sent to the Secretary 50 Buckingham Road Brighton not later than July 5th Canvassing will prevent consideration

Board Room PERCY F SPOONER
50 Buckingham Road Secretary
Brighton June 16th 1938

VICTORIA HOSPITAL BLACKPOOL

(120 Beds)

HOUSE SURGEON (MALE) TO THE SPECIAL DEPARTMENTS
(Eye Ear Nose and Throat and Obstetrics)

Applications are invited for the above appointment There are four resident officers
Appointment is for six months Salary with the rate of £150 per annum with board residence and laundry
Applications with copies of three recent testimonials should be sent immediately to the

General Superintendent

WEST SUFFOLK GENERAL HOSPITAL Bury St. Edmunds (112 Beds)

Applications are invited for the following posts
HOUSE PHYSICIAN Duties to include charge of the Medical Beds Maternity Wards and Casualty and Administration of Anaesthetics Salary £120 per annum with board lodging and laundry Vacancy June 15th 1938
Applicants for this post must be registered Practitioners Applications stating experience and nationality with copies of three recent testimonials to be sent to the Secretary The appointment is for six months

May 19th 1938

WEYMOUTH AND DISTRICT HOSPITAL Weymouth

(92 Beds and Cots)

Wanted July 25th HOUSE SURGEON (unmarried) (European) Salary £140 per annum with board residence and laundry
Applications stating age and experience and copies of testimonials to be sent to the undersigned not later than July 6th 1938

MORRIS LODGE
Hon Secretary

THE ROYAL INFIRMARY SUNDERLAND

(240 Beds)

Applications are invited for the following appointments
CASUALTY OFFICER AND HOUSE SURGEON to the Ear Nose and Throat Department for period of six months with board residence laundry etc and £ per annum
Applications with copies of testimonials to be sent to

W J HUNTLEY
House Governor and Secretary

BRISTOL ROYAL INFIRMARY

Applications are invited for the following Resident Medical Appointments for the six months commencing 1938

Three (one of whom also to the Cancer Department)
Four HOUSE SURGEONS and One ASSISTANT HOUSE SURGEON
One HOUSE SURGEON to the Casualty Department
One HOUSE SURGEON to the Ear Nose and Throat Department
One HOUSE SURGEON to the Fracture Department
One SENIOR OBSTETRIC HOUSE SURGEON
One JUNIOR OBSTETRIC HOUSE SURGEON

Salaries at the rate of £80 per annum except in the case of the Senior Obstetric House Surgeon who will receive a salary at the rate of £100 per annum and the Senior Casualty House Surgeon who will receive a salary at the rate of £150 per annum

Candidates who must be duly qualified to send in their applications on forms to be obtained from the undersigned which must be returned on or before July 15th 1938 together with copies of not more than three testimonials

The elected candidates must become members of the Medical Defence Union before taking up their appointments

ELLIS C SMITH FCIS
Secretary and House Governor

DISTRICT INFIRMARY ASHTON UNDER Lyne (General Hospital 200 Beds)

CASUALTY HOUSE SURGEON (male) required immediately

Applicants must have had previous experience

Salary at the rate of £180 with the usual residential emoluments

HOUSE SURGEON required immediately

Six months appointment which may be renewed

The Staff comprises a Resident Surgical Officer a Casualty Officer and two House Surgeons

Salary at the rate of £150 per annum with board residence and laundry

Applications with testimonials to be sent at once to the undersigned

FRANK OLIVER
General Superintendent and Secretary

DISTRICT INFIRMARY ASHTON UNDER Lyne (200 Beds)

RESIDENT SURGICAL OFFICER required immediately

Six months appointment with possibility of renewal

Salary at the rate of £200 per annum with the usual residential emoluments

Applications with testimonial to be sent at once to—

FRANK OLIVER
General Superintendent and Secretary

WORCESTER ROYAL INFIRMARY (165 Beds)

Applications are invited for the posts of —

SECOND HOUSE SURGEON Salary at the rate of £120 per annum

HOUSE PHYSICIAN Salary at the rate of £150 per annum

CASUALTY HOUSE SURGEON Salary at the rate of £140 per annum

All the above salaries include board residence and laundry

Applications stating full particulars as to age whether married or single qualifications etc and accompanied by copies of three recent testimonials should be sent to the undersigned by July 7th 1938

H J CLOUT
Secretary

ABERDEEN ROYAL INFIRMARY

The Board of Directors invite applications for the post of SURGICAL REGISTRAR The post is a full time one and the successful applicant will be required to perform the duties of a Junior Assistant Surgeon attached to a general Surgical Ward

Salary £200 per annum with quarters or an allowance in lieu Six copies of applications and of three testimonials stating age qualifications and experience should be lodged with the undersigned by 10 a.m. on Monday July 11th 1938

1 Albyn Place JOHN A McCONACHIE
Aberdeen Clerk and Treasurer

CROYDON GENERAL HOSPITAL

Applications are invited from qualified and registered Medical Men for the post of HOUSE SURGEON Salary £125 per annum with board residence and laundry

Applications stating age qualifications accompanied by copies (which will not be returned) of three testimonials to reach the undersigned not later than Thursday July 7th 1938

The post is recognised for the FRCS examination

GEORGE H DAMS
House Governor and Secretary

June 22nd 1938

ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL (296 Beds)

Applications are invited for the following appointments

One RESIDENT ANAESTHETIST
One CASUALTY OFFICER who shall have had some experience in the reduction and treatment of fractures

for the six months commencing July 1st 1938 each at a salary of £150 per annum with board lodging and laundry Candidates must be male and unmarried

Applications accompanied by not more than three testimonials should be sent to the undersigned immediately

S W BARNES
House Governor and Secretary

ROYAL BERKSHIRE HOSPITAL READING (318 Beds)

Applications are invited for the post of RESIDENT ANAESTHETIST (male) which falls vacant on August 6th 1938

The appointment is for six months in the first instance Candidates must be fully qualified and registered and have had considerable experience in the administration of anaesthetics

A salary of £250 p.a. with board residence and laundry will be paid to a candidate possessing suitable qualifications for the post

Applications stating age and experience with copies of not more than three recent testimonials to be sent to the undersigned as soon as possible

H E RYAN
Secretary and House Governor

OLDHAM ROYAL INFIRMARY

SENIOR HOUSE SURGEON required for a period of six months to take charge of the Casualty Department and to work under the Honorary Surgeon in charge of the Fracture Clinic (average attendance of 150/170 cases per week) Previous hospital experience essential

Salary at the rate of £250/£300 per annum according to qualifications and experience with board residence and laundry

Applications stating age experience and qualifications together with copies of three recent testimonials to be forwarded to the undersigned

H EWART MITCHELL
General Superintendent

MANCHESTER NORTHERN HOSPITAL Cheetham Hill Road Manchester 8 (General Hospital—113 Beds)

[illegible] for the posts of RESIDENT and RESIDENT Salary £100 per annum

The appointments are for six months from mid August 1938 (successful candidates are eligible for reappointment for a further six months)

Applications stating age qualifications and nationality with copies of not less than three recent testimonials should be sent to Mr JAMES C DANIELS Secretary 38 Barton Arcade Manchester by July 13th

---

MANCHESTER NORTHERN HOSPITAL Cheetham Hill Road Manchester 8 (General Hospital—113 Beds)

Applications are invited for the post of RESIDENT SURGICAL OFFICER commencing salary £150 per annum with board and residence The appointment is for twelve months from mid August 1938

Applications stating age qualifications and nationality with copies of not less than three recent testimonials to be sent to the Secretary Mr JAMES C DANIELS 38 Barton Arcade Manchester 3 not later than July 13th

---

HUDDERSFIELD ROYAL INFIRMARY (321 Beds)

MALE HOUSE PHYSICIAN required to commence duty on August 8th 1938

Salary £150 per annum with board residence and laundry Appointment for six months subject to renewal at the discretion of the Board of Management

Applications with copies of three recent testimonial to be addressed to the undersigned immediately

H J JOHNSON
Gen Supt and Sec

LEEDS PUBLIC DISPENSARY AND HOSPITAL

HOUSE PHYSICIAN (Male)

Wanted at once

Appointment for six months Salary at the rate of £120 per annum with board residence and laundry

Application with copies of three recent testimonials to be sent to the undersigned Public Dispensary and Hospital North Street Leeds 2

CHARLES F J MAURY
Secretary and Superintendent

THE LIVERPOOL SANATORIUM Delamere Forest Frodsham Via Warrington

(175 Beds for the Treatment of Patients Suffering from Pulmonary Tuberculosis)

ASSISTANT to the MEDICAL SUPERINTENDENT

Applications are invited from male practitioners with suitable qualifications for the above-named appointment Candidates must be unmarried and preference will be given to applicants who have held resident medical appointments since qualification and have had practical institutional experience in the treatment of pulmonary tuberculosis

Salary will be at the rate of £225 per annum with board quarters and laundry

The appointment is normally tenable for twelve months but may be extended

Particulars of duties and full information together with forms of application can be obtained from the Secretary Hospital for Consumption Mount Pleasant Liverpool 3

Forms completed with copies of three recent testimonials should be returned by July 7th 1938 to the Secretary Hospital for Consumption Mount Pleasant Liverpool 3

YORK DISPENSARY

Applications are invited for the post of RESIDENT MEDICAL OFFICER (female) to commence duties as soon as possible As there are TWO VACANCIES applications from doctors knowing each other would be welcomed

The resident medical staff consists of two medical officers whose duties are to visit and attend the sick poor in their own homes and to assist the honorary staff

Candidates must be duly qualified registered and unmarried Experience in the administration of anaesthetics is essential

Salary £200 per annum with board lodging and attendance with an allowance towards car expenses and for laundry

Applications with testimonials to be sent on or before July 9th to

JOHN C PETERS
4 New Street York Secretary

YORK COUNTY HOSPITAL (204 Beds)

Appointment of
HONORARY SURGEON TO THE EAR NOSE AND THROAT DEPARTMENT

Applications are invited for the post of Honorary Surgeon to the Ear Nose and Throat Department

Candidates should send a copy of their application (stating age) and testimonials together with diplomas to the undersigned not later than July 31st 1938

Candidates may send such printed or written testimonials to the members of the Elective Committee as they may think desirable but canvassing personally or otherwise will be considered a disqualification

J R MACKRILL
Secretary

THE ROYAL HOSPITAL WOLVERHAMPTON (Incorporated under Charter)

HOUSE SURGEON required (General Surgery) duties to commence August 1st The Hospital contains 300 beds includes the usual special departments and is recognized by the various Examining Bodies for a part of the requisite attendance on Medical and Surgical Practice

Candidates must be registered under the Medical Acts and unmarried

The appointment is for six months Salary at the rate of £100 per annum Board furnished rooms and laundry provided

Applications with copies of testimonials to be forwarded to the undersigned

Wolverhampton W H HARPER
June 27th 1938 House Governor

THE ROYAL INFIRMARY BRADFORD

ASSISTANT RADIUM OFFICER (Resident) male wanted for August 1st Twelve months appointment Candidates must be single and legally qualified

Salary £175 per annum with board residence and washing Applications stating age qualifications and previous experience (not necessarily in Radio-Therapy) with copies of recent testimonials should be sent to the undersigned at once

H TRUSSON
June 2nd 1938 House Governor and Secretary

THE SHEFFIELD ROYAL HOSPITAL

Applications are invited for the post of WHOLE TIME CLINICAL ASSISTANT in the Medical Service of the Hospital Salary £300 per annum non-resident Appointment in the first instance for one year

W H BOOTH
Superintendent and Secretary

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association B M A House, Tavistock Square, W C 1 (in the case of Scottish appointments with the Scottish Secretary 7, Drumsheugh Gardens, Edinburgh)

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—(contd)	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY (*Medical Officer*)	MID RHONDDA MEDICAL AID SOCIETY (*Assistant Medical Officer*)	
BLAENAVON MEDICAL SOCIETY (*Chief Medical Officer*)	NEATH AND DISTRICT (*Medical Aid Association*)	COUNTY OF ROXBURGH (*Assistant Medical Officer of Health*)
GILFACH GOCH GLAMORGAN (*Workmen's Medical Scheme*)	OGMORE VALLEY GLAMORGAN (*Brandham Collieries Medical Aid Society*) (*Workmen's Medical Scheme*)	**DISPENSARY APPOINTMENTS**
LLWYNYPIA CLYDACH VALE PENYGRAIG GLAMORGAN (*Workmen's Medical Scheme*)	OAKDALE, MON (*Medical Officer for Medical Aid Association*)	LIMERICK CITY (*Whole time Dispensary Medical Officer*)

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association B M A House Tavistock Square, W C 1

Town or District.	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch.	Town or District.	Hon Sec of Division or Branch
NEW SOUTH WALES (*All Friendly Societies Appointments*)	The Medical Secretary New South Wales Branch 135 Macquarie Street Sydney N S W	**VICTORIA** (*All Institute or Medical Dispensaries*)	*The Honorary Secretary* Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria	**WESTERN AUSTRALIA** (*Contract and Lodge Practices*)	The Hon Sec Western Australian Branch British Medical Association 205 St Georges Terrace Perth Western Australia
QUEENSLAND (*Brisbane Associate Friendly Societies Institute*)	The Hon Sec Queensland Branch British Medical Association B M A House 2-5 Wickham Terrace Brisbane B 17				

June 29 1938 By Order of the Council G C ANDERSON *Secretary*

ADDENBROOKE'S HOSPITAL CAMBRIDGE

Applications are invited for the following posts :—

(a) HOUSE SURGEON from August 1st

(b) HOUSE PHYSICIAN from August 1st

Each appointment is tenable for a period of six months but is terminable at an earlier date by one month's written notice on either side

The salary of each officer will be at the rate of £130 per annum with board residence and laundry

Candidates (male) who must be unmarried and duly registered are requested to forward their applications stating age, qualifications etc together with copies of not more than four testimonials to the undersigned on or before Wednesday July 6th 1938

J A BEARDSALL
Secretary Superintendent

BIRMINGHAM AND MIDLAND EYE HOSPITAL (114 Bed)

Applications are invited from duly qualified Medical Practitioners for the post of HOUSE SURGEON at the above Hospital Salary £1 0 per annum (rising to £150 at the end of six months satisfactory service) and £10 laundry allowance

The Resident Staff consists of a Resident Surgical Officer and three House Surgeons

Application with testimonials and evidence of registration should be forwarded immediately to the undersigned

Church Street, Birmingham — J W PEARCE, General Superintendent

---

BURTON ON TRENT GENERAL INFIRMARY

Applications are invited for the position of CASUALTY OFFICER AND HOUSE PHYSICIAN salary at the rate of £150 per annum with board residence and laundry Duties to commence July 1st 1938

Applications giving age qualifications and nationality together with copies of testimonials to be sent to E W THORNLEY Secretary

---

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL (200 Surgical and Medical Beds)

HOUSE SURGEON TO OPHTHALMIC AND EAR NOSE AND THROAT DEPARTMENTS

Applications are invited from fully qualified men for the above post The appointment is for six months from July 0th 1938

Salary at the rate of £1 0 per annum

Application stating age together with copies of three recent testimonials should be sent to the undersigned as soon as possible.

M H BOONE.
Superintendent and Secretary

June 21st 1938

NORFOLK AND NORWICH HOSPITAL Norwich (417 Beds)

Applications are invited for the post of HOUSE SURGEON Salary £1.0 per annum with board residence and laundry Candidates (male) must be unmarried and must possess registered qualifications

Applications stating age and nationality together with copies of testimonials should be forwarded to the undersigned not later than Tuesday July 5th

FRANK INCH
House Governor and Secretary

June 24th 1938

BUTE HOSPITAL LUTON

HOUSE SURGEON (male) wanted to commence duties on July 1st or as soon after as possible Salary £1 0 per annum with board residence and laundry

Applicants must give age, nationality and experience together with copies of not more than three recent testimonials should be sent immediately to the Secretary of the Medical Advisory Committee at the Hospital

R E LINGARD
Secretary Bute Hospital

HOSPITAL OF ST CROSS RUGBY (120 Beds)

Applications are invited for the post of ONE MALE RESIDENT MEDICAL OFFICER (the PMO)

Salary to commence at the rate of £100 per annum for the first three months £120 per annum for second three months and at the rate of £140 per annum for subsequent months

Full board washing and free bed

Six months appointment and eligible for consideration of service for further extension of six months

Candidates must be prepared to commence duties as early as possible

The practice of the Hospital offers exceptional opportunities for wide experience

Certificates and other fees covered by R M O

Applications stating age nationality and full details with copies of three recent testimonials to be sent to the undersigned

(Signed) W COCKBURN
Superintendent and Secretary

ROYAL MANCHESTER CHILDREN'S HOSPITAL
Pendlebury (near Manchester)
(Beds)

RESIDENT HOUSE SURGEON

Applications are invited for the post of Resident House Surgeon for a period of [illegible] Candidates must be [illegible] experience [illegible] Applications [illegible] personal [illegible]

[illegible]

P O [illegible]

H HESKETH

TO ADVERTISERS

The BRITISH MEDICAL JOURNAL has a larger circulation than that of all other British weekly medical periodicals combined

This issue 41 000 copies

TERMS FOR ADVERTISING

SMALL PREPAID ADVERTISEMENTS

The MINIMUM charge is 9s which covers up to 30 words Extra words are charged 1s 6d for 5 or less *e g* 33 words would be charged as for 35 Name and address should be included when counting words for cost

If BOX NUMBER is used, it should be reckoned as 5 words in the total

Advertisements accompanied by remittance, should reach this office not later than NOON, TUESDAY, for insertion in ensuing number

DISPLAYED ADVERTISEMENTS

Whole Page, £24 and *pro rata* to one eighth page

Special and facing matter positions, £30 and £25

EVERY EFFORT IS MADE TO ENSURE THE ACCURACY OF ADVERTISEMENTS [illegible] NOR IN THE JOURNAL NO [illegible] S IMPLIED BY [illegible] THE BRITISH [illegible] N RESERVES THE INTERRUPT THE [illegible] ADVERTISEMENT

ADVERTISEMENT MANAGER,
BRITISH MEDICAL JOURNAL
B M A House, Tavistock Square,
London, W C 1
Telephone EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA TOBACCO GOOD SMOKES at a low price quality guaranteed Box of 50 for 25/ post free—Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

'BIZIM' CIGARETTES THESE luxurious deliciously satisfying smokes 50 s or 100 s at 6/3 per 100 5s/6 per 1 000 post free—Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"SOLACE CIRCUS" TOBACCO THE finest combination ever discovered of Choice Natural Tobaccos Every pipeful an indescribable pleasure 12/6 per ½ lb tin post free—Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

MISCH—THESE DESIGNATORY letters after a CHIROPODIST'S name indicate that he or she is a MEMBER of the INCORPORATED SOCIETY OF CHIROPODISTS Founded 1911 Patron H M Grace the Duke of Portland K G P C G C V O Panel of Examiners in Medical Subjects approved by the Royal College of Physicians and Royal College of Surgeons of England respectively The regulations of the Society PROHIBIT Members from advertising their names and addresses Chiropodists in the district who are members of the Society and also information regarding training of Members may be obtained from the Secretary The Incorporated Society of Chiropodists 21 Cavendish Square London W 1 Tel [illegible]

ARDARA—LEAST KNOWN MOST LOVELY holiday resort in Ireland Best free fishing rough shooting golf bathing an artist's paradise First class ACCOMMODATION provided by doctor's widow Few guests taken Vacancies now—Address No 7008 B M A House Tavistock Square W C 1

FOR ALL INCOME TAX COMPLICATIONS or difficulties consult or communicate with Mr C G C KILNER (late H M Inspector of Taxes) 7 St James Street Piccadilly London S W 1 Telephone Whitehall 9278 for appointment

NATIONAL ADOPTION SOCIETY 4 BAKER STREET W 1 Telephone Welbeck 7211 OFFERS ASSISTANCE in the legal adoption of illegitimate and orphan babies into suitable Family life Chairman THE LADY GWENETH CAVENDISH

TYPEWRITING DUPLICATING TRANSLATIONS—Experts in Medical work TESTIMONIALS THESES etc accurately copied in style that commands attention—WOBURN BUREAU Drayton House Gordon Street London W C 1 (close B M A House) EUSton 1775

TYPEWRITING—SPECIALISTS IN TYPING Medical and scientific papers lectures theses and books Shorthand typists always available Proof reading indexing—MARGARET WATSON LTD 16 Palace Chambers Bridge Street S W 1 WHItehall 3838

WHEN YOU COME TO LONDON STAY AT THE HAMPDEN RESIDENTIAL CLUB FOR GENTLEMEN Hampden Street N W 1 Close Kings Cross and Euston 300 bedrooms 15/ to 22/6 p w includ baths attend and boot cleaning All meals à la carte in dining room Mod tariff Large club rms reading rm study for students Illus pros See Euston 2244/5

ASSISTANCIES

WANTED IMMEDIATELY MARRIED ASSISTANT (British) for South Wales *colliery practice with early view 30/35 Salary* £450 and car allowance or car provided with free unfurnished house—Apply with photograph Address No 6634 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY—INDOOR AND outdoor ASSISTANTS for town and country practices with and without view to partnership Good salaries offered—State full particulars BRITISH MEDICAL BUREAU 33 Cross Street Manchester 2

WANTED IMMEDIATELY OUTDOOR ASSISTANT male single British Protestant for practice in County Durham Salary £400 *per annum* and £50 car allowance—Address No 7036 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY RECENTLY qualified male ASSISTANT single for mixed private and panel practice near London Work light—Address No 7041 B M A House Tavistock Square W C 1

WANTED—*OUTDOOR* ASSISTANT IN Colliery Practice *in Glamorgan One* with car preferred Salary £400 p a and £50 car allowance with room and attendance—Address No 6811 B M A House Tavistock Square W C 1

WANTED OUTDOOR MALE ASSISTANT *for panel and private practice in the Midlands Salary £400 per annum* Must be reliable Car supplied Usual bond—Address No 6828 B M A House Tavistock Square W C 1

WANTED ASSISTANT OUTDOOR SALARY £450 with view to partnership Half to third share in £5 000 practice at two years purchase Mixed practice Midland suburb Prospects decidedly good—Address No 7007 B M A House Tavistock Square W C 1

WANTED—MALE ASSISTANT INDOOR for mixed London practice Salary £350 per annum Recently qualified man considered—Address No 7019 B M A House Tavistock Square W C 1

WANTED WOMAN DOCTOR AS ASSISTANT in Sanatorium Previous experience necessary—Address No 6856 B M A House Tavistock Square W C 1

WANTED *INDOOR ASSISTANT* MALE *with view panel and private* Cambridge [illegible] pros board and lodging and car allowance copies testimonial—Address No 7031 B M A House Tavistock Square W C 1

ASSISTANT REQUIRED IMMEDIATELY FOR practice in Manchester Full personal and professional particulars required—HOLCO HOSFASON AND Co LTD Manufacturing Chemists Sun Building Bridge Street Manchester

LADY ASSISTANT INDOORS EASY REACH of Cardiff Work light time for study if desired Salary accordingly—Full particulars Address No 6823 B M A House Tavistock Square W C 1

LADY ASSISTANT WANTED COUNTRY practice Dorset Salary £250 all found Able to drive car live in—Address No 7023 B M A House Tavistock Square W C 1

OUTDOOR MALE (UNMARRIED) ASSISTANT wanted in agreeable South Wales colliery district near Cardiff Principal young work not onerous car provided Salary £350 to £400 (according to experience) with furnished *rooms and attendance*—Applications to Address No 7016 B M A House Tavistock Square W C 1

QUALIFIED LADY MEDICAL REQUIRED to give HELP in small practice country £150 all confinements fees board and lodging Sign usual bond—Address No 6831 B M A House Tavistock Square W C 1

QUALIFIED ASSISTANT WANTED OUT *door* Panel and club *Northumberland* View to succession—Address No 7040 B M A House Tavistock Square W C 1

LOCUMS

WANTED LOCUM FOR MONTH AUGUST and possibly occasional week-ends in panel and working-class practice S E London Active man with experience essential Scotch preferred—Address No 7042 B M A House Tavistock *Square* W C 1

WANTED—LOCUM AUGUST ST JOHN'S Wood No midwifery Panel Private Prospects future work State age and experience Elderly locum not objected to—Address No 7017 B M A House Tavistock Square W C 1

WANTED LOCUM JULY 29th AUG 19th Bradford Work light Car and chauffeur—Address No 7024 B M A House Tavistock Square W C 1

WANTED POSITION AS LOCUM IN general practice for first three weeks in August in Scotland or North England 10 years *experience*—Address No 7001 B M A House Tavistock Square W C 1

WANTED BY LOCUM TENENS WORK from July 18th to Aug 4th Booked after that date to Sept 8th Senior man with large experience of private and panel patients—Address No 7038 B M A House Tavistock Square W C 1

HOSPITALITY LOCUM OFFERED (WITH wife and child) for August Small practice Panel 700 One appointment Car necessary Work light £2 2s weekly allowed for expenses—Address No 7044 B M A House Tavistock Square W C 1

LADY DOCTOR EXPERIENCED GENERAL practice available *LOCUMS early July to* Sept Own car Eight guineas *per week indoor*—Address No 7003 B M A House Tavistock Square W C 1

M.R.C.P.E., INDIAN EXP G P AND Panel desires fortnight's LOCUM WORK in London or suburb *between* July 23rd and August 17th Own car—*Address* No 7006 B M A House Tavistock Square W C 1

M B, Ch B ex H.S H P EXPERIENCE G P own car REQUIRES LOCUM July 30th 14 days approx coast town—Address No 7035 B M A House Tavistock Square W C 1

MEDICAL POSTS, DISPENSERS

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request qualified and with practical experience in private practice and dispensary work also trained in Bacteriology and Laboratories of the LONDON COLLEGE OF PHARMACY FOR WOMEN Prepares ons for Examinations—Write wire or phone (Bayswater 0969) Secretary 7 Westbourne Park Road W 2

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY and Secretary Dispensers can be supplied to Doctors Sessions January April and September—Apply Principals School of Pharmacy Drayton House Gordon Street W C 1 Phone Euston 3900

DAUGHTER OF DECEASED R A M C officer urgently desires post a SECRETARY CHAUFFEUSE Competent driver References—Apply Hon Mrs Davey 6 Bedford Gardens W 8

DISPENSING CAREER FOR YOUNG LADIES FULL TRAINING for Apothecaries Hall Certificate Enrolment every three months—Apply The Principal Central School of Pharmacy 8 Moreton Street London S W 1 Telephone Victoria 1641

DOCTORS REQUIRING QUALIFIED Dispensers Nurse-Dispensers Secretary Dispensers or Chauffeuse-Dispensers are invited to write wire or phone Temple Bar 8888 THE DISPENSERS BUREAU 3 Lindsay House 171 Shaftesbury Avenue London W C 2

LADY DISPENSER BOOKKEEPER DESIRES post with Private Practitioner 10 years exp Private and N H I dispensing Shorthand and typing if necessary own machine excell ref—Address No 7004 B M A House Tavistock Square W C 1

LADY DISPENSER REQUIRED RECENTLY qualified Country practice Kent near London Age 20- Educated smart adaptable willing Farm live in district full particulars salary photo—Address No 7010 B M A House Tavistock Square W C 1

LADY DOCTOR WANTED FOR PRIVATE Mental Home near London Salary £300 Experience essential—Address No 7015 B M A House Tavistock Square W C 1

MRCS, LRCP 1 YEARS GOOD family connection all round athlete desires suitable EMPLOYMENT business or professional—Address No 7003 B M A House Tavistock Square W C 1

POSTGRADUATE WANTED AT ONCE TO live at surgery near Bart EMERGENCY WORK only Rent free—Address No 7004 B M A House Tavistock Square W C 1

PSYCHIATRIST — HONORARY ASSISTANT wanted for CHILD GUIDANCE CLINIC Psychiatric experience necessary and paediatric if possible Honorarium £5 per annum—Apply Honorary Director East London Child Guidance Clinic Jews Free School E 1

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION 88 Eccleston Square S W 1 (Telephone Victoria 2262) supplies qualified Dispensers Bookkeepers Laboratory Assistants Sanitary Assistants Male Nurses *Mental and Special Treatment Orderlies Dental* Clerk Orderlies Porters Caretakers etc without charge to prospective employers

PARTNERSHIPS

WANTED PARTNER TO DEVELOP NEWLY built area Midland city site secured for new house and urgent Existing practice in rising seaside Premium £300 for share guaranteed minimum and permanents Excellent opportunity for young energetic man—Address No 7019 B M A House Tavistock Square W C 1

LANCASHIRE TOWN—HALF SHARE IN old-established middle and working-class practice Receipts £1,600 Panel 1100 Preliminary partnership 3 months—Address No 7019 B M A House Tavistock Square W C 1

NEAR MANCHESTER HALF SHARE worth £1,200 one and three quarter years purchase Panel over 2,000 increasing Good house rent or buy rapidly growing district—Address No 7026 B M A House Tavistock Square W C 1

PARTNERSHIP PRELIMINARY ASSISTANTship Midland industry practice Hospital general urgently and indefinitely essential—Address No 7031 B M A House Tavistock Square W C 1

SHARE VALUE £1,000-£1,200 IN FIRST class country practice in West Wales near sea coast Welsh or Scotch preferred Practicars purchase—Address No 7010 B M A House Tavistock Square W C 1

SOUTH EAST COAST RESORT—PARTNERSHIP in practice doing £3,000 p a Panel 1,000 Good hospital appointment on staff Endured Good schools Premium half share £1,000—Address No 6610 B M A House Tavistock Square W C 1

SOUTH MIDLANDS — THIRD SHARE OF £1,000 in growing town practice—Address No 7027 B M A House Tavistock Square W C 1

THIRD PARTNER REQUIRED RESIdential town northern coast England Share worth £1,500 at first one and three-quarter years purchase Good house Capital essential—Address No 6971 B M A House Tavistock Square W C 1

PRACTICES

WANTED IMMEDIATELY IN SOUTHERN Midland or Home Counties unopposed country PRACTICE 1,000-1,500 Panel and good house and garden essential—Address No 7027 B M A House Tavistock Square W C 1

WANTED COUNTRY PRACTICE SMALL or large W Kent or E Sussex Will purchase good house with large garden Panel minimum—Address No 6760 B M A House Tavistock Square W C 1

A NUMBER OF SMALL PRACTICES AT low premium Excellent opportunities for practitioners wishing to get a practice with scope—Apply PEACOCK AND HADLEY LTD 6/7/8 Chandos Street Strand W C 2

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed

Applications should be separately enclosed and clearly addressed

Address No
B M A House
Tavistock Square W C 1

All communications are forwarded to advertisers under plain cover

FASHIONABLE S E COAST RESORT Present owner hand 10 years £600 p a nett 2 years purchase Six bedroomed house and garden Freehold £2,000 must be bought—Address No 6620 B M A House Tavistock Square W C 1

FOR SALE—SCOTLAND EAST COAST town Old-established PRACTICE Panel 1,000 Receipts £1,700 Little Midwifery Hospital Good scope Excellent house for sale £1,000 1 year purchase—Address No 6693 B M A House Tavistock Square W C 1

FOR IMMEDIATE DISPOSAL — COUNTRY PRACTICE in S W England averaging nearly 1,000 p a panel 65 Choice of two excellent modernized houses to let charming village and district Introduction required Price practice £4,000—Address No 7011 B M A House Tavistock Square W C 1

FOR SALE LONDON S W 15 MINUTES West End Old-established PRACTICE Receipts 3 years average £4 Panel 900 increasing Trained rate appointment £ per annum Suitable house or flat Large Consulting room—Address No 7000 B M A House Tavistock Square W C 1

FOR SALE UNOPPOSED COUNTRY PRACTICE in beautiful South Western county near large town Panel 1,600 Large appointment Receipts about £1,600 p a House with electric light and garage Price £1,500 or offer Present proprietor retiring after 40 years—Address No 7011 B M A House Tavistock Square W C 1

FOR SALE OLD ESTABLISHED PRACTICE North East Lancashire Industrial and middle-class Receipts £2,000 Panel 1,800 Good house surgery and garden Part time—Address No 7017 B M A House Tavistock Square W C 1

FOR DISPOSAL — OLD ESTABLISHED PRACTICE in market town and village east midlands about 1,600 panel Receipts Cottage Hospital Panel Practice Good house 1,000 Excellent facilities—Address No 6973 B M A House Tavistock Square W C 1

GLASGOW SOUTH SIDE—PRACTICE private and panel Large house consulting rooms Low rent in new approved block £1,000 per annum Receipts over last three years good Reason for disposal inadequate introduction—For further particulars apply CRAWFORD HERRON AND CO 116 St Vincent West George Street Glasgow C 2

KENT DEVELOPING PART — PROMISING NUCLEUS Receipts £1,200 Corner house easy terms Premises for practice Excellent opportunity—PEACOCK AND HADLEY LTD 6/7/8 Chandos Street Strand W C 2

LARGE MIDLAND TOWN (SUBURB) PRACTICE held 16 years Receipts nearly £1,000 p a Good panel Attractive house rental Premium about £1,000—PEACOCK AND HADLEY LTD 6/7/8 Chandos Street Strand W C 2

MIDLANDS—LADY DOCTOR HAS WELL established PRACTICE for sale Owing to ill-health £1,500 Panel 1,100—Apply MEDICO 164 Edmund Street Birmingham

MEDICAL PRACTICE FOR SALE IN country district in Dumfriesshire good vacancy House to let Average receipts £1,000 Expenses small—Particulars from HENDRY & MACKAY Solicitors Lockerbie

MIDDY SUBURB — STEADILY INCREASing PRACTICE now reaching Panel months 1,700 panel 900 appointments Excellent house easy rate brick built 4-5 rooms good garden Freehold £1,700 Premium £1,000—Address No 6611 B M A House Tavistock Square W C 1

NORTH EAST COAST ON TERMS LAY MAN able to purchase Good modern Suburban PRACTICE Panel 1,300 Absolutely genuine House with surgery £1,600—GREENHILL DALBY AND KNIGHTING Solicitors Newcastle upon Tyne 1

NEAR FULHAM S W —WELL ESTABLISHED PRACTICE Receipts last year over £1,600 panel nearly 1,500 increasing New house Premium £1,000—Apply PEACOCK AND HADLEY LTD 6/7/8 Chandos Street Strand W C 2

NUCLEUS LOCK UP SURGERY PANEL 1,200 Premium £300 Very prominent corner site West House above now vacant rent £110 per annum Both or urgent reasons 18 week Phone Bayswater 3076

OLD ESTABLISHED MIXED PRACTICE near Manchester Receipts averaging £4,000 panel nearly 1,500 Nine district nurses Practice Premium two years purchase or near offer Suitable for two men Two houses rent free—Address No 6619 B M A House Tavistock Square W C 1

PRACTICE OF ABOUT £2,000 REQUIRED with a view to Partnership preferably on South side Part time help could be given Car available—Address No 6618 B M A House Tavistock Square W C 1

SCOTLAND - UNIVERSITY CITY OLD medical PRACTICE for sale Old established [illegible] Panel [illegible] Receipts [illegible] Price [illegible] Address No 6990 B M A House Tavistock Square W C 1

WOMAN DOCTOR'S NUCLEUS CENTRAL [illegible] Address No 6611 B M A House Tavistock Square W C 1

WELL ESTABLISHED NUCLEUS [illegible] Address No 6611 B M A House Tavistock Square W C 1

HOUSES, CONSULTING ROOMS

For available

CONSULTING ROOMS
PROFESSIONAL HOUSES & FLATS

in Harley Street and the medical area generally including Mayfair

LEY CLARK & PARTNERS,
AUCTIONEERS SURVEYORS & VALUERS
3a Wimpole Street Cavendish Square W 1
Telephone Langham 1095 6-7
Represented at Cannes Nice and Monte Carlo

A FEW DOORS FROM THE CLINIC SHOP TO LET in the centre of the Medical Profession Safe opening for dealers and manufacturers of medical appliances —Apply the Landlord 27b Devonshire Street London W 1 Welbeck 1694

DEVONSHIRE ST W 1—AN EXCELLENT CONSULTING ROOM in one of the finest houses in the street available five sessions per week Rent £125 p a inclusive —Address No 6356 B M A House Tavistock Square W C 1

FOR SALE OR LEASE—DOCTOR'S COMmodious HOUSE 147 Narborough Road Leicester £1 000 or £125 p a rent —Address No 7058 B M A House Tavistock Square W C 1

HAMPSTEAD FINCHLEY ROAD—COMfortable RESIDENCE occupied by medical man during the last 30 years 6 bed 3 recept Garage can be made £1 950 —Apply BLESSLEY AND SLYER Chartered Surveyors 321 Finchley Road N W 3

HARLEY STREET
AND MEDICAL DISTRICT
For all types of available accommodation
BERTRAM & CO., Surveyors and Estate Agents
59 Connaught Street W 2 Paddington 1642 3

HARLEY STREET AND DISTRICT—A NUMber of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application—ELCOOD AND Co 10 Henrietta Place Cavendish Square W 1 Lang 2601

HARLEY STREET—LARGE CONSULTING ROOM beautifully decorated will be converted into suite to requirements all amenities and services Also furnished treatment rooms available —Address No 7043 B M A House Tavistock Square W C 1

LONDON W 1 MIN TUBE FINE HOUSE 16 rooms 3 bath garden park adjoins Receptionist bookkeeper available Several years with Harley Street Dr —Address No 7010 B M A House Tavistock Square W C 1

NOTTINGHAM CITY—DOUBLE FRONTED RESIDENCE for sale Freehold shrubbery rockery rear entrance Rooms reception surgery breakfast hall kitchen dining drawing bath three bed store Mahogany R G K staircase excellent decoration £875 —BAWTREE 133 N Sherwood Street Nottingham

OPHTHALMIC SURGEON HAVING RETIRED from practice now wishes TO LET his HOUSE The house is modern and situated in a charming residential district on the Lancashire coast A suitable oculist would soon recover the practice Full particulars —Address No 7005 B M A House Tavistock Square W C 1

PARK LANE—ADVERTISER WISHES TO meet consultant with view to LETTING ROOM Use of waiting and ladies room also small X rays £155 p a References —Address No 7011 B M A House Tavistock Square W C 1

QUEEN ANNE STRELT—ONLY £40 P A secures exceptionally fine CONSULTING ROOM for use when required with attendance and all services Residential accommodation available —Address No 6355 B M A House Tavistock Square W C 1

QUEEN ANNE STREET—LARGE FIRST floor CONSULTING ROOM available Full or part time with attendance and all services —Address No 7070 B M A House Tavistock Square W C 1

IMPORTANT
to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE Specially Cut Fitted and Moulded to each individual figure made from Finest Quality Materials and in the Best Possible Style cost no more than mass production ready made clothes

The invaluable Practical Experience and Advice of our 14 Expert West End Cutters and Fitters is always at your disposal

ALL HARLZONI Productions are HAND FINISHED IN EVERY ESSENTIAL DETAIL

SPECIAL OFFER

JACKET & VEST (in black or grey)	£1 1
Lined best quality Art Satin Art Silk or Alpaca	
SOLID FANCY WORSTED TROUSERS	£1 1
The Ideal Suit for Profession or Private wear	
LOUNGE SUITS to measure from	£6 6
OVERCOATS	£7 7
DINNER SUITS	£8 8
DRESS SUITS from	£10 10
PLUS FOUR SUITS from	£6 6
THE IDEAL Suit for Country and Sporting Wear	
GOLD MEDAL RIDING BREECHES from	£2 2
RIDING HABITS	£8 8
RIDING BOOTS	£3 3
COSTUMES & TOPCOATS	£6 6

UNSOLICITED APPRECIATION

I strongly advise all medical men who wish to have satisfaction to patronise Harry Hall Ltd as all the clothes I have had from them during 35 years have been perfect in Fit Cut and Finish
(Signed) S J A MA MB FRCPS

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self measurement Form or Pattern Garments
Visitors to London can order and fit same day Special Patterns would then be cut and Perfect Fitting Clothe supplied after without trying on

HARRY HALL, LTD.
Governing Director Harry Hall
THE Coat Breeche Habit and Costume Specialist
181 OXFORD ST W 1 119 CHEAPSIDE E C
Telephones
GERrard 4905 4906 and 4907 NATional 8696/7
Makers of Finest Quality Bespoke Civil Sporting and Hunting Clothes for Ladies and Gentlemen
Highest Awards 12 Gold Medal
Est over 10 years

SMALL ADVERTISEMENT FOR INSERTION IN BRITISH MEDICAL JOURNAL.

The MINIMUM charge is 9s which covers up to 30 words Extra words are charged 1s 6d for 5 or less Example 33 words would be charged as for 35 Name and address should be included when counting words for cost
If BOX NUMBER is used it should be reckoned as 5 words in the total
PLEASE WRITE CLEARLY—ONE WORD IN EACH SPACE

1						
2						
3						
4						
5						
6					(30 words)	9/
7						10/6
8						12/
9						13/6
10						15/

To the Advertisement Manager BRITISH MEDICAL JOURNAL B M A House Tavistock Square London W C 1

Please insert my advertisement in ..... issues Name .....
dated ..... Address .....
I enclose remittance value £ ..... Date .....

MISCELLANEOUS SALES etc

INCOME TAX

YOUR burden OUR business
Tax Specialists to the Medical Profession
HARDY & HARDY
49 CHANCERY LANE LONDON W.C.2
Telephone Holborn 6659
Write for free copy of Address on Income Tax

FOR SALE.—FULL TRIAL SET LENSES walnut case (Curry and Paxton) adjustable trial frame etc in good condition £10.—Address No. 7000 B.M.A. House Tavistock Square W.C.1

X-RAY INSTALLATION FOR DISPOSAL from private practice. Comprising 10 m.A. Newton and Wright mobile unit 6kW. radiator tube. Bucky diaphragm table cones cassettes screens and complete darkroom accessories. For further details—Address No. 7009 B.M.A. House Tavistock Square W.C.1

COVERS FOR BINDING

Vols. I and II of the BRITISH MEDICAL JOURNAL for 1937 and previous years can be had price 2s. 6d. by parcel post 2s. 10d. each

Orders with appropriate remittance should be addressed to

THE SECRETARY
BRITISH MEDICAL JOURNAL
B.M.A. HOUSE, TAVISTOCK SQ.
LONDON, W.C.1

APPOINTMENTS—Contd

LONDON JEWISH HOSPITAL
Stepney Green, E.1
(General Hospital—109 Beds.)

The Council of Management are about to appoint an HONORARY ASSISTANT SURGEON to the Ear, Nose and Throat Department. Candidates who should be Fellows of the Royal College of Surgeons of England, Edinburgh or Ireland or Masters of Surgery of a British University, should send twenty-four copies of their application with copies of three recent testimonials to the Secretary of the Hospital from whom particulars of the office may be obtained on or before July 2nd, 1938.

ST. MARY'S HOSPITAL, W.
CASUALTY HOUSE SURGEON

Applications are invited for the above post from duly qualified candidates.

Candidates must have been House Surgeons for a full period of office to this Hospital or to some other General Hospital approved by the Board.

The salary is £100 per annum with board and residence and the appointment is for six months.

Applications with copies of testimonials not exceeding three in number should reach the undersigned (from whom particulars may be obtained) on or before Thursday, June 23rd.

W. PARKES, House Governor.

BOOTLE GENERAL HOSPITAL
Bootle, Liverpool 20
(103 Beds.)

ONE HOUSE PHYSICIAN
TWO HOUSE SURGEONS
ONE CASUALTY OFFICER

Applications are invited for the above posts tenable for six months from October 1st next. The salary attached to each post is £110 per annum with board, residence and laundry.

Applicants must be duly qualified and registered under the Medical Acts.

Applications with copies of testimonials should reach me by Friday, July 15th.

A. J. COOPER,
Secretary Superintendent.

COUNTY OF SOMERSET
APPOINTMENTS OF MEDICAL OFFICER OF HEALTH FOR THE URBAN DISTRICTS OF FROME AND KEYNSHAM AND THE RURAL DISTRICTS OF FROME AND BATHAVON AND ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from duly qualified Medical Practitioners who are registered in the Medical Register as holders of diplomas in Sanitary Science, Public Health or State Medicine for the above appointments which if made will be held by the same person.

The duties as Assistant County Medical Officer will include school medical inspection and ante-natal clinic work.

The officer appointed will be required to devote his whole time to the duties of the above-mentioned appointments and will be restricted from engaging in private practice as a medical practitioner. He will be required to perform all the duties prescribed by statute or regulation and such other duties as may from time to time be assigned to him by the County Council.

The appointments carry a salary of £500 rising by annual increments of £25 to £900 a year.

Travelling allowance for the use of the officer's motor car will be paid in accordance with the County scale and office accommodation and clerical assistance will be provided.

The successful candidate who must pass a satisfactory medical examination will be required to reside in or near the City of Bath.

Applications stating age, qualifications, diplomas and experience, must be accompanied by copies of not more than three recent testimonials and must be sent to the Clerk of the County Council, County Hall, Taunton, so as to reach him not later than July 15th, 1938, in envelopes endorsed "Deputy Medical Officer."

Further particulars and conditions of appointment may be obtained from the Clerk of the County Council on receipt of a stamped addressed foolscap envelope.

Canvassing directly or indirectly will be deemed a disqualification.

HAROLD KING, Clerk of the Somerset County Council.
H. J. ALLARD, Clerk to the Frome Urban District Council.
W. B. KENT, Clerk to the Frome Rural District Council.
GEORGE R. ASHTON, Clerk to the Keynsham Urban District Council.
R. H. WHITTINGTON, Clerk to the Bathavon Rural District Council.

June, 1938.

THE ROYAL WATERLOO HOSPITAL FOR CHILDREN AND WOMEN
Waterloo Road, S.E.1

HONORARY ASSISTANT PHYSICIAN

There is a vacancy for an Honorary Assistant Physician at the above Hospital. The candidate should be a Fellow or Member of the Royal College of Physicians and a graduate of a University recognized by the General Medical Council. He should also have special knowledge of the diseases of children.

Applications accompanied by three testimonials should be sent to the undersigned from whom further particulars can be obtained, not later than July 15th.

J. H. TEASDALE, Secretary.

ST. PANCRAS DISPENSARY
39 Oakley Square, N.W.1

There is a vacancy for an HONORARY GYNAECOLOGIST who must possess the qualifications and experience appropriate to such a description. The duties will include the conduct of a weekly clinic of two hours for ailing mothers and children. Cases are referred to this clinic from the Welfare Centres in the Borough and in respect of advice and treatment given to such cases a fee of One and a half guineas per session will be paid. Application accompanied by testimonials should reach the Honorary Secretary at the Dispensary not later than Saturday, July 9th, 1938.

THE HARTLEPOOLS HOSPITAL
(95 Beds.)

Applications are invited for the position of HOUSE SURGEON at a salary of £110 per annum plus board, residence and laundry.

Appointment for six months subject to renewal and duties to commence July 15th.

Applications to be made to the undersigned.

NORMAN O. DEANS,
Secretary.

THE CASSEL HOSPITAL FOR FUNCTIONAL NERVOUS DISORDERS
Swaylands, Penshurst, Kent.

LOCUM TENENS (male) required for this Hospital for three months from August 1st. Part time experience essential. Salary £5 5s. a week with board, residence and laundry.

Applications to be sent to the Medical Director, enclosing testimonials, not later than Wednesday, July 13th.

MOUNTAIN ASH URBAN DISTRICT COUNCIL AND EDUCATION COMMITTEE

ASSISTANT MEDICAL OFFICER

Applications are invited from Qualified Female Doctors for the combined post of ASSISTANT MEDICAL OFFICER OF HEALTH and ASSISTANT SCHOOL MEDICAL OFFICER under the Maternity and Child Welfare and Education Committees for the above area. The officer appointed will be required to devote his whole time to the duties of the appointment and will not be allowed to engage in private practice except with the consent of the Council. The duties will include those of Medical Officer to the Day Nurseries and Clinics, and such other duties as may be assigned to him by the Council.

In respect of School Children the duties will be those of an Assistant School Medical Officer under the Director of Education for the County Borough of Rhondda, who is the School Medical Officer, the appointment may be terminated by either party by three months' notice.

The salary will be £[illegible] per annum rising by annual increments of £[illegible] to a maximum of £[illegible] per annum. The salary will be subject to deduction in respect of each half-year during which the officer is absent from duty, except when on duty in connection with the Council's Maternity and Child Welfare Scheme.

Applications stating age, qualifications, and previous experience, should be sent to the undersigned not later than the first post on Saturday, July 9th, 1938.

Canvassing either directly or indirectly will disqualify.

CYRIL E. THATCHER,
Clerk and Solicitor to the Council.

Town Hall, Mountain Ash.
June 9th, 1938.

THE GLOUCESTERSHIRE ROYAL INFIRMARY AND EYE INSTITUTION
Gloucester
(180 Beds—Six Resident)

Applications are invited for the POSITION OF RESIDENT SURGICAL OFFICER (male) at the rate of £200 per annum with board, residence and laundry. Candidates must be fully registered and unmarried and have had previous hospital appointments. The appointment is for three months which may be extended.

Applications stating age, nationality, qualifications and previous experience, together with copies of not more than three testimonials, should be sent to the undersigned not later than July 9th.

The elected candidate will be required to enter upon his duties at once.

F. J. SYMONS,
Secretary.

June 9th, 1938.

WEST END HOSPITAL FOR NERVOUS DISEASES
IN-PATIENT DEPARTMENT
Glocester Gate, Regent's Park, N.W.1

The Committee of Management invite applications for the post of RESIDENT HOUSE PHYSICIAN (male). Duties to commence September 1st. Salary at the rate of £[illegible] per annum with board residence and laundry.

Preference will be given to candidates who have held a resident appointment in a general hospital.

Applications with copies of three recent testimonials must be received by the undersigned not later than Monday, July 11th, 1938.

J. P. WETENHALL,
Secretary and House Governor.

[illegible] Welbeck Street, W.1.

THE RADIUM INSTITUTE
Riding House Street, London, W.1

Applications are invited for the post of RESIDENT MEDICAL OFFICER. Candidates must be unmarried.

The salary will be at the rate of £[illegible] per annum, board residence and laundry being provided. The appointment is for six months commencing July 11th next.

Applications stating age, nationality, qualifications and experience with names of three recent testimonials must be received at the Institute not later than ten o'clock on July 9th next.

Canvassing either directly or indirectly will disqualify.

THOS. A. CARNEY,
Secretary.

THE NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1

[illegible]

HOUSE PHYSICIAN [illegible]

BOLINGBROKE HOSPITAL
Wandsworth Common S W 11
(135 Beds)

HOUSE PHYSICIAN (male unmarried) required

The appointment is for six months commencing on August 1st 1938 Salary £120 per annum with board residence and laundry

Candidates must be fully qualified and registered

Applications stating age qualifications and experience with copies of not more than three testimonials should be sent to the undersigned on or before July 13th 1938

W S RANDOLPH BISS
Secretary Superintendent

CONNAUGHT HOSPITAL WALTHAMSTOW E 17

(118 Beds with Four Resident Medical Officers)

CASUALTY OFFICER (male) required to commence duties July 18th

The appointment will be for six months with remuneration at the rate of £110 per annum with board residence and laundry

Applications stating age nationality qualifications and experience accompanied by copies of not more than three testimonials must be delivered to the undersigned not later than July 8th 1938

R HALTON HARRISON
Acting Secretary

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road E 7 (100 Beds)

The General Committee invite applications for the post of HONORARY GYNAECOLOGIST

Candidates must be Fellows of the Royal College of Surgeons and engaged solely in Gynaecology Applications stating age and full particulars together with copies of three testimonials should reach the undersigned on or before July 14th

Candidates will be expected to send copies of their application and testimonials to and call upon members of the honorary medical staff

REGINALD PERRY
Secretary

SAINT MARY'S HOSPITAL FOR WOMEN AND CHILDREN
Plaistow E 13

Applications are invited for the post of RESIDENT SURGICAL OFFICER male or female

The appointment is for six months Board and residence are provided Salary at the rate of £155 per annum including £5 allowance for laundry

Personal canvassing not desired Applications with copies of three *recent testimonials to be* sent to the undersigned as soon as possible

A ERNEST WILKES
Secretary

HOSPITAL FOR TROPICAL DISEASES
Gordon Street W C 1 (Seamen's Hospital Society)

HOUSE PHYSICIAN (male) required for six months from August 1st 1938 Salary £120 per *annum* with board residence and laundry

Applications with copies of three testimonials to be sent in on or before July 16th 1938 to the undersigned

D A C IRICL Secretary
Hospital for Tropical Diseases
Gordon Street W C 1
June 24th 1938

HAMPSTEAD GENERAL HOSPITAL
Haverstock Hill N W 3
(Out Patient Department Camden Town N W 1)

A vacancy *declared in the office of SURGEON* TO OUT PATIENTS Candidates must be Fellows of the Royal College of Surgeons England and are required to call upon members of the Honorary Medical Staff of the Hospital

Applications stating age qualifications and experience with copies of three testimonials should reach the undersigned by July 15th from whom further particulars may be obtained

KENNETH A E MILES
Secretary

HAVERSTEAD GENERAL HOSPITAL
Haverstock Hill N W 3

Applications are invited from [illegible] men for the [illegible] of HOUSE PHYSICIAN and HOUSE SURGEON for six months vacant [illegible] Salary £100 per annum with board residence and laundry

Applications on the prescribed form with three testimonials to be returned to the Secretary by July [illegible]

ST GEORGE'S HOSPITAL S W 1

HOUSE SURGEON required for the [illegible] Department

Applications for appointment from July 15th [illegible] Salary at the rate of £40 per annum will be given to candidates [illegible] experience

Applications to the Secretary not later than [illegible]

ROYAL NORTHERN HOSPITAL
Holloway N 7

Applications are invited for the following appointments

HOUSE PHYSICIAN vacant September 1st The appointment is for nine months (three months as Out patient Medical Officer and Anesthetist and six months as House Physician) Salary at the rate of £70 per annum with board residence and laundry

OBSTETRIC HOUSE SURGEON vacant September 15th The appointment is for nine months (six months as Obstetric House Surgeon and three months as Casualty Officer) Salary at the rate of £70 per annum with board residence and laundry

Applications with copies of testimonials should be sent by July 8th to the undersigned from whom the necessary forms of application and rules can be obtained

GILBERT G PANTER
Secretary

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST
Brompton S W 3

The Committee of Management invite applications for the post of HOUSE PHYSICIAN (for which there are three vacancies) The duties include work in the Out patient Department as well as in the Wards The appointment is for six months commencing on August 1st with an *honorarium of* £50

Applications with copies of testimonials must reach the undersigned not later than Saturday *July 9th* 1938

Brompton S W 3 F G ROUVRAY
June 1938 Secretary

LONDON HOSPITAL E 1

Applications are invited for the post of MEDICAL FIRST ASSISTANT AND REGISTRAR The appointment is for one year but is renewable annually on application for two further periods of one year Salary £300 per annum payable by the Hospital and Medical College jointly

Candidates must be fully qualified medically

Applications should arrive at the Hospital not later than by the first post on Saturday July 16th

Further particulars may be obtained from the *House Governor*

ARTHUR G ELLIOTT
House Governor

LONDON HOSPITAL E 1

Applications are invited for the post of MEDICAL OUT PATIENTS FIRST ASSISTANT Candidates must be fully qualified medically

The salary of the post is £150 per annum

The duties involve attendance in the Medical Out patient Department on every weekday after noon

Applications with testimonials should be sent to the House Governor (from whom further particulars may be obtained) and should arrive not later than *on July 16th*

ARTHUR G ELLIOTT
House Governor

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL

Applications are invited for the posts of HOUSE SURGEON (two Male unmarried) at this Hospital's country branch at Brockley Hill Stanmore Middlesex 276 Beds (160 cases of surgical tuberculosis)

Salary £150 per annum with board quarters and laundry The appointments are for six months Duties to commence one on August 1st and one on September 1st Applications with copies of *testimonials* should be sent to the Secretary 234 Great Portland Street London W 1 not later than July 13th

THE QUEEN'S HOSPITAL FOR CHILDREN
Hackney Road E 2

A Temporary Vacancy has occurred in the DEPARTMENT OF PSYCHOLOGICAL MEDICINE Applications are invited and should be sent with copies of recent testimonial to the undersigned as soon as possible Six months appointment Attendance two half-days weekly Honorarium of one guinea per session Candidates must be medically qualified

CHARLES H BESSELL
June 21st 193 Secretary

THE SOUTH LONDON HOSPITAL FOR WOMEN
Clapham Common S W 4 (140 Beds)
(A General Hospital for Women and Children)

Applications are invited from medical women for the undermentioned appointment

HOUSE SURGEON for a period of six months from September 1st 1938 Salary at the rate of £100 per annum with board residence and laundry

Candidates are requested to call on Members of the Hon Medical Staff before Saturday July 16th by which date applications and copies of testimonials must reach the Secretary at the Hospital

ST PETER'S HOSPITAL FOR STONE ETC
Henrietta Street Covent Garden W C 2

The office of HOUSE SURGEON will fall vacant about August 20th and applications are invited from male candidates with previous experience in a similar office at a General Hospital The salary offered is at the rate of £75 per annum with board lodging and laundry

On April 1st 1939 and subject to the recommendation of the Medical Committee the House Surgeon will be advanced to the office of Resident Surgical Officer for a period of six months Candidates *should therefore be prepared* if successful to remain at the hospital for about thirteen months in all

Applications accompanied by copies of testimonials should be forwarded to reach the undersigned not later than the first post on Wednesday July 6th

BLECHEY ROGERS Secretary

QUEEN MARY'S HOSPITAL FOR THE EAST END
Stratford E 15

Applications are invited from fully qualified and registered medical men (only) for the post of CASUALTY AND OUT PATIENT OFFICER

The Hospital contains 219 beds including 50 for Maternity patients

The appointment will date from July 1st 1938 and will be for six months Salary at the rate of *£150* per annum

Candidates who must be single and who should previously have held hospital appointments should send applications accompanied by testimonials to the undersigned at once

RAPHAEL JACKSON Major
Secretary

THE GORDON HOSPITAL FOR DISEASES OF THE RECTUM AND COLON,
Vincent Square S W 1

Present accommodation 62 Beds On completion of Rebuilding accommodation will be 10_ Beds

SURGICAL REGISTRAR

The Committee of Management invite applications for the appointment of Surgical Registrar Candidates must hold the I R C S Diploma or the *M S degree of a recognized University*

Applications with copies of three recent testimonials should be submitted by July 30th next addressed to the Secretary at the Hospital from whom details concerning duties and terms of the appointment can be obtained

THE CENTURY
INSURANCE COMPANY LTD
7 LEADENHALL STREET
LONDON, E C 3
18 CHARLOTTE SQUARE
EDINBURGH

ASSISTS DOCTORS
TO PURCHASE
A PRACTICE
OR
PARTNERSHIP

NO GUARANTORS REQUIRED
REPAYMENTS ARRANGED
BY EQUAL QUARTERLY
INSTALMENTS WHICH DO
NOT VARY WITH FLUCTUATIONS IN THE BANK RATE

PLEASE WRITE FOR PARTICULARS, STATING AGE NEXT BIRTHDAY

MENTION 'B M J'

PERCIVAL TURNER
LTD
MEDICAL AGENCY
ESTABLISHED 60 YEARS
25, MAIDEN LANE STRAND W C 2
(Corner of Bedford Street)
Telegrams Locomotion London
Phone Temple Bar 9011 (3 lines)
After office hours Walton-on-Thames 1
Assistants and Locums Provided without fee to Principals Practices investigated Book keeping Debt Collecting etc
MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE EXCLUSIVE OF HOUSE PROPERTY £5 0 FULL TERMS ON REQUEST
WANTED
BY M B Ch B MIDDLE CLASS PRACTICE in or near London or Provincial Town Income to £1 000 to £1 00 p a Capital to £ 00
FOR DISPOSAL
YORKSHIRE DALES—BEAUTIFUL country Average £1 000 p a Panel 7/800 Premium £1 00 Large house and ground only £60 p a Suit resident patients Smaller house available —1
KENT WITHIN 20 MILES—ABOUT £ 00 p a Panel 3/5 Premium £ 50 or near Nice house, for sale or rent —
DEATH VACANCY — GLOS — £900 p a or more Panel over £900 Premium £900 Semi-detached house 5 bed etc large garden £800 freehold —
MIDDLESEX SUBURB — HALF SHARE of about £ 000 p a Increasing panel over 600 Developing area Choice of house Premium £ 000 —4
GUILDFORD—NEARLY £700 P A fast increasing Small panel Scope Small house to rent at £70 p a —5
LONDON N E—£1 460 P A PANEL 2,300 Ample scope Half share with succession soon Rent £4 p a —6
DEVON—UNOPP COUNTRY OVER £1 100 p a and increasing Panel worth £400 p a Appts £60/70 Premium £1 500 Excellent freehold house 6 bed garden etc —
LONDON N 12—OVER £900 INCREASING and scope Panel 0 Fees 5/ to 10/6 Conv house in excellent position to rent —8
NEAR BIRMINGHAM — AVERAGE £7/800 p a Panel 500 Premium £1 00 House 4 bed garden etc Price £900 or let —9
LONDON W—AVERAGE £1 260 P A Better-class non-panel Fees £1/ Premium £1 750 or near Excellent house 6 bed etc to rent.—10
SCOTLAND (N)—COUNTRY OVER £1 000 p a incl panel of £300 p a Visits 5 to £5 5s Premium 18 years purchase or offer Good house rent or sell —11
MIDDLESEX—SUBURB £1 0,0 P A Panel 600 increasing PMS £100 Premium years purchase Comf house (4 bed) Sell or let —12
MIDLANDS — AVERAGE £1 068 Panel nearly 1 000 Prem 18 years purchase Good detached house 6 bed nice garden etc £1 0 freehold —13
LOCK-UP LONDON S W—HELD BY WOMAN £485 p a Panel abt 00 Prem 18 years purchase —14
LONDON W 2—AVERAGE £1 900 p a Panel 1 00 Fees 5/ to £1 Lease of imposing house for disposal —15
LADY DR S PRACTICE—EASTERN SUBURB £1 400 £1 500 p a Small panel and PMS Premium 18 years purchase Well-equipped surgery and living accom £80 p a —16
KENT SUBURB—ABOUT £700 P A increasing Panel 1 0 Fees 5 6 to /6 Premium £ 00 Detached modern residence 4 bed and good garden —17
LONDON W 12—AVERAGE £800 P A Selected panel of 900 Fees Visits 6 to 5 Premium years purchase Large house part let off at over £ 00 p a —18
LONDON N 18—£300 P A WITH scope Branch PRACTICE Panel 600 Nice house to rent —19
CO DURHAM—AVERAGE £1 200 No panel or dispensing Premium £ 000 Semi detached 4 bed etc and large garden Price £1 00 —0
KENT COAST TOWN—1 OR 4 SHARE receipts £ 650 p a Panel over 000 Good house on rental at £85 p a Premium years purchase —1
CROYDON AREA — NEARLY £700 p a Panel 600 increasing Club etc Premium about £8 0 Semi-detached house to rent —
NO CHARGE TO PURCHASERS
FINANCIAL ASSISTANCE ARRANGED
ASSISTANTS—VACANCIES IN TOWN and Country Indoor and Outdoor List on application

THE MEDICAL AGENCY, Ltd
DUDLEY HOUSE 36-38 SOUTHAMPTON ST., STRAND W C 2
Telephones—Temple Bar 10 —10 4 Established in 1892 by J A P

MIDDLESEX WEST—Well-established fully equipped G P Detached house 6 spacious bedrooms Large garage Receipts approx £ 00 Panel 1 00 Fees 6 up Premium 2 years purchase
YORKS—Mixed G P situated near Lime City Receipts £1 00 Panel 2 5 6 Suitable house available Fees 5 6 up Premium for Practice £2 500
ESSEX (Near London)—Well established G P Receipts approx £1 000 Panel over 00 Medium sized house available garden garage Fees 6 up Premium 1½ years purchase or near offer
LONDON N W—PARTNERSHIP—Good class non-dispensing PRACTICE Corner house Receipts approx £2,500 Small panel Premium

LOCUMS AND ASSISTANTS ALWAYS AVAILABLE

LONDON W—Main line PRACTICE Actual receipts Large house Receipts 1 0 0 Panel 00 Small house and Premises 500 Fees
LONDON S E—Within 10 minutes Lime Street Modern Corner PRACTICE Commanding position to realise Receipts approximately 0 Opportunity for increasing Large house Premises
GLOUCESTERSHIRE.—PARTNERSHIP short Assistantship Semi-rural G P Centre Good house to rent Receipts 2,500 share

MANY OTHERS FOR SALE. DETAILS ON REQUEST

ESTABLISHED 1877
LEE & MARTIN, LTD,
The Birmingham Medical Agency
71 TEMPLE ROW BIRMINGHAM
Telegrams Locum Birmingham Telephone 963 Mid and 8 Barn

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED
MAXIMUM FEE £ 0 if exclusively entrusted to us.
ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED
RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORT NOTICE also ASSISTANTS

WANTED TO PURCHASE
1 BIRMINGHAM (or within 0 miles thereof)—Good Mixed PRACTICE with a Panel of 1 0 over and receipts of from £1,500 to £ 000 URGENTLY REQUIRED CAPITAL AVAILABLE
- REQUIRED Good ENGLISH SCOTTISH and IRISH LOCUMS immediately Also good ASSISTANTS Posts to offer with or without view

FOR DISPOSAL
1 GLOUCESTERSHIRE—Death Vacancy well established country PRACTICE Receipts average £900 p a Panel 50 Good house with all services
- STAFFS—RAPIDLY GROWING mixed Private and Panel PRACTICE in pleasant suburb Receipts last year £1 050 Panel 1 100 Excellent house with all services
GLOUCESTERSHIRE—Well-established middle and working class PRACTICE Receipts average £1 0 p a Panel 1 1 00 Good scope to increase Good house
4 LANCS—Old-established middle and working class PRACTICE Receipts average £3 0 p a Panel 3 000 Excellent house with all services
5 LONDON—Old-established mixed Private and Panel PRACTICE Receipts £1 5 p a Panel 966 ample scope and good house
6 LANCS—Old-established middle and working class PRACTICE Receipts average 1 400 p a Panel 1 00 Good scope to increase and good house

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partnerships on very reasonable terms Full particulars on application
RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE.

Telephone Welbeck
Telegrams ASSISTED, LONDON
NURSES
MALE OR FEMALE
TRAINED NURSES FOR MENTAL MEDICAL SURGICAL, AND FEVER CASES
Nurses retire on the premises and are available for urgent cases Day and Night
THE NURSES' ASSOCIATION
(In conjunction with the MALE NURSES' ASSOCIATION)
29 York St., Baker St., London, W 1
Mrs MILLICENT HICKS
W J HICKS Secretary

THE WESTERN MEDICAL AGENCY
LONDON and BRISTOL
Dr K H BENNETT and Dr W J PRATT will give personal attention to every case
Financial Assistance to Purchasers of Medical Practices arranged
LOCUMS AND ASSISTANTS SUPPLIED WITHOUT CHARGE TO PRINCIPALS
For certain Agency arrangements commission is charged which includes every kind of service provided

1 DORSET COAST DEATH VACANCY Wonderful prospect Net £1 00 p a Fees 1 year purchase Good house
- WESTERN CITY—Well established PRACTICE Unopposed opening with excellent Well established returned Rapidly increasing Over 00 p a Commencing
DEVON COAST—Small PRACTICE Good house in delightful position Could be for sale Recently established Fees increasing 0 last year Half share purchase
4 LONDON E—Large South PRACTICE Panel 00 p a Premises Practice rent
S COAST—PRACTICE Panel over 1 000 p a Good purchase House rent Partnership
6 CORNWALL—Country PRACTICE Delightful part Assistantship Panel Fees 5 p a years purchase House rent
- SOMERSET COAST—PARTNERSHIP Country town Panel Fees over £ 00 p a Third share at years purchase House rent
8 CORNISH COAST—PRACTICE In favourite part Growing panel About 900 p a Premium £1 500 House rent
9 LONDON N W—Panel 60 00 p a Premium £1 000 House sale or rent
10 LONDON S W—Panel 00 Over 00 p a Premium £1 0 House rent

22 CLARE STREET BRISTOL, 1
Telegrams Medreen Bristol Telephone B 9
15 BEDFORD ST., STRAND W C 2
Telephone Temple Bar

ESTABLISHED 1 5
PEACOCK & HADLEY Ltd,
MEDICAL TRANSFER AGENCY
67 68 Chandos St Bedford St Strand W C 2
Telegrams Herbarian, Lesquare, London
Telephone Temple Bar 4
This old-established Agency specialises in the SALE of PRACTICES and PARTNERSHIPS on reasonable terms which can be obtained upon application
LOCUM TENENS and ASSISTANTS supplied free of charge to principals

CAVENDISH NURSES
★ MALE AND FEMALE
[illegible] BEAUMONT STREET LONDON W 1
[illegible] MANCHESTER [illegible]
GLASGOW
DUBLIN
Telephone [illegible]
Telegrams [illegible]
Telegrams Tempus London
Telephone [illegible]

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1880)

Tele Address
Triform Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1

Telephone Euston { 1644 / 1645

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical Scholastic, and Accountancy business and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult The Manager in all transactions requiring the services of a Medical Agent

Members of the British Medical Association may take advantage of a reduced scale of charges applicable to them

REDUCTION IN FEES

In cases where the Bureau are sole Agents the commission in respect of any sale of goodwill, book debts furniture drugs fittings and other effects (excluding sales of any freehold or lease hold property or of practices, effects etc, outside Great Britain) is limited to a maximum fee of Fifty Pounds

FULL TERMS ON APPLICATION

Practices and Partnerships for Disposal — **Full Particulars sent free**

1 S COAST—Better class non dispensing PRACTICE in favourite watering place Receipts £2 455 p a, including general surgery and ear nose and throat work Excellent non basement house Purchaser should hold F R C S Hospital and chance of appointment Premium one and three quarter years purchase

2 S W ENGLAND—Country PRACTICE over £1,400, in beautiful part Panel about 1 100 Exceptionally nice modern house standing in own grounds for sale Hunting and shooting Scope Premium two years purchase

3 EASTERN COUNTIES—THIRD PARTNER required in Practice £5 200 p a in market town within 90 miles of London Panel over 4 000 House to rent One fifth or one fourth share two years purchase

4 CENTRAL LONDON PRACTICE—Better-class part at comfortable West End family flat Larger lock up branch 10 minutes distant Both increasing Panel 1 650 Receipts past year £1 698 (average £1 460) 2 years purchase

5 S E COAST—PARTNERSHIP in Practice averaging £4 100 p a in growing resort Panel 1 350 Good house (4 bedrooms) to rent One fifth share at first at two years purchase

6 MIDDLESEX—PARTNERSHIP in Practice over £4 000 in growing town Panel 2 300 Modern detached house for sale or rent One fourth share at first at two and a quarter years purchase Preliminary Assistantship

7 Consulting Ear Nose and Throat PRACTICE in industrial city Receipts 1937 £1 392 Centrally situated house to rent Purchaser should hold F R C S and have specialist experience Premium two years purchase

8 KENT—PRACTICE in developing district 12 miles from London Receipts past year over £500 Panel about 465 House (3 bedrooms) to rent Ample scope Premium £750 to include drugs etc

9 BIRMINGHAM—Medical Woman s PRACTICE averaging £1 269 p a Panel nearly 400 Good house with garage and garden Price £500 leasehold Scope Premium one and three quarter years purchase

10 S AFRICA—PARTNERSHIP in lucrative Practice in Natal Share worth about £1 800 p a at one years purchase Applicant should be competent surgeon and preferably in F R C S

11 WEST END near Lord s Cricket Ground—PRACTICE averaging about £1 900 p a in ideal residential part Panel about 1 300 with prospects of good increase Well built detached double fronted house with garage and nicely wooded garden Good introduction Premium £3 325

12 MIDLANDS—PARTNERSHIP in mixed Practice £4 800 p a in prosperous town Panel over 3 500 Modern labour saving house to rent Premium one third share £3 500 to include drugs etc Hospital

13 S W OF ENGLAND—PARTNERSHIP in mixed country town Practice over £6 400 Panel 4 500 Share worth £1 700 at two years purchase Preliminary Assistantship

14 W MIDLANDS—PARTNERSHIP in non dispensing Practice about £3 750 p a in beautifully situated country town Panel 2 800 House to rent One fourth share at first two years purchase Aged about 30 with F R C S preferred Preliminary Assistantship

15 MIDDLESEX—PARTNERSHIP in steadily increasing town Practice about £2 000 p a Panel 1 800 House to rent Premium one half share two years purchase Applicant should be English or Scottish

16 SURREY—Medical Woman s PRACTICE in outlying suburban district Receipts last year £340 House for sale or rent Scope Premium one years purchase

17 S AFRICA—Medical Woman holding D O M S required in Ophthalmic Practice Experienced in operative work and not over 40 preferred SHARE about £1,000 offered after ASSISTANTSHIP

18 SUSSEX—PARTNERSHIP in good class Practice nearly £3 000 in favourite market town Panel about 1 200 House (4 bedrooms) etc Rent £80 p a Premium one half share £3 000

19 S COAST—PARTNERSHIP in Practice over £3,000 p a, in seaside resort Panel about 2 000 Semi detached house (5 bedrooms) for sale or rent Premium one half share £3 000 Excellent hospital and scope for surgery

20 MIDLANDS—Country PRACTICE over £1,300 p a in hunting district Panel 546 Good house (5 bedrooms) garage and good garden Main water and electricity Price £1 400 freehold Premium two years purchase

21 N E ENGLAND—PARTNERSHIP in non panel Practice, doing about £6 000 in one of the chief towns House available One sixth share at two years purchase Partner should be surgically inclined

22 LONDON, S E 1—PRACTICE about £1,150 p a in populous district Panel 1 800 Corner house Rent £105 p a Scope Premium two years purchase

23 LONDON, S E 13—PRACTICE averaging over £650 p a Panel 800 Accommodation available Premium £1 150 or near offer to include waiting room furniture etc

24 LONDON, N W—Medical Woman s PRACTICE over £800 p a in growing district Panel 740 House for sale or rent Premium 1½ years purchase Appointments worth £250 p a additional possibly transferable

25 S COAST HEALTH RESORT—PARTNERSHIP in Practice about £1 500 p a Panel over 1 100 House (3 bedrooms) garage and garden to rent Premium two fifths share £1 250 to include drugs etc

26 N OF ENGLAND INLAND SPA—PARTNERSHIP in Practice about £1 900 p a Panel 1 200 Excellent house (8 bedrooms etc) for sale Scope Premium one half share £1 800

27 S COAST—PARTNERSHIP in non dispensing Practice over £5 600 p a in health resort Panel about 600 Share worth about £900 at two years purchase Further share in two years

28 S OF ENGLAND—Easily worked PRACTICE about £1 000 p a in Cathedral city (clubs worth about £160 and panel 1 065) House (6 bed and dressing rooms) for sale Premium 1½ years purchase or very near offer

29 WEST END OF LONDON—Good class non dispensing PRACTICE about £1 150 No panel Large house to rent Premium lease and practice £3 000

30 BUCKS—PRACTICE in growing town Receipts last year £894 Panel about 790 House for sale Well equipped hospital Premium £1 500

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD.)
(FOUNDED 1890)

Tele Address Triform Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE W.C.1

Telephone Euston 1644 1645

Practices and Partnerships for Disposal (continued)

31 LONDON W.6.—Non-dispensing PRACTICE £1,000 p.a. Pleasant suburb. No panel. House (5 bedrooms) garage and garden. Premium house and practice £2,500.

32 ESSEX.—Country PRACTICE about £700 p.a. Panel about 450. Very good house (5 bedrooms) garage and garden. Rent £65 p.a. Premium £1,050.

33 LONDON, S.W.—Medical Woman's PRACTICE about £960 p.a. in outlying suburb. No panel. Suitable accommodation available. Premium £950.

34 SURREY.—Medical Woman's PRACTICE about £500 in developing district. No panel. Rent of house £100 p.a. Scope. Premium £500.

35 SMALL RADIOLOGICAL PRACTICE in provincial town. Good opportunity for young able man. Prospect of hospital appointment later. Premium £1,600 to include modern plant (value about £1,100).

36 PARTNERSHIP in increasing Ear, Nose and Throat Practice in provincial town. Partner must hold F.R.C.S.

37 MIDDLESEX.—FOURTH PARTNER required in Practice over £7,600 p.a. in residential district on the Thames. Panel 3,600. House (5 bedrooms) to rent. Scope. Premium 6/30ths share £3,100.

38 LONDON, N.W.—PARTNERSHIP in Practice averaging about £5,200 p.a. Panel about 6,000. Maisonette (2 bedrooms etc.) to rent. One fifth share at first at two years' purchase.

39 N.E. COAST.—Middle and better working-class PRACTICE over £1,150 p.a. in seaport town. No panel. Private residence for sale. Premium £750 to include furnishings etc. of consulting rooms.

40 LONDON, W.9.—PRACTICE doing between £900/£950 p.a. in residential district. Panel about 60 but plenty of scope. Rent of maisonette (4 bedrooms) £200 p.a. Premium £1,000 or offer.

41 S. WALES.—Chiefly non-dispensing PRACTICE £830 p.a. in seaside town. Panel 380. Centrally situated house. Price £1,250. Good scope. Premium £1,450.

42 LONDON, N.W.4.—Middle-class PRACTICE about £800 p.a. in developing part. Panel 300. House (3 bedrooms) for sale or rent. Scope. Premium £1,250.

43 LONDON, S.W.16.—Medical Woman's PRACTICE over £1,000 p.a. Panel 450. Semi-detached house. Price £950 freehold. Scope. Premium £1,500.

44 HOME COUNTY.—FOURTH PARTNER required in Practice in growing town. Part I. £1,000. Income partner must be energetic, aged about 30 (married preferred) with a leaning towards medicine. Initial share about £1,500 p.a. Premium £3,000. Preliminary assistantship.

45 S.W. OF ENGLAND.—Non-dispensing PRACTICE averaging £1,166 p.a. in favourite watering place. Small panel. Semi-detached house for sale or rent. Good hospital. Premium £2,500.

46 CORNWALL.—PRACTICE averaging £695 in market town on West coast. Panel 200. House (5 bedrooms) garage and garden for sale or rent. Scope. Premium [illegible] and a quarter years' purchase (half down).

47 LONDON, S.E.22.—PRACTICE in suburban district. Receipts past year £1,284. Panel 700. Good house with garage and nice garden for sale or rent. Premium two years' purchase.

48 HOME COUNTY.—PARTNERSHIP in Practice averaging £1,500 p.a. in beautiful [illegible] country. Panel about 1,100. Choice of house. Incoming partner must be experienced and aged about 30-40. Premium [illegible] share two years' purchase. Hospital.

49 LONDON, N.7.—PRACTICE averaging about £2,000 p.a. including valuable appointment and panel. Small house (3 bedrooms), garage and small garden for sale or rent. Premium £1,000 or near offer.

50 LONDON, S.W.—PARTNERSHIP in mixed class Practice about £1,000 p.a. in residential suburb. Panel [illegible]. Very nice house with garage and quarter-acre garden for sale. Two fifths share at first at two years' purchase.

51 N. MIDLANDS.—PRACTICE in residential district near progressive town. Receipts 1937 £750 p.a. about. 100 House (4-bedroomed) for sale. Good scope. Premium £[illegible].

52 LONDON, S.W.9.—Non-panel PRACTICE averaging over £1,500 p.a. House on main road to rent or on lease. Premium one years purchase.

53 S. LINCS.—Country PRACTICE nearly £500 p.a. in agricultural district. House to rent. Premium £1,000 to include surgery furniture. Morris 8 Saloon car if required.

54 CORNISH COAST.—PARTNERSHIP in non-dispensing Practice nearly £1,000 in favourite resort. Panel 1,200. House obtainable. One-third share at two years' purchase. Good anaesthetist required. Short Assistantship.

COLONIES.—Number of Colonial PRACTICES. Incomes range from about £750 p.a. upwards.

Purchasers can raise additional capital for the purchase of approved practices or shares. Particulars will be forwarded on application.

All communications to be addressed to The Manager

Manager W. M. SCOBIE.

SCOTTISH BRANCH, 21, Alva Street, Edinburgh, 2

Telephone [illegible]

FOR DISPOSAL.

A. SCOTLAND.—Old established City PRACTICE. Receipts approximately £2,400. Panel 2,500. House price £900. Premium two years' purchase or near offer.

B. YORKSHIRE.—Country PRACTICE. Receipts £1,200. Panel 500. Excellent house with garage. Price £1,200 freehold. Premium one and three-quarter years' purchase.

C. E. OF SCOTLAND.—Manufacturing town. Receipts about £1,250. Panel 1,250. Attractive house price £1,500. Premium one and three quarter years' purchase or near offer.

D. EDINBURGH.—DEATH VACANCY.—PRACTICE. Very large scope for private and panel. Excellent house for sale. Any reasonable offer.

E. E. OF SCOTLAND.—Country town. Receipts last year £685 (appointment £112, panel 565). Excellent house with garage and garden. Price £1,450. Premium £1,000.

F. EDINBURGH.—Lady Doctor's PRACTICE. Receipts last year £660. Panel 90. Suitable for single or married lady. Premium one and a half years' purchase.

G. N. OF SCOTLAND.—Country PRACTICE. Long established. Receipts approximately £1,600. Panel [illegible].

H. WALES.—PARTNERSHIP in country town. Receipts £1,200. Panel over 1,000. Suitable for [illegible] £800. One-half share at one year's purchase.

I. EDINBURGH.—PRACTICE doing £[illegible]. House must be sold. Premium [illegible] and house [illegible].

K. EDINBURGH.—PRACTICE averaging £1,022. Panel 850. Price for goodwill, [illegible] one and three-quarter years' purchase or near offer.

L. EDINBURGH.—PRACTICE about £600. Suitable house to rent. Premium [illegible].

For further details apply The Manager, 21 Alva Street, Edinburgh.

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager to whom all communications should be addressed.

RELIABLE LOCUMS AND ASSISTANTS ARE URGENTLY REQUIRED BY ALL OFFICES OF THE BUREAU

INDEX TO ADVERTISEMENTS

PUBLISHERS
British Medical Association 4 6 16 19
Churchill J & A Ltd 3
Lewis H K & Co Ltd 6
Livingstone E & S 4
Macmillan 4
Oxford University Press 6
Practitioner 2
Saunders W B & Co Ltd 5

ASSURANCE & INSURANCE
Century Insurance 62
Medical Defence Union Suppl

BANKS & FINANCE
British Medical Finance Ltd 38

CHEMISTS
Abbott Laboratories Ltd 25
Bayer Products Ltd Cover iii
Boots Pure Drug Co 20
British Drug Houses Ltd 23 24 27
British Federal Co Ltd Cover ii
British Oxygen Co Ltd 11
Burroughs Wellcome & Co 33
Ciba Ltd Cover iii
Coate & Cooper Ltd 16
Continental Laboratories Ltd 32
Dunn Hurd & Co Ltd 20
Eli Lilly & Co Ltd 29
Evans Sons Lescher & Webb Ltd 26
Genatosan Ltd 24
Heinemann W Ltd 6
Hoyle & Sons Ltd 17
Imperial Chemical Industries Ltd 28
Macfarlan & Co Ltd 34
Maw Son & Sons Ltd 14
Nicholas J & Sons Ltd Suppl iv
Parke Davis & Co Cover iv
Reckitt & Sons Ltd 22
Roche Products Ltd 21
Simpkin A L & Co Ltd 6
Smith Martin H Co 19
Sparklets Ltd 14

FOODS, BEVERAGES
Allen & Hanburys Ltd 31
Fairchild Bros & Foster 23
Horlicks Ltd 16
Husband J K & Co Ltd 18
Marmite Food Ext Co Ltd 22
Mitchellhills Biscuits 38
Nestlé's Milk Products Ltd 16
Toffex & Co Ltd 40
Robb Alex & Co Ltd 39
Ryvita Co Ltd 30
Valentine's Meat Juice Co 19
Wander A Ltd Cover ii

MOTORS & ACCESSORIES
Henlys 9
Lodge Plugs Ltd 38
Mann Egerton & Co Ltd Suppl i

NAME PLATES, etc
Cooke's (Finsbury) Ltd 40
Hall I B & Co 40
Hird S J & A 40
Lewis H K & Co Ltd 40
Osborne F & Co Ltd 40
White Bronze Co 40

PRINTING, TYPEWRITERS, etc
Taylor's Typewriters 40

SURGICAL APPARATUS
Compri-Vena Ltd 40
Curtis H F & Son Ltd 12
De Soutter Bros Ltd 15
Hilliard 40
Salt & Son Ltd Suppl iii
Smith & Nephew T J Ltd 35

TAILORING & CLOTHING etc
Burberrys Ltd 39
Clark C & J Ltd Suppl ii
Regent Dress Co 40

TOBACCO & CIGARETTES
Carreras Ltd Suppl ii
Players No 3 8

VACCINES & SERA
Evans Sons Lescher & Webb Ltd 26
Genatosan Ltd 24
Heinemann W Ltd 6

X-RAYS & ELECTRO-MEDICAL
Allen & Hanburys Ltd 10
General Radiological Ltd 12
Hanovia Ltd 13
Portable X Rays Ltd 40
Victor X Ray Corporation Ltd 37

HOMES & INSTITUTIONS
Pages 40 41 42 43 44 45 46

HOUSE AGENTS
Page 60

HOSPITALS & CLINICS
London Clinic 44

SANATORIA
Cornish Riviera San 44
Cotswold Sanatorium 44
Montana Hall 46
Mundesley Sanatorium 44

SPAS, HEALTH RESORTS & HYDROS
Czechoslovakia 45
Kenworthy's Hydro 46
Pistany Spa 45
Smedley's Hydro 45
Woodhall Spa 45

MEDICAL SCHOOLS, TUTORS, & LECTURERS
Pages 46 47 48

NURSING, etc
Page 61

TRANSFER AGENTS
Bovril Medical Agency 67
British Medical Bureau 64 65 66
Lee & Martin Ltd 63
Medical Agency Ltd 63
Peacock & Hadley Ltd 63
Turner Percival 63
Western Medical Agency 63

CONTRACT PRACTICE
Page 57

HOSPITAL VACANCIES, etc
Pages 48 49 50 51 52 53 54 55 56 57 61 62

CLASSIFIED ADVERTISEMENTS—(Wanted & Vacant)
Pages 58 59

GENERAL
British Commercial Gas Assn 7
British Electrical Dev Assn 10
British Motor Boat Co Ltd 38
British Taxpayers Association 68
Franklands L J & Co Ltd 38
White H Mfg Co Ltd 38

INCOME TAX
IN 12 EQUAL MONTHLY PAYMENTS
STRICTLY CONFIDENTIAL
This practical convenience is praised by medical men

DOUBTFUL DEBTS
CAN BE TURNED INTO
CASH
A specialised department is maintained for collection of medical accounts

WRITE BRITISH TAXPAYERS' ASSN LTD, GRAND BUILDINGS, LONDON, W.C.2.

[illegible] British Medical Association Tavistock Square London W C 1 and printed by Eyre and Spottiswoode [illegible] Printed in Great Britain Entered as Second Class at New York U S A Post Office

PHYSIOLOGICAL SLEEP

SUSPENSION OF CEREBRAL ACTIVITY and MUSCULAR RESOLUTION WITH

DIAL

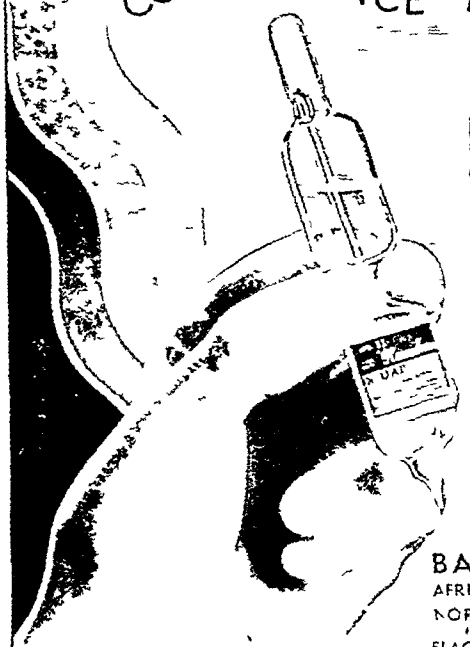
"CIBA"

SPECIFIC IN NERVOUS INSOMNIA and AGITATION OF THE OVERWORKED NEUROPATHIC PATIENTS
ANALGESIC IN CHILDBIRTH

TABLETS LIQUID AMPOULES
SAMPLES AND CLINICAL REPORTS TO PHYSICIANS ON REQUEST

CIBA LIMITED
TELEPHONE ... LONDON WALL ... LONDON E.C.1 ...

CONVENIENCE - ACCURACY - SAVING IN TIME



By Administration of
EHRLICH'S Original SALVARSAN preparations in

ISO DOUBLE AMPOULE

containing the necessary amount of sterile redistilled water for preparation of solutions ready for use

'NEOSALVARSAN'

TRADE MARK Neoarsphenamine

(Ehrlich's Original 914)
Also Double Ampoules 0·15 0·3 0·45 0·5 0·75 gm

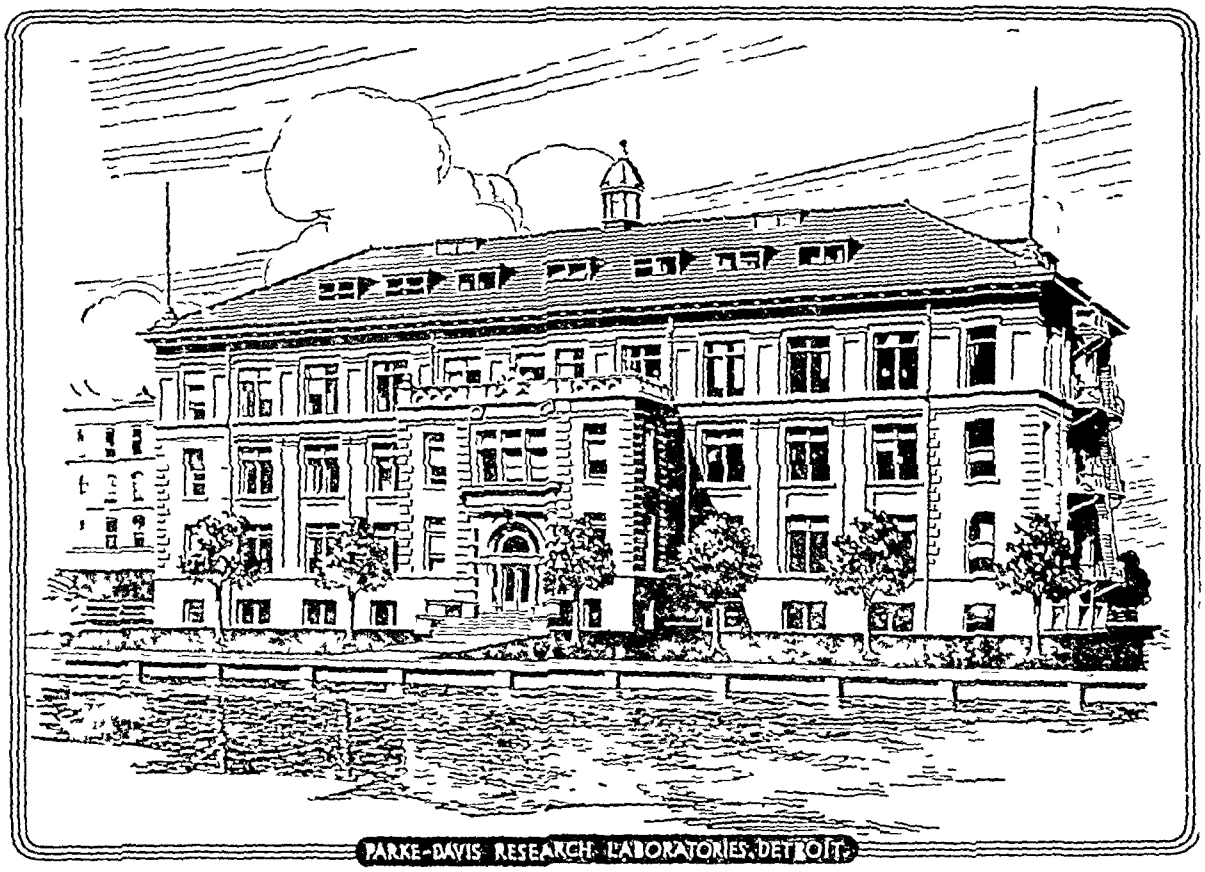
'MYOSALVARSAN'

TRADE MARK Sulpharsphenamine

For *intramuscular* and subcutaneous injection
Iso Double Ampoules with glucose solution 0·15 0·3 0·45 0·6 gm

BAYER PRODUCTS LTD
AFRICA HOUSE KINGSWAY LONDON W.C.2
NORTHERN OFFICE ... FLAXEFRIARS HOUSE PARSONAGE MANCHESTER 3
DUBLIN OFFICE ... OLESWORTH HOUSE 12 STH FREDERICK ST DUBLIN

Fifty Years of
1885 BAYER 1938
PHARMACEUTICAL PRODUCTS



RESEARCH LABORATORIES

In a building which stands apart from the main manufacturing plant the Parke-Davis Research Laboratories house a staff of scientific workers engaged in the search for new medical knowledge and in the elucidation of problems connected with the treatment of disease.

Each of the separate phases of research work, such as bacteriology, botany, chemistry pharmacology, physiology, pharmacy, etc is supervised by a scientist of specialised training and frequently of national or international reputation Under him is a staff of skilled technicians working with up-to-date equipment in an endeavour to bring to light new knowledge and to explore new avenues in the conquest of disease

This work of research which has been in progress in the Parke-Davis Laboratories for more than half a century, is not controlled by time schedule or calendar—often many months and even years are spent in the solution of a problem and the only stipulation is that the work shall be done conscientiously and well

PARKE, DAVIS & CO., 50, BEAK STREET, LONDON, W.1

Laboratories Hounslow Middlesex Inc U.S.A. Liability Ltd

BRITISH MEDICAL JOURNAL

JOURNAL OF THE

BRITISH MEDICAL ASSOCIATION

SATURDAY JULY 9 1938

PRINCIPAL CONTENTS

Prostatic Enlargement and its Treatment p 53

Anaemia and the Gastro-intestinal Tract 57

Benzedrine 60

Placental Extract in Measles Epidemic 65

Sight Acquired at 22 Years of Age 67

Moulds and Asthma 68

Leading Articles p 74

Correspondence 90

Surgery in General Practice
Shoulder-joint Injuries—II 80

Reviews 71

Tuberculosis Conference 83

Charge of Procuring Abortion 97

Plymouth Meeting Programme and Exhibition (in Supplement)

WITH SUPPLEMENT AND EPITOME

LONDON

BRITISH MEDICAL ASSOCIATION

TAVISTOCK SQUARE

No 4044, WEEKLY, PRICE 1/3

Copyright

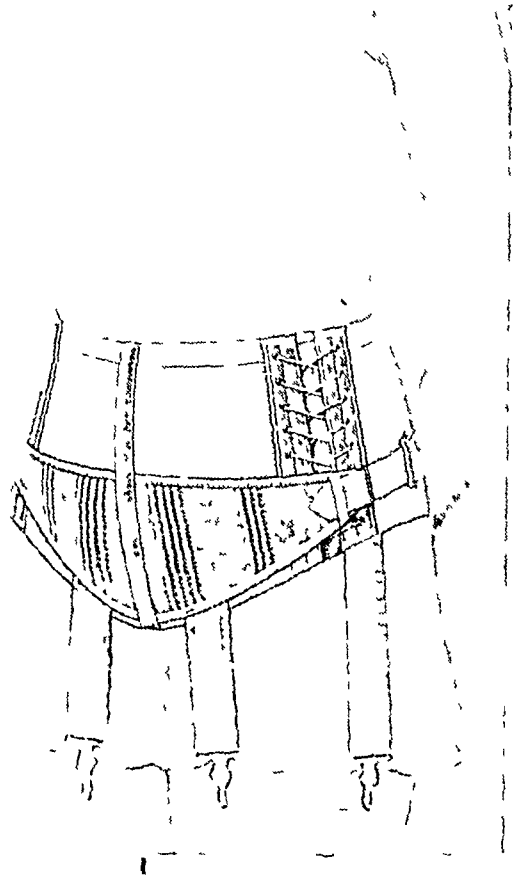
REGISTERED AS A NEWSPAPER

SALTAIR SURGICAL SERVICE

Guarantee
"We guarantee to alter exchange or accept the return of any appliance without cost ordered by the Medical Profession if not found Suitable within fourteen days from date of supply"
Salt and Son Ltd.

Readily Adjustable;
Consistently Comfortable—

SALT'S MATERNITY BELT . . . .



● All the essentials for comfortable and effective support during pregnancy are incorporated in Salt's Maternity Belt Its design is the outcome of many years' experience

● Facilities for easy adjustment are provided by lacings at both sides As a result the Belt is at all times completely comfortable affording support that is highly beneficial to the physical and mental well-being of the patient

● Salt's Corset & Belt Book contains Measure/Order forms for the Doctor's use Interested Practitioners will receive this Book post free per return upon request

SURGICAL SERVICE SALTAIR

SALT & SON LTD BIRMINGHAM 2

BRITISH MEDICAL JOURNAL

JULY 9 1938

TABLE OF CONTENTS

ADDRESSES AND PAPERS

A Survey of Prostatic Enlargement and its Treatment KENNETH WALKER F R C S 53

Anaemia and the Gastro intestinal Tract JANET M VAUGHAN D M M R C P 57

Further Observations on Benzedrine E W ANDERSON M D M R C P 60

Placental Extract in an Epidemic of Measles T N PARISH M D 65

A Woman Blind from Birth who Acquired Sight at 22 Years of Age R COLLEY M B ch B 67

Moulds and Asthma E M FRAENKEL M D 68

SURGICAL SERIES

Injuries to the Shoulder-joint—II R WATSON JONES M Ch F R C S 80

CLINICAL MEMORANDA

Sulphonamides for Meningococcal Meningitis A H WINCHESTER F R C S Ed 70

A Case of Streptococcal Meningitis MORRIS SCHWARTZ, M R C S 70

MEDICO LEGAL

Charge of Procuring Abortion Mr Aleck Bourne at Marylebone Police Court 97

OBITUARY

Sir Colin Mackenzie M D 99
Hugh Woods M D 99
Professor Georges Marinesco 100
John Watterson Miller M D 100
E W Griffiths M R C S L R C P 100

GENERAL ARTICLES AND NEWS

Tuberculosis Conference 83
The Human Skin Lecture by Dr LEONARD WILLIAMS 86
MENTAL WELFARE OF EX SERVICE PATIENTS 85
EXCHANGE HOLIDAY VISITS 87
CORPORAL PUNISHMENT 87
LIFE ASSURANCE MEDICAL CONGRESS 87
PREPARATIONS AND APPLIANCES 73
MEDICAL NOTES IN PARLIAMENT 100
UNIVERSITIES AND COLLEGES 104
MEDICAL NEWS 105

LEADING ARTICLES

Rockefeller and the Frontiers 74
Management of Phthisis 75

ANNOTATIONS

Changes in Teeth following Parathyroidectomy 76
Post vaccinial Encephalitis 76
Treatment of Myotonia 77
Royal Medical Benevolent Fund 77
The Heart in Relation to its Blood Supply 78
Rural Hygiene 78
Traumatic Shock 79
Refugee Doctors from Austria 79

SUPPLEMENT

PLYMOUTH PROGRAMME

ANNUAL EXHIBITION PLYMOUTH
THE COLONIAL MEDICAL SERVICE AND THE B M A
INSURANCE ACTS COMMITTEE
INSURANCE MEDICAL SERVICE
CORRESPONDENCE
POSTGRADUATE NEWS
MEETINGS OF DIVISIONS
Association Notices Vacancies and Appointments Diary

REPORTS OF SOCIETIES

ASSOCIATION OF CLINICAL PATHOLOGISTS 88

LOCAL NEWS

SCOTLAND—
University of Glasgow 89
Royal (Dick) Veterinary College 89
St Andrews University 89
ENGLAND AND WALES—
Minister of Health at Sheffield 89
After care Work of the Mersey side Hospitals Council 89
Health Congress at Portsmouth 90
Welsh National Institute of Radiotherapy 90
Conditions of Nursing Service 90

EPIDEMIOLOGY SECTION

TABLE OF INFECTIOUS DISEASES AND VITAL STATISTICS 102
EPIDEMIOLOGICAL NOTES 10

CORRESPONDENCE

Uterine Rupture following Caesarean Section CHASSAR MOIR F R C P 93
When to Start Sulphonamide in Gonorrhoea Colonel L W HARRISON C I E 91
Sulphanilamide Treatment of Gonorrhoea W GILLIES ANNAN F R C S 91
Sulphanilamide in Staphylococcal Skin Infections M MARCUS M B 92
The Origin of Cancer J V FIDDIAN M D 92
Cancer and Heredity P A GOPEP B Sc M R C S L R C P 93
Treatment of Apoplexy FREWEN MOOR M D 93
Emergency Bed Service A R MONTGOMERY M B 93
The Unconscious Mind HARRY CAMPBELL M D 93
Ichthyosis Osteochondritis G EDGAR CHURCH M B G O TIPPETT F R C S 94
Anti venereal Measures ALISON NEILANS 94
Anatomical Terminology D F ELLISON NASH F R C S 95
Tuberculin in Diagnosis JOHN R GILLESPIE M D 95
Medical Relief for China MILLAIS CULPIN M D W C W NIXON M D and H J SEDDON F R C S 96
Schopenhauer and Syphilis J D ROLLESTON M D 96
The Psychology of the Medical Profession A J BROCK M D 97
Assistance to Students from Austria VICTOR CONSTAD L M S S A 97

REVIEWS

Post operative Radiography of the Biliary Tract 71
Differential Diagnosis 71
Yearbook of Urology for 1937 71
The Paget Tradition 71
Diseases of the Blood 72
British Health Resorts 72
Notes on Books 72

THE SERVICES

Efficiency Decoration 10
Deaths in the Services 105

LETTERS AND ANSWERS

Case for Diagnosis 105
Recurrent Ulcers 10
Income Tax 105
Sterilization of Hypodermic Needles 105
Histidine in Peptic Ulcer 105
Death from a Wasp Sting 105
Aspirin Poisoning 105

THE PRACTITIONER

Edited by

SIR HUMPHRY ROLLESTON, Bt, G C V O, K C B, M D, F R C P, and ALAN MONCRIEFF, M D, F R C P

PROGRAMME—July-October. 1938

JULY

The symposium in this issue deals with psychology in general practice Anxiety, obsessions, hysteria, suicide, and the common behaviour problems of children, are some of the subjects which are discussed by experts Articles of general medical interest include "Corns and Callosities," 'Infectious Diseases and Disinfection," and 'Diet in Allergic Diseases" Price 4s post free

AUGUST

This number will contain a really practical guide to the correct prescription of physiotherapeutic measures in general practice Articles of general medical interest include Affections of the Nails,' Vertigo its Causes and Treatment, 'Tropical Diets in Health and Disease, etc Price 4s, post free

SEPTEMBER

Disorders of Sex will be discussed from the point of view of the general practitioner in a series of six articles dealing with marriage difficulties problems of celibacy in man and woman homosexuality, and the sexual developments in childhood and adolescence Price 4s, post free

OCTOBER

Special Number

The advances of the year in diagnosis and treatment will be reviewed by twenty contributors This greatly enlarged Special Number will prove indispensable to every doctor in active practice Price 7s 6d, post free,

The annual subscription which includes two Special Numbers 1 - 2 post free to any part of the World

THE PRACTITIONER

5, Bentinck Street, London, W.1

PUBLICATIONS

of the

BRITISH MEDICAL ASSOCIATION

The B M A Proposals for a General Medical Service for the Nation
50 pp 8vo FREE ON APPLICATION

Medical Insurance Practice
By R W Harris and Leonard Shocten Sick Fourth Edition January 1937
Price 2s post free

Medical Practitioners' Handbook
23- pp 8vo Price 3s 10d post free

Report of Committee on Nutrition
48 pp 8vo Price 6d post free

Family Meals and Catering
32 pp 4to Price 6d post free

Facts about Small-Pox and Vaccination
(Revised Edition 1924)
34 pp Price 7d post free

Report of Committee on Immunization including Vaccination
38 pp 8vo Price 6d post free

Report of Committee on Tests for Drunkenness
20 pp 8vo Price 2d post free

Report of Special Committee on the Relation of Alcohol to Road Accidents
10 pp 8vo Price 2d post free

Relationship of the Private Practitioner to the Treatment of Mental Disability
22 pp 8vo Price 6d post free

Report of Mental Deficiency Committee
52 pp 8vo Price 1s post free

The Essentials of a National Medical Service
16 pp 8vo Price 2d post free

Hospital Policy
40 pp 8vo Price 3d post free

Problem of the Out-Patient
10 pp 8vo Price 2d post free

Report of Committee on the Diagnosis and Certification of Miners' Nystagmus
16 pp 8vo 3d or 2s 6d per doz post free

Report of Committee on Fractures
32 pp 8vo 4d or 3s 6d per doz post free

The Osteopaths Bill
Report of the Proceedings before a Select Committee of the House of Lords
156 pp 8vo Price 1s 3d post free

Report of the Psycho Analysis Committee, July, 1929
24 pp 8vo Price 3d post free

Report of Committee on Medical Education
3- pp 8vo Price 6d post free

Report of Committee on Physical Education
6- pp 8vo 6d or 5s 6d per doz post free

National Maternity Service Scheme for England and Wales
18 pp 8vo Price 3d post free

B M A Model Forms (No 1) for Doctors use when sending a patient to Hospital
Price 1s per 100 post free

B M A Model Forms (No 2) for use of Hospital when Patient attends without a Doctors Letter
Price 6d per book of 50 free

British Medical Association,
B M A. House, Tavistock Sq,
London W C.1.

JUST READY!—Andrews on the Skin

The New (*2nd*) *Edition* of Dr George C Andrews' book on Diseases of the Skin is *just off the press*. Not a page escaped revision. New material has been added to every chapter. *75 diseases* are discussed for the first time while the very latest applications of tests, diagnostic procedures and the newest approved therapy are given in the fullest detail.

Dr Andrews first takes up those subjects of more general nature devoting separate chapters to anatomy, pathology, symptomatology, general diagnosis, roentgen therapy, radium therapy and surgical diathermy. Then he describes individually the various diseases and conditions, with specific emphasis on the clinical aspects and the measures of treatment indicated. You will find full discussions of industrial dermatitis, drug dermatitis, eczema, pruritus, tuberculosis of the skin, diseases caused by filterable viruses, diseases of hair and skin appendages, neoplasms of the skin, and a monographic presentation of *syphilis* that covers *119 pages*.

Dr Andrews gives you *over 100 actual prescriptions*. He tells you just what the patient should eat as well as what he should not eat. He tells you how to use the *new therapeutic agents* such as sulphanilamide, fever therapy, diathermy, malaria therapy, etc., etc. He calls important points to your attention by the use of italic type, gives the skin manifestations of other diseases, stresses the importance of prophylaxis. There are 958 illustrations that constitute a veritable atlas.

By GEORGE CLINTON ANDREWS, A.B., M.D., Associate Professor of Dermatology, College of Physicians and Surgeons, Columbia University. Octavo of 899 pages, with 958 Illustrations. Cloth, 45s. net.

PRACTICE OF UROLOGY

By LEON HERMAN, B.S., M.D., Professor of Urology, University of Pennsylvania, Graduate School of Medicine. Octavo of 925 pages, with 756 Illustrations on 504 figures. Cloth, 45s. net.

Dr Herman's work is exactly what he intends it to be—a practical treatise of diseases of the urogenital system, for the use of general practitioners and surgeons. The subject matter is skilfully arranged, and the text is well illustrated.—THE LANCET

PRACTICAL PROCTOLOGY

By LOUIS A. BUIE, A.B., M.D., F.A.C.S., Head of Section on Proctology, the Mayo Clinic, Professor of Proctology, the Mayo Foundation. Octavo of 512 pages, with 152 Illustrations, including 6 in colours. Cloth, 30s. net.

justifies its title up to the hilt. It is above all practical. It writes in a simple and attractive manner, and covers the whole field of proctology in such a way that even a beginner can have no excuse for blunders in diagnosis and treatment. The book is confidently recommended as a stimulating and beautifully produced work in the field of proctology.—SOUTH AFRICAN MEDICAL JOURNAL.

PRE- AND POST-OPERATIVE TREATMENT

By ROBERT L. MASON, A.B., M.D., F.A.C.S., Assistant in Surgery at the Massachusetts General Hospital. Octavo of 495 pages, Illustrated. Cloth, 25s. net.

gathers together a considerable amount of very useful information and presents it in an arresting and entertaining manner. It will appeal to the house surgeon requiring help in a specific case, and will make a useful addition to the library of a surgeon.—EDINBURGH MEDICAL JOURNAL.

THE LARYNX AND ITS DISEASES

By CHEVALIER JACKSON, M.D., Sc.D., LL.D., F.A.C.S., and CHEVALIER L. JACKSON, A.B., M.D., M.Sc.(Med.), F.A.C.S. 555 pages, 221 Illustrations, 11 Plates in Colour. Cloth, 35s. net.

From the accepted masters of bronchoscopy and oesophagoscopy we expected really outstanding book on the larynx, nor are we disappointed. The book is more than complete, and also [illegible] rarer laryngeal troubles and at every point [illegible] all the rarer conditions.—IRISH JOURNAL OF MEDICAL SCIENCE.

W. B. SAUNDERS COMPANY, Ltd., 7, Grape Street, London, W.C.2

OXFORD MEDICAL PUBLICATIONS

Visitors to our Stand (No. 33) at the B.M.A Exhibition, held at Plymouth, July 18th to 22nd. will be able to inspect the full range of our books, including the following most recent issues

DYSMENORRHOEA

its Aetiology, Pathology and Treatment

By **ALBERT A DAVIS**, M D, Ch M, F R C S

Hon Gynaecological Surgeon to Out patients, the French Hospital London, Consultant Gynaecologist and Obstetrician, London County Council late Hunterian Professor, Royal College of Surgeons, etc

Contents include —Historical—Classification—Aetiology—Cause of the Pain—Causes of Dysmenorrhoea—The Neurogenic Theory—Psychogenic Factors—Membranous Dysmenorrhoea—Nasal Vicarious and Dermatitic Dysmenorrhoea—Secondary Dysmenorrhoea—Intermenstrual Dysmenorrhoea (Ovulalgia)—Treatment—Surgical Treatment—Bibliography—Index

Pp 266 34 Illustrations 1 Colour Plate **12s 6d** net

HEART DISEASE & PREGNANCY

By **CRIGHTON BRAMWELL**, M D, F R C P

Physician, Manchester Royal Infirmary, Consulting Physician for Women, St Mary's Hospitals, Manchester, Examiner in Medicine to the Universities of Cambridge and Aberdeen

and **EDITH A LONGSON**, M B, Ch B D P H

Late Cardiographic Registrar Manchester Royal Infirmary

with a Foreword by Sir EWEN MACLEAN M D F R C P I L D D Sc etc

President of the British College of Obstetricians and Gynaecologists, Emeritus Professor of Obstetrics and Gynaecology Welsh National School of Medicine, Cardiff

Contents include —Cardiac History—Physical Examination—Auricular Fibrillation—Congestive Heart Failure Rheumatic Heart Disease—Infective Endocarditis—Congenital Malformations—Thyrotoxic Heart Disease—Hypertensive Heart Disease—Cardio aortic Syphilis—Prophylaxis—Therapeutic Abortion—Caesarean Section—Induction of Premature Labour—Immediate Prognosis—Ultimate Prognosis—Case-histories—Bibliography—Index

Pp 206 57 Illustrations **8s 6d** net

TEXT-BOOK OF NUTRITION

By **J A NIXON** C M G M D, F R C P

and **DORIEN G C NIXON**, M B, B S, M R C S, L R C P

Contents include Physiology of Digestion—Food and Metabolism—Assessment of the State of Nutrition—Dietary Requirements—Vitamins—Minerals—Energy Protein and Fat Requirements—Classification of Foods—Tables of Food Values—Tables of Vitamin Content—Food Consumption and Income—Adequacy of Diet in relation to Income—Family Budgets—Studies of Individual Diets—Fuel Expenditure in Cooking—Dietetics Prevention—Diet and Disease Production—Diet and Infection—Diet and Work—Diet and Physical Efficiency Nutrition in Disease—Nutrition in Lactation—Effects of Cooking—Index

Pp 280 9 Illustrations **7s 6d** net

Oxford University Press

AMEN HOUSE. WARWICK SQUARE. LONDON. E.C.4

MODERN TEXTBOOKS

New Edition ★ *RECENT ISSUES* ★ *New Edition*

MANUAL OF PUBLIC HEALTH HYGIENE

By Profe or J I CUPPIE MD D I H Dep of Public Health Univer ity of Gla ow 343 pp 3 Illu tration 15s net po tage 6d (Jul 1938)

"The be t and m t up to date Manual for Medical Student

MEDICAL JURISPRUDENCE AND TOXICOLOGY

Sixth Edition By Profe or JOHN GLAISTER MD DSc Univer ity of Glas ow and J I 8 Illu tration 25s net po tage 6d (Mar h 19

"Fully revised throughout ... Many new colour plate ..."

HANDBOOK OF PRACTICAL BACTERIOLOGY

Fifth Edition By Prof or T J MACKIE MD D P H Univer ity of Edinburgh and J E McCARTNEY MD DSc Dire tor of Re earch and Bacteriological Service Crown 8vo 6 0 pp Illu trated 12s 6d net po tage 6d (January 193)

"The whole book ... is brought fully up to date ..." (June 193)

CLINICAL CHEMISTRY IN PRACTICAL MEDICINE

Second Edition By C J STEWART D and Prof or D M DUNLOP MD M C P Univer ity of Edinburgh 344 pp Illu trated 10 6d net po tage 6d (Oct b

"... a ... book ... which ... will ... be found ... helpful ..."

MEDICO-LEGAL ASPECTS OF THE RUXTON CASE

By Prof or JOHN GLAISTER MD DSc Univer ity of Gla ow and Prof or JAMES C RICHMOND MD MD 400 pp with 12 Illu tration 21s net po tage 6d (Sep tember 193)

"... is discolored and other ... ... ape ... of a ... tell ... without parallel in the annals of crime"

AN INTRODUCTION TO BACTERIOLOGICAL CHEMISTRY

By C C ANDERSON PhD D Lecturer in Bacteriology Univer ity of Edinburgh 8 pp Illu trated 10s 6d net po tage 6d (Novembe 193)

"... a ... book ... which ... will ... be found ... helpful ... by ... ... in ... Bacteriological Laboratories"

DISEASES OF THE NOSE, THROAT AND EAR

By I SIMSON HALL MB FRCI FRCS 420 pp 5 Illu trations and Coloured Frontispiece 10s 6d net po tage 6d (March 193)

"The technique is clear and definite and the advice given is sound this work should ... often establish ... place ... among the small er textbooks on the subject"

—LANCET

A MANUAL OF TUBERCULOSIS

For Nurses and Public Health Workers

By E ASHWORTH UNDERWOOD MA D Sc MB Ch B DPH Second Edition 424 pp with 3 Illu tration 8s 6d net po tage 6d (No ember 193)

"Lucidly ... written ... A ... textbook of a kind ..."

—SCOTTISH NURSE

DIAGNOSIS AND TREATMENT OF VENEREAL DISEASES

Third Edition Revised by LOFERT LEES MB FRCI Edinburgh Royal Infirmary 624 pp 8 Illu tration and 8 Coloured Plate 15s net po tage 6d (January 193)

"... Students and general practitioners will find all the information they want in this admirable book" —BRITISH MEDICAL JOURNAL

ILLUSTRATIONS OF REGIONAL ANATOMY

Second Edition By E B JAMIESON MD Univer ity of Edinburgh Se tion IV (Abdomen 193) (Each Se tion ... attractive loose leaf ... when ... complete ... will be published at 50s net ... purchaser ... having the even ... tion ... at one ... can obtain them ... the reduced price of 4 s 6d net

A TEXTBOOK OF MEDICINE

Third Edition By J J CONYBEARE MD FRCP Physician to Guy Hospital London and Contributor Demy 8vo 1000 pp Illu trated In ex of 3000 ... reference 21s net po tage Inland 2d Abroad 1s 6d (Reprint January 1938)

"... will continue to ... ... place ... at the ... ... books on its division of the ..."

—BRITISH MEDICAL JOURNAL

WHEELER AND JACK'S HANDBOOK OF MEDICINE

Tenth Edition Revised by Profe or HENDERSON MD Ga ... Physician ... 12s 6d ... po tage 6d (Augu 193)

"... a ... book ... ...

POCKET MONOGRAPHS ON PRACTICAL MEDICINE

Edited by ARNOLD SORSBY, M D , F R C S , and MAURICE SORSBY, M D , F R C S

This Series is designed to supply authoritative and up to date information on subjects of daily importance to General Practitioners Published in uniform volumes foolscap 8vo 2s 6d each volume net post free 2s 8d

URINARY INFECTIONS
By Albert Clifford Morson O B E F R C S Eng

TREATMENT OF FRACTURES IN GENERAL PRACTICE
By W H Ochsner, M D, M Ch, F R C S 2nd Edition In Two Volumes

ALLERGY
By G H Oriel M A M D Cantab

BLOOD DISEASES IN GENERAL PRACTICE
By A Piney M D, M R C P

AN EPITOME OF THE LABORATORY DIAGNOSIS AND TREATMENT OF TROPICAL DISEASES
By Horace M Shelley, F R F P S, M R C S, L R C P, *D T M and H Eng*

THE MINOR MEDICINE OF GENERAL PRACTICE
By I V Snowman M A M B Cantab, M R C P Lond

AN EPITOME OF OBSTETRICAL DIAGNOSIS AND TREATMENT IN GENERAL PRACTICE
By Bethel Solomons M D F R C P I, I C O G, F A C S 2nd Edition In Two Volumes

RADIUM AND CANCER
By H S Souttar, C B E M D M Ch Oxon F R C S Eng

THE DISCHARGING EAR
By A G Wells M B B S D P H

OPHTHALMOLOGY IN GENERAL PRACTICE
By O Gayer Morgan M A I R C S, M R C S, L R C P

DISEASES AND DISORDERS OF THE DIGESTIVE ORGANS
By Adolphe Abrahams, O B E M D Camb F R C P Lond

COMMON GYNAECOLOGICAL CONDITIONS AND THEIR TREATMENT
By R Christie Brown, M B, M S, F R C S M C O G

THE ACUTE ABDOMEN
By C H Tucker, M S Lond, F R C S Eng

GENERAL HAEMATOLOGY With Special Reference to the Child in Health and Disease
By W M Feldman, M D B S M R C P Lond

THE EARLY DIAGNOSIS OF MALIGNANT DISEASE
By Geoffrey L. Keynes, M A, M D Cantab, F R C S Eng

DIABETES MELLITUS
By Otto Leyton, M D, D Sc, F R C P

INSOMNIA AND OTHER DISTURBANCES OF SLEEP
By Emanuel Miller, M A Cantab, M R C S, L R C P, D P M Cantab

ACUTE OTITIS MEDIA
By Wm Mayhew Mollison, C B E M A, M Ch, F R C S

PULMONARY TUBERCULOSIS IN GENERAL PRACTICE
By Andrew Morland, M D Lond, M R C P

FAILURE OF THE HEART AND CIRCULATION
By Terence East M A, D M, F R C P

JOHN BALE, SONS & CURNOW, LTD , 83-91, GREAT TITCHFIELD STREET, LONDON, W 1

WRIGHT'S PUBLICATIONS

EMERGENCY SURGERY By Hamilton Bailey F R C S (Eng) Third Edition Fully Revised Large 8vo 812 pp With 816 Illustrations a large number of which are in colour 30 net postage 8d

Forms a reliable and at the author merits praise for the high standard which is consistently maintained —THE LANCET

DEMONSTRATIONS OF PHYSICAL SIGNS IN CLINICAL SURGERY
By Hamilton Bailey F R C S (Eng) Sixth Edition Fully Revised 8vo 344 pp With 338 Illustrations some of which are in colour 15 net postage 6d

It fills an interesting and useful place —BRITISH JOURNAL OF SURGERY

INDEX OF DIFFERENTIAL DIAGNOSIS OF MAIN SYMPTOMS Edited by R Hutchison C V O C B E M A M D Oxon F R C P Second Edition with 19 Distinguished Contributors Fully Revised Detailed Index of Subjects 1144 pp Illustrations (10 in colour) 63

Indispensable —BRITISH

INDEX OF TREATMENT. Edited by R Hutchison M D F R C P assisted with Special Chapters by J M Mackintosh M D F R C P Fully Revised Illustrations

A very useful —LANCET

ANÆSTHESIA AND ANALGESIA FOR NURSES AND MIDWIVES
By I K Watson M D (Edin) Just Published Crown 8vo 136 pp 49 Illustrations 3/6 net Postage 3d

The aim of the author has been to supply the trained nurse and the midwife with an elementary account of the present day aspects of anæsthesia and analgesia for surgical and obstetrical purposes

SYNOPSIS OF PHYSIOLOGY. By A Kessler Short M D D Sc and C J C Pratt M Sc M D Just Published Third Edition Fully Revised 328 pp Illustrated 10 6d net postage 9d Interleaved for Notes 17s 6d net postage 6d

AN ATLAS OF THE COMMONER SKIN DISEASES By Henry C G Semon M A M D Oxon M I C P I Lond Photography under the Direction of Arnold Moritz B A M I P C Cantab With 103 Plates reproduced by direct colour photography from the living subject 21 net postage 6d

We have no hesitation in commending the Atlas to both medical public and we venture to predict for it a high degree of popularity —BRITISH MEDICAL JOURNAL

DISEASES OF THE NOSE, THROAT, AND EAR For Practitioners and Students
Edited by A Logan Turner M D L L D F R C S I with the collaboration of 6 Distinguished Contributors Fourth Edition Fully Revised Demy 8vo 473 pp 243 Text Illustrations and 21 Plates (8 in colour) 20 net postage 6d

Here is another book which includes keynotes by avoidance with such success The present edition should interest the practitioner in popularity —BRITISH MEDICAL JOURNAL

Bristol JOHN WRIGHT & SONS LTD London SIMPKIN MARSHALL LTD

HEINEMANN

NEURO-OPHTHALMOLOGY By R LINDSAY REA, B Sc M D M Ch, F R C S Crown 4to Fully Illustrated in the Text and twenty coloured plates 42s net

POULSSON'S TEXTBOOK OF PHARMACOLOGY AND THERAPEUTICS Second English Edition thoroughly revised by STANLEY ALSTEAD, M D (Liverp), M R C P (Lond) Royal 8vo 25s net

A TEXTBOOK OF BACTERIOLOGY FOR DENTAL STUDENTS By ARTHUR BULLEID, M R C P (Lond), M R C S, L D S (Eng) Second Edition Demy 8vo Fully Illustrated 15s net

CONCEPTS AND PROBLEMS OF PSYCHOTHERAPY By L E HINSIE, M D Large Demy 8vo 15s net

OBESITY A Practical Handbook for Physicians By W F CHRISTIE, M D Demy 8vo Illustrated 12s 6d net

IDEAL WEIGHT A Practical Handbook for Patients By W F CHRISTIE M D Crown 8vo 5s net

HANDBOOK OF DIETS Second Edition By ROSE SIMMONDS With a Foreword by Lord Dawson of Penn Demy 8vo 7s 6d net

CLINICAL CONTRACEPTION Second Edition By GLADYS COX With a Foreword by Lord Horder of Ashford 7s 6d net

DIATHERMY Including Diathermo herapy and other Forms of Medical and Surgical Electrothermic Treatment Third Edition By ELKIN P CUMBERBATCH, M A, B M (Oxon), D M R E (Camb), F R C P With nine collaborators Demy 8vo About 600 pp 21s net

MATERNITY AND POST-OPERATIVE EXERCISES By MARGARET MORRIS, C S M M G in collaboration with M RANDELL, S R N, S C M, T M M G Demy 8vo Fully Illustrated 7s 6d net

VITAMINS AND OTHER DIETARY ESSENTIALS By W R AYKROYD, M D Second Edition 7s 6d net

THE SCIENCE OF SIGNS AND SYMPTONS In Relation to Modern Diagnosis and Treatment A Textbook for General Practitioners of Medicine By R J S McDOWALL, D Sc, M B, F R C P (Edin) Third Edition Enlarged and Revised Small Royal 8vo Illustrated 21s net

PSYCHOLOGY OF SEX The Biology of Sex—The Sexual Impulse in Youth—Sexual Deviation—The Erotic Symbolisms — Homosexuality — Marriage—The Art of Love A Manual for Students By HAVELOCK ELLIS author of Studies in the Psychology of Sex Demy 8vo 12s 6d net

SEX IN RELATION TO SOCIETY By HAVELOCK ELLIS Demy 8vo 12s 6d net

SACRIFICE TO ATTIS A Study of Sex and Civilization By WILLIAM A BREND M A (Cam) M D B Sc (Lond) Demy 8vo 10s 6d net

Prospectuses of the above books sent on application to

WM. HEINEMANN (MEDICAL BOOKS) LTD.
99, GREAT RUSSELL STREET, LONDON, W.C. 1

INFLUENZA

In A Study of Epidemic Influenza the Medical Research Council presents results of correlated clinical and laboratory studies undertaken during the epidemics of influenza and influenza-like diseases in 1936 and 1937. Influenza due to virus infection can be distinguished from febrile catarrh by laboratory methods; the present work shows how far such a distinction can be made from the symptoms and signs. The question is an important one in view of the possibility of prophylaxis and serum treatment. No. 228. 2s. 6d. (2s. 9d.)

EPIDEMICS IN SCHOOLS

School communities offer somewhat special facilities for the investigation of epidemic and other illnesses, and the Medical Research Council has now made available a careful study based on data collected over five years which throws a great deal of light on the problem of school infections generally, and points to the important problems still unsolved and indicates how they may best be tackled. No. 227. 4s. 6d. (4s. 11d.)

SYPHILIS

An Analysis of the Results of Treatment of Early Latent and Muco-cutaneous Tertiary Syphilis is a study of 570 cases treated at Glasgow between 1919 and 1932. By following up over this long period cases of syphilis which had received a standard course of treatment, and of which the diagnosis had depended on constant methods, it was possible to see in their proper perspective the conditions which allowed the maximum amount of success, and those which were followed by comparative failure. No. 224. 2s. (2s. 2d.)

THE CHEMISTRY OF ANTIGENS AND ANTIBODIES

This report by J. R. Marrack replaces an earlier one with the same title (No. 194) of which it is in extensively revised edition. It includes the more important results of recent experimental work, and the subject is reviewed in the light of present-day knowledge of molecular structure. No. 230. 3s. (3s. 4d.)

CARDIAC ENLARGEMENT

The Development of Cardiac Enlargement in Diseases of the Heart is a record of cases selected to show the ultimate effects upon the heart's size of such major events as persistently increased heart-rate, high blood-pressure, congestive failure, and coronary thrombosis. The grouped descriptions of cases should have permanent value in providing for reference direct examples and clear details of changes of the heart's size in many different types of patient. 1s. (1s. 2d.)

All prices are net. Those in brackets include postage.

HM STATIONERY OFFICE

[illegible]

For those Cases where

SPECIALISED FOOTWEAR

is Indicated...



For normal and abnormal foot cases Hardy's MASTAFIT footwear supplies a much-needed service. No longer is it necessary to make the bulk of such shoes to measure; for MASTAFIT shoes are stocked in several different foot formations on the principle that every foot type needs its own particular shoe. Medical men are invited to call and test the system in operation. A pair of shoes (please state size) and booklet will be gladly sent for inspection on request.

HARDY'S

EXCLUSIVELY COMFORT SHOEMEN

London 60, BAKER STREET W.1
9 KENSINGTON HIGH STREET W.8
17 BALHAM HILL S.W.12

THE CONSTRUCTION OF VULCANITE APPLICATORS

FOR APPLYING RADIUM TO LESIONS OF THE BUCCAL CAVITY, LIPS, ORBIT AND ANTRUM

By DESMOND GREER WALKER,

M.A., M.Dent.Sc., M.B., B.Ch.

With a Foreword by W. WARWICK JAMES

23 *Plates* 5s. *net*

Published for the Middlesex Hospital Press by

JOHN MURRAY

B·M·A Publications

B.M.A. Model Forms (No. 1) for Doctor's use when sending a Patient to Hospital

Price 1s. per 100 post free

B.M.A. Model Forms (No. 2) for use of Hospital when Patient attends without a Doctor's Letter

Price 6d. per book of [illegible]

British Medical Association

B.M.A. House, Tavistock Sq., London, W.C.1

AUTHORITATIVE MEDICAL BOOKS

Cassell and Company, Ltd , La Belle Sauvage, London, E C 4



Sick Children: Diagnosis and Treatment

By DONALD PATERSON B A M D F R C P Lond

Contains an enormous amount of information in a small compass Covers the subject fully and well —Medical Press and Circular A sound convenient sized text book The essentially practical concentration on diagnosis and treatment and the detailed attention to diet which is a particularly valuable feature should commend it to the general practitioner —*Clinical Journal*

New (Third) Edition Crown 8vo 600 pages With 15 Plates and 75 Text figures 12s 6d net

Diseases of the Nose and Throat

By SIR STCLAIR THOMSON M D, F R C P Lond F R C S Eng and V E NEGUS M S F R C S Eng

'A splendidly documented work of reference to which every laryngologist will constantly be turning and never in vain —*Journal of Laryngology and Otology*

New (Fourth) Edition Medium 8vo 976 pages With 29 Plates 15 in Colour and 386 Text figures 45 net

Diseases of the Eye

By EUGENE WOLFF M B B S F R C S Eng

'The author has compressed into a relatively small manual the essential and practical features of ophthalmology The book is well and richly illustrated —*Practitioner*

Quarto 256 pages With 5 Coloured Plates and 120 Text figures 15s net

Materia Medica and Therapeutics

(Bruce and Dilling) By PROFESSOR WALTER J DILLING M B Ch B Aberd

Fourteenth Edition Foolscap 8vo 700 pages 10s 6d net

Manson's Tropical Diseases

Edited by PHILIP H MANSON BAHR C M G D S O M A M D D T M & H Cantab F R C P Lond

Tenth Edition Demy 8vo 1004 pages With 22 Colour Plates 15 Half tone Plates 381 Figures in the Text 6 Maps and 38 Charts Price 31s 6d

Elements of Surgical Diagnosis

By SIR ALFRED PEARCE GOULD

Revised by ERIC PEARCE GOULD M D M Ch F R C S Eng

'It is remarkable how much valuable information has been packed into a little book of so handy a size —*British Journal of Surgery*

New (Eighth) Edition Foolscap 8vo 750 pages With 22 Radiographic Plates 10s 6d net

Surgical Diseases and Injuries of the Genito-Urinary Organs

By SIR JOHN THOMSON WALKER F R C S Eng and KENNETH WALKER M A M B B C Cantab F R C S Eng

Recent (Second) Edition Medium 8vo 974 pages With 58 Plates 25 in Colour and 283 Text figures 32s 6d net

A Textbook of Gynæcological Surgery

By SIR COMYNS BERKELEY M A M C M D F R C P Lond F R C S Eng and VICTOR BONNEY M S M D B Sc F R C S Eng F R C S I

Third Edition Royal 8vo 863 pages With 550 new Descriptive Drawings and 17 Colour Plates 15 net

Modern Operative Surgery

Edited by G GREY TURNER M S F R C S Eng F A C S (Hon)

Second Edition Two Volumes Medium 8vo 1780 pages With 11 Half tone Plates and 870 Figures in the Text £3 3 net the Set

A System of Surgery

Edited by C C CHOYCE C M G M D F R C S Eng

Editor of Pathology J MARTIN BEATTIE M A C M M D

Third Edition Three Volumes Medium 8vo 3500 pages With 60 Colour Plates 117 Half tone Plates and 929 Text figures £4 net the Set

H. K. LEWIS & Co. Ltd., Publishers and Booksellers.



MEDICAL EXHIBITION: PLYMOUTH, JULY 18th–22nd

STAND No. 9

Selection of Textbooks and Works in Medical and Surgical Science of all Publishers

STATIONERY DEPARTMENT Special Stocks of Medical Stationery, Card Index Systems Filing Cabinets, Name Plates etc

MODELS DEPARTMENT Anatomical Models, Charts, Osteology, etc

MEDICAL AND SCIENTIFIC LENDING LIBRARY
Annual Subscription from One Guinea Prospectus on application

London H K LEWIS & CO LTD, 136 Gower Street, W C 1

Telegrams PUBLICAVIT WESTCENT LONDON Telephone LUSton 4282

The demand for CAPSTAN increases daily

W D & H O Wills



PLAIN OR CORK TIPPED

10 FOR 6ᵖ
20 FOR 11½ᵖ

MORE AND MORE PEOPLE ARE SMOKING
CAPSTAN CIGARETTES

W D & H O Wills Branch of The Imperial Tobacco Co. (of Great Britain and Ireland) Ltd C C 618J

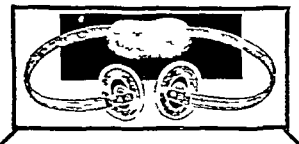
DR DEIMEL UNDERWEAR is a Summer necessity for every man, woman and child who would be delicately clean, cool, and comfortable The garments admit air freely to the skin, absorb perspiration instantly, dry more rapidly than any other garment and are non-irritating to the most sensitive skin

Can be washed in boiling water for sterilization without injury

Dr Deimel
DEIMELIN
Underwear
BRITISH MADE

Please write for full particulars of this remarkable Underwear

DEIMEL FABRIC COMPANY, 99, NEW BOND ST, LONDON, W 1



DOCTORS PRESCRIBE
the famous
SALMON ODY BALL & SOCKET TRUSS

Most scientific and reliable yet devised Perfect support comfort, resiliency

Single 30/ Double 50/

Most of our clients are sent to us by Doctors

WRITE FOR BOOKLET

NOTE NEW ADDRESS

SALMON ODY LTD

Trusses Make to 130 years

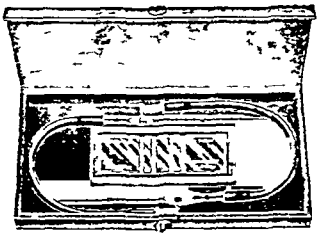
74, NEW OXFORD ST,
LONDON, W C 1

Phone Museum 2313

ARCH SUPPORT



STUDENT'S
HAEMACYTOMETER
(BRITISH MADE)



Solid glass counting chamber, 2 cover glasses and 2 pipettes complete in case

£1-7-6

Haemoglobinometers Viscosimeters
Sedimentation and other apparatus for

Blood Diagnosis

Distributors for Great Britain of

COOKE MICROSCOPES

British made by Cooke Troughton & Simms Ltd

Illustrated Lists on Request

REPAIRS

to all forms of Medico Scientific Apparatus Microscopes Objectives Microtomes etc

HAWKSLEY & SONS, LTD
17 New Cavendish St., London, W 1

Telephone WELbeck 38 9
Telegrams Diffract, Wedo London

THE CORRECT OILS IN

SUMMER

THE NEW LIGHTER
PATENT
Castrol

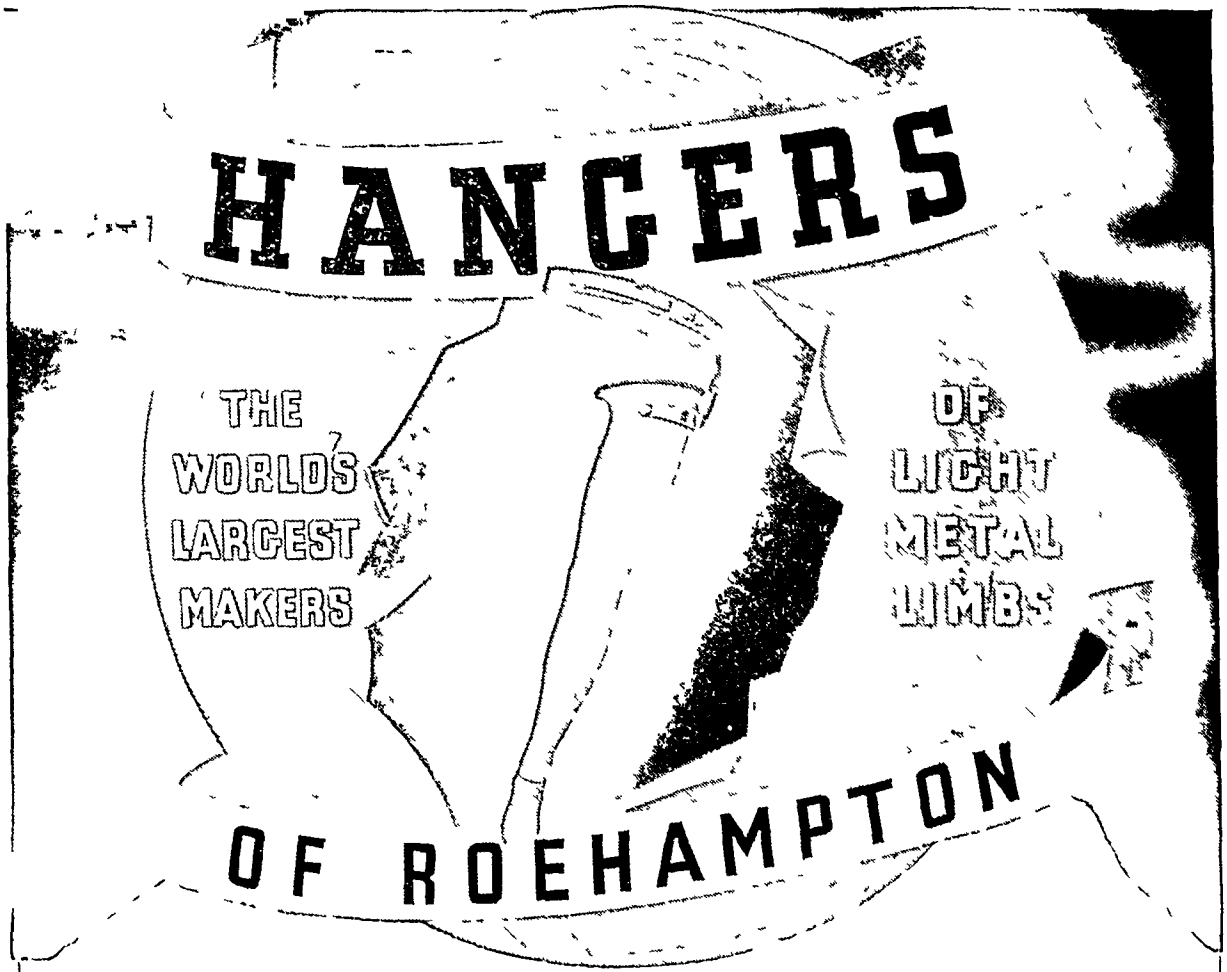
XL AND XXL

OFFICIALLY APPROVED by car manufacturers for ALL new cars except Vauxhall

FOR OLDER CARS where consumption is a problem and for some sports cars IT COSTS NO MORE.

Patent CASTROLITE is expressly designed as a WINTER OIL and is unsuitable for use in SUMMER except in Vauxhall (*1937-38 models*)

C. C. WAKEFIELD & CO LTD., All-British Firm, Wakefield House, Cannon St., London, E.C.4



RECENTLY ISSUED Post Free to the Medical Profession on Application

"Solvitur Ambulando"

72 pages, 37 Coloured Plates, deals exhaustively with the problem of providing prostheses for the lower extremities for every type of amputation and congenital deformity Many distinguished Surgeons have written to us in terms of the highest appreciation of the usefulness of this book

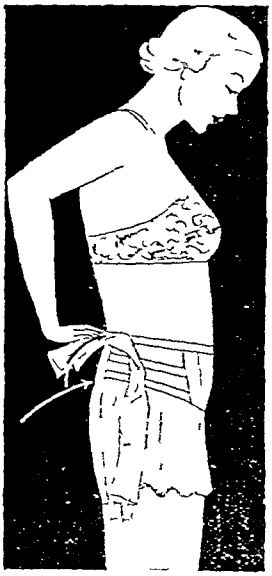
J. E. HANGER & CO., LTD.

Queen Mary's (Roehampton) Hospital for the Limbless,
ROEHAMPTON LONDON, S W 15

Branches at —Aberdeen Belfast Birmingham Bristol, Cambridge Cardiff Cosham Dublin, Edinburgh Exeter, Glasgow, Leeds Liverpool, Manchester, Newcastle on Tyne and Nottingham

THESE 3 ESSENTIALS

are assured only when a support is *individually designed* for patient



1 WEIGHT OF SUPPORT ON PELVIC GIRDLE

Each Spencer is designed to place the weight of the abdominal support on the pelvic girdle—NEVER on the spine at or above the lumbar region

To be helpful to the Doctor in his treatment a support must

1 **Place the weight of support on the pelvic girdle—never on the spine at or above the lumbar region**

2 **Provide gentle abdominal uplift without compression**

3 **Guide the figure into improved posture**

Spencer Supports assure these three essentials because each Spencer is individually designed cut and made to meet the particular needs of the one patient who is to wear it

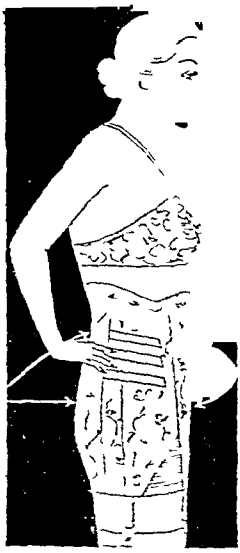
Spencers are light in weight flexible easily laundered and guaranteed NEVER to lose their shape They are made of non-stretchable fabric —not elastic (A support that stretches loses its shape and its efficiency to control)

Spencer Supports are individually designed for Hernia Sacro-iliac Strain, Enteroptosis Movable Kidney Pregnancy and Postpartum Breast Conditions

Let a trained Spencer Corsetiere call at your surgery or arrange an appointment to suit your convenience

Spencer Supports and Corsets are never sold in shops

Trained Spencer Corsetieres are resident throughout the Kingdom Name of nearest stockist supplied on request



2 ABDOMINAL UPLIFT WITHOUT COMPRESSION

Insurance the [illegible] assurance [illegible] with [illegible] Attention [illegible] to any [illegible] from the specific support to [illegible] for

BEWARE OF SUBSTITUTION — Spencer Corsets Ltd regret the necessity of warning the medical profession that in several instances where doctors have specifically prescribed a Spencer Support a corset of another make has been substituted, and because its makers do not understand the Spencer principles of individual designing has been unsatisfactory Every genuine Spencer Support bears the SPENCER Label

3 POSTURE IMPROVEMENT

Spencers are designed to improve posture Spencer Individually Designed Support which provides abdominal support and uplift without back strain guides the body into improved posture

SPENCER

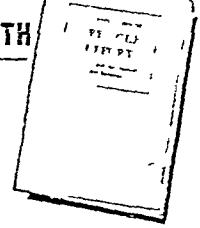
CORSETS - GIRDLES - BELTS
BRASSIERES - SURGICAL SUPPORTS

Branch Offices and Salons

LONDON GLASGOW BRISTOL LIVERPOOL BIRMINGHAM EDINBURGH MANCHESTER
(See Local Telephone Directory)

Expert Fitter (Trained Nurse) at your immediate Service

May we send you this New Professional Booklet describing Spencer Supports and their Accepted Uses?



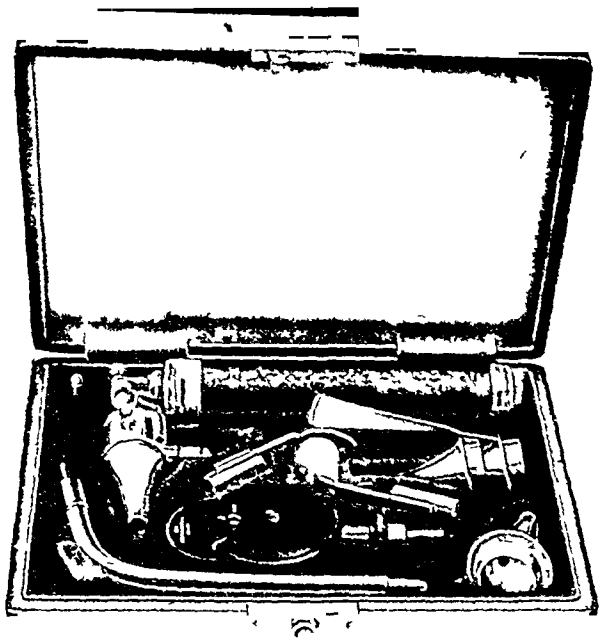
STAND No 55 B M A EXHIBITION, PLYMOUTH

SPENCER CORSETS LIMITED Spencer House Banbury Oxon

Please send your illustrated booklet I am particularly interested in supports for

Name Dr

Address



Gowlland
electric diagnostic instruments

This Popular

DIAGNOSTIC SET

contains a May Ophthalmoscope, giving a brilliant and unobstructed view of the fundus even with undilated pupils The prism is designed and adjusted so that corneal glare is reduced to a minimum The instrument is well designed and made so as to be easy and convenient to handle

The set contains a May Ophthalmoscope, Auriscope with three specula having different sized apertures, a Duplay Nasal Speculum a Bent Arm Throat Lamp Flat Metal Tongue Depressor one each Laryngeal and Post Nasal Mirrors, a small Battery Handle taking Ever Ready No 2015 Batteries and a spare lamp complete in a strong and attractive case All bright parts are chromium plated and untarnishable

The Battery Handle may be had chromium-plated finish instead of the more usual black crackle finish if desired

Catalogue No 3003

Obtainable from

ALL SURGICAL SUPPLY HOUSES

Made by a British firm with 40 years reputation as Surgical Instrument Manufacturers

THE NEWEST IDEA IN HEARING AIDS

The most beneficial and the essence of convenience

'As a sufferer from deafness for many years and one who has tried practically every instrument evolved writes T G N Littlehampton "I find that the V P Maxade is definitely the most beneficial and really is the essence of convenience Unobtrusive and reliable the new V P Maxade consists of three compact units *each as easy to conceal in the clothing or handbag as a cigarette case* It comprises a 3 valve amplifier and sensitive crystal microphone for either bone or air conduction hearing miniature or disc type earpieces and combines the important advantage of 'invisibility' with the efficiency only possible in an electrical valve instrument Maxade is entered upon the Approved List of the National Institute for the Deaf and consistently used and prescribed by the principal hospitals and clinics A Model will gladly be sent for free clinical test Details of the V P Model and other reasonably priced Maxade Models from Mr W Scott Worthington I R S A PETO SCOTT Co, Ltd 77 City Rd E C 1 (*Acoustical Engineers since 1919*)

On view at the Empire Exhibition Glasgow —Hall of Industry (North Section) Stand No T 106

The New V.P.

MAXADE

"Invisible" Hearing Aid

Medical Photography

Ilford Limited supply a wide range of specialized photographic materials which are eminently suited to the exacting requirements of the medical profession These materials are manufactured under scientific control which ensures uniformity of speed, contrast, and the other excellent qualities which characterise Ilford Plates, Films and Papers Available for all forms of record work including the following —

RADIOGRAPHY
CLINICAL PHOTOGRAPHY
PHOTOMICROGRAPHY
CINEMATOGRAPHY
CARDIOGRAPHY

Whilst at the Exhibition visit
STAND No. 78

ILFORD
PHOTOGRAPHIC MATERIALS

ILFORD LIMITED  ILFORD, LONDON

Alphidine and Pancreatin

In the Treatment of

Graves' Disease

Palatinoid No 3211, O S & Co with **Pulverette 'Alphidine,' O S & Co**

Pancreatin, gr 5 — Equals Iodine, gr ½

One thrice daily, before meals — One twice daily, between meals, on two or three days each week

For full particulars see B M J, Oct 2nd, 1937, p 660

Oppenheimer Son & Co. Ltd.

Handforth Laboratories, Clapham Road, LONDON, S W 9

GEDEON RICHTER LABORATORIES

RICHTER HOUSE, WEEDINGTON ROAD, LONDON, N W 5

And at **BUDAPEST, X.**

"GLANDUBOLIN" Clinically and biologically tested **OVARIAN HORMONE** in Ampoules containing 100, 1000, 10,000, and 50,000 international units Also in Tablets **AMENORRHOEA, DYSMENORRHOEA** and all menstrual and menopausal disorders

"GLANDUANTIN" The Gonadotropic Fraction of the **ANTERIOR PITUITARY HORMONE** Indicated in **SEXUAL HYPOFUNCTION, AMENORRHOEA** Issued in Ampoules

"CORTIGEN" Hormone of the **SUPRARENAL CORTEX** Indicated in **ADDISON'S DISEASE** and **ASTHENIA** Issued in Ampoules of 1 c c and Phials of 10 c c, each c c containing 4 **CORTICO-DYNAMIC UNITS**

"PERHEPAR" Brand **LIVER EXTRACTS** indicated in **PRIMARY** and **SECONDARY ANAEMIAS** For Oral and Parenteral Use

● **EACH BATCH IS CLINICALLY TESTED BEFORE ISSUE**

SAMPLES AND LITERATURE ON REQUEST

MORE THAN 37 YEARS' SPECIALISATION IN THE FIELD OF ORGANOTHERAPY

TRADE MARK

'AMYTAL'

BRAND

Iso-amyl Ethyl Barbituric Acid

FOR SEDATION AND HYPNOSIS

● The tranquil sleep of children is always the envy of less fortunate adults to whom at times this boon is denied because of sickness or other conditions which upset the psychic or emotional equilibrium

'Amytal' supplies the relaxation and sleep which are essential to recuperation of vital forces It may be prescribed wherever there is need to combat insomnia restlessness or apprehension A noteworthy margin of safety is characteristic of 'Amytal, and since destruction of the hypnotic within the body appears to be accomplished rapidly there is little tendency to unwelcome side-reactions or after depression

'Amytal' is supplied in ½ grain ¾ grain and 1½ grain tablets in bottles of 40 and 500

Lilly

TRADE MARK

ELI LILLY AND COMPANY LIMITED

2 3 & 4 Dean Street London W 1

Distributing Agent in Britain for ELI LILLY AND COMPANY INDIANAPOLIS U S A

LACTOFLAVINE B.D.H.

(*Vitamin B_2*)

The separation of the three components of the Vitamin B_2 complex was quickly followed by the establishment of nicotinic acid and its amide as specific in pellagra, these substances being closely related to, if not identical with, the pellagra-preventing factor itself

Lactoflavine, another component of the complex, has not been investigated so completely, but sufficient information is available to justify its use (collaterally with other forms of treatment) in various types of anæmia, in cyanotic conditions, cataract and, possibly, in cases of sterility of uncertain origin

Lactoflavine B D H is available in ampoules of sterile solution for intramuscular or subcutaneous injection

Literature on request

THE BRITISH DRUG HOUSES LTD LONDON N1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

Lac S/1

or two cases there was an increase in the depression when the effect of the drug was wearing off, and it is important to bear in mind that Davidoff and Reifenstein mention a case of manic-depressive illness in which the patient impulsively attempted suicide One of our patients (the alcoholic depressive) became very much more depressed, and the question of suicide was uppermost in our minds for some days, and in another (C 5) the depression was considerably intensified This might, of course, just as well have been a usual constitutional intensification in the first case, but it appeared to be a definite effect of the drug in the second

Comment

It must be admitted that, so far at least as these results are concerned, it is difficult to claim any great therapeutic value from benzedrine Nevertheless, if its use relieves the depressed patient even transiently and gives him a few hours respite, the drug has a place in psychiatry To claim more than this from it at the moment, however, is impossible, and there are many limitations to its usefulness, not the least of which is the variability of its action A small minority of cases seem to benefit definitely from benzedrine, and its greatest usefulness perhaps is in those cases of depression in which a clinical improvement has already set in Here it may be helpful in giving the patient a temporarily increased insight, which has been of use psychotherapeutically Apart from this, the drug is of doubtful value as an aid to psychotherapy It was difficult to resist the impression in one or two cases that the speed of convalescence from a depression was increased, but this is difficult, if not impossible, to establish objectively Indeed it is almost impossible in many cases to separate the changes of the normal process of recovery from the effect of the drug, which makes any pronouncement of its value in such cases very dubious For those patients who have clinically improved but who for economic or other reasons are unable to stay in hospital and must return to work, benzedrine is sometimes of help in enabling them to face their day's work The drug should, however, be controlled by frequent examination of the patient afterwards For those depressed patients who may at any time get worse and perhaps contemplate suicide, suitable doses of benzedrine may enable one to keep them in a hospital or even in everyday life without extra supervision Here, again, they should not be given a bottle of tablets and allowed to go their way

With regard to dosage, 10 to 40 mg in ordinary cases should be enough, and a divided dosage—say, 15 mg at 9 a.m and a further 15 mg at 11.30 a.m—is to be recommended, and certainly, unless the patient is under full in-patient supervision, this dosage should never be exceeded The drug is admittedly still in its experimental stage, but enough work has now been done to make it doubtful how far, if at all, it is likely to be of greater value in psychiatry than it is at present The contraindications are now being established but from my experience it would appear to be unwise to give benzedrine to any subject with cardiovascular disease in any form, or to those with prominent anxiety symptoms The initial dose should not exceed 10 mg and the optimum dose should be determined carefully I agree with Davidoff and Reifenstein that it should be used cautiously in certain depressives because of the possibility of intensifying the depression with consequent suicidal risk This risk has not been sufficiently stressed

Summary

Thirty-three patients suffering from different forms of mental disorder and eight normal subjects were given benzedrine orally in doses of from 5 to 45 mg In sixteen the drug had to be discontinued because of untoward effects, mental or physical, and in two more because no beneficial effect was produced In eleven (one-third) the drug appeared to be helpful In five no effect mental or physical, was produced Dosage, contraindications, and the general value of benzedrine in psychiatry are discussed

I should like to thank my colleague Dr W C M Scott for having furnished me with his observations on several patients in this series and some of the controls, and also for much valuable help in the preparation of this paper

I would like also to thank Messrs Menley and James the distributors, for supplying me with a generous supply of the drug with which to carry on this work

REFERENCES

Anderson, E W, and Scott, W C M (1936) *Lancet* 2, 1461
British Medical Journal (1937), 2, 625
Davidoff, E, and Reifenstein, E C (1937) *J Amer med Ass* 108 1770
Guttmann, E, and Sargant, W (1937) *British Medical Journal*, 1, 1013
Korns, H M, and Randall, W L (1937) *Amer Heart J*, 13, 1, 114
Myerson, A, Lomin, J, and Dameshek, W (1936) *Amer J med Sci* 192, 560
—— Rinkel, M, and Dameshek, W (1936) *New Engl J Med* 215, 1005
—— and Ritvo, M (1936) *J Amer med Ass* 107, 24
Prinzmetal, M, and Bloomberg, W (1935) *J Amer med Ass*, 105, 2051
Serrano, J A (1934) *Med Rec* 140 602
Schube, P G, Raskin, N, and Campbell, E (1937) *New Engl J Med* 216, 922
Solomon, P, Mitchell, R S, and Prinzmetal, M (1937) *J Amer med Ass* 108, 1765
Ulrich, H, Tripp, C E, and Vidgoff, B (1936) *Ann intern Med* 9, 1213
Wilbur, D L, MacLean, A R, and Allen, E V (1937) *Proc Mayo Clin*, 12, 97

The following medical promotions in and appointments to the Venerable Order of the Hospital of St John of Jerusalem are announced in the *London Gazette* of June 24 As Knights Major A W Anderson M B, Major W O Evans M B E, L R C S, as Commanders D W A Bull M D, C Armstrong M B, as Officers L L Westrope M D, H Riddell, M B, E H Knowles, L R C P and S Ed H Banks F R C S, A P Martin, M B, J Vaillancourt, M D, Lieutenant Colonel F A Young, M D, Major General P S Mills, C I E, W T Thomson M R C S, C A Verco M B, W G Shellshear, M B, Colonel J L Hamilton, M C, T D, M D, K S Maurice-Smith M R C S Lieutenant Colonel C L Dunn, C I E, J K Milligan M R C S, A T Mckay, M D E Lewis Lloyd, M R C S, Hon P P Debono M D, F R C S Professor J Ellul, M D, E I D Parry, M B as Associate Officers Colonel D H Rae M C, as Serving Brothers F M Longson M B, E Ringrose, M D, J R Hall M B, G Fisk M D (since deceased) G H Edgecombe, M B, L A Williams M D, W O F Sinclair, M B J F Scales, M R C S, J C P Bayley, I M S S A J B Mckay, M B, F C Cozens, M B, W W A Kelly, M B A J Crai M D T D Delprat M B, A F Janes, M B, H C L Donovan M B J Mck Woods M B, C S Renwick M B F L Firkin, M B P D Braddon F R C S, as Serving Sister Frances C B McKay, M B

THE USE OF PLACENTAL EXTRACT IN AN EPIDEMIC OF MEASLES

BY

T N PARISH, M A , M D ,

Medical Officer to Benenden School

This is an account of an epidemic of measles in a girls school in which placental extract was used as a prophylactic

The girls vary in age from 13 to 17 years There had been no such epidemic in the school for nine years and at the beginning of the Easter term 1938 of the 205 girls under my care eighty nine had not had measles On January 18 a few hours after the return to school one child was found to be in the incubation stage of measles She came by the school train and school bus so that contacts were widely spread throughout the school Prophylactic measures were discussed and in view of the difficulty of obtaining convalescent serum it was decided to use placental extract in an attempt to modify the subsequent attacks and to lower the complication rate Moeller (1937) maintains that this extract is as efficacious as convalescent serum and of greater prophylactic value than adult serum Parents were circularized and forty-seven asked that their children should be given the injection some of them requesting that this should be done at once When the time of injection was left to our discretion the injection was given as soon as a case occurred in either the girl s house or form All were given between January 27 and February 16 The term ended on April 3

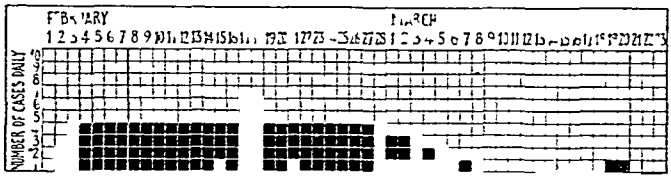


FIG 1 —Unmodified cases (6)

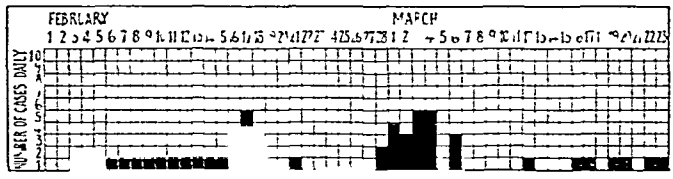


FIG 2 —Modified cases (44)

Dose and Reactions

The extract used was Lederle s immune globulin, and it was given in one intramuscular injection of 4 c cm into the buttock There were no immediate reactions but after a few hours stiffness and some pain at the site of injection were usual The stiffness persisted for about two days One child had a temperature for twelve hours but in no case was there constitutional disturbance of any severity nor did any delayed reactions occur

Course of the Epidemic

The case incidence throughout the term after the initial infecting case (which is not included in these statistics) is given in Figs 1 and 2 Fig 1 shows the day of onset of rash in the unmodified cases and Fig 2 the day of onset in the modified cases

Taking into consideration the larger number of cases in which the prophylactic injection had been given it does not appear that the extract had any effect in delaying the onset of the attack

By the end of the term seventy five of the eighty nine susceptibles had developed measles as well as five of the 116 said to have had measles previously of whom two had also received a prophylactic injection The distribution of cases in the modified and unmodified groups is shown in Table I

TABLE I —*Incidence of Measles*

	Previous Measles (116 Cases)		Susceptible (89 Cases)	
	Modified (2 Cases)	Unmodified (114 Cases)	Modified (56 Cases)	Unmodified (33 Cases)
Measles developed	2	3	53	33
No measles	0	111	3	11

It is obvious that the extract had no effect whatsoever in preventing the attack of measles On the contrary the above figures show that among the susceptible cases measles developed in 93 per cent of those who had been given the modifying injection and in only 75 per cent of those who had not The two children who had previously had measles and who had also been injected both developed measles

The epidemic was of moderate severity although there was a most remarkable freedom from serious complications Temperatures of over 103 were present in 66 per cent of the total cases The only complication of any severity was one case of suppurative otitis media

Effect of Extract on Attack

The effects of the prophylactic injections were much more noticeable in the first half of the term It is not possible to convey a clinical impression by statistics but the impression received by all observers was that those cases in which the attack developed within three to four weeks of the injection suffered far less constitutional disturbance A few of these showed a slight rash of small discrete papules with no tendency to coalesce but on the whole little difference was observed in the rashes of the modified and unmodified cases The most noticeable feature of the recently modified cases was that although the temperature was high and a well developed rash was present the patient remained surprisingly cheerful and undisturbed, and did not present the typical woebegone facies and prostration

The cases were classified (Table II) as they occurred as mild moderate or severe this classification being based on the degree of constitutional disturbance This is necessarily a somewhat arbitrary classification for the degree of disturbance did not appear to have any relation to the temperature or nature of the rash

The effect of the extract in reducing the severity of the attack is most noticeable in those cases in which it had been given within three weeks of onset of rash

TABLE II—*Type of Attack*

	Total Cases	Mild	Moderate	Severe
Unmodified	36	17%	78%	5%
Modified	44	50%	45.5%	4.5%
Modified within 3 weeks of onset	19	74%	26%	—

Table III contrasts the behaviour during the attack, of the unmodified cases with that of the total modified cases, and with those cases in which the extract was given within three weeks of the onset of the rash

TABLE III—*Course of Attack*

	Koplik's Spots	Days under Observation Before Onset of Rash	Days Temperature After Onset of Rash	Temperature over 103°
Unmodified	61%	2.6	3.4	72%
Modified	36%	2.8	2.6	61%
Modified within 3 weeks of onset	26%	2.5	2.0	74%

The most noticeable features of this table are the lowering in incidence of Koplik's spots and the quicker fall in temperature after the onset of the rash in modified cases. Both these features are more marked in the recently modified cases. The temperature of the recently modified cases is noticeably high, which is anomalous in comparison with the other results, but may be related to the apparent increase in susceptibility following injection of extract.

Complications

Apart from the one complication of bilateral suppurative otitis media, there were no serious complications. The complications given in Table IV are chiefly accounted for by the persistence of what may be regarded as normal concomitants of measles. Apart from the one case of suppurative otitis media in which paracentesis was performed, all cases of otitis were of the catarrhal type.

TABLE IV—*Complications*

	Total Cases	No. Complicated Cases per Cent	Acute Conjunctivitis	Styes	Persistent Nasal Catarrh	Sinusitis	Laryngitis	Persistent Bronchitis	Otitis Media	Total Complications per Cent
Unmodified	36	61	8	2	3	1	—	8	5	75
Modified	44	25	1	1	2	1	2	3	5	34
Modified within 3 weeks	19	5	—	—	—	—	—	—	1	5

There is a remarkable freedom from complications in the modified cases. The one complication in the recently modified cases was the case of suppurative otitis media and this occurred in a child who had previously suffered from bilateral otitis media and mastoiditis, and who had received her injection only eight days before the onset of the rash.

Discussion

The great defect in prophylaxis of measles whether by convalescent or adult serum or by placental extract, is the difficulty in estimating when exposure has been intimate enough to ensure subsequent development of an attack. In a large girls' school there are many opportunities for contact with cases in the incubation stage, but these contacts may be brief and not sufficient to produce an attack.

It was unfortunate that the epidemic started so soon in the term, for it seems probable, from a study of other reports (McKhann, 1937) and from the results obtained during this epidemic, *that the passive immunity* conferred is of short duration and that immunity decreases rapidly after three weeks.

By mid-term it is probable that most of the immunity conferred by the placental extract had vanished. Fortunately it does not appear that the extract in the doses given prevented or delayed the development of measles. Crosbie (1938) found that 4 c.cm. of placental extract was not always sufficient to ensure a modified attack, although it did prevent complications and sequelae. It is probable that if a dose larger than 4 c.cm. had been given *in this epidemic the immediate modifying effect* would have been more pronounced but there would then have been a greater risk of postponing the peak of the epidemic until later in the term, by which time the modifying power would have been greatly diminished. In a school epidemic it seems wiser to recommend for "modification" a dose which may in some instances fail to modify, although preventing complications, for such a dose will be less likely to bring about complete prevention.

There was a remarkable freedom from serious complications in the epidemic, and this renders the estimation of the value of the extract in reducing the complication rate less conclusive. If however, by the use of the extract, the reduction obtained in the number of somewhat trivial complications may be taken as an indication of its power in preventing major complications in some less fortunate epidemic, then the value of the extract is undoubted.

Apart from deliberate exposure of susceptible cases with a coincident modifying injection, the ideal course to adopt in an epidemic would be to immunize susceptible cases at intervals of three weeks until an attack developed. This would involve considerable inconvenience and expense, and in an epidemic of the type described, in which serious complications were absent from the start, it does not seem justifiable to advise this procedure.

Summary

An epidemic of measles in a girls' school is described in which placental extract was used in an endeavour to reduce the severity of the attack and the subsequent complications. There were no serious reactions following the injections. The extract did not have the effect of preventing or postponing the attack. It rendered the attack milder, the duration of temperature shorter and lessened the subsequent complications. It is probable that the immunity conferred diminishes fairly rapidly after three weeks.

REFERENCES

Crosbie, W. E. (1938) *British Medical Journal*, 1, 1003.
McKhann, C. F. (1937) *New England J. Med.* 216, 450.
Moeller, U. (1937) *Mschr. Kinderheilk.* 69, 101.

The next annual meeting of the Society of German Neurologists and Psychiatrists will be held at Cologne from September 25 to 27 when the subjects for discussion will be Meinert's, Wernicke's, and Kraepelin's doctrines and their importance in modern psychiatry. Further information can be obtained from Professor Nitsche, Pirna Bezirk, Dresden.

A WOMAN BLIND FROM BIRTH WHO ACQUIRED SIGHT AT 22 YEARS OF AGE

BY

R COLLEY, M B, Ch B, D O M S

Honorary Ophthalmic Surgeon Royal United Hospital Bath Senior Honorary Surgeon Bath Eye Infirmary

Very few cases have been reported of a person who blind from birth has obtained sight in adult life I have been able to find records of only four cases although I have no doubt more may have been published

I saw this girl for the first time on March 8 1932 She had been blind from birth as a result of congenital cataract and had been educated at a blind school from 10 to 19 years of age No operation on the eyes had been performed

Condition of Eyes before Operation

On March 8 1932 she could distinguish light from darkness with each eye and could tell when an object was moved in front of her face especially if a bright light was behind the object The projection of light of both eyes was good They exhibited marked nystagmoid move ments best described as shuddering There was con vergent strabismus possibly the right eye being the one more usually turned in Both lenses were completely opaque Slight epiphora was present the lacrimal sacs having been removed during childhood There was no history of blindness in the family and she was the only blind member out of seven children

Condition when Blind

Before the operations she was a totally blind person earning her living as such She was unable to get about without assistance and had to be led when not in her own home except for the fact that she used occasionally to visit a friend's house and a shop about two minutes distance to reach which it was not necessary for her to cross a street She had never seen a human face a flower a motor car or anything which a sighted person takes for granted All her ideas about the world had been obtained from reading braille from information given to her by others and by the use of her other senses She had scarcely any preconceived ideas of things which she could not feel When reading in braille she took no interest in the description of things or places but only what people said and did

The other senses were well developed She had very acute hearing—better than the other members of her family Similarly her senses of smell and touch were very good She says she was unable to detect the presence of a person in a room if he kept absolutely still but could recognize members of her family by their cough the way they walked etc

While at the blind school she had learnt braille which she can read fluently She had been taught machine knitting and chair seating as well as the ordinary school subjects—English history geography music and arith metic up to fractions and decimals etc She was very happy while at the blind school as being with blind people she did not realize any disability but on returning home she felt her position in comparison with those with sight After leaving the school she worked at home at knitting and chair seating She came to consult me in the hope that something could be done for her

Operative Measures

Both lenses were needled several times and a corneo evacuation was performed on the right Later the cap sules were needled

CONDITION ON DECEMBER 8 1932

Right eye Vision with − 15 D sph and − 1 D cyl axis 60 = 3 60 add + 4 D sph reads J 12 with diffi culty Left eye Vision with − 16 D sph and − 1 D cyl axis 135 = 6 60 and + 4 D sph reads J 5 Both media are clear and the fundi appear normal Horizontal nystagmus is present in both eyes but far less marked than before the operation The axis of the eyes is usually parallel but occasionally one eye usually the right is turned in

On account of the type of the operations performed her vision returned only very slowly—from appreciation of light through blurred vision eventually to seeing things reasonably well with the aid of glasses Having built up a world of her own it is very difficult to appreciate her thoughts on being presented with the sight of the ordinary things of life

Psychological Observations after Operations

PERCEPTION

On gradually obtaining her sight the first thing she noticed was a white apron worn by a nurse then the red colour of a dress Next she saw a window and a door way The window had no shape but appeared as a bright area and the sky white Later she saw her hands and fingers but could not distinguish her nails After this she saw chairs and tables Then she saw a face The second colour she noticed was green and the other colours later She had to be told the name of each colour Even now she has difficulty with some of the different shades

When she first saw a building it appeared a dark object with no shape After she got her glasses buildings looked huge but she had no preconceived idea of their shape or the appearance of the different types She did not recog nize a church although she knew that it had a tower or steeple but this did not convey anything to her She had read descriptions of different things but did not appreciate what they were going to look like

At first she had no estimation at all of distance and could not judge the position of objects in relation to herself Cars seemed to be coming straight at her and people appeared to be walking into her She still occa sionally thinks a car is coming straight at her but she can cross roads and is usually able to tell how far away a car is and whether it is safe to cross In going upstairs she could not judge the height of steps and sometimes raised her foot too high She fell both when going upstairs and when coming down Even now if stone steps are wet she has some difficulty When blind she did not bump into a door but when she first relied on her sight she did so—similarly with tables and chairs She could see the door way but had no idea of its relation to herself she could not tell how far away it was Now however she has no difficulty in avoiding objects

At first she had no appreciation of solid objects prob ably the outline only being seen She had no perception of form She thinks that at first she could not have told a brick from a ball except by touch but is able to do so now and she can also appreciate depth and can distin guish a solid object from a flat one Also in the blind state she had no knowledge of the relative size of different

things and on seeing objects such as houses for the first time they looked enormous She thought some animals were much larger than she found them to be when she went to the Zoo She had imagined that bears were as large as elephants and the latter much larger still Cats and dogs did not appear larger than she expected probably because she had touched them when blind She knew that dogs were of different sizes Looking at a cat and a dog of the same size she could not distinguish one from the other unless the dog barked, but she could do so quite easily by touch Objects which she could feel she was able to recognize, and thus learn to know by sight

She is intelligent and has a good memory She has asked many questions and on being told what things were she has remembered Looking out of the window at the Bath Eye Infirmary she saw an object going up the road outside She knew it was some kind of motor vehicle as she had previously seen cars but this was different On describing it to another patient she was told that it was a motor van Similarly with all the objects she saw—she had to learn what they were

Faces at first looked alike but she is now able to distinguish one from another She was greatly disappointed with faces, as she said she had thought all people were beautiful and had "happy-looking faces In looking at a print or photograph she has difficulty in telling the foreground from the background Coloured pictures at first appeared just a mass of colour, but now she is able to a large extent to make out the subject of the picture She likes bright things and thinks flowers are beautiful

She is a fluent braille reader but of course did not recognize the ordinary printed word or figures and had to learn the ordinary alphabet and figures before she could read the printed and written word

As she did not understand what she was looking at she made progress by (1) asking questions (2) recognizing things by touch and then by sight (3) recognizing things by smell and touch—for example the different flowers, where of course colour helped (4) recognizing things by knowing what she had read or been told

VISUALIZING ASSOCIATION ETC

She had no visual images until she obtained her glasses The association of ideas in a person who has never seen are by sound—including sound of words—touch and smell Thought in the blind state is mainly word thinking but in the sighted it is mainly picture thinking Her association of ideas is now that of a sighted person—that is dependent on visual images She is able to describe objects which she has seen earlier

At first she was very depressed and wept a lot—in fact, she must have gone through a great emotional strain Probably she had not realized that she would have to learn all about visible objects and more or less start again at the beginning She was so to speak between two worlds Eventually, as time went on she gained confidence as her vision improved and her sighted knowledge increased

On March 30 1936 she obtained a post at a factory, starting at 10s a week After three months her wage was raised to 12s at six months to 14s, and at a year to 16s Now she is earning 19s a week Normally a girl leaving school starts at the age of 14 years at 10s a week, rising to 18s at 16

Before the operations she had to be brought from her home to see me in Bath but now she can find the way herself, travelling by bus and walking to the Eye Infirmary She has joined the local company of rangers, and does the ordinary field work and plays games, but has difficulty in catching a ball She can do general housework, dusting polishing floors and making beds, and when washing up does not break more things than a sighted person She has not yet done any cooking She goes to the cinema, and on her holidays enjoys sea-bathing She watches her friends playing tennis but cannot play herself as she cannot hit a ball with a racket Although she can write well and read the printed word she still finds it quicker to read braille She has also visited London—seen Madame Tussaud's the Zoo, and the theatres, etc

More detailed psychological studies are being undertaken, and will be published later There seems no doubt that at least in the case of a person of the intelligence of the present one, it is possible for a previously blind person to make a fresh start in life as a sighted person, though in some of the cases described this has proved too hard a task

BIBLIOGRAPHY

Lotta, R (1904-5) *Brit J Psychol* **1**, 135
Ramsey, A Maitland (1903) *Lancet* **1**, 1364
Talmey, Max (1910) *N Y med J* **91**, 592

MOULDS AND ASTHMA

BY

E. M. FRAENKEL, M.D.

Voluntary worker at the L.C.C. Southern Group Laboratory, Park Hospital, London, S.E.

In a previous communication (1934) I published a list of allergens which had given rise to positive skin reactions in 522 cases of asthma observed by me in Germany Of these patients 290 were males and 232 females The reactions most often obtained were those given by extracts of house dust, bed feathers, and mattress stuffing The next most frequent reactions in this series were those obtained from bacteria (108, 20·7 per cent) and moulds (84 16·1 per cent) This latter figure is almost identical with Hansen's figure of 15 per cent given in his record of asthma cases in Germany

Storm van Leeuwen was the first to suggest that moulds, especially *Aspergillus fumigatus* mucor, and penicillium, play a part as "miasms" in (*a*) climatic or (*b*) house allergens In my own observations the patients were usually tested with aspergillus, penicillium, and mucor extracts, the original cultures being made from the residence of asthmatic patients

More recently a number of papers have been published in the United States on the problem of moulds as a cause of asthma and hay-fever Some of these investigations deal with mould extracts as supplied by the Arlington Chemical Company, who made preparations of four types of aspergillus, and one type each of alternaria, chaetomium, monilia, mucor, and penicillium, in all, nine different types With these extracts Lamson and Rogers (1936) working in Los Angeles, found that of 1,259 patients tested 154 gave positive skin reactions (12·2 per cent) Of these sixty-six were positive towards alternaria twenty-four to chaetomium, twelve to *Aspergillus fumigatus* and fifty-two to others On the other hand Balyeat (1932) who carried out his investigations in Oklahoma found that only 1 per cent of 480 patients gave reactions towards moulds Feinberg (1935), working in Chicago, found that sixty-eight patients out of a total

of 243 (28 per cent) gave positive reactions towards one or more of several fungi

Schonwald (1938) on the other hand reports from Seattle that out of a total of 150 patients 77 per cent gave positive skin tests to one or the other of ten types of moulds Reactions were obtained most frequently with *Penicillium expansum* (77 per cent) *Trichoderma kerningi* (72 per cent) *Alternaria tenuis* (70 per cent) and *Aspergillus niger* (68 6 per cent) and were procured by means of scratches and intradermal reactions The latter were of course comparatively the most frequent

Brown (1936) tried sixty eight different types of moulds and yeasts in twenty-four cases He found that twelve cases were sensitive to saccharomyces and six to alternaria compared with four who were sensitive towards aspergillus Prince *et al* (1937) tested twenty nine different moulds in eighteen individuals in Texas obtaining eleven positive reactions of which he considered eight to be significant Feinberg (1935) has pointed out that apart from moulds yeasts gave positive results in about 11 per cent of the total number of cases tested It has also recently been established by Wagner and Rackemann (1937) that old kapok which had been subjected to the action of moulds produced certain allergens to which patients were sensitive when they were not sensitive towards either the kapok itself or the mould alone This indicates that not only are the moulds themselves a source of allergic reactions, but that these are produced in addition, by some products of the action of moulds on other materials

The great variation in the frequency of mould reactions in allergic patients apparent in different parts of the United States is explained by differences in the climate and the resulting frequency of the occurrence of mould spores in the atmosphere The incidence of air borne fungus spores varies in different places according to the humidity and other climatic factors It has been pointed out by Schonwald (1938) that there is a far more abundant growth of moulds in Seattle with an average morning humidity of 85 per cent and evening humidity of 51 per cent, than 300 miles inland where the average humidities are 42 per cent and 27 per cent respectively These facts explain the great part played by moulds in the aetiology of asthma in this district of the United States this is also proved by the success of desensitization treatment with mould extracts in eighty six patients

In hay fever and in asthma the mould spore is an important factor because of its abundance in the atmosphere and because being much smaller than grass pollen it is more easily inhaled and absorbed This has been pointed out by Durham (1937) who working in Chicago found that there are more alternaria spores in the atmosphere than there are particles of rag weed pollen Observations were made in a number of towns during the months of May to November From a total of over 5 000 observations made by an average number of fifty stations he comes to the conclusion that alternaria spores are an inhalant comparable in importance to ragweed pollen The view that moulds are of importance is supported by Feinberg Prince Lamson and Underwood whereas Brown Credille van der Veer and Rackemann have a more conservative view of their importance

Bernton and Thom (1937) found that cladosporium acts as an allergen causing asthma or hay-fever in tomato growers This mould is responsible for the colour of decaying vegetables It is also mentioned by Guba (1936) as causing the asthma associated with tomato plants Another cladosporium—*Cladosporium fulvum* Cooke—has previously been mentioned as a cause of asthma by Cobe (1932)

I have examined 185 allergic patients in England of whom 148 suffered from asthma and twenty-one from hay fever and rhinitis The 148 asthma patients were made up of ninety two males and fifty six females Of these males eighty were tested with moulds and positive results were obtained in forty-one cases Of the females fifty-one were so tested and twenty-eight gave positive results Of the males seventy five were tested with bacteria forty six giving positive results Tests with bacteria were also carried out on forty five females twenty seven positive results being obtained

Table giving the Incidence of Positive Skin Reactions towards Moulds and Bacteria in England and Germany

	Males		Females		Totals	
	Moulds	Bacteria	Moulds	Bacteria	Moulds	Bacteria
England						
Tested	80	75	51	45	131	120
Positive	41 (51)	46 (61)	28 (55)	27 (60)	69 (53)	73 (61)
Germany						
Tested	290	290	232	232	522	522
Positive	43 (15)	54 (18)	41 (18)	54 (24)	84 (16)	108 (21)

The table shows that positive skin tests with moulds and bacteria were obtained with comparative frequency in England the figures with moulds being about the same as those reported by Schonwald from Seattle On the other hand the figures observed in Germany which are similar to the 15 per cent reported by Hansen for that country compare with the results reported from the interior of the United States It is most probable that this is due to the damp climate of England and Seattle corresponding to their similar geographical situation in the two continents The relative frequency of positive skin tests with bacteria cultured from asthmatic sputa is also probably due to the fact that infections of the respiratory tract are more common in wet climates than in others

REFERENCES

Balyeat R M (1932) *J Allergy* 3 227
Bernton H S and Thom C (1937) Ibid 8 363
Brown G T (1936) Ibid 7 455
Cobe H M (1932) Ibid 3 389
Durham O C (1937) Ibid 8 480
Feinberg S M (1935) *Wisconsin med J* 34 254
Fraenkel E M (1936) *Schweiz med Wschr* 66 1193
Guba E F (1936) *Florists Rev* 78 32
Lamson R W and Rogers E L (1936) *J Allergy* 7 582
Prince H E Selle W A and Morrow M B (1937) *Tex State J Med* 30 37
Schonwald P (1938) *J Allergy* 9 175
Wagner H C and Rackemann F M (1937) *Ann intern Med* 11 505

The thirteenth Italian Congress for Occupational Disease will be held at Bari from September 10 to 12 under the presidency of Professor L Ferrannini when the following subjects among others will be discussed occupational pathology of aviation occupational pathology of athletics silicosis adaptability of the Italian workman to the climate of East Africa and results of the application of compulsory insurance against industrial diseases in the first four years Further information can be obtained from the secretary Dr M Majo R Clinica Medica Bari

Clinical Memoranda

Sulphonamides for Meningococcal Meningitis

References to the success of the sulphonamides in the treatment of meningococcal meningitis are still not very numerous A report of two cases so treated may be of interest

CASE I

A male child aged 7 months was admitted late on November 24 1937 unconscious, convulsed on the fourth day of illness, with a diagnosis of probable pneumococcal meningitis A head only of fluid was obtained on lumbar puncture The child was conscious next day

A Gram negative diplococcus giving the sugar reactions of the meningococcus was found Anti meningococcal serum was given intrathecally and intramuscularly on November 28, and subsequently 150 c cm in all were given by December 16 On that day the cerebrospinal fluid contained 115 cells per c mm the direct film showed pus and meningococci chlorides were 648 mg per 100 c cm and meningococci grew on culture The child's temperature was 104° F, pulse 172, respirations 54

One c cm of 5 per cent soluseptasine (M and B) in 4 c cm anti meningococcal serum was given intrathecally and half a tablet of soluseptasine by mouth During the next forty-eight hours the infant was extremely ill the temperature rising to 106 F On December 17 the cerebrospinal fluid contained 60 cells per c mm and the film showed Gram negative diplococci On December 20 there were 39 cells per c mm a film showed no organisms but culture revealed a Gram negative bacillus (found to be a contamination from a supply of supposedly sterile water) The temperature fell to under 100 F on the 19th and did not rise again

The child was discharged on February 5 1938 well but with paresis of right arm and leg which has since cleared up

CASE II

A child of 11 months was seen on May 7 1938 with head retraction and absent abdominal reflexes I took him into hospital at once by car (mainly because it was a Saturday and the laboratory closes at noon) A lumbar puncture was done and 1 c cm soluseptasine given mixed with aspirated cerebrospinal fluid and 4 c cm 5 per cent soluseptasine was also given intramuscularly The cerebrospinal fluid showed *2,400 cells per c mm and meningococci*

The child was transferred to the local isolation hospital on May 8 5 c cm soluseptasine was given that day and half a tablet of soluseptasine by mouth twice a day On May 9 the cerebrospinal fluid contained 300 cells per c mm chlorides were 660 mg per 100 c cm and culture was sterile Next day 5 c cm anti meningococcal serum was given intrathecally and 5 c cm intramuscularly Soluseptasine was given by mouth until May 14 The cerebrospinal fluid on May 19 contained 15 cells per c mm chlorides were 717 mg and culture was sterile

SUMMARY

One severe and one mild case of meningococcal meningitis are reported Both recovered The severe case was not apparently helped by serum, but rapidly improved under treatment by sulphonamide

In the mild case a sterile cerebrospinal fluid was obtained forty eight hours after sulphonamide was given and prior to any serum treatment

Curiously enough these are the only two cases of meningococcal meningitis I have seen in twelve years in general practice

I am indebted to Dr P Lazarus Barlow for the pathological reports

A H WINCHESTER MB St And FRCS Ed
Bexhill on Sea

A Case of Streptococcal Meningitis

A girl aged 7 was admitted into Loughborough Hospital with definite signs of severe meningitis She had a history of a discharging right ear for ten days following an attack of influenza There was no evidence of mastoid involvement The ear was dry on admission

Lumbar puncture performed on the first day produced a cerebrospinal fluid which was under great pressure and cloudy The report describes it as "a frankly purulent fluid with a predominant *polymorphonuclear leucocyte* reaction Cultural examination has yielded a growth of streptococcus A further report on the same specimen stated that these were haemolytic streptococci The next day before the report was received 10,000 units of *meningococcal antitoxin* were injected intramuscularly with the result that the temperature of 104·4° F dropped to 99° F eight hours later On receiving the report 3,000 units of streptococcal antitoxin (scarlatinal type) were given intramuscularly This was repeated the next day The temperature was then 101° F The following day 6,000 units were injected intramuscularly but the temperature began to swing between 104° and 99° F We then gave three daily intravenous injections of 9,000 units (30 c cm) The temperature fell to normal after the first injection and stayed down for the two days following The next day 9,000 units were introduced intramuscularly, with the result that the temperature rose to 102° F Four daily intravenous injections of the scarlatinal antitoxin were then given in decreasing doses of 9,000 6,000, 6,000 and 4,500 units respectively—a total of 25,500 units (85 c cm) Since the first of these four injections the temperature has remained normal

Lumbar punctures were done daily, and the cerebrospinal fluid only became clear (pathologically) after the first series of intravenous injections of antitoxin The temperature and pulse are now normal and the child is behaving normally There was a slight serum reaction on the eighth day of treatment, in the form of erythematous patches and occasional wheals The antitoxin injections were given daily but three minims of adrenaline were injected subcutaneously on the day the rash was first seen and this disappeared in two days The ear condition seems to have subsided completely as well On the first lumbar puncture done under open ether anæsthesia paracentesis of the right drum was performed, and apart from a slight discharge which stopped after four days, the ear has kept dry and there has not been any discomfort from it since The child has been discharged from hospital and has since been well

The rapid response to intravenous antitoxin therapy indicates that this form of treatment is worthy of consideration in cases of meningitis following middle ear infections The total dosage of scarlatinal antitoxin was 245 c cm or 73,500 units of which 175 c cm were given intravenously

The serum used was Parke Davis and Co's streptococcal antitoxin (scarlatinal type)

MORRIS SCHWARTZ MRCS
General Hospital Loughborough

The fifteenth congress of the Association of French speaking Doctors of North America will be held at Ottawa from September 6 to 8 under the presidency of Dr J H Laporte Further information can be obtained from the Secretary 320 East Boulevard St Joseph, Montreal

Reviews

POST-OPERATIVE RADIOGRAPHY OF THE BILIARY TRACT

L'Exploration Radiologique Post Opératoire de la Voie Biliaire Principale By B Desplas P Moulonguet and P Malgras (Pp 120 40 figures 40 fr) Paris Masson et Cie

This volume deals with the radiographic exploration of the biliary passages after operation and opens up a new field in surgery The method employed is the injection of either lipiodol or tenebryl into a drainage tube left after operation on the gall bladder or bile ducts So impressed have the authors been by the value of the results obtained that it is now part of their routine treatment carried out a few days after operation In some cases the operation itself has been of a complete nature with the removal of stones in the bile ducts when the object of the injection was to ensure that the passage was clear and that no stones had been left behind In other cases a preliminary drainage has been deliberately performed and the radiographs serve to indicate what further procedures are required

The monograph is amply illustrated with actual radiographs of injected cases the interpretation of which is greatly facilitated by key sketches They demonstrate the extraordinary ramifications of the bile ducts the extent of which is really astonishing They also show the free communication which commonly exists between the bile ducts and the duct of Wirsung while certain of them show with great beauty the mechanism of the sphincter of Oddi The subject is so entirely new that we are unable to form an estimate of its possibilities but we have no doubt at all that it is one which demands the close consideration of every surgeon operating on the biliary passages The monograph is equally remarkable for its originality and its admirable presentation

DIFFERENTIAL DIAGNOSIS

Differentialdiagnose in der Inneren Medizin By Professor Dr Med O Naegeli Part III (Pp 722 59 illustrations RM 10 80) Leipzig Georg Thieme 1937

The third part completing the whole of Professor Naegeli's book on differential diagnosis in clinical medicine has now appeared The earlier portions of the work were favourably commented on in this *Journal* eighteen months ago and the present section continues on the high standard already attained The book has 700 pages of text and 22 pages of well arranged index Professor Naegeli whose recent death we deplore, has everywhere impressed it with his own personality and experience and it is thus one of the best books available on the subject of differential diagnosis In dealing with the diagnosis of the febrile state the author points out how much has been gained by the application of serological and other laboratory methods in differentiating the fevers of hitherto undefined origin There is no sure diagnosis from the course of the temperature curve itself Of the simple continued fevers typhoid is still the most prevalent the various aspects and complications of typhoid are therefore used to contrast with those diseases which may simulate them though certain acute febrile diseases with exanthemata have characters of their own The tropical fevers are included so that a reference to the book should enable anyone to be aware of the salient points leading to a correct diagnosis Joint diseases are dealt with under the broad headings of those with fever and those which may be accompanied by fever A separate section on the differentiation of diseases of the vertebral column is specially useful The final sections on diseases of the kidney and urinary tract of the nervous system and of the organs with internal secretion are equally good

It is remarkable how much information the author has been able to pack in to a small space the essential features of the normal and abnormal electrocardiogram are given in about ten pages Throughout the book there is evidence of the critical faculty the teaching capacity and the research spirit which brought Naegeli to a respected position on the Continent not only for his work on the blood alone but also in general medicine

YEARBOOK OF UROLOGY

The 1937 Year Book of Urology Edited by John H Cunningham M D (Pp 472 120 figures 2 50 dollars 10s 6d postage 6d) Chicago The Year Book Publishers London H K Lewis and Co 1937

This handy well printed and well illustrated volume maintains the high standard of its predecessors in offering a succinct and critical compendium of current urological activities The good result of a bilateral plastic operation for hydronephrosis after ten years makes one wish that more late results of such operations were published The transatlantic love of scientific accuracy is reflected in such classifications as pus grade 3 erythrocytes grade 3 But when it comes to tenderness grade 3 (p 151) are we to look forward to headache grade 2 constipation grade 4 etc? The surprising statement that the administration of chondroitin sulfuric acid is the best known agent for prevention of stone formation may reflect the inefficacy of most so-called preventives It is noteworthy that most children with vascular obstruction of the ureter are treated for months for chronic pyelitis and that in the absence of infection the renal changes are regularly interpreted as interstitial nephritis although a correct diagnosis can usually be made by complete urological examination Criticism is rightly expressed of those gynaecologists who say If one does not know what to do then cut the presacral nerve Pyelitis hydronephrosis and male sterility are mentioned as observed sequelae The confession of *110* perurethral resections with sixteen deaths at a reputable clinic is a refreshing change from the monotonous and largely incredible reports of hundreds of resections without a death Another valuable commentary is the statement that cystostomy followed by resection is the safest prostatic procedure With regard to bilateral cryptorchidism the report that of fifteen patients in whom orchidopexy had been done in childhood nine were fertile is very encouraging *All urologists should* read this book

THE PAGET TRADITION

The Paget Tradition By G Grey Turner (Pp 148 2s 6d) London Cassell and Co Simpkin Marshall 1938

James Paget (says Professor Grey Turner) physiologist pathologist surgeon and man of honour was one of the greatest ornaments of the Victorian era As the leader of the profession in his day he stood for rectitude in surgery His example has become a tradition not only at St Bartholomew's Hospital where he was nurtured but in all those parts of the world where it was carried by his many pupils Of this tradition Professor Grey Turner has written three charming essays in language which does

credit to his knowledge of English The first essay is the address he gave in Boston when he was presented with the Henry J Bigelow medal It tells the story of Paget's life and shows how he came to exercise so great an influence upon his generation He was a teacher and consultant in the strictest sense of the word Through the two small rooms of his little house in Harewood Place, then a dead end with locked gates into Oxford Street, passed for many years all that was interesting or obscure in English surgery

The second essay is devoted to Stephen Paget, the youngest son of Sir James It is entitled, What Research Owes to the Paget Tradition,' and is the eleventh Stephen Paget Memorial Lecture Much of his useful and all too short life was spent in the service of the Research Defence Society It was well said that 'when it is one man's business to propagate a delusion and nobody's business to destroy it, Truth is apt to find herself more than usually hampered" Stephen Paget set himself to free her from the shackles The third essay is entitled "Opportunity,' and was the winter address given at the Welsh National School of Medicine in 1934

The publishers state that the little book has been published at the request of Professor Grey Turner's past and present students 'No profit whatever is being made by the author, or in fact by anyone but the booksellers" Even they cannot be much in pocket, because it only costs half a crown, the money is well expended since it contains much of interest for every reader

DISEASES OF THE BLOOD

The Diagnosis and Treatment of Diseases of the Blood By Thomas Ordway M D and L Whittington Gorham M D Revised by Raphael Isaacs M D (Pp 605 33 figures, 15 coloured plates 32s 6d net) London New York Toronto Humphrey Milford, Oxford University Press 1938

The textbook on *Diseases of the Blood* by Ordway and Gorham is described as revised by Dr Raphael Isaacs and the foreword bears the date December 1937 The reader is a little surprised to find that the pages are not numbered consecutively, some having been interpolated, and that there is a supplementary index His surprise deepens into concern when he finds that the section on agranulocytosis contains no reference later than 1927 and makes no mention of amidopyrine under aetiology or of nucleotide, liver, or bone-marrow under treatment An article on the hypochromic anaemias has been inserted, but the original chapter on chlorosis has not been altered to suit and still mentions cases of atypical or chronic chlorosis Mitchell and Schmidt are quoted as finding that ferric chloride and ferric ammonium citrate, which are soluble, were much more effective in building haemoglobin than ferric oxide and ferrous carbonate, which are insoluble without indicating that their experiments were performed on rats and that in man the ferrous salts are more effective than the ferric The count of anaemia in pregnancy is antediluvian and pernicious anaemia of pregnancy is recognised definitely as an haemolytic anaemia, probably produced by a toxin from the placenta' Treatment by hydrochloric acid and blood transfusions is advised and the number of cases treated by liver is said to be still too few to draw conclusions No mention is made of nutritional deficiency under aetiology or of marmite under treatment In the treatment of leukaemia more stress is laid on radium than on x rays and on benzol and malariotherapy than on arsenic In the chapter on haemophilia the value of snake venom is not indicated Neither the original index nor the supplementary index refers to scurvy

Enough has been said to show the many deficiencies of this book 'In few fields of medicine,' says the foreword, 'have more important advances been made in recent years than in the diagnosis and treatment of diseases of the blood' We can only warn our readers that no adequate account of these advances is contained in the volume under review

BRITISH HEALTH RESORTS

Official Handbook of the British Health Resorts Issued tion (2s 6d net) London J and A Churchill Ltd

The new edition of the handbook of the British Health Resorts Association contains a vast amount of knowledge succinctly set out, concerning the spas and the seaside and inland health resorts of Great Britain This year a section has been incorporated giving particulars also of spas and climatic resorts in the Dominions and certain of the Colonies

The coasts of the British Isles include five distinct climatic regions—north-western, south-western, southern, south-eastern, and eastern Nearly all the places belonging to the first four groups may be described as winter as well as summer stations Many seaside places in the south and west have a warm and equable winter climate, being largely unaffected by the cold polar currents, and protected from easterly winds by hills or wide spaces of intervening land In addition to what may be called these regional climates there are innumerable local climates depending on the aspect, shelter, geological formation, even the vegetation of a given place, and this may be of importance from the medical point of view It looks as if, instead of the general advice to go to the sea, or the moors, or the mountains, or to a spa, the practitioner will have to prescribe health resorts with something of the particularity with which he prescribes drugs In that event the handbook bids fair to form an excellent equivalent to the *Pharmacopoeia* Under the editorship of Dr Fortescue Fox, it is an authoritative and impartial publication, packed with detail, and the happy illustrations on every page almost make one want to be an invalid The fullest information is afforded of the twelve spas of the British Isles (meaning by spas places at which establishments for medical use have been set up at the source of recognized natural medicinal springs) Particulars are given of the situation and history of each spa, its geology, climate the constitution of its waters, and the bathing and other facilities When so much is given it is rather churlish to ask for more, but a few more particulars of spa hospitals would be useful

This spreading volume, which began many years ago as an inset in the *Medical Directory* is now owned entirely by the British Health Resorts Association which intends to secure for it a greatly increased circulation, largely among members of the medical profession It is well on its way to becoming one of those few publications which are indispensable

Notes on Books

Studies on the Physiology of the Eye by J GRANDSON BYRNE M D LL D, is reissued with supplement and new index by H K Lewis and Co at 40s It is a collection of papers each more or less self contained and dealing with a large variety of subjects but mainly with the innervation of the pupil and the lid and with the proprioceptive system of the external ocular muscles The work recorded deals essentially with experimental observations on the cat and much space is devoted to the paradoxical reactions Much in this collection of

papers departs from accepted teaching It is possible to indicate only broadly the author s conclusions He holds that the primitive response is of a chemical type the stimulus acting directly on the muscle It is this type of reaction which is responsible for paradoxical reactions A later development is the chemico neural response the chemical stimulus acting indirectly through the neural centre The highest state is the reflex response

A valuable book of reference for all who have occasion to inform themselves about the London hospitals is *The Hospital Guide* which has reached its fourth edition (price 3d) It is published by the Advisory Hospital Committee of the Hospital Saving Association (30 Lancaster Gate Hyde Park W 2) and naturally has been compiled from the point of view of the contributory movement One table shows the progress of the Hospital Saving Association itself which in 1937 reached for the first time over one million pounds in contributions and had over one and three quarter million contributors Contributions and contributors have almost doubled since 1931 But the body of the *Guide* is full of information regarding all the voluntary hospitals of the metropolitan area giving details of accommodation charges or terms hours of attendance in the different departments and even bus routes and the like

Fermente Hormone Vitamine und die Beziehungen dieser Wirkstoffe zueinander by ROBERT and WILHELM DIRSCHERL is published at Leipzig by Georg Thieme at the price of RM 30 For ferments hormones and vitamins the authors propose the generic name of ergines According to their definition ergines (efficient substances) are such organic compounds as are formed in the living cell and necessary for the normal course of life in plants and animals They act in such small amounts that their effect cannot be due to the energy produced by the combustion of the molecule *The book under review* deals with the three groups separately and comprehensively and adds a chapter on the relations between ferments and ferments ferments and hormones ferments and vitamins hormones and vitamins hormones and hormones and vitamins and vitamins The literature seems to be taken into consideration well into the year 1937 but a bibliography would have been a very useful addition

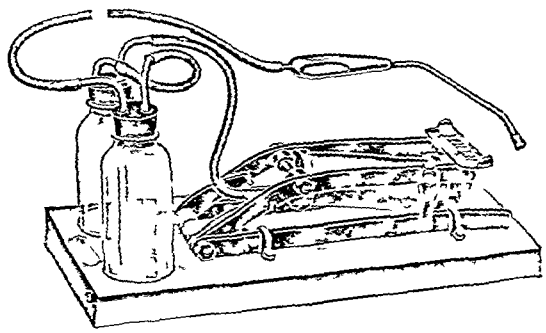
Not So Long Ago A Chronicle of Medicine and Doctors in Colonial Philadelphia by CECIL K DRINKER M D Sc D is published in this country by the Oxford University Press at 15s Professor Drinker s great great grandmother who was a member of a Quaker family which moved to the site of Philadelphia a few years before William Penn founded that city of brotherly love in 1682 kept a diary there for nearly half a century until her death in 1807 Parts of this footnote to history have been already published and Professor Drinker made use of *other parts—and they were many—about disease* as a basis for a series of lectures at the Lowell Institute These lectures have been utilized in this publication The text of the diary has been scrupulously copied with all its abbreviations inconsistencies and mistakes It tells the story of the large families which took up all the time of married women if they lived at a time when so many men had a succession of two or three wives There is much about the diseases—tuberculosis small pox yellow fever fever and the bloody flux (dysentery probably bacterial)—then rampant in Philadelphia and the medical men especially Benjamin Rush who wrote a small pamphlet about Old Drinker who lived to be 103 Professor Drinker has added an extremely interesting running commentary on the records of a time when medical men were kept busy and responded with a great armament of system and theory but with a minimum of fundamental knowledge The contrast between medicine then and now is graphically displayed

Preparations and Appliances

SIMPLE PORTABLE SUCTION PUMP

Mr J EWART PEPYES (Bromley Common Kent) writes

Every surgeon has felt the need for a simple portable suction apparatus which could be counted on to give a sharp suction stroke when required A motor tyre foot pump



seemed to present a good basis for experiment Messrs Down Bros by carefully balancing the reversed non return valve have produced a cheap and efficient suction apparatus which can be relied on to clear a throat of mucus or blood clot and to remove fluid from an abdomen or a cyst which has to be tapped If manipulated carefully it can also replace a Potain s aspirator The bottles are of reasonable size and the stand has been kept very simple to make the ensemble cheap and light

PROTAMINE ZINC INSULIN

Protamine insulin (with zinc) suspension has been produced conjointly by Allen and Hanburys Ltd and the British Drug Houses Ltd It is a sterile suspension of protamine insulin (with zinc) with a reaction of *p*H 7 1 The preparation is slightly turbid and the phials must be shaken before use

The introduction of the slow acting protamine zinc insulin was an advance of very great importance in the treatment of diabetes but hitherto its use has been hampered by the fact that it was necessary to mix separate solutions shortly before use The manufacturers have surmounted this technical difficulty and have produced a preparation which will keep for six months after manufacture and for a fortnight after the rubber of the cap of the phial has been pierced This represents a technical improvement of considerable practical importance

The manufacturers issue a very useful pamphlet explaining the special properties of protamine zinc insulin and the manner in which it should be used The value of protamine zinc insulin depends on its slow and persistent action but this involves certain special dangers The fall in blood sugar is so slow that warning symptoms of hypoglycaemia may not arise and a severe attack may follow suddenly moreover the action is so long that it will outlast a single replacement of carbohydrate

GONADOTROPIC HORMONE

Gonadyl (Roussel Laboratories Ltd) is a preparation of the gonadotropic hormone prepared from pregnant mare s serum The preparation is in powder form in ampoule and is dissolved immediately before use Each ampoule contains 40 rat units (=160 mouse units) The gonadotropic hormone has been used with pronounced success in the treatment of cryptorchidism It has been tried in a variety of disorders of menstruation and is also being tried for azoospermia and impotence

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY JULY 9 1938

ROCKEFELLER AND THE FRONTIERS

The story is told of a revolution which broke out in a Central American city some twenty years ago A medical investigator was engaged there at the time in studying yellow fever control and determined to continue his researches in spite of the hostilities Every morning with a flag of truce he crawled through the barricades to collect his mosquitos on one side of the fighting line, and in the evening crawled back again to gather up his specimens on the other Neither army molested him, but both thought him crazy—a man who, when great issues of human destiny were being fought out, spent his time catching insects To day in that part of Central America the revolution is forgotten, but the name of the investigator, Emmett Vaughn, is remembered as that of the man who helped to stamp out an age-long pestilence Which is of course, a parable But a sorrowful footnote has to be written, that such is the present intensification of nationalism and racialism in various parts of the world that even the collecting of mosquitos is now sometimes impossible Mr Raymond B Fosdick, the lawyer-president of the Rockefeller Foundation, in his *Review for 1937*, writes of the new international barriers which interrupt and embarrass the pursuit of philanthropic purposes and the advancement of knowledge Objective scholarship, he says, is possible only where thought is free and freedom can exist only where there is tolerance where there are no "keep out" signs against the inquisitive and questioning mind Disinterested research cannot survive in an atmosphere of compulsion and repression In some fields the Foundation is finding it profitless to go where formerly it went It is stopped at some frontiers, not because the frontiers have any greater geographical significance than they had a few years ago but because behind them the search for truth by eager and sceptical minds has been made impossible

Nevertheless the benefactions of the Foundation continue on the grand scale In 1937—the year of J D Rockefeller's death—the Foundation appropriated for philanthropic purposes a sum of nearly two million pounds Of this amount nearly one quarter was given to the medical sciences, another fifth to public health, and the remainder for work in other social and natural sciences and the humanities The largest single appropriations were £80,000 for the maintenance of Peiping Union Medical College, China £70 000 to Harvard University for research on industrial hazards and £60,000 to Yale for the Department of Psychiatry The benefactions to public health took the form of aiding various health departments, education in public health and the study and control of specific diseases These diseases included yellow fever in South America and Africa hookworm and schistosomiasis in Egypt, tuberculosis in Jamaica and Austria, scarlet fever in Rumania, influenza in Hungary and malaria in a number of countries Diseases know no frontiers and are no respecters of flags "In this field of public health' comments Mr Fosdick "more clearly perhaps than in any other phase of human effort one sees the complete inadequacy and meaninglessness of the conception of the absolute sovereignty of the State' The field studies undertaken during the year have added a good deal of information regarding the conditions under which jungle yellow fever occurs The absence of *Aedes aegypti* from infected areas has been amply confirmed and further evidence has been accumulated suggesting that human cases are not essential—even that they are relatively unimportant—in the maintenance of jungle infection The biological control of the insect vector so successful in the case of urban yellow fever, is not applicable in this field, and the elimination of animal hosts is not economically possible throughout the vast regions of South America, where jungle infection abounds The only hope of prevention at present lies in individual immunization of exposed populations by vaccination, and during 1937 well over 40,000 persons were vaccinated in Brazil and Colombia

At present, in its appropriations for medical sciences, the Foundation is concentrating on assistance to psychiatry The comment is made that mental disease is only now slowly being divested of the opprobrium meted out to misconduct Mr Fosdick speculates as to the attitude to the common cold if one of the early signs, along with sneezing and chills, was a transitory attack of kleptomania 'The ancients saw mental abnormality as a possession by demons, the quasi-modern layman still sees it as a disgrace, the modern man is coming to recognize it as a disease" It cannot yet be said that the development of psychiatry has paralleled the development of other branches of medicine As a new science it has not yet gathered about itself a body of knowledge or trained personnel comparable to that achieved in other disciplines and to its frequent isolation from the rest of

medicine must be ascribed the fact that it has sometimes run to strange cults and theories The Foundation is trying to infuse medicine with psychiatry and neurology Since 1932 it has given roughly £1 200 000 for this purpose The appropriations for 1937 included £8 000 for the support of the Department of Experimental Medicine at Cambridge with a view to aiding in the development of psychosomatic studies in this country

A discerning tribute is paid to J D Rockefeller who was no mere distributor of largesse but a man of far reaching vision He did not hold the view as so many benefactors have done that wisdom came to an end with his own generation He was not under the illusion that what seems important to-day will necessarily be important to morrow Therefore he did not tie up his Foundation to rigid and unchangeable purposes Nor did he believe in the maintenance of the Foundation in perpetuity—"perpetuity' he was apt to say "is a pretty long time'—and therefore the Foundation can and does spend its capital as well as its income It has adopted some liberalizing provisions whereby, ten years after the date of a gift the income from it may be used in whole or part for some purpose other than that for which the gift was made, and after twenty five years the principal in part or whole may be so used subject in both cases to the qualification that the new purpose shall be as reasonably related to the original as may be found practicable at the time having regard to intervening changing conditions This explains the occasional redirections of Rockefeller policy which have puzzled some people Rockefeller and those who come after him have been anxious to free their work from the embarrassment of "frozen' funds and tired endowments of which those who have to do with ancient—and some modern—foundations in this country know too much

THE MANAGEMENT OF PHTHISIS

Much of recent discussion on the after-care of the tuberculous patient has been based on little more than vague surmise A report[1] compiled by E Brieger and edited by Sir Pendrill Varrier-Jones Dr Bachmann of Switzerland and Dr Bronkhorst of Holland for the International Union against Tuberculosis gives for the first time a comprehensive account of carefully sifted evidence from which more reliable conclusions may be drawn In this country it is generally agreed that both the immediate and the remote results of sanatorium treatment are bad The proportion of patients whose sputum contained tubercle bacilli discharged with negative sputum tests is disappointingly low That it could be improved is brought out clearly in the report This has been achieved by what Brieger calls combined intensive treatment He defines this as including prolonged rest hygienic measures chrysotherapy collapse therapy and surgical procedures used in various combinations and sequences with one object in view—healing the tuberculous lesion, which implies that no tubercle bacilli can be detected by culture of the sputum or gastric contents and/or animal inoculation of the gastric contents At the Bilthoven Sanatorium in Holland for instance the proportion of patients admitted with positive sputum tests and discharged with them negative has been raised from about 25 per cent in 1921 to over 70 per cent in 1936

More time is needed before a true estimate can be made of the final results of combined intensive treatment but it is claimed that the proportion of relapses in the patients discharged as sputum negative or conditionally arrested is not increased In such of these patients as remain under observation any relapse is detected early and can also be dealt with by combined intensive treatment The proportion of untreatable good chronic cases is, however increased Lawrason Brown and H L Sampson have defined this group thus 'A cavity 2 cm in diameter or larger must be present The general condition must be favourable The temperature and pulse must be normal during the period of observation of several months The appetite and strength must be good and the patient must sleep well Expectoration may be present but must not be excessive He is usually able to take some exercise The number of tubercle bacilli in the sputum is not taken into consideration The net result of applying combined intensive treatment is therefore to save lives to increase the number of patients with healed lesions and to enlarge the group of good chronic cases at the expense of the 'bad chronic cases which are those not conforming to Brown and Sampson's criteria The problem of after-care arises not with those patients who are well enough to return to their work provided they can be trusted to live reasonably nor with those in whom the disease is so advanced that isolation in hospital is necessary but with a large intermediate group After-care is needed for the 'conditionally arrested' patients who must be rehabilitated before returning to their original jobs or to new occupations and for the good chronic cases For the latter permanent settlement in an appropriately developed village on the lines of Papworth is indicated for the former, a training centre

[1] *After Care and Rehabilitation* By E Brieger Published by the *British Journal of Tuberculosis* as a special supplement, October 1937

The training centre and the village settlement are not alternative solutions to the same problem Each meets a different need and has a different object in view, though there is no reason why the two should not form part of the same unit It has been found necessary at Papworth to add to the village a large sanatorium-hospital section well-equipped laboratories, and a surgical unit, and it has been thought that the period spent in a village settlement might be limited for the completely arrested case, so that in these instances the village settlement would function as a training centre These things lead us to suggest that perhaps the whole problem of after-care might be approached in an opposite direction, beginning with the sanatorium and hospital, adding to them the training centre, and allowing the village settlement proper to evolve around these institutions What is needed is a departmental unit completely equipped for the treatment and after-care of the tuberculous poor, for treatment and after-care are indivisible parts of the same entity A patient cannot be expected to submit to prolonged treatment unless his livelihood and that of his family are assured in the event of his becoming as a result of combined intensive treatment, a "good chronic case" It is fortunate that more than half of this group are unmarried The falling mortality from tuberculosis gives no ground for complacency Tuberculosis remains an important economic and social problem, the solution to which may partly lie in the evolution of units in which one authority has the sole responsibility for both the treatment and after-care of cases of tuberculous infection of the lung

CHANGES IN TEETH FOLLOWING PARATHYROIDECTOMY

The incisor teeth of the albino rat are sensitive indicators of fluctuations in the metabolism of calcium and phosphorus and are therefore useful in studying the physiology of the parathyroid glands Schour Chandler and Tweedy [1] in a recent re examination of the influence of parathyroidectomy on the structure of these teeth have confirmed some of the earlier findings of other workers but not all Some of the previous work was carried out on rats fed on diets now recognized as deficient in vitamin D calcium and phosphorus which probably accounts for the differences now observed by Schour and his co workers who used a diet adequate in calcium phosphorus proteins carbohydrate fat and almost certainly in vitamin D though the content is not stated Calcium formed 1 41 per cent of the diet and phosphorus 0 95 per cent The changes in the structure of the teeth were examined in respect to gross and microscopical changes in (Group I) eighteen rats which were allowed to survive 3 to 20 days in (Group II) fifty-seven rats which survived 39 to 159 days in (Group III) fourteen rats which survived 105 days and were subjected to fasting every seventh day in (Group IV) eleven rats which survived four months to one year and which underwent repeated pregnancies and lactations and in (Group V) twenty-seven controls In Group I (short survivals) the dentine formed after operation was more densely calcified than normal It is demarcated from the dentine formed before operation by a distinct ring (the calcio-traumatic ring) which appears to be an acute response to a shock to calcium metabolism The denser calcification of the post-operative dentine may be a result of the calcium retention that is reported to persist during the early survival period In Group II (longer survivals) calcification is defective the longer the survival the more defective is the calcification The dentine shows an irregular and accentuated alternation of zones of different densities in calcification which is probably responsible for the readiness to fracture of the dentine of parathyroprivic rats In Group III (long survivals with fasting every seventh day) the histological changes were found to be aggravated In Group IV (long survivals with repeated pregnancies and lactations) there was no evidence of withdrawal from the calcified tissues of the teeth Schour Tweedy Chandler, and Engel [2] have also compared the effects of parathyroid extract and of calciferol on the incisor of the parathyroidectomized albino rat The effect of the parathyroid extract given to twenty-nine rats is the same as that observed in normal dentine—namely, a short primary hypocalcified region (staining with eosin) and a secondary hypercalcified region (staining with haematoxylin)—but doses which were ineffective in normal animals were enough to produce the typical response in the experimental animals In some animals which survived longer than six days, however the deeper staining reaction receded and blended with the staining reaction of a normally calcified dentine Generally, a calcio traumatic ring was found, and cytological changes in the active enamel-forming cells were found in one half of the animals Similar changes were found in thirty parathyroidectomized rats which were given single doses of 46,000 to 644,000 international units of calciferol In this group of rats the serum calcium rose during the first three days after administration of calciferol then declined slowly to the original level The maximum height and the rapidity of the rise increased with the dosage The earlier findings of these workers—that the presence of the parathyroids is not needed for massive doses of calciferol to exert their effect—is therefore confirmed

[1] *Amer J Path* 1937, 13 945

POST-VACCINIAL ENCEPHALITIS

The incidence and fatality of post-vaccinal encephalitis formed one of the subjects recently discussed at the International Office of Public Health [1] when Professor Reiter the German delegate stated that during 1936 ten suspected cases after primary vaccination had been reported In five the diagnosis was supported by

[2] *Amer J Path* 1937 13 971
[1] *Bull Off int Hyg Publ* 1938 30, 737

clinical examination but in none by necropsy Three patients recovered and two died The one necropsy which was performed showed meningitis but not encephalitis According to Dr M T Morgan the British representative five cases of post-vaccinal encephalitis of which three were fatal were reported in England and Wales in 1936 and three more in 1937 up to September 15 which were all fatal The ages of the children ranged from 4 months to 15 years As in the German cases the encephalitis was always the sequel of primary vaccination No mention is made of a post mortem examination Professor G Petragnani the Italian delegate stated that of 1 104 520 primary vaccinations and 1 205 971 revaccinations performed in Italy in 1936 and in the spring of 1937 only five cases were reported in 1936 and six in 1937 In every case the intradermal method was used Of the eleven cases four were in the north of the kingdom two in the centre and four in the south Ten occurred in the spring and only one in the winter Six were fatal and in two pareses appeared as sequels The ages of the patients ranged from 8 months to 8 years and no case occurred in children vaccinated at the sixth month in accordance with the law concerning primary vaccination According to Professor Kling the Swedish delegate in the period 1924–36 inclusive there had been forty three cases of encephalitis following primary vaccination with eight deaths and eleven cases with two deaths following revaccination As regards age distribution most of the cases appeared during the first two years of life and immediately before school age

TREATMENT OF MYOTONIA

Recent work on the chemistry of the changes which occur at the neuromuscular junctions on discharge of the nervous impulse has led to important advances in the therapeutic field especially in primary disease of the muscles The action of physostigmine in delaying the destruction of acetylcholine by the cholinesterase has been found of specific benefit for example in myasthenia gravis In that group of diseases in which the cardinal feature is myotonia—inability to relax the muscles after they have been contracted—a drug having the precisely opposite effect of physostigmine has recently been used with much success Those who attended the Section of Neurology at the Oxford Meeting of the B M A in 1936 may remember the cinematograph film presented by Foster Kennedy of New York which demonstrated strikingly the difference in the muscular actions of a man with myotonia congenita (Thomsen's disease) before and after injection of quinine dihydrochloride In the report[1] on this film Foster Kennedy showed clearly that the action of quinine in abolishing the myotonic reaction of muscle could be antagonized by subsequent injection of physostigmine which rapidly reproduced the original myotonia A further study of the action of quinine in myotonia has been published by Kolb Harvey and Whitehill[2] who have studied the effects of oral administration of this drug in eight cases of myotonia atrophica and in one case of myotonia congenita Although perhaps the least incapacitating symptom of that heredofamilial disease better known in this country as dystrophia myotonica myotonia is the one of which the patient is most conscious and relief from it may help to compensate him for the weakness occasioned by the gross atrophy of the muscles and the premature senility which is so characteristic of the disease Kolb and his co workers found that by giving 0 6 gramme of quinine sulphate by mouth three or four times daily patients with myotonia atrophica could be kept free from the symptom of myotonia There was no resulting increase in strength of the muscles as recorded by the dynamometer although several patients declared that the muscles worked better After treatment with quinine had proved effective these patients were given injections of prostigmin whereupon the myotonic reaction immediately reappeared even if quinine were given at the same time as the prostigmin which thus directly antagonized the effect of the quinine Conversely quinine counteracted the effect of prostigmin in myasthenia gravis increasing the signs of that disease Other therapeutic agents were investigated in the cases of myotonia atrophica but none was successful No symptoms of overdosage of quinine appeared with the large doses necessary to abolish the symptom of myotonia It was found that smaller doses than 0 6 gramme three times a day were ineffective and that if the drug was discontinued patients complained that the rigidity of muscles was worse than it had been before treatment was initiated It would seem therefore that once begun this treatment must be continued almost indefinitely Whether prolonged dosage with quinine will eventually have deleterious results has yet to be seen No series of cases has been under observation long enough for any conclusions to be reached In the meantime there can be no doubt that a valuable therapeutic agent has been found for the relief of a distressing symptom

[1] *British Medical Journal* 1936 2 356
[2] *Johns Hopk Hosp Bull* 1938 62 105

THE ROYAL MEDICAL BENEVOLENT FUND

Annual reports are usually dry enough documents and the one hundred and second to come from the Royal Medical Benevolent Fund is no exception for 200 of its 220 pages consist of lists of subscriptions and donations But even these have their interest because not only are the subscriptions shown for 1937 but also the total amount which the subscriber had given before that year and it is encouraging to notice how many faithful friends this charity has enlisted In several cases the accumulated total against a subscriber's name is over £100 It is also shown what considerable and widely distributed support the Fund receives from the Branches and Divisions of the British Medical Association City companies masonic lodges and chapters medical societies hospital staffs and Panel Committees Over seventy Panel Committees subscribed during 1937 one of them (Norfolk) making a gift of £117 and fifty Divisions and Branches of the B M A contributed directly But the purpose of an annual report is to remind subscribers that their subscriptions for the

current year are due, and as there is always a tendency for such documents to go the way of circulars and other ephemeral literature the Fund this year is issuing with the report, but in a separate envelope a letter from Sir D'Arcy Power chairman of the committee of management, and also a selection of typical stories of persons benefited Sir D'Arcy Power describes briefly the activities of the Fund and the number of the grants and annuities He mentions that the income from subscriptions has been doubled during the last ten years, yet still it only represents something under seven shillings for each medical practitioner in Great Britain The great need is to enlist a larger number of annual subscribers, this would make it possible to raise the meagre amount given as an annual allowance in often very pitiful cases Volunteers are also requested for honorary local secretaryships

THE HEART IN RELATION TO ITS BLOOD SUPPLY

The efficiency of the myocardium depends largely on the quantity and quality of the blood in the coronary circulation, and two recent studies on this merit attention because of their practical importance Kountz and Smith[1] of St Louis have tried to assess experimentally the flow of blood in the coronary arteries of pathological hearts The information was derived from perfusion and heart-lung preparations of revived beating human hearts Under the conditions of their experiments the average coronary flow for normal hearts is estimated to be about 1 4 c cm per gramme of heart per minute In the hearts of persons dying of cardiac disease the total flow through the coronary artery was often greater, especially in greatly hypertrophied hearts, but when reduced to the terms of unit weight it was found to fall below the level of 0 75 c cm per gramme per minute, which Kountz and Smith regard as a minimal safe flow for the function of the heart In subjects with a history of heart failure the flow ranged from 0 15 to 0 6 c cm per gramme per minute The lowest figures were encountered in arteriosclerotic hearts Kountz and Smith consider that their work shows that hearts fail in chronic cardiac disease because of a limited flow through the coronary artery, which may result from either increased muscle mass or narrowing of the coronary vessels In dilated hearts lengthening and stretching of the coronary vessels may be the chief factor Tung and his associates[2] in a careful investigation into the effect of severe anaemia on the heart point out that in this condition the functional efficiency of the heart is of the highest importance since increase in the cardiac output is an essential compensation for the diminished carriage of oxygen in the blood The ten patients studied had severe chronic anaemia (haemoglobin values 1 5 to 3 5 grammes per 100 c cm or averaging about 17 per cent) and no other discoverable cause of heart disease yet in only one of them was the heart normal In six it was considerably enlarged and there was definite congestive failure, the venous pressure being elevated Three patients had much enlarged hearts but little or no evidence of congestive failure The degree of cardiac enlargement was assessed radiographically, and the difference between the measured area and the estimated normal area expressed as a percentage The increases in cardiac area varied between 25 and 143 per cent The x-ray illustrations reproduced in the paper reveal the gross cardiac dilatation which occurred in these anaemic subjects In the light of the findings of Kountz and Smith in regard to the decrease in coronary blood flow caused by dilatation the viciousness of the circle is apparent The poor state of the heart in severe anaemia explains the not infrequent fatalities attending rapid transfusion of blood in such cases The dilated and failing heart cannot take on the burden imposed by a sudden augmentation in the total blood volume Such fatalities not long ago formed the subject of articles by Plummer[3] and Pygott[4] and of correspondence in this *Journal* The work of Tung and his colleagues throws light on these deaths Transfusion in such cases may sometimes be essential, but it must be by a very slow drip method

[1] *J Clin Invest* 1938 17 157
[2] *Clin Sci J* 1937 52 [illegible]

RURAL HYGIENE

Representatives of European countries are to meet in a conference summoned by the League of Nations for July 1939, to consider the subject of rural planning and hygiene The Council of the League amid the graver preoccupations of its recent session at Geneva, approved the report of the preparatory committee for the conference which has been sitting under the chairmanship of M Wauters, Belgian Minister of Public Health A similar conference was held in 1931 and drew up a programme of studies to be carried out under the auspices of the Health Organization The conference recommended that another European conference should be summoned after an interval of a few years to examine the results achieved and adapt the proposals made to current problems and to the progress of public health technique Such is the real origin of the conference to be held next year One section of the preparatory committee's work deals with medico-social policy The previous conference it is stated, has exercised a considerable influence on the organization of public medical and assistance services in the rural parts of Europe in countries but it remains to extend the study to diseases which are still all too frequent in rural areas such as typhoid and tuberculosis together with diseases which affect both human beings and livestock *The conference* will have at its disposal further studies carried out on the international plane by the Health Organization relating to sanitation, the cost and efficiency of medical and sanitary assistance prevention of disease and the "medico social protection" of the rural population by which last is meant nutrition housing and rural planning The Health Organization has lately been undertaking in conjunction with public health authorities national nutrition committees and European institutions and schools of hygiene some further

[3] *British Medical Journal* 1936 2 1186
[4] Ibid, 1937, 1, 496

studies on nutrition in order to ascertain the effective consumption of particular groups of populations to consider whether their dietaries are sufficient and to evolve measures for combating defects These studies have taken place in Belgium France Finland and half a dozen other European countries The composition of bread, and accordingly its nutritional value has been found to vary much from one country to another and even within particular countries A study of bread dealing with the species and sifting of cereals the form of consumption and so forth will be available before the conference meets As to milk the Health Organization already has copious material at its disposal on the place which milk should hold in a system of nutrition together with the hygienic questions arising in connexion with its production and distribution and this material is being extended and completed It is hoped that the participating Governments will later be in a position on the basis of these extensive international studies to give more detailed particulars in their several national monographs as to the nutrition of the rural classes in their respective countries On this subject of nutrition the Council has decided to invite the eighteen States within the League which have set up national nutrition committees to send representatives to Geneva for an exchange of views on subjects of common interest during the coming autumn League countries which have national nutrition committees include the United Kingdom with Australia and Canada among the Dominions France Belgium Holland Soviet Russia Poland Czechoslovakia Latvia and all the Scandinavian countries also outside Europe Egypt and Iraq The first meeting held in February 1937 derived great benefit from the participation of a representative of the committee recently set up in the United States and it was decided to invite an American representative again to participate in the forthcoming discussions

TRAUMATIC SHOCK

Recent experimental work on the nature of traumatic shock has demonstrated the relative unimportance of toxaemia at least in the early stages of the condition Toxaemia from infection particularly by gas producing organisms which so complicated the picture of cases of shock in the last war does not arise until a later stage It is unlikely that the absorption of crush products is a potent factor though as Sir Henry Dale[1] has suggested these may have some effect on capillary walls and so contribute to the loss of fluid which is apparently an important if not the most important aetiological factor The older surgeons looked upon the part played by nervous impulses as all important—for example Furneaux Jordan in the second edition of his *Surgical Enquiries* (1880) regarded the condition as

> the result of a powerful impression applied to the nervous centres or to a portion more or less considerable of the peripheral nervous expansion

Concentration on the factor of fluid loss has of late led to neglect of the nervous side of the question Shock can be prevented by complete occlusion of the arterial blood supply to a limb before it is injured and as Slome and O Shaughnessy have recently pointed out not only is loss of fluid prevented under these conditions but the limb may be rendered anæsthetic and the nervous factor eliminated An examination of the action currents in the nerves passing from a traumatized limb showed that no abnormal impulses could be recognized for three-quarters of an hour after the injury but that subsequently an almost continuous barrage of impulses developed There is some evidence to suggest that an initial fall of blood pressure in a case of traumatic shock is caused by loss of fluid and that a later and continued drop is due to the continued discharge of nervous impulses Control by appropriate analgesia or anaesthesia is therefore necessary as well as the restoration of the blood volume in the treatment of shock

REFUGEE DOCTORS FROM AUSTRIA

Sir Samuel Hoare the Home Secretary who was accompanied by Lord Winterton the Chancellor of the Duchy met at the Home Office on July 4 representatives of the British Medical Association the Royal Colleges of Physicians and Surgeons the University of London and the Society of Apothecaries to discuss the question of the admission of some Austrian doctors to practise in Great Britain It was agreed that it would only be possible to admit a limited number that any such admissions must be the subject of careful selection and that a committee representing the medical profession should be set up to assist in the selection The Royal College of Physicians of London was represented by Dr Robert Hutchison and Professor J A Ryle the Royal College of Surgeons of England by Sir Cuthbert Wallace the University of London by Sir William Girling Ball and Dr A M H Gray the Society of Apothecaries of London by Mr Hugh Lett and Sir William Willcox and the British Medical Association by Mr N Bishop Harman Dr H Guy Dain Dr J W Bone Dr G C Anderson and Dr A Macrae

Professor Sigmund Freud now living in exile in London was elected a Foreign Member of the Royal Society in 1936 As his health does not permit him to visit Burlington House to sign the ancient Charter Book of the Society the President and other officers have paid him the high honour of taking the book to him for his signature

Professor Frank C Mann who is Director of the Mayo Foundation for Medical Education and Research of the University of Minnesota will deliver in the Theatre of the Royal College of Surgeons of England on Friday July 15 at 5 p m a special lecture on the Mechanism of Peptic Ulceration which is to be a review of the results of experimental investigations Professor Mann is well known for his research into the problems of peptic ulceration and the College is pleased to invite Fellows and Members to attend Those who are neither the one nor the other will be admitted on presenting their private visiting cards

[1] *Proc roy Soc Med* 1935 28 1493

Brit J Surg 1938 25 900

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

INJURIES IN THE REGION OF THE SHOULDER-JOINT

II BONE AND JOINT INJURIES

BY

R WATSON-JONES, M.Ch.Orth., F R.C.S.

One of the most important principles of the treatment of all fractures applies with particular force to fractures and dislocations of the shoulder joints which do not need to be immobilized must be actively mobilized from the first day If immobilization is not essential, mobilization is imperative A fracture of the clavicle should not cause more than a few weeks' incapacity But many healthy men have been incapacitated for a year or even incapacitated permanently by simple fractures of the clavicle treated with Sayre's strapping, which bound the fingers and hand flat against the chest wall In other cases abduction frames have been used with a palmar splint so situated that the patient could not flex the fingers normally With the tendency to oedema which exists immobility of the fingers for only two or three weeks may cause such a degree of adhesion formation that the patient is fortunate if he recovers in a year The stiffness of the fingers is not only serious in itself, but it adds greatly to the difficulty in restoring shoulder movement where some stiffness may have been inevitable The only stiff shoulders which are really difficult to treat are those associated with severe stiffness of the other joints of the limb If the elbow, wrist, and fingers are normal the patient has an incentive to use the limb, and functional activity rapidly restores movement to the shoulder But if every joint, including the fingers, is as stiff as a board, it never occurs to the patient to use the limb at all, he gives up the impossible task, and the difficulties are greatly increased The first principle, therefore, in the treatment of fractures of the clavicle and neck of the humerus, and of dislocations of the shoulder and acromio-clavicular joints, is that the patient must actively move the fingers, thumb, wrist, and radio-ulnar joints throughout their full range many times every day

Fractures of the Clavicle

Fractures of the clavicle occur most commonly in the middle third following a fall on the outstretched hand The inner fragment is displaced upwards by the sterno-mastoid, and the outer fragment is displaced downwards and forwards by the weight of the limb The fragments can only be realigned by pulling the whole shoulder girdle, and with it the outer fragment, upwards and backwards and outwards Scores of methods of immobilization have been described, and this in itself suggests that one of them is really perfect Fortunately, however, these fractures almost invariably unite firmly in a few weeks, and the thickening which may result from imperfect reduction is usually absorbed and disappears in a few months On the other hand, over-zealous attempts to maintain anatomical reduction by immobilization of the shoulder for many weeks may cause far more serious trouble from adhesion formation round the shoulder-joint

Method of Treatment—The figure of-8 bandage method is simple, and if carefully used will give excellent cosmetic and functional results The patient sits on the front of a stool, the operator standing behind with one foot on the stool and his knee between the patient's shoulder-blades A large pad of wool is placed in front of each shoulder extending into the axilla Several long bandages five or six inches wide are now applied in the form of a figure of-8, passing in front of the shoulders under the axillae and crossing between the shoulder-blades With each turn of the bandage the shoulder girdles are pulled backwards and upwards as strongly as possible without compressing the axillary vessels (Fig 1) The bandages may be stitched together to prevent slipping and it is advisable to reapply them every second or third day for the first fortnight The tension of the figure of 8 bandage prevents the outer fragment from displacing forwards, and the weight of the arm acts as a lever over the axillary pad, distracting the outer fragment away from the mid line and correcting the overriding For the first two weeks the shoulder is elevated by a triangular sling tied over the opposite side, but after that time it is left free for exercises The finger-, wrist-, and elbow-joints must be exercised frequently from the first day The figure of-8 bandage may be discarded after three weeks when there is clinical evidence of union, there is no necessity to wait for radiographic evidence, which is much more delayed

COMMINUTED FRACTURES

Occasionally the fracture is comminuted and a small fragment may be tilted out of position so that a subcutaneous spur develops These fragments may be replaced by direct pressure after the main fracture has been reduced by the figure-of-8 bandage Even if these attempts fail operative reduction should still not be contemplated The sharpest of spurs usually absorbs and becomes rounded, and if any symptoms do remain it is very much more simple to remove the spur after union of the fracture than to attempt open reduction The only indication for operation in recent fractures is the exceedingly rare complication of compression of the brachial plexus or subclavian vessels by displaced fragments

Dislocation of the Acromio-clavicular Joint

If the ligaments of the acromio clavicular joint are torn the weight of the arm displaces the shoulder girdle and acromion downwards below the level of the outer end of the clavicle If the injury is confined to the ligaments between the acromion and the clavicle subluxation of the joint results, but if there is also a tear of the ligaments between the coracoid and the clavicle still more serious displacement develops The dislocation is very easily reduced by elevating the whole arm and shoulder girdle, but it is just as easily redisplaced by the unsupported weight of the limb

Immobilization by Strapping—The limb must be kept elevated by strapping which encircles the clavicle above and the elbow below A small pad of wool is placed in the axilla, and the wrist is slung from the neck by

a collar and a cuff with the elbow at a right angle A pad of adhesive felt is placed below the elbow to protect the bony prominence of the olecranon and the ulnar nerve with a second pad over the outer end of the clavicle These two points are now pulled together by strips of brown strapping four or five feet long applied as tightly as possible (Fig 2a) While the strapping is being applied the humerus is pushed upwards to elevate the scapula and the acromion and the clavicle is pulled downwards The strapping is easily stretched by the weight of the limb so that five or six layers should be used one on top of the other It is a common mistake to apply the strapping over the top of the humerus and the shoulder-joint itself instead of over the clavicle and supraclavicular triangle (Fig 2b) In these circumstances the surgeon is attempting the impossible task of compressing the humerus in its longitudinal axis If the uninjured the muscle is felt contracting even although the shoulder is not actually moved

Method of Reduction —The head of the humerus is held in its inwardly displaced and inwardly rotated position by the tension of the subscapularis To reduce the dislocation this muscle must be slowly and gradually stretched The patient lies on a couch and the surgeon stands at his side For a dislocation of the right shoulder the surgeon takes the elbow in his right hand and the wrist in his left Strong smooth traction is applied to the humerus by pulling with the right hand The arm is now very slowly and gently externally rotated by moving the wrist outwards until the normal limit of 90 degrees external rotation is reached The limb being kept in full external rotation the elbow is brought toward in front of the chest Finally the limb is internally rotated and the hand brought over to the opposite shoulder The manipu

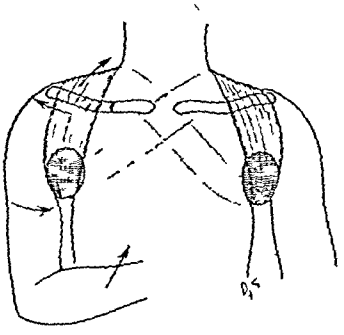


FIG 1 —Figure-of 8 bandage with large axillary pads for fracture of clavicle The outer fragment is pulled back by the bandage distracted away from the mid line by the leverage of the weight of the arm over the axillary pad and elevated by a triangular sling

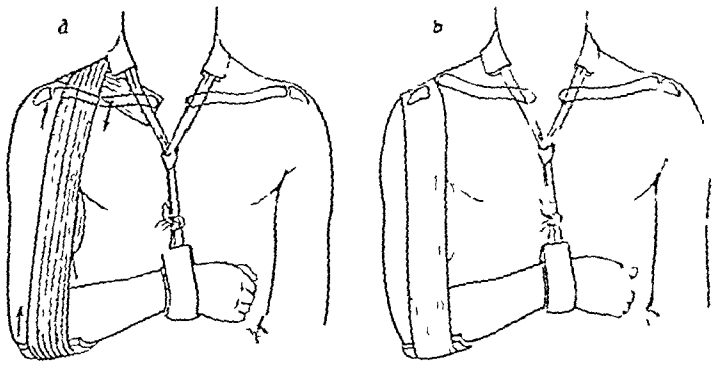


FIG 2 (a and b) —(a) Correct and (b) incorrect method of strapping acromio clavicular subluxation and dislocation The strapping must pass over the clavicle and not over the top of the shoulder It must be tightened on alternate days and retained for three to five weeks

strapping is applied in the right place and if the method is used conscientiously excellent results may always be obtained and operative measures are unnecessary It is however essential to tighten the strapping every second or third day by applying additional strips on top of the original and to continue the fixation for at least three weeks in subluxation of the joint and for at least five weeks when the joint is completely dislocated

Dislocation of the Shoulder-joint

Since the head of the humerus does not occupy its normal position immediately below the acromion process there is loss of the normal rotund outline of the shoulder The acromion is unduly prominent and there is a hollow beneath it This hollowing may not be obvious on inspection owing to the marked swelling but it is quite evident on palpation when the shoulder is compared with the normal side All movements of the shoulder are limited and painful and there is particular difficulty in putting the elbow to the side owing to the locking of the head of the humerus in its inwardly displaced position

The limb must be carefully examined for nerve injuries The deltoid muscle is often paralysed by injuries to the circumflex nerve the posterior cord or the outer trunk of the plexus The examiner palpates the muscle belly with one hand and instructs the patient to attempt abduction movement against the resistance of his other hand over the patient's elbow If the nerve supply is

lation is performed so smoothly that the head of the humerus glides into position and often the surgeon does not know at which stage the dislocation was reduced There is no necessity to elicit any click or sudden jerk Frequently such a click does not indicate successful reduction but is due to movement from one dislocated position to another It is essential that the accuracy of reduction should be confirmed not only clinically but also by radiographic examination

After treatment —A small pad of wool is placed in the axilla well powdered with talcum and a wisp of wool is similarly placed in the fold of the elbow to prevent intertrigo dermatitis The wrist is slung from the neck by a collar and a cuff and the whole limb is bandaged to the trunk to prevent external rotation movement of the shoulder The fingers hand and wrist must not be covered and these joints are constantly exercised All bandages and slings may be discarded in three weeks and the patient regains movement at the elbow joint and shoulder joint by his own exercise If the shoulder is immobilized for a shorter period there is a danger of recurrent dislocation necessitating operative treatment

Dislocation with Fracture of the Tuberosity —Radiographs may show that a large fragment of the great tuberosity has been torn off at the time of the dislocation (Fig 3) As a rule the fragment is in perfect position when the dislocation is reduced An axillary pad somewhat larger than usual may be applied but an abduction

frame is not necessary. Active movement of the shoulder is begun in three to four weeks, exactly as if there was no fracture

Dislocation with Avulsion of the Supraspinatus—In a proportion of cases the supraspinatus tendon has been avulsed from the tuberosity The complication is rarely recognized until several weeks have elapsed After the bandage and strapping have been discarded it is found that passive abduction is recovering more rapidly than active abduction A greater range of passive than of active abduction in the presence of a normally contracting deltoid is clear evidence of rupture of the supraspinatus tendon This complication was fully discussed in the preceding article (*Journal* July 2, p 30)

Dislocation with Paralysis of the Deltoid—If there has been an injury to the circumflex nerve or one of the cords the brachial plexus the paralysed deltoid muscle must relaxed by abducting the shoulder in a frame If the patient's arm is firmly bandaged to the frame but the trunk part is loose and can slide down, there is a danger that the joint may be re-dislocated For this reason some surgeons defer the application of a frame for two or three weeks but if it is skilfully applied it is safe to use it even earlier At least seven or eight six-inch bandages must be employed to fix the trunk part of the frame and to hold it up the turns of the bandage being hitched under every hook screw and bar and passed over both shoulders

Stiffness and Myositis Ossificans due to Passive Stretching—In the after-treatment of shoulder dislocations passive stretching by masseuses and manipulation under anaesthesia by surgeons must be rigidly avoided There is no more certain means of converting temporary into permanent stiffness than by permitting passive stretching It is now well recognized that myositis ossificans after dislocation of the elbow is due to passive stretching and that this practice delays the recovery of elbow movement The only pathological difference between dislocations of the elbow and dislocations of the shoulder is that the elbow is usually dislocated in children, in whom the periosteum is loosely attached, whereas the shoulder is usually dislocated in adults, in whom the periosteum is firmly attached For this reason elevation of the periosteum and 'myositis ossificans' are more often seen in the elbows of children than in the shoulders of adults The myositis ossificans is merely one evidence of the harm done to the child's elbow by passive stretching The passive stretching is just as harmful to the adult's shoulder, even although there is no outward and visible sign

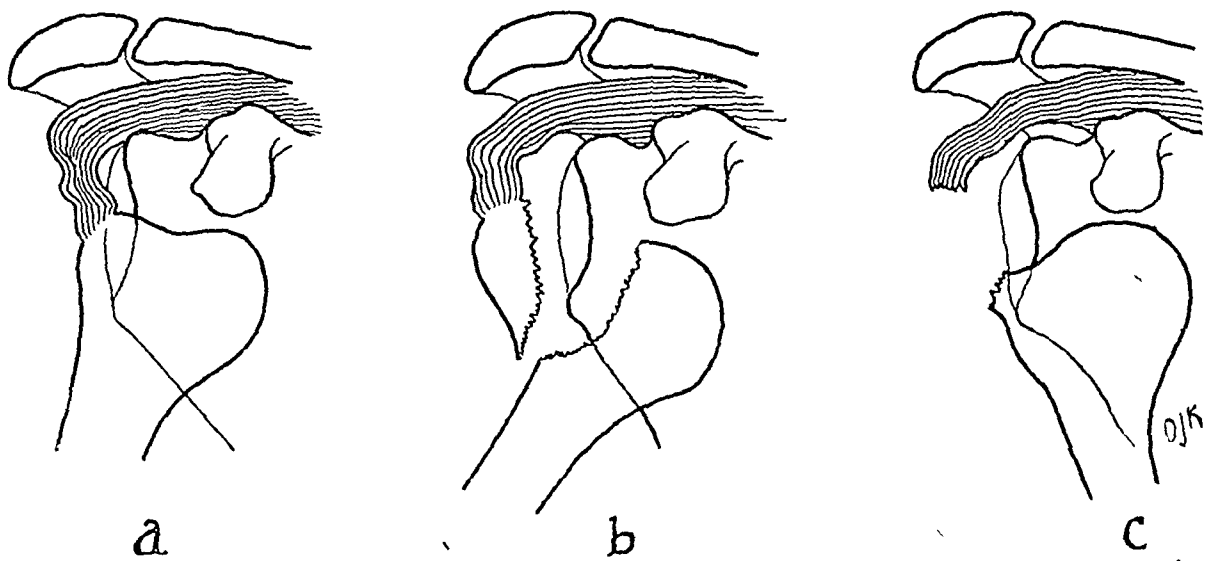


FIG 3 (a, b, c)—(a) Dislocation of shoulder (b) Dislocation with fracture of great tuberosity (c) Dislocation with avulsion of supraspinatus

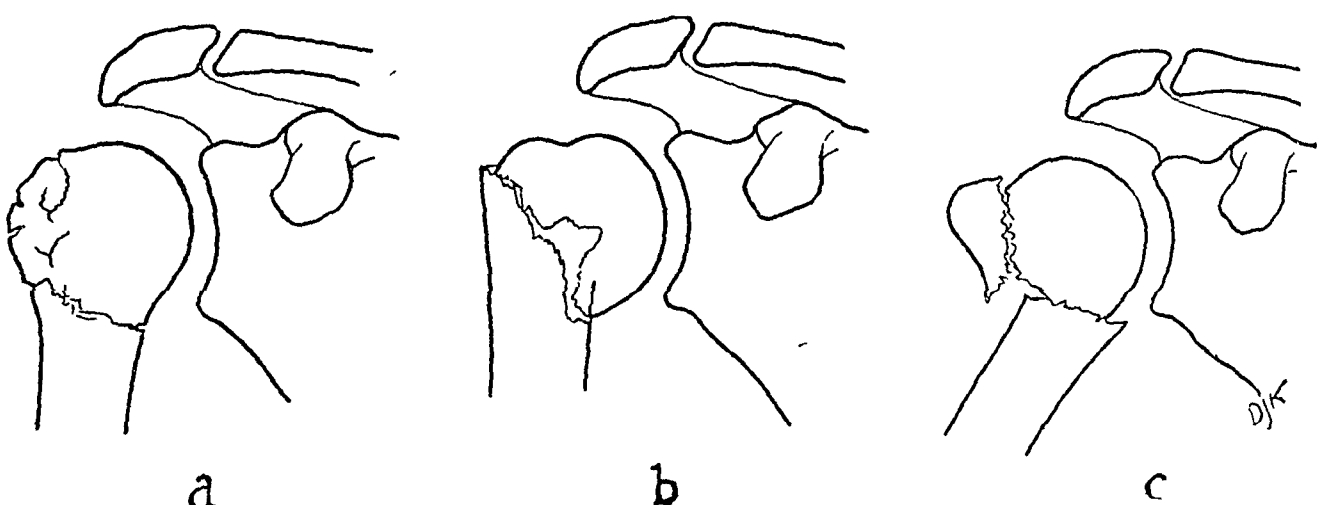


FIG 4—Three types of fracture of neck of humerus (a) contusion crack fracture, (b) adduction fracture, (c) abduction fracture

Movement must be recovered by the patient's own exercise Attempts to accelerate recovery by stretching the joint or by manipulating it under anaesthesia will have exactly the opposite effect to that which was intended

Fracture of the Neck of the Humerus

Three types of fracture must be distinguished (1) contusion crack fractures, (2) adduction fractures and (3) abduction fractures (Fig 4)

Contusion Crack Fractures—The injury follows a fall on the outer aspect of the shoulder and the crack across the neck of the humerus is often associated with a comminuted fracture of the tuberosity Complete immobilization is not necessary The limb should be supported in a sling for two or three weeks throughout which time the finger-, wrist- and elbow joints are exercised As soon as the swelling and bruising of the shoulder have begun to subside active exercises are practised

Adduction Fractures—These occur equally commonly in adults and in children, and the fragments are impacted in such a way that the shaft is adducted on the head If the displacement is not corrected abduction movement is permanently limited by a degree corresponding with the degree of angulation In elderly patients this is unimportant and the impaction should not be broken down by manipulation Treatment is carried out exactly as for contusion crack fractures In younger patients the displacement is reduced by traction on the limb in the abducted position so that the adduction angulation is corrected The limb is immobilized on a frame in right-angled abduction for four to five weeks

Abduction Fractures—It is a serious mistake to believe that every fracture of the upper end of the humerus should be treated in abduction Although an abduction frame is harmless or even advisable in adduction fractures it is the wrong treatment in most abduction fractures The shaft is already abducted on the head and an abduction frame will perpetuate or increase this displacement As a rule the displacement is not of serious degree and does not require manipulative reduction The limb is supported in a sling in the adducted position by the side of the trunk Movements of the finger wrist, and elbow are begun at once and shoulder exercises are instituted in two or three weeks

Very rarely the degree of abduction displacement at the time of injury is so extreme that the shaft is driven inwards beneath the head and completely detached from it There is now no apposition between the fractured surfaces, and the loose head is completely externally rotated and abducted by the unopposed pull of the muscles inserted into the tuberosity It may be possible to reduce the displacement by angulating the fragments on each other adducting the shaft across the chest, and pushing the upper end outwards by a hand in the axilla until the fractured surfaces engage The arm is then brought to the side and immobilized in that position for four weeks before active shoulder movements are begun

If the manipulation fails to secure engagement of the fractured surfaces the proximal fragment remains fully abducted and externally rotated It is now essential to abduct and externally rotate the distal fragment but recurrence of the original displacement must be prevented by maintaining constant traction An abduction fracture must never be treated in the abducted position unless continuous traction is applied and a special frame is employed Skin traction by adhesive strapping is all that is necessary Skeletal traction by olecranon pins should not be used The traction must be of sufficient degree to prevent inward displacement of the shaft below the head If this is not prevented the fragments will unite in this position and it will be impossible to bring the arm down to the side Frequent checking by radiographs is therefore necessary The frame is jointed so that elbow movements may be practised and the forearm wrist and finger joints must be regularly exercised

PREVENTION OF TUBERCULOSIS

NATIONAL CONFERENCE IN LONDON

The twenty fourth annual conference of the National Association for the Prevention of Tuberculosis was held last week at the British Medical Association House in London and was largely attended by delegates from local authorities and other public bodies The subjects of discussion included the organization of anti tuberculosis activities in rural areas the discovery and protection of contacts the control of tuberculosis in tropical and sub tropical regions (to which delegates from India and Tanganyika contributed), and the mental aspects of tuberculosis The conference was preceded by the annual meeting of one hundred affiliated care committees at which many suggestions were made for the employment of former tuberculous patients

The conference of which the Marchioness of Titchfield was president was opened by the Minister of Health Dr WALTER ELLIOT who quoted some statistics showing the great improvement which had taken place in the tuberculosis death rate since the middle of the nineteenth century The rate had now fallen to about one fifth of what it was then He also spoke of the multiplication of facilities for prevention and treatment In 1911 there were only some 5 000 or 6 000 beds in England and Wales available for tuberculosis cases to-day there were nearly 31 000 and nearly 150 000 persons were examined for the first time in English dispensaries last year The problem of rural housing to which he was giving personal attention was of great importance in tuberculosis prevention and the legislation passed last year for the provision of new houses and reconditioning of soundly built old cottages could be regarded as a notable contribution in this field

Tuberculosis in the Rural Areas

The first subject of discussion was the rural areas where said Dr G LISSANT COX in opening all the facilities for modern treatment isolation of infective cases with unsatisfactory home conditions education and preventive measures examination of contacts and so on ought to be available just as much as in the towns even though admittedly the tuberculosis incidence and mortality are lower in the country He stressed as of first importance co operation between the family doctor and the tuberculosis officer It was possible to measure in England at any rate the different degrees of this co operation not by notification of cases, but by the number of persons sent to the official doctor or consultant before notification for an opinion as to diagnosis In his own county (Lancashire) 92 per cent of all new cases were so dealt with Dr Lissant Cox discussed the organization of the dispensary and the institution unit in rural localities

Dr A M FRASER also stressed the importance of the general practitioner but questioned whether the general practitioner as he was turned out to-day was as well informed as he might be in these respects Post graduate training was of the utmost importance and facilities should be available to all doctors at certain intervals It seemed a pity that in the organization of postgraduate schemes for insurance practitioners local authorities were not given an opportunity to hold a stake so that the schemes could have been made more comprehensive and include an intensive study of tuberculosis

The administration of a tuberculosis scheme in rural Wales was described by Dr V EMRYS JONES Among other things, he mentioned that the inhabitants of North-West Wales—Dr Jones is tuberculosis officer for Anglesey and Carnarvonshire—were mainly a cultivated, well-read, and intelligent people, but highly fatalistic, and tending to regard tuberculosis more as a disgrace than a disease The "spes phthisica" or optimism of the tuberculous was not as evident among them as it was in their neighbours over the border The incidence of the disease was very high, the average annual rate for the last ten years being over 1,500 per million

Discovery and Protection of Contacts

In a discussion on the discovery and protection of contacts, over which Dr R A YOUNG presided, Dr G T HERBERT said that the perfunctory examination of a contact was of little value, and might even be harmful in giving a false sense of security A careful clinical inquiry must be supplemented by x-ray examination, at least screening, and usually by the taking of a film as well It was unlikely that a single examination would coincide with the date at which incipient disease first became recognizable and continued medical supervision seemed to be necessary, particularly during the susceptible age period He had discovered active tuberculosis at the thirty-seventh dispensary attendance of a contact first examined as a child some ten years before

Dr G S BANKS said that it was disappointing to have to acknowledge that even now the first introduction of the tuberculosis officer to a tuberculous household was obtained by the haphazard and variable route of the private doctor With a few exceptions—where, for instance, the doctor was swayed more by symptoms and perhaps by the knowledge of contact with an infective case in the household than by the chest signs—the average case of pulmonary tuberculosis sent to the centres was little less advanced than it was twenty years ago There should be a more general method of case-finding, a wider net should be cast All school children should be tested as a routine measure with tuberculin, and all who had reacted positively should be kept under observation by the tuberculosis officer, with whom the insurance practitioner should be associated, through the dangerous age periods of adolescence and young adult life

Dr C H C TOUSSAINT urged upon administrators and sanatorium superintendents the grave danger of returning sputum-positive cases to their homes after only comparatively short periods of treatment Prevention should be the basic policy of all the schemes, and too often prevention went by the board

Mental Aspects of Tuberculosis

At the final session of the conference an interesting discussion took place on the mental aspects of tuberculosis from the point of view both of the effect of tuberculosis on the mental life of the normal person and on the mentally disturbed patient Dr A J MORLAND asked whether people who got tuberculosis were any different mentally from those who did not Why was it that the child with pulmonary tuberculosis tended to be precocious in mind and adult in manner? It had been suggested, in explanation of the number of men of genius who had been tuberculous, that the bacterial poison could actually increase mental activity Much more likely was it that the possession of exceptional mental powers, which, as seen in writers and artists rather militated against a regulated and temperate existence, made a man more likely than his fellows to develop tuberculosis Perhaps Keats's trouble was due to the labour of his poetry superadded to the medical curriculum Again, a normal person was more adaptable to his surroundings In treatment the main problem was to get the patient to see his case in its proper perspective Many people when told they have tuberculosis start by being incredulous and refusing to accept so unpleasant a fact, others go to the opposite extreme regulate their rest hours to the exact second, and become so completely wrapped up in their symptoms and treatment that being a patient becomes their life work

Dr A W PETRIE gave an analysis of the type of major mental disorders occurring among 126 cases of tuberculosis in an institution for certified mental cases The manic-depressive type accounted for thirty-five, schizophrenia for thirty-five, and paranoid types for twenty-five It had been suggested that schizophrenia was in itself a manifestation of tuberculosis, but it was doubtful whether there was any aetiological connexion There was, however, no doubt as to a lowered resistance to tuberculosis in the case of schizophrenics, given exposure to the disease, a high proportion would contract tuberculosis There had also been shown a definite diminution of resistance to tuberculosis in the siblings of schizophrenics

On the other hand, Dr J BRANDER said that figures which he had been able to investigate showed that in reasonably favourable surroundings schizophrenics did not *develop tuberculosis in any striking degree, though their* susceptibility was suggested by the fact that six out of 106 patients submitted to pyrexial therapy by means of sulphur compounds developed pulmonary tuberculosis in fatal form within relatively short periods after the treatment In the hospital of which he was medical superintendent (Friern Hospital, formerly Colney Hatch) the post-mortem records showed tuberculosis in the middle of last century to have been the cause of death in the institution in between 40 and 50 per cent of cases At the beginning of the present century the tuberculosis death rate was 12 per cent and during the past ten years it had been 8 per cent Great changes in hygiene and improvements in dietary having taken place in the intervening period, it might be inferred that the old special susceptibility of the mentally ill to be victims of tuberculosis was a myth, and that the problem was merely one of hygiene, nevertheless he believed a certain liability persisted

Tuberculosis Death Rate in Mental Hospitals

SIR ROBERT ARMSTRONG JONES mentioned that the resident medical officer at Papworth had stated that the number of cases in that colony which had developed mental symptoms and had been sent to a mental hospital was only one in 500 over the course of twenty years At Claybury he had had experience of 16,000 insane persons, of whom 5 000 had died, and of these deaths over 800, or 16 per cent, were from tuberculosis Deaths from tuberculosis in mental hospitals had gone down enormously during the last ten years—from 6·6 to 4·5 per 1,000 patients resident In his experience at Claybury haemorrhage was very rarely seen in the tuberculous patient Both in insanity and in tuberculosis there was low resistance, also a tendency to run in families He regarded tuberculosis as a serious complication of insanity and almost, as a natural termination of chronic brain disease

Dr E RIST of Paris recalled that Laennec, writing about tuberculosis more than one hundred years ago, mentioned the importance of what he called the "sad passions meaning worry and anxiety Dr Rist had carried out a study of conjugal tuberculosis It was a striking fact that when one marriage partner was tuberculous the other rarely became so On the other hand when tuberculous husbands died or were removed to sanatoriums it was not infrequent for the widows or wives to develop tuberculosis, perhaps explainable on the ground of increased economic insecurity and responsibility for the children Dr NOEL D BARDSWELL commented upon the irritability and fussiness of sanatorium patients, though he thought this might be attributable to the segregation rather than to the disease for it was seen in other isolated colonies even of normal people

SIR PERCIVAL HARTLEY who presided said it had been claimed that just as the tubercle bacillus stimulated the

thermogenic centres and caused pyrexia so it could stimulate the higher centres to increased creative faculty It was worth remembering that Robert Louis Stevenson wrote or finished *Treasure Island* while a patient under strict regime at Davos and that John Addington Symonds did some of his best work while a patient at the same resort

The subject of the control of tuberculosis in tropical and subtropical regions was dealt with by Dr C WILCOCKS lately tuberculosis research officer to the Government of Tanganyika Territory Dr E COCHRANE of the Colonial Medical Service Major General E W C BRADFIELD of the Indian Medical Service and Dr N D BARDSWELL medical commissioner in Cyprus for the National Association for the Prevention of Tuberculosis and Professor LYLE CUMMINS discussed the general subject At the annual meeting of the National Association Dr W M MACPHAIL medical superintendent of Burrow Hill Sanatorium Colony gave a short address on the work carried out at the Colony

MENTAL WELFARE OF EX-SERVICE PATIENTS

A luncheon was given by the Ex-Services Welfare Society on July 1 at the Grosvenor Hotel following a medical conference at which the mental sequelae of head injuries sustained during the war were discussed Admiral Sir REGINALD TYRWHITT presided over the luncheon and Lord HORDER a vice president proposed the principal toast Lord Horder congratulated the Society on the work it was doing for ex service men he assured the Pressmen present that the Society was a good story In the medical sphere it was doing exactly the field work which was wanted *Laboratory research* was all very well but without observation of the patient medicine could not advance He quoted the remark of the great French physician Trousseau *Le malade toujours le malade*

Neurasthenia and Employment

Sir ADAIR HORE Permanent Secretary of the Ministry of Pensions in responding to the toast said that to-day the Ministry had 45 000 neurological cases on its books of these 29 000 were classed as neurasthenia and the remainder as mental cases some certifiable and others not epilepsies and other The original shell shock case had practically disappeared The cases of neurasthenia and other troubles such as were now encountered were in men whose mental and nervous balance was—to use a nautical metaphor—just on the Plimsoll line of safety In all treatment the occupational interest had been emphasized It was most desirable to take the patient out of the atmosphere of what had been called fireside gloom the besetting danger of the neurasthenic Sir Adair said that he wanted in the name of the Minister of Pensions to make one suggestion Great Britain had in its social system the biggest scheme of economic security yet evolved—namely social insurance of various kinds The experience of the Ministry was that the majority of the men remained within this system but a certain number tended to drift out of it and the neurological cases were the most likely so to drift If such a man got into intermittent employment he tended to lose confidence in himself It was very important to get hold of such men and if possible get them back into insurance at full benefit It was far better for such men to be in social insurance than for them to be in the insecure position of depending upon the success of an application for higher pension or for a grant from the Society A scheme had been devised in the Ministry for assisting these men to get back into social insurance

Mental Sequelae of Head Injuries

At the conference preceding the luncheon the general subject of discussion was the mental sequelae of head injuries Dr EDWARD MAPOTHER Professor of Psychiatry London University and chief consultant to the Society who presided addressed the conference at some length on this topic

Professor Mapother said that it seemed probable judging from the cases of head injury in civil life that the mental sequelae of head injuries in war had been underestimated by the Ministries of Pensions in this and other countries He proceeded to some speculations about the physical basis of those mental sequelae which were clearly organic Last summer he had analysed some 2 000 civil cases in which mental disorder of some degree was attributable to head injury These included both the cases in which the relation was psychogenic and those in which it was physiogenic Among the psychogenic cases the first group was the hysterical and the second what he called the affective cases those in which there was an outstanding deviation of mood related to the injury as an emotional experience The cases which unclassifiable had a physical basis fell from the psychiatrist's point of view into two main groups those in which there was a specialized mental disability of some kind with no general impairment and those with a generalized mental syndrome The first of these groups included conditions on the borderline between organic neurology and psychiatry It might be divided into two subgroups the first of which had a very good prognosis and the second a very bad The first included such conditions as apraxias agnosias and aphasias both motor and sensory also pure amnesia for current events There might be failure to distinguish the remote from the recent and the imaginary from what had been perceptual experience Such amnesia might coexist with perfect perception and comprehension good memory of recent events good association of ideas good reasoning insight and entirely normal conduct Such syndromes tended to clear up to a surprising degree though they might leave slight residues The second subgroup of specialized syndromes which had an exactly opposite prognosis included epilepsy epileptoid mental paroxysms and demoralization The second main group comprised of syndromes in which the mental disability was generalized In respect of these cases Dr Symonds had emphasized a principle of great importance not only for understanding them but for the theory of psychiatry in general—namely that during the progress towards normality after a head injury the mental state passed through a series of stages The total duration of mental abnormality might be an hour several months the halt which progress made at each stage was quite variable and any stage might be so protracted as to constitute a psychosis but the order remained always the same exactly the reverse order to what was observable in progressive mental disintegration due to artificial intoxication or artificial hypoglycaemia thus indicating that the syndromes or stages which could be discriminated depended upon the structure of the central nervous system and not upon the specific influence of any causal factor

Effect of Fracture of the Skull

After discussing the sequence of syndromes which seemed to correspond to stages of integration that normally succeeded one another in mental activity and describing mental activity itself as a selective balance of reciprocal activations and inhibitions between the cortex and sub-cortical centres Professor Mapother went on to point out that the degree of mental disturbance immediate or late had very important relations to the amount of damage to the skull A fracture might be present in a patient who had never been unconscious and had no subsequent mental complications On the other hand the worst results might occur in the absence of fracture Nor could all the mental complications be ascribed to haemorrhage of any kind He believed loss of consciousness to be due to disturbances of sub-cortical centres which were set up instantaneously at the moment of injury by general compression of the contents of the skull or by vibration Therefore despite the fact that it was disorder of the mental processes that was perceived it was a disturbance of basal centres that was primary The recovery of the lost ex followed according to the rule that functions involving the simpler and more primitive integrations came back first and those involving complex and more recent integrations returned last and were most apt to be left imperfect

In civil injuries, such as road traffic accidents, one commonly saw fissured fractures or comparatively localized depressed ones in war, smashing might occur by shell fragments spent bullets and high-velocity bullets fired very close It might be that the head injuries of war were less likely to start mental disturbances of the generalized organic kind because their effect was more commonly confined to the hemispheres and they were less likely to produce the instantaneous general compression of the contents which would damage basal centres Penetrating wounds by bullets of medium velocity need not be associated with loss of consciousness or retrograde amnesia, but many war wounds like those induced by a large fragment of shell or a blow on the head by a rifle butt, were liable to bring about results exactly comparable with those following civil injury

Representatives of the Services and the Ministry of Pensions participated in an informal discussion One point mentioned was that among the 200,000 people non-fatally injured in motor casualties a year the insurance companies reckoned that 4 per cent had a serious head injury There was general agreement as to the seriousness and the prevalence of minor nervous disabilities following head injury, and the opinion was expressed that many who did not have any gross breakdown were none the less incapacitated for their work owing to the injury, and that this incapacity increased as time went on

THE HUMAN SKIN

DR LEONARD WILLIAMS'S LECTURE

The thirteenth annual Macalister Lecture (in memory of Sir John Macalister, secretary of the Royal Society of Medicine) was delivered at the National Temperance Hospital on June 30 by Dr Leonard Williams The lecture was entitled 'This Mortal Coil, and in explanation Dr Williams reminded his audience that German commentators—good Shakespeareans—took the word "coil" to mean the shuffled-off skin of the snake The lecture was a provocative and delightful discourse on the skin—what Dr Williams called the largest organ of the body, and, with the exception of the brain, probably the most complicated

Physiology of Pigmentation

Those who took the trouble to trace the skin backwards in evolution, he said, could not fail to be struck by the aptitude with which Nature undertook its protection from the slings and arrows of outside attack But when the genus *Homo* was reached Nature seemed to have exhausted her protective expedients, for man had, even in individuals in whom it was most profuse only a meagre amount of hair and a capacity for producing pigment which in many cases was altogether insufficient, and it had to be remembered that from the point of view of protection hair and pigment were to some extent interchangeable

The question of capacity to produce pigment in response to solar stimulus was of great interest, and, in view of modern means of transport, was likely to grow in practical importance Why did the quite healthy young human being react so naturally to the wholesome stimulus of sunlight? The answer was not simple but it might be said that inasmuch as the laying on of colour in the skin was a physiological act demanding a great deal of energy, Nature would not undertake it except when she was obliged to do so for the preservation of the race The negro's black skin enabled him to thrive in any coloured man's country whereas in a white man's land that same black skin shut out the solar stimulus to which the negro was accustomed and to resist which he was properly equipped The real black was by no means happy in Southern Europe and in Aberdeen he was miserable not only because he could not make any money wherewith to get out but because there was insufficient sunshine to keep his physiological fires burning

Unfiltered Solar Rays

The cult of sunshine was by no means confined to nudist cranks The therapeutic value of the solar rays had been recognized for several generations What had not been recognized until comparatively recently was that, as in the case of most measures potent for good, the unfiltered rays were very potent for evil The anaemic children who were sent in shoals to the seaside every summer doubtless benefited enormously in the long run, by being subjected to the sunshine and other cosmic forces, but it was undoubtedly the case that in many instances the exposure was sudden and intensified when it should be gradual and partial The summer sun was very powerful in northern climates and it beat pitilessly upon the fully exposed skins of little children causing them to react by fever with nervous and intestinal symptoms which were usually attributed to eating raw fruit or something equally harmless Brunettes, though they might suffer in some measure, quickly acclimatized themselves by becoming swarthy, but the true blonde was seldom capable of offering effective resistance to solar onslaught If blondes in general, and especially blonde children, either were given a separate course of medicinal iron or were to increase their intake of iron-containing foods before the sun's rays became piercing there would be more harmless enjoyment of open air conditions

Compatibility of Odours

After its colour the most important attribute in the human skin was its odour, which might be very delicate and highly agreeable Undoubtedly said Dr Williams, the more delicate smells played an important though only partially recognized part in the life of the individual One succumbed to the magic of a gracious lady's charm even as she entered a room The element which decided the sympathy or antipathy in such cases was almost certainly the compatibility or otherwise of the body odours If that element could be operative in the case of perfect strangers, how much more certainly was it likely to operate in the case of married people and candidates for wedlock? Indeed it was high time means were invented for classifying people's bodily odours much as their blood groups were classified so that that powerful factor in the suitability of two people for marriage might be accorded the place it deserved In the matter of heavy odours as opposed to the delicate no serious student of the subject could be found to deny that odours irradiated from the human skin had a Freudian significance There was really no escaping the fact that the human skin was intended by Nature to be odoriferous, the odour being intensified or decreased according to the stage of life

The Facial Skin as a Record

After a brief reference to the other important functions of the skin, Dr Leonard Williams concluded by urging his audience to bear in mind that both stimuli and their reactions left a record on the skin which was not only indelible but progressive In spite of the masks which people opposed to the outside world there was nothing so revealing as the skin on a person's face—its colour, its texture, and the folds and fissures into which it was drawn by the individual's indulgences, sufferings, and emotions The skin of the face came to carry a merciless record, not only of the gross material side of existence but of the more subtle thoughts By middle age Nature had stamped upon the features the outcome of her past struggles Indeed 'the mortal coil" resembled a scroll bearing the record of the fate of the talents with which an individual had been entrusted—which of them had been used, which misused, where the individual had conquered and where faltered and, perchance, fallen

On the motion of Mr Herbert Paterson seconded by Dr H Sanguinetti Dr Williams was accorded a most hearty vote of thanks for his stimulating lecture

EXCHANGE HOLIDAY VISITS WITH FRENCH DOCTORS

We have received particulars of a scheme for improvement in the knowledge of and the relationship between the English and French peoples Few will disagree that in these times a better knowledge and understanding between our two peoples is much to be desired and in this members of the medical profession can play their part

The Scheme Outlined

Briefly the idea is that an English doctor is put into touch with a French doctor of corresponding age and position with a view to exchanging holiday visits as guests in each other's homes thus avoiding hotel and other incidental expenses which are such a costly item to the visitor abroad At the same time the visitor has in his host a reliable guide to the country The community of interest between guest and host will it is considered add to the interest of the holiday and mitigate to a large extent the difficulties where such may exist of the two languages

The organizers of the scheme have arranged with the railways on both sides of the Channel for a 40 per cent reduction in the ordinary fares to be given for the journey throughout thus reducing what is in effect almost the only cost to the visitor apart from pocket money This 40 per cent reduction also applies to wives and children

The idea is not restricted to the medical profession but is open to all the community of vocation hobby or denomination being the key to the contact established between the opposite numbers In practice the scheme operates in the following manner

An English or French secretary acting for his profession establishes a list of applicants desirous of exchanging visits with a colleague in the other country From these lists the secretaries choose to the best of their ability a suitable opposite number in each country The applicants so paired are put into touch with each other and left to make their own arrangements When dates of the visits have been decided the applicants obtain from the secretary in their own country an eligibility voucher entitling them to a ticket to their destination at a reduction of 40 per cent on the ordinary fares The visitor will be met at the foreign station by his or her host and henceforth all residential expenses will be defrayed by the host on the explicit understanding that the latter will meet with reciprocal treatment when he or she in turn becomes a visitor and guest in the other country

Information from Applicants

The scheme has already been put into practice with much success for members of various occupations The organizers will be pleased to hear from any doctors in this country who would like to take advantage of the scheme Applicants are requested to state in their letter

1 Their age

2 The desired duration of their holiday abroad with approximate dates

3 The part or parts of the foreign country (including Algeria) which they particularly want to see

4 Their willingness at the end of their holiday to return the hospitality of their host for a like period and at a mutually convenient time at their own house with approximate dates for receiving the visitor

5 The places of local interest which they can show their visitor on the occasion of the return visit or generally the way in which they propose to entertain their visitors

Letters of application should be addressed to Mr D Woodman Anglo French Exchanges Committee 27 Euston Square London N W 1

CORPORAL PUNISHMENT

Under the auspices of the Howard League for Penal Reform (Parliament Mansions Victoria Street S W 1) the letter printed below has been addressed to Sir Samuel Hoare Secretary of State for the Home Department It is signed by men and women prominent in public life and in various professions The medical signatories are Dr Alfred Salter M P Dr Havelock Ellis Lady Barrett Mr C J Bond Dr A Helen Boyle Dr William Brown Dr C L C Burns Sir William Collins Dr Ralph H Crowley Dr Letitia Fairfield Dr Kate Fraser (medical commissioner for the General Board of Control for Scotland) Dr Edward Glover Dr Thomas S Good Dr R G Gordon Mr Somerville Hastings Professor D K Henderson Dr E T Jensen Dr William Moodie Dr J R Rees Dr Jane Walker and Dr T Drummond Shiels

Letter to the Home Secretary

Three years ago we signed a letter to the then Home Secretary appealing for an inquiry into the question of corporal punishment Some of the signatories to that letter held that corporal punishment under the criminal law could not be justified on any grounds others that it could only be justified if it were proved to be essential for the protection of society

The recently published report of the Departmental Committee on Corporal Punishment has proved conclusively that it affords no better protection to society than other forms of punishment The only possible argument for its continuance therefore falls to the ground To maintain it in these circumstances implies the acceptance of deliberately imposed suffering that serves no useful purpose Such attitude is we believe foreign to the whole spirit of our penal code

We recognize with gratitude that you your self are following in the traditions of the penal reformers who believed in reformation rather than retribution We therefore confidently appeal to you to implement the recommendations of the Departmental Committee at the earliest possible date

LIFE ASSURANCE MEDICAL CONGRESS

The next International Congress on Life Assurance Medicine will be held in Paris from May 18 to 21 1939 under the patronage of the Minister of Public Health The honorary presidents are Dr P Hornig (Berlin) and Sir Walter Langdon Brown (London) The chairman is Professor M Loeper of Paris and the general secretary Dr P A Carrie 8 rue de Bellov Paris XVI The following subjects in relation to life insurance will be discussed (1) pulmonary tuberculosis (2) hyperthyroidism (3) obesity (4) addiction to tobacco (5) albuminuria and (6) the value of statistics The contribution for members of the congress who must be medical practitioners engaged whole or part time in life assurance work is fixed at 200 francs each may be accompanied by one person paying 100 francs These payments give the right to the banquet the evening parties and excursions and (for members) to a full report of the congress

The second session of the International Congress of Anthropological and Ethnological Sciences will be held in Copenhagen from August 1 to 6 under the patronage of the King of Denmark and Iceland The scientific meetings will be held at the University Seven sections have been organized physical anthropology psychology demography ethnology ethnography sociology and religion linguistics and writing The congress will be followed by a three-days excursion to places of historical interest in Denmark Arrangements for travel and hotel accommodation are in the hands of Wagon lits Cook (Thomas Cook and Son) other communications should be sent to the Secretary General of the Congress Nationalmuseet 10 Ny Vestergade Copenhagen K

Reports of Societies

CLINICAL PATHOLOGY

The summer meeting of the Association of Clinical Pathologists was held at the Nuffield Institute, Oxford, on June 25 The chair was taken by Dr A G GIBSON and more than seventy members and guests were present The special discussion on the technique of medico-legal post-mortem examinations was opened by Sir BERNARD SPILSBURY

Medico-legal Necropsies

Sir Bernard Spilsbury pointed out the importance in every case of a thorough examination of the organs of the head, neck, chest, and abdomen He referred also to conditions which rendered it necessary to examine other parts of the body, and laid emphasis on external inspection as an important part of the examination He described methods of recording injuries and of searching for hidden bruises by incision of the skin The routine method of removal of the organs, ensuring that no important structure was overlooked, might have to be modified to meet special requirements—for example, in infants he removed in one mass all the structures from the floor of the mouth to the pelvis A special dissection of the neck might be required in cases of strangulation or cut throat It was important to open up the heart while it was still attached to the lungs and to open the intestines from end to end, noting the character and distribution of their contents Finally he described the method of removal in one mass of the pelvic organs and their examination in cases such as those of abortion

Use of Fresh Preparations

Dr A H T ROBB-SMITH read a paper on the use of fresh preparations in post-mortem work He illustrated the value of these preparations in the identification of fat emboli, of pigments, and of deposits in the kidneys For the recognition of fat emboli a small snippet of lung tissue was placed on a slide, moistened with 2 per cent potassium hydroxide, and examined with a partially closed condenser diaphragm after the application of a cover-slip The pulmonary tissue was rendered transparent though the elastic fibres were not dissolved The fat was seen lying in the alveolar capillaries, either as cylinders or as droplets radiating in a fan-shaped manner The fat could be distinguished from air bubbles, since the latter had a broad dark rim with a bright centre, whereas the fat was uniformly colourless to the edge of the globule The application to fresh specimens of reagents such as acids alkalis, hydrogen peroxide, and silver nitrate enabled a distinction to be made between haemosiderin, haematoidin malarial pigment, and melanin These methods might be used also for the identification of small deposits in the pyramids of the kidney These might consist of bilirubin, acid sodium urate, sodium biurate, or calcium carbonate Bilirubin infarcts could be recognized by the characteristic rhombic or fine needle crystals and by Gmelin's reaction This was carried out by rinsing thin slices of the kidney in weak potassium hydrate then applying a cover-slip, and placing a drop of strong nitric acid at one side and drawing the solutions through with blotting paper, the bilirubin deposits changed colour from green through red to blue Uric acid infarcts had usually an amorphous form and were soluble in dilute acids without the formation of gas calcium carbonate infarcts could be recognized by the formation of needle-shaped calcium sulphate crystals on the application of strong sulphuric acid or of calcium oxalate crystals after the addition of hydrochloric acid and ammonium oxalate They were also soluble in hydrochloric acid with the evolution of carbon dioxide Gouty deposits of sodium biurate were identified by their characteristic crystalline form Dr Robb-Smith did not advocate the use of unfixed frozen sections, as these seldom supplied information which could not be obtained from a careful observation of the gross characters of the organ

Status Lymphaticus

Dr E WORDLEY opened a discussion on the subject of status thymico lymphaticus He mentioned that the older textbooks on pathology were quite definite in their descriptions of a condition characterized by enlargement of the thymus and lymphoid tissues and associated with sudden heart failure and death They accepted the association between such post-mortem findings and sudden death without any reservations, except to say that it was difficult to explain exactly how and why death occurred He then briefly discussed the findings of a joint committee on status lymphaticus, which came to the conclusion that an enlarged thymus in itself could not be considered as indicating status lymphaticus, and that there was no definite evidence of general hyperplasia of lymphoid structures in cases with an abnormally large thymus Dr Wordley then discussed seven cases in which the original criteria justifying a diagnosis of status lymphaticus were all present He gave certain figures which seemed to indicate that some cases showed an abnormal proportion of lymphocytes in films made from blood taken post mortem and suggested that this point might be further investigated He himself was inclined to the view that a diagnosis of status lymphaticus as the cause of death was justified in a limited number of cases

In the discussion which followed the general feeling of the meeting was that sudden death after comparatively trifling causes was often found in individuals with an enlargement of the thymus and lymphatic glands and hypoplasia of the circulatory system It was thought that it would be helpful if some scientific body, such as the Association of Clinical Pathologists, were to undertake a combined investigation of the cause of death in these cases and make recommendations as to nomenclature It was decided to refer the question to the Council of the Association

Before the scientific meeting at the Nuffield Institute a demonstration was arranged in the pathology department of the Radcliffe Infirmary Here Dr J G GREENFIELD demonstrated his method of removing the brain and spinal cord Dr A H T ROBB SMITH showed Graff's technique for removing the upper air passages and pharynx and Dr A G SHERA exhibited an electric rotary saw for the removal of the skull cap and exposure of the spinal cord in post mortem work

---

A meeting of the North of England Obstetrical and Gynaecological Society was held in Newcastle on June 17 Dr W R ADDIS (Manchester) described two cases of pseudo myxoma of the peritoneum with lesions in the appendix Mr ST GEORGE WILSON (Liverpool) gave an account of a case of carcinoma of the vagina secondary to carcinoma of the colon Professor FARQUHAR MURRAY (Newcastle) discussed a case of a large sloughing fibroid in a nulliparous woman associated with cellulitis and bilateral white-leg and detailed the operative treatment of a case of absence of the vagina in a girl aged 13 Dr C G PAIN (Sheffield) showed a film, *White Cells in Action* of the movement of normal leucocytes and the phagocytosing of streptococci

Local News

SCOTLAND

University of Glasgow

At the commemoration day graduation ceremony of the University of Glasgow on June 22 the Principal Sir Hector Hetherington conferred honorary degrees upon sixteen recipients of whom one Professor Matthew John Stewart is a member of the medical profession Professor Stewart graduated M B Ch B at Glasgow in 1907 and is professor of pathology in the University of Leeds and pathologist to Leeds General Infirmary He is a member of the Medical Research Council and has published various studies on pathological subjects including gastric ulcer, the cellular reactions induced by cholesterin deposits and sacro-coccygeal chordoma

Royal (Dick) Veterinary College

At the annual prize giving of the Royal (Dick) Veterinary College Edinburgh on June 27 Lord Rosebery who presented the prizes said that veterinary science was doing an enormous amount of work to ameliorate the condition of animals in this country and to help their owners He announced that the Totalisator Board which distributed a certain amount of money for purposes apart from racing had given £1 000 towards this College and the Board had also given £1 000 towards research work in connexion with grass sickness in horses The chairman Sir Thomas Hudson Beare in a short review of the work of the College during the session referred to the death of Dr Charnock Bradley the late principal who had guided its destinies for over a quarter of a century His final illness had been largely due to overstrain and overwork and the governors had decided that the new principal when appointed should be freed from teaching work He hoped within about a week to be able to announce the new principal and the new professor of anatomy

St Andrews University

At the graduation ceremony on June 30 of the University of St Andrews the Vice Chancellor Sir James C Irvine conferred the degree of LL D upon five recipients including one member of the medical profession Professor E D Adrian F R S of the Chair of Physiology in the University of Cambridge Professor Blyth Webster in presenting Professor Adrian for the degree said that he was a graduate of Cambridge Oxford Harvard and McGill and had done valuable work on the physiology of nerve and the integrative action of the nervous system By experimental work of unusual delicacy he had brought the complexities of this subject within the range of analysis for which in 1932 he had been awarded jointly with Sir Charles Sherrington the Nobel Prize in physiology and medicine Since the foundation of the Nobel Prize in 1901 out of more than eighty awards about a quarter had gone to scientific men in Britain and it was a rarer honour that both awards in the same field should have fallen to this country in one year

At the same ceremony Professor Gordon Campbell was installed in the Chair of Dental Surgery being the first professor of dental surgery in Scotland The Vice Chancellor said that the foundation of this chair was the culmination of long years of patient effort and thanks to the generosity of some public citizens in Dundee and to the enthusiasm of a group of able dental practitioners in that city the Dundee Dental Hospital had come into being and had presented an opportunity for the University to join in the new movement which had resulted in the present satisfactory position Special thanks were due to Mr William Boyd whose liberal endowment had enabled them to found this chair Twelve diplomas in Dental Surgery and two in Public Dentistry were afterwards conferred by the Vice Chancellor the recipients being the first University graduates in this department in Scotland The number who received the degrees of M B Ch B was forty six while two received the M D

ENGLAND AND WALES

The Minister of Health at Sheffield

Dr Walter Elliot Minister of Health visited Sheffield last week to open the Firth Park Maternity and Child Welfare Centre and the Coisley Hill Sewage Works which have been provided by the corporation At the opening of the new sewage works he said that the ideal of sewage engineers meant that the rivers of the country should receive only what was right to flow down them to the sea We were recovering though slowly to day from one of the worst features of the industrial revolution—namely the throwing into our rivers of untreated waste products of all kinds Purification of sewage by helping to clean our rivers was part of a bigger thing—that of preserving the countryside of being a good neighbour of preserving health and of doing what was right If everybody showed the same care and was as up to date as the Corporation of Sheffield and its ally the Chesterfield Rural District Council much more would be done to make our rivers clean Nothing could be more beautiful than a beautiful river and nothing could be more loathsome than a river which was foul polluted and dead At the opening of the maternity and child welfare clinic Dr Elliot referred to the decline in the infant mortality rate per 1 000 live births from 136 in 1885 to 58 in 1937 and to the recent decline in the maternal mortality rate The problem of maternal mortality still required however to be attacked in every possible way and much was to be expected from the recent Midwives Act and from the steps which his Department had taken following the publication last year of a report on a series of intensive investigations by medical officers of the Ministry Team work was the keynote of the attack The Firth Park Clinic marked in Sheffield the beginning of a scheme of decentralization and he commended this example to other local authorities Clinics should be established in the outlying parts of big towns so that the entire population could be served It was vital that when health services had been provided the people should be told of their existence and he congratulated the Sheffield Corporation on the efficient manner in which it had joined in the recent public health campaign and had told the people of Sheffield in no uncertain manner what it was doing for them

After care Work of the Merseyside Hospitals Council

The headquarters in Lord Street Liverpool of the Merseyside Hospitals Council is the centre of a department concerned solely with the transfer of patients from hospitals to convalescent homes and with the allied aspects of after care There is an all too prevalent impression that the work of the Council begins and ends with the penny in the pound scheme That is a vital part of its work and is the foundation of and largely the justification of its existence But it is not the whole story The Council has a variety of co ordinated activities and this after-care department is one of them Established eleven years ago it is a closely knit piece of organization doing its own specific work as an integral part of the entire activities of the local group of thirty hospitals After care has a much wider application than convalescent home treatment and it is through the work of the department's visitors to the homes of the patients—skilled and sympathetic full time social service workers—that the full

possibilities of after-care are realized These home visitors, many of whom have made a close study of social science, divide much of their time between the hospitals and the homes of the patients Their services are in constant demand, and the information they gather becomes the basis of action by the department in the way of arranging for convalescent home accommodation, or in some other way supplying the urgent needs of those who have just passed through hospital wards and are fit subjects for some form of after-care In this work of mercy medical men hospital matrons sisters and nurses co operate with the department's visitors

Health Congress at Portsmouth

Nearly fifty papers and addresses will be read and discussed during the week of the Health Congress, which opens at Portsmouth on Monday next In the section of architecture, town planning, and engineering, over which Sir Raymond Unwin presides, town planning and the safeguarding of public water supplies will be discussed Air raid precautions will be dealt with in the conference of representatives of local authorities, and in connexion with this discussion a mimic air raid has been arranged for Wednesday evening, July 13, in which the full A R P organization of the city will be seen in action Among other subjects to be discussed are rheumatism, introduced by Lord Horder, the future of the general hospital, the Food and Drugs Bill, defects found in school entrants, meat inspection, and health propaganda among natives in the Tropics During the week a Health Exhibition is being held in the Connaught Drill Hall As recorded in the *Journal* of June 25 (p 1373), the Duchess of Gloucester opened an exhibition at the Imperial Institute a short time ago of more than 200 photographs illustrating progress and activity in Kenya A supplementary series of photographs deals with some aspects of the work of the Medical Department in Kenya with special reference to the part played by Africans These photographs will be on view in Portsmouth next week at the Health Exhibition of the Royal Sanitary Institute

Welsh National Institute of Radiotherapy

The chairman of the Welsh Board of Health on June 23 convened a conference, which was attended by representatives of county councils, county boroughs, and boroughs in South Wales, and of the Welsh School of Medicine and the large hospitals, to discuss a proposal to establish a Welsh National Institute of Radiotherapy to serve the whole of South Wales The proposal is stated to have the approval of the National Radium Commission During the discussion on the scheme Sir Ewen Maclean mentioned that the Miners Welfare Fund of South Wales had donated £5,000 towards the project and the Cardiff Royal Infirmary had announced its readiness to give £15,000 from its Centenary Fund Appeal

Conditions of Nursing Service

The Interdepartmental Committee on Nursing Services which with Lord Athlone as its chairman, is investigating conditions of service in the nursing profession, is issuing a questionary to all hospitals The object of this is to obtain statistics for the country as a whole on such matters as the hours nurses have to work, the salaries they receive, and the length of their annual holidays This is the most comprehensive survey of the kind ever undertaken in this country the committee which has been receiving evidence from various bodies and associations since last January has found that its consideration of several important problems has been seriously handicapped by the lack of any general statistics Other matters dealt with in the questionary are the numbers of nurses of the various grades employed by each hospital the arrangements in operation for the training of probationers and the reasons which cause so many probationers to leave the nursing profession during their first years in the service

Correspondence

Uterine Rupture following Caesarean Section

SIR —The paper on "Uterine Rupture following Caesarean Section" by Mr C E B Rickards (*Journal* June 25, p 1359) is timely and instructive For better or for worse, Caesarean sections are being performed more frequently each year, and this late complication of the operation consequently becomes a more and more common emergency of obstetric practice

Mr Rickards quotes Eardley Holland as saying that 4 per cent of Caesarean section scars rupture during a subsequent pregnancy or labour, and this figure is now also quoted in various textbooks of obstetrics The statement is taken from Holland's analysis of the after-results of 1,605 cases of Caesarean section, published in 1921 (*J Obstet Gynaec Brit Emp* 28, 488) but, as so often happens, the sentence taken from its context is misleading and has caused many people to underestimate the frequency of this accident

The following is an abbreviated table taken from the article in question

Delivery by natural passages	78 cases
Repeated Caesarean section	352 "
Rupture of the scar	18 "

It will be seen that out of the 448 cases listed there were eighteen ruptures, which is the origin of the "4 per cent so often quoted But a little consideration will show that this figure is easily misinterpreted The majority of women in this group were subjected to a repetition of the Caesarean section (presumably before the onset of labour) and were therefore deprived of the best opportunity of rupturing their scars On the other hand, it would be equally fallacious to say that eighteen women ruptured their scars out of the seventy-eight who were delivered by the natural passages for many of the ruptures may have occurred *before* labour, and the number would therefore be artificially loaded by cases which should, in a sense, belong more rightly to the 'repeated Caesarean section" group

In short, although 4 per cent represents the proportion of women who did in fact suffer from rupture of the uterus, this figure does not represent the percentage of women who would rupture the uterus were their pregnancy allowed to go to term and to end in natural labour the actual number of ruptures can be counted, but it is impossible to find a denominator by which the real frequency of the accident may be estimated There is little doubt that the figure of 4 per cent seriously underestimates the average risk which a woman runs of rupturing her uterus during subsequent pregnancy and labour after a classical Caesarean section —I am, etc,

CHASSAR MOIR

Department of Obstetrics and Gynaecology, University of Oxford July 4

When to Start Sulphonamide Treatment in Gonorrhoea

SIR —The published results of sulphonamide treatment justify a hope that in this group of remedies may eventually be found the "606" of gonorrhoea, but it seems possible that at first their misuse may lead to an increase in its incidence As everyone with experience of this form of treatment knows, in a large number of cases of acute gonorrhoea it causes a rapid cessation of discharge, which leads the patient to believe that he has been cured

Unfortunately in a certain proportion of cases when the treatment is stopped the discharge returns as profusely as ever In such cases after resumption of treatment the same thing may be repeated a number of times and eventually the duration of the attack may be found to have been longer than it would probably have been under ordinary treatment It seems not unlikely also that when the treatment has to be resumed a number of times on account of relapse the germ may become sulphonamide resistant Further in one of the periods when such a patient sees no discharge he is apt to resume sexual intercourse, passing on the disease to his consort

For these reasons alone it seems to be most desirable that there should be agreement among practitioners as to the method of using the sulphonamide remedies which will result in the minimum of relapses after the administration of such an amount as causes the least possible proportion of toxic effects and in this connexion the point in the course of the disease at which the treatment should be started seems to be particularly important

In a discussion on sulphonamide treatment of gonorrhoea which was opened by Dr Hanschell at a meeting of the Medical Society for the Study of Venereal Diseases in October 1937 I drew attention to the views of H Felke (1937) to the effect that treatment with the sulphonamide preparation 'uleron ought not to be started for at least two weeks after the attack began otherwise the result would be indifferent He considered that in order to obtain the best effect of the remedy the tissues should have acquired some of that resistance to the gonococcus which we know is essential to natural recovery Felke's views seem to me to be supported by results previously reported by Grutz (1937) with the same remedy, and further evidence to the same effect has been afforded by other German workers notably Fischer (1937) and Schreus (1937) The latter worker recommends in fresh cases that the patient be prepared for the sulphonamide treatment by administration of gonococcal vaccine during the first six days treatment with uleron being started on the tenth My own experience with uleron here and recently in Jamaica in collaboration with Dr S E Ferreira the Island V D O supports the view that if one will wait until the attack is at least three weeks old before starting treatment comparatively little uleron (four or five days treatment) brings the attack to an end in the majority of cases, and toxic effects are very few

Using another sulphonamide remedy sulfanilamide (which appears chemically to be the same as the preparations known as sulphanilamide and prontosil album in this country) Herrold (1937) in the U S A doubted if more than one-third of acute cases would be cured in one to three weeks with even maximum doses but believed that two thirds of the chronic cases would be cured in two to four weeks with moderate doses Van Slyke Thayer and Mahoney (1937) also in a recent paper have reported results which seem to show the advantage of waiting Counting as acute all cases with infections of less than twenty eight days duration and as chronic those with infections older than this with given amounts of treatment with sulphanilamide they had fifteen failures in sixty three acute cases and only one in thirty six chronic ones

On the strength of this evidence I suggest that it is better in all cases to wait until the attack has lasted three weeks before starting treatment with any of these remedies In this period very few men indeed would indulge in sexual intercourse and the greater certainty of cure out of hand when the treatment is started then makes it possible that universal adoption of a rule to wait as suggested would result in a reduction of the incidence of fresh infections I am encouraged to hope that I may be supported in this recommendation by the knowledge that some directors of clinics in this country have already adopted such a rule I have brought the matter forward at this stage in the hope of provoking such discussion as will give practitioners clear guidance on the best method of using a very valuable group of remedies

May I add that I think that the present chemotherapy is likely to fail in any case where the local drainage is defective—I am etc

London S W 1 July 1 L W HARRISON

REFERENCES

Felke H (1937) *Dtsch med Wschr* 63 [illegible]
Fischer C (1937) *Forschr d Therap* 13 [illegible]
Grutz O (1937) *Munch med Wschr* 84 [illegible]
Hanschell H M (1938) *Brit J vener Dis* 14 [illegible]
Herrold R D (1937) *Urol cutan Rev* 41 [illegible]
Schreus H Th (1937) *Arch klin Chir* 24 [illegible]
Van Slyke C J Thayer J D and Mahoney J F (1937) *Dis Intoxication* 18 [illegible]

Sulphanilamide Treatment of Gonorrhoea

SIR—I should like to allude briefly to four cases illustrative of two conditions which in my opinion have resulted from the sulphanilamide treatment of acute gonococcal urethritis In each case following the accepted administration of sulphanilamide tablets with suitable local therapy the urethral discharge dried up and the urine became clear by the tenth day After a further fourteen days of local treatment only all four patients were untreated for fourteen days At the end of this time prostatic smears were examined In two of the cases there was a slight bogginess of the right lobe of the prostate which subsided with massage and the smears showed pus epithelial cells and well formed gonococci occurring both intra and extra-cellularly These tests have been repeated on several occasions during the past four weeks with very similar results and at no time has there been any reappearance of urethral discharge or haziness of the urine Such a finding would suggest prostatic latency the dangers of which cannot be overestimated

Dr A E W MacLachlan director of the Newcastle upon Tyne clinic mentioned this tendency early in 1937 in correspondence and will shortly be publishing a full account of his observations The other two cases having undergone varied provocative measures satisfactorily were provisionally discharged and told to report again in six weeks time Both returned within thirty six hours with evidence of a slight muco purulent urethral discharge and a slightly hazy first urine with threads The smear test showed a few epithelial cells fairly numerous pus cells and extracellular gonococci in large numbers I did not consider the possibility of a newly acquired infection in either case because the average incubation period in this area is five days and I have never known it to be less than two days After washing out the urethra with a weak silver solution a urethroscopic examination revealed a definite cystic littritis This had obviously existed without giving rise to the usual signs and despite provocative instrumentation it may therefore be referred to as a latent littritis

The moral would appear to be that it is most essential to examine prostatic smears repeatedly and to carry out routine urethroscopy in all cases even where there are no definite indications for such procedures The risk is infinitely better than being lulled into a false sense of security by the 'apparently dramatic cure I am

W GILLIES ANNAN F R C S
Clinical Surgical Officer
Durham Infirmary

Durham June 14

Sulphanilamide in Staphylococcal Skin Infections

SIR,—It would seem to be generally held that sulphanilamide is of little or no value in the treatment of staphylococcal infections in man, though laboratory work has shown that, in mice, the drug has some slight protective action. This unfavourable view must obviously be based on good clinical evidence, but inasmuch as this evidence may perhaps be drawn from the more serious and late cases that are treated in hospital, it appeared to me worth while to try the drug in some of the common staphylococcal infections of the skin which in the first place at all events, are seen by the general practitioner. The results in a small first series of cases are given below, and may be tentatively summarized by saying that in multiple lesions such as Bockhart's impetigo sycosis barbae, pustulous acne, and multiple boils the drug had no effect. When the infection however, was a localized one, as in carbuncles, solitary boils furuncles of the nose or of the external auditory meatus, styes, or whitlows, the results were often astonishingly good. Provided that the drug was given early before necrosis had occurred, it was surprising to see how quickly resolution took place. Boils furuncles, and whitlows generally healed in about three days and carbuncles in about seven to ten days. Where some days had elapsed before treatment was started the lesions invariably ran their natural course.

The results were particularly gratifying in infections of the upper lip, in the few cases in this series it was remarkable to observe the rapidity with which pain and swelling disappeared and to note the almost imperceptible scar that was left. Equally good results even in diabetic patients, were obtained in boils and carbuncles of other parts of the body. Furuncles were quickly aborted, and subcutaneous abscesses, after incision healed more quickly. Three patients were treated for chronic whitlows—pain, tenderness, and slight redness and swelling having existed for some three to four weeks—and all cleared up in a few days on sulphanilamide.

The dosage generally used was 1·5 to 2·0 grammes daily by mouth in tablet form. If an improvement was not manifest within a day or two no benefit was seen to result from larger or long-continued doses. Cyanosis was not observed but other of the well-known toxic symptoms were occasionally complained of; these were intense weakness, palpitation, diarrhoea or constipation, and were sometimes severe enough to make it necessary to stop the administration of the drug. The table above sets out the results in a first series of cases. They are described as good when resolution was more rapid than previous experience would have led one to expect and when there was less scarring than usual. A second and larger series is being collected, which too, so far seems to justify the more extended use of sulphanilamide in certain staphylococcal infections of the skin.

Condition	No. of Cases	Results	
		Good	Failed or Doubtful
Boils (including 2 of upper lip)	22	18	4
Bockhart's impetigo	3	0	3
Furuncles (of nose 3, of ear 3)	6	6	0
Styes	6	4	2
Carbuncles (upper lip 1, neck 3, thigh 1, chin 1)	6	5	1
Whitlows (acute 3, chronic 3)	6	6	0
Infections of hand and foot	4	2	2
Subcutaneous abscesses	3	3	0
Abscess of breast	2	0	2
Sycosis barbae	3	0	3
Acne pustulosa	1	0	1
Total	62	44	18

Some of the patients in this series were treated with Messrs. Bayer's brand of sulphanilamide—prontosil album—for a generous trial supply of which I should like to express my thanks. The rest were given sulphanilamide made by other well-known firms.

—I am, etc.,

London, E.1, June 27 M. MARCUS

The Origin of Cancer

SIR,—In a letter in the *Journal* of June 25 (p. 1394) Surgeon Rear-Admiral Charles M. Beadnell avers that my statement in a previous letter—that conjugation occurs among the cells of malignant growths—requires correction. He goes on to say on the authority of Dr. W. E. Gye that conjugation of cancer cells "is no longer believed in." My authority for stating that conjugation occurs among the cells of malignant growths is the first scientific report of the Cancer Research Fund published in 1904. There in an unsigned article which I learnt from other sources was the work of *Bashford*, the following clear description of the observed phenomenon appears. They were studying nuclear changes in young transplanted mouse epithelioma (p. 31):

'In one case towards the end of the first week nuclei are found which are drawn out into blunt finger like processes as if amoeboid (Fig. 31). One of these processes can frequently be seen applied closely to the cell wall which separates the cell from those adjoining. In isolated instances this amoeboid process of the nucleus filled with condensed chromatin, is seen closely applied to the nucleus of the adjoining cell and ultimately the two nuclei become continuous through the cell wall (Fig. 32). The process is identical with the process of conjugation in many protozoa and lower plants and probably has the same significance—namely starting a new cycle. The same phenomena have been observed in a tumour of seven weeks' growth.

He goes on to show convincingly that, though conjugation occurs rarely and is seldom demonstrated, when it is seen it is invariably associated with rapidly growing tumours and that transplants from such tumours give a very high proportion of rapidly growing daughter tumours in striking contrast to the transplants from tumours where conjugation was not observed.

I do not see how observations so clearly made and described and figured by highly competent observers can be withdrawn subsequently, as Rear-Admiral Beadnell says they were. There is no reference to them in subsequent publications of the Cancer Research Fund that I can find. Conjugation once observed cannot be got rid of by "not believing in it." That it has not been seen more often is not remarkable when one considers that a single conjugation provides the reproductive momentum for the growth and all the tissue changes of a lifetime. What other possible explanation can be given for the apparent immortality of a tumour that transplanted from mouse to mouse, produces a total mass of tissue many thousands of times the bulk of the original mouse on which it grew than the very natural explanation of periodic rejuvenescence by conjugation? *And conjugation has been observed*—I am, etc.

Ashton-under-Lyne, June 28 J. V. FIDDIAN

Cancer and Heredity

SIR—I would be obliged if you would allow me to correct a slight inaccuracy that occurred in your leading article on heredity and cancer in the *Journal* of June 18

I have never made the statement that the serum of an animal with a regressing tumour contains antibodies directed against the tumour cells On the contrary it was shown that iso haemagglutinins were formed The latter finding has been independently confirmed by Lumsden (1938) The conclusion drawn by me was that the *dominant genes* concerned in the fate of transplants of normal and malignant tissues were precisely those which determined iso antigenic differences

At the present juncture two questions concerning the antigenic structure of tumour cells and the antigenic basis of tumour transplantation demand discussion (1) Are malignant cells antigenically different from the normal cells from which they arise? (2) If such differences exist do they play a part in transplantation? There is some evidence that the answer to the first question is in the affirmative For example it is known that virus induced tumours in the rabbit or fowl will regress spontaneously (see discussion by Kidd, 1938) Furthermore it has been shown that the members of a pure line can be immunized against leukaemic cells derived from other members of the line and the immunity can be passively transferred (MacDowell *et al* 1934 Potter *et al* 1937–8) However the balance of evidence does not indicate that these differences play any part in transplantation as ordinarily carried out For reasons that were suggested in a previous communication (Gorer 1937) and that have been considerably amplified in a paper recently sent to press it would appear that the fate of transplanted tissues (normal and neoplastic) is determined to a very large extent by iso antigenic reactions—I am etc

P A GORER

Lister Institute of Preventive Medicine
June 24

REFERENCES

Gorer P A (1937) *J Path Bact* 44 691
Kidd J G (1938) *J exp Med* 67 551
Lumsden T (1938) *Amer J Cancer* 32 295
MacDowell E C Taylor M J and Potter J S (1934) *Proc Soc exp Biol* N Y 32 84
Potter J S Taylor M J and MacDowell E C (1937–8) *Ibid* 37 655

* In an attempt to compress in a relatively short space a number of observations on the problem of cancer and heredity in the leading article which appeared on June 18 we misquoted Dr Gorer, and apologize for doing so—ED *B M J*

Treatment of Apoplexy

SIR—The treatment of apoplexy by infiltration of the stellate ganglion described in the *Journal* of July 2 by Mr W A Mackey and Dr L D W Scott lends support to the theory that cerebral haemorrhage is an active rather than a passive process The passive theory is that haemorrhage results either from weakening of the vessel wall by sclerosis or aneurysm or from a sudden catastrophic rise in blood pressure such as might be supposed to occur in straining at stool or from a combination of the two

The active theory is that cerebral haemorrhage is the result of a temporary local flushing of the arterioles of the brain I venture to put forward the following suggestions in favour of the latter view

1 Massive cerebral haemorrhage is seldom a single lesion around the main mass is an area of smaller petechial spots in the brain substance These may not be noticed if the brain is cut up at once and it ought to be a rule always to harden in formalin first If this is done the petechiae are easily seen

2 High blood pressure alone is not sufficient to rupture the cerebral vessels Fineberg found that 1520 mm of mercury ruptured the cerebral vessels in only two out of thirty cadavers

3 There is a clinical association between severe portarenal epistaxis and cerebral haemorrhage I cannot give figures but I have often noticed that patients (particularly elderly women) to whom I have been called on account of bleeding from the nose subsequently died of apoplexy In epistaxis one sees a pulsating vessel surrounded by an area of engorged mucous membrane Application of the electric cautery neck the main flow and blanches the reddened area as well not necessary to touch the bleeding point merely to cover the affected area is sufficient in most cases suggesting that the action of the cautery is reflex rather than the direct effect of the vessel

4 Dramatic results in apoplexy have been reported both from venesection and from lumbar puncture—operations which must surely have a diametrically opposite effect on the intracranial pressure I suggest that both of these procedures act at all (and my own experience has not been happy in this respect) do so in a reflex manner Injection of the stellate ganglion is also an indirect method but I note that Mr Mackey and Dr Scott envisage an area of ischæmia around the haemorrhage and not an area of flushing

5 Sudden death at stool in my experience one sees after evacuation and not such as would require straining I believe that the call to stool in these cases is a symptom of the cerebral lesion and not its cause In one of my cases sudden and severe headache was followed by call to stool and watery evacuation the patient quickly lapsed into unconsciousness and died of a cerebral haemorrhage

If cerebral haemorrhage is held to be an active process it certainly suggests that indirect attacks aiming at altering the condition of the blood vessels in the vicinity of the lesion offer the best hope of success—I am etc

FREWEN MOOR

Norwich July

Voluntary Hospitals' Emergency Bed Service

SIR—I should like to express through your columns my appreciation of the recently inaugurated emergency bed service which I have found most useful in getting urgent cases into hospital

This organization is a great time saver for the busy practitioner and I feel sure that there will be plenty of demand for its services as soon as the advantages are realized Up to the present however I understand that there has been only a fraction of the inquiries that were catered for as regards office staff etc It suggests that the majority of London doctors are doubtful of the value of the new system or are so used to their former methods that they are loath to change It seems apparent that this valuable scheme for co-ordinating hospital services sponsored as it is by the British Medical Association and financially supported by King Edward's Hospital Fund deserves general support and encouragement—I am etc

A R MONTGOMERY

London W June 28

The Unconscious Mind and Medical Practice

SIR—One of the difficulties I have always experienced in connexion with the unconscious of the psychoanalysts is that they give no precise definition of the term I am reminded of this difficulty by the following passage occurring quite early in Dr Ernest Jones's paper in the *Journal* of June 25 (p 1 Sec The apprehending of one reality is for long preceded by a period in which the mind is ruled by fantasy and an

of such a grotesque and exaggerated nature as to seem quite incredible to our conscious mind This is one feature of the unconscious ' But surely fantasy implies consciousness rob it of all consciousness and what remains?

I do not desire to initiate a controversy on this subject, but I feel that we need a precise definition of the term "unconscious as here employed —I am etc,

London, W 1, June 28 HARRY CAMPBELL

Ischio-pubic Osteochondritis

SIR —After a careful perusal of Mr G D F McFadden s able description of a case which he describes as one of osteochondritis (*Journal*, June 18, p 1309) I would suggest that it is only fair to your readers to ask him to explain why he considers that such a diagnosis should be made The diagnosis rests on clinical, pathological, and radiological findings The clinical history in any case of *osteochondritis is at best inconclusive*, and that in his reported case is not of help in diagnosis, as both trauma and infection could have originated the condition His pathological findings are not of any great assistance, but rather point to a blood-borne infection The radiological findings, in the light of reproduction in the Journal, do not suggest a condition similar to Perthes or Osgood-Schlatter s disease, as he thinks probable

The whole field of osteochondritis has in recent years been reviewed with doubt The very term "osteochondritis" is a misnomer The more modern "osteochondropathy' is preferable Within the last few years Kummel s disease of the spine has been relegated to its rightful place in the group of post-traumatic conditions, as have Kienbock's disease of the semilunar and Preiser s disease of the carpal scaphoid A few years ago all were called ' osteochondritis ' Why then should Mr McFadden add a doubtful entity to an already dubious classification? I submit that from a perusal of his case history and an examination of the reproduction of his radiograph no resemblance to Perthes' or Osgood Schlatter's disease is presented The condition rather indicates a juxta-epiphyseal lesion

I would suggest that the condition he describes is a juxta epiphysitis, as seen in other general infections or a metaphyseal ' dystrophy" similar to that shown in the rickets group (renal, coeliac or due to an avitaminosis) and I would ask him to examine his case at a later date, when the synostosis should show the broadening and shortening seen typically in the femoral neck in Perthes disease, if osteochondritis is present, or the more normal metaphyseal appearance shown in a well-treated rickets if it is not I trust that Mr McFadden will treat this note not as a criticism but as part of an attempt to simplify classification —I am, etc,

Liverpool, July 1 G EDGAR CHURCH

SIR —I was much interested in the case reported by Mr G D F McFadden in the *Journal* of June 18 (p 1309)

Last month (no doubt while Mr McFadden s article was in the press) I showed before the Orthopaedic Section of the Royal Society of Medicine some radiographs of the condition and discussed this rather unusual site for osteochondritis There was one radiograph of an adult case which revealed bulbous swellings not only at the epiphyses of the descending rami but also two at the middle of the horizontal rami The appearance strongly suggested symmetrical fracture of this part of the pelvis There was however no history of any injury or disability in youth I also showed another radiograph of an old reduced congenital dislocation of the hip joint in a child aged 6 Here the head of the *femur* was flattened and distorted, the appearance being similar to that seen in a case of healed Perthes disease, but on the same side as the hip abnormality there was an osteochondritis at the site of the ischio-pubic epiphysis on the descending ramus The usual *condition* as Mr McFadden pointed out is a unilateral ischio pubic epiphysitis without any other abnormalities

As regards symptomatology and physical signs, it is rather difficult to interpret such well-marked ones as limp, spasm of muscles, and pain in the hip Rarely is there much discomfort in Kohler's disease of the tarsal scaphoid, yet the stresses that this bone undergoes in the foot are enormous in comparison with those affecting one of the pubic bones In discussing the reasons for the occurrence of an osteochondritis of the pubis I showed a slide depicting the way in which ossifying bone growing from the body of the ischium peripherally along both the horizontal and descending pubic rami met, the ossification extending centripetally at the same time from the body of the pubis At the site of the union of these separate ossifying processes powerful groups of muscles are attached—the rectus abdominis and pectineus on the horizontal ramus, and the adductors of the thigh on the descending ramus There is also a vascular anastomosis at these sites with the pubic branch of the deep epigastric artery at the epiphysis of the horizontal ramus, and the obturator artery at the epiphysis of the descending ramus Possibly an explanation of why the normal union of the ossifying processes at the site of these epiphyses is upset is to be found in some imbalance of these three factors Certainly it is difficult to see how any other pathological theory dragging in even sepsis or tuberculosis, can be made to fit Yet in nearly all textbooks these two factors are put forward after trauma as possible causes of the analogous Perthes disease which is an osteochondritis of the epiphysis of the head of the femur —I am, etc,

London, W 1, June 27 G O TIPPLTT

Anti-venereal Measures

SIR —Dr Robert Forgan s letter on this subject in your issue of June 25 (p 1389) questions the accuracy of the conclusions of the Ministry of Health Commissioners in their recent report on ' Anti-venereal Measures in Certain Scandinavian Countries and Holland In particular the conclusion the accuracy of which Dr Forgan questions is the following

'Considering that in the countries employing compulsory treatment and in those which rely on a voluntary system the degree of success in reducing the incidence of syphilis and of relative failure in gonorrhoea are broadly similar compulsory treatment does not seem to us to be a major factor influencing the results of the anti venereal measures in the countries where it is employed

The item which Dr Forgan stresses most as a reason for questioning the accuracy of the above quoted conclusion is that according to him, England and Wales have reduced the cases of syphilis between 1922 and 1936 by less than 30 per cent, whereas Denmark has reduced the cases by 300 per cent At first this seemed to be a possible misprint but he repeats these figures again Here are his two comments on this point

'According to the Ministry of Health s official figures the number of cases of syphilis fell from 25 000 in 1922 to 18 000 in 1936—a *reduction of* less *than* 30 per cent In Denmark during the same period the figure fell from 2 400 to less than 800—a reduction of over 300 per cent While one has every respect for the clinical acumen of the personnel of the

Commission one may be forgiven for questioning the accuracy of conclusions based on the assumption that 30 per cent and 300 per cent are even broadly similar

Dr Forgan is right in saying that the decline in England and Wales between 1922 and 1936 was less than 30 per cent—actually it was 28 per cent—but the decline in Denmark on the figures he quotes was 66·7 per cent *not 300 per cent* Even so on that basis Denmark certainly achieved better results than England and Wales in that period but does that prove that our Ministry of Health Commissioners were inaccurate in stating their conclusion that as regards the countries which employ compulsory measures and the countries which employ non-compulsory measures the degree of success in reducing the incidence of syphilis are broadly similar ? If we compare the cases of acquired syphilis the rate for new infections in England and Wales in 1936 was 1·40 per 10 000 of the population (Table D p 238 Annual Report Chief Medical Officer) in Denmark the rate was 2·1 per 10 000 and in Copenhagen the rate was 5·5 per 10 000 (Table D 1 p 28 of British Commissioners Report) Even though this is in our favour does it prove anything satisfactorily to compare England and Wales with Denmark? The total population of Denmark is 3 723 000 whereas the total population of England and Wales is over 40 million The population of Copenhagen is 672 000 the population of London is over 8 million Our vast population is mostly concentrated in great cities whereas the Danish population is largely rural yet England and Wales have a rate of 1·40 per 10 000 of fresh infections in 1936 while Copenhagen has 5·5 per 10 000

Those in favour of Great Britain abandoning non compulsory measures and imposing compulsory measures may comment on these figures that Denmark notifies all cases and we do not notify so that our figures are not necessarily accurate That is true but if we look at page 23 of the Commissioners report it is obvious that the cases reported in Denmark each year do not include every case Dr Krag of the Danish State Serum Institute had evidence that 1 713 cases of syphilis *in all stages* had been tested *for the first time* in 1936 while the cases actually reported in 1935 and 1936 were respectively 834 and 835

Dr Forgan also refers to the much quicker decrease of syphilis (as notified) in Sweden between 1919 and 1935 than in this country and says that not even the most ardent supporters of our English come and go as you please methods will dare to claim anything comparable for England and Wales True they would not but can he prove with accuracy that the better results in Sweden are due to their compulsory methods? Actually it is impossible to prove anything definitely on this point on the statistics available but ought we not to realize that there are other factors to consider than the venereal statistics? First population Sweden is under 7 million total and we are 40 million Second the results of war on our enormous and largely industrialized population Syphilis rose in Sweden as a result of the war but it had nothing comparable to our problem to deal with in this respect it had 5 976 cases in 1919 the peak year for Sweden whereas we had 42 134 in 1920 which was our peak year It naturally was more difficult for this country to deal effectively with the post war health problems than it was for two small and largely rural non combatant countries such as Denmark and Sweden There is a third factor—namely the differing characteristics of nations it is doubtful if drastic compulsion would be helpful in Great Britain in the matter of venereal disease and also it might not be applied so equally and democratically between all classes and both sexes as it seems to be in Scandinavia

In any case the choice before us is to go on continuously improving our national fight against V D on voluntary methods or of abandoning our present system and going all out for compulsion In our view the latter course would do infinite damage and moreover we can see nothing in the statistics of other countries to prove that there is any reason to differ from the Ministry of Health Commissioners conclusion that compulsory treatment does not seem to us to be a major factor influencing the results of the anti venereal measures in the countries where it is employed—I am etc

ALISON NEILANS
Secretary Association of Moral and Social Hygiene
Livingstone House Broadway S W 1 June 27

Anatomical Terminology

SIR—At this time of the year when professional examinations are rife the topic of anatomical terminology suggests itself The summer examinations of the Chartered Society of Massage and Medical Gymnasts have finished Students have been taught the latest possible terminology and have been told to buy the latest editions of anatomy books The second M B examinations at Oxford and Cambridge have been conducted on the Basle *Nomina Anatomica* and the second M B Part II will take place in London this week conducted in the British revised terminology The Conjoint Board examinations in anatomy are also in progress and the final Conjoint examinations are fixed for next week The utter confusion into which academic anatomists have thrown their own subject is now proving to be a serious obstacle to the mutual understanding and the education of members of the medical massage and nursing professions

It seems quite clear that the matter of uniformity lies in the hands of the examiners of these three professions and it is incredible that some are examining to more than one board and tolerating the teaching of more than one terminology So far as the medical students are concerned in London at any rate the British Revised is being taught in the anatomy schools the provincial universities vary The clinical teachers are inconsistent registrars have a knowledge of all three—the Victorian the B N A and the British Revised—and they teach a triple confusion partly for the students sake and partly to escape the wrath of the older teachers who love the more romantic names The student of to-day has to learn all three terms for any structure in order to protect himself so far as is possible from being dubbed a dunderhead by his learned clinical chief

A complete ignorance even of the B N A predominates in the massage and nursing professions so that the confusion is increasing as the students of the last decade qualify One often hears complaints that the average doctor knows nothing of modern physiotherapy and efforts are constantly being made to secure a greater co operation between doctors and physiotherapists but one difficulty is the language bar Must we teach the nerve to the serratus lateralis (the serratus magnus) as the long thoracic nerve *and* the respiratory nerve of Bell ? Will the sister in the rural department appreciate a request for a pharyngeal impure catheter?

The massage and nursing professions could be modernized at once in their teaching The medical profession itself may require more self sacrifice from the overworked clinicians than they are likely to give before the examiners have the key to the solution If men of good will

the profession were introduced to three or four new terms weekly in the *Journal* the more important items would soon be covered, but the terms would have to be in bold type I understand that the whole question of the teaching of anatomy to nurses is at present under survey by the General Nursing Council Perhaps the council will find it possible to state a policy on terminology It may be an anatomical Utopia that I am suggesting, but it affects us all It will mean that even the physicians with have to talk of atrial flutter—I am, etc,

D F ELLISON NASH, F R C S

St Bartholomew s Hospital, June 30

Tuberculin in Diagnosis

SIR—I am sorry to see that Dr J R Forbes (*Journal* June 25, p 1389) has been unable to find in my paper, to which he refers, any evidence of the diagnostic value of the subcutaneous tuberculin test Skin tuberculin tests show that in the British Isles the great majority of the adult population has been infected with tubercle, but only a small minority of the infected require treatment for tuberculosis It is as an aid in determining whether in a particular case, with symptoms and/or signs suggestive of pulmonary tuberculosis, treatment is required that I find the subcutaneous tuberculin test of great value Of course all tuberculin-positive cases require treatment, but so also do many tuberculin-negative cases

Speaking of the intracutaneous test, Dr L S T Burrell (*Recent Advances in Pulmonary Tuberculosis* 1929, p 26) says "A negative tuberculin test is by no means uncommon, and is of the greatest importance in diagnosis A positive test is of less value in diagnosis, as it indicates infection only" Now the subcutaneous test gives a much larger proportion of negative results than does the intracutaneous test, and is on that account more useful, if one may safely eliminate all the doubtful cases that do not react to this test The facts stated in my paper, published in October, 1932, which have a bearing on this and on the need for treatment of the otherwise doubtful cases that do react are as follows

'From January 1913 to March 1932 I have used the subcutaneous test in 798 doubtful cases In 344 of these there was no reaction and the patients were assured that they were not suffering from tuberculosis This does not mean that they were immune to tuberculosis for life Of 344 non reactors five did suffer later from pulmonary tuberculosis with positive sputum The 454 patients who reacted to the test doses were advised to take the matter seriously and have either sanatorium or tuberculin treatment and most of them did so From 1913 to 1922 inclusive there were 165 reactors of whom 130 got at least three months treatment at a sanatorium or with tuberculin and 35 got neither In March 1932, the condition of these was as follows

	Total	At work	Unfit	Dead
Treated at sanatorium or with tuberculin	130	87 (66 9%)	6 (4 6%)	37 (28 5%)
Treated otherwise or untreated	35	15 (42 9%)	2 (5 7%)	18 (51 4%)

As the average time that these cases were under observation was fourteen and a quarter years the deaths among those treated at a sanatorium or with tuberculin were not much in excess of those of the general population the deaths among the others being much greater

I leave it to readers to judge whether Dr Forbes is justified in dismissing these figures as 'no evidence'—I am etc,

Belfast June 28 JOHN R GILLESPIE

*** This correspondence is now closed—ED *B M J*

Medical Relief for China

SIR—Nine weeks ago you were good enough to publish a letter from us asking the profession in this country to help in the provision of medical supplies for relief work in China The response was so gratifying (£100 having been received) that we composed a second letter, more detailed than the first intending to ask you to publish it as the basis for a wider appeal However, at this juncture we were delighted to find in your issue of June 18 (p 1339) a letter signed by some of the most eminent members of our profession, describing with simple eloquence the heart breaking conditions in the war-stricken parts of China and asking for donations to be sent to the Lord Mayor s Fund for the Relief of Distress in China, 121, Westbourne Terrace, London, W 2

We feel that since this matter is now in such competent hands there is no need for our second letter to appear We have decided to hand over the sum of £100 to the Lord Mayor s Fund on the understanding that it is administered entirely in favour of the Hong Kong Division of the Chinese Red Cross Society, to help which our appeal was specifically made

A number of our colleagues have given generously We thank them whole heartedly Others have not yet responded, for them we feel bound to reiterate the urgency of the need and to commend to their notice the letter signed by some of our most distinguished brethren—We are, etc,

MILLAIS CULPIN
W C W NIXON
H J SEDDON

July 2

Schopenhauer and Syphilis

SIR—The statement made in the *Journal* of July 2 (p 22) that Schopenhauer contracted syphilis and that this disease accounted for his pessimism rests on a somewhat slender foundation This accusation was first made by Iwan Bloch, the well known syphilologist and medical historian, in a paper read before the Berlin Society for the History of Medicine and Natural Sciences (*Munch med Wschr*, 1906 **53**, 1374) mainly on the ground that some posthumous papers showed that in 1823 Schopenhauer was undergoing mercurial treatment—both internally and by inunction—associated with tincture of guaiacum, which in those days was in vogue as an anti syphilitic drug The sensual propensities of the philosopher made it seem highly probable to Bloch that he was often exposed to infection and that syphilis was the chief cause of his pessimism Professor Wilhelm Ebstein however, whose work on Schopenhauer I reviewed many years ago (*Rev Neurol Psychiat* 1907, **5**, 660), disposed of this argument by showing that Schopenhauer had been a pessimist from his youth onwards Another objection to Bloch s theory was that brought forward by J Volt (*Munch med Wschr* 1906, **53**, 1818) to the effect that the first volume of Schopenhauer s chief work, *Die Welt als Wille und Vorstellung* was published in 1818 This fact excluded the possibility of a disease contracted five years later having had any influence on the development of Schopenhauer s philosophy Moreover Ebstein points out that mercury both internally and by inunction together with tincture of guaiacum was strongly recommended by Rust, a celebrated medical contemporary of Schopenhauer s as a remedy for joint affections from which Schopenhauer suffered Similar charges of syphilis based on inadequate grounds have been brought against Voltaire and Goethe, as I have shown elsewhere—I am, etc

London, July 2 J D ROLLESTON

The Psychology of the Medical Profession

SIR—May I be allowed to thank Dr N Howard Jones for his useful contribution (*Journal* June 25 p 1391) to the problem which I raised in your issue of June 6 He appears to say in effect that the therapy advocated by the industrial chemical firms is more truly scientific and therefore more commendable than the treatment by stock *mixture so much in favour with the average practitioner* Assuming then (1) that scientific treatment of disease consists essentially in the administration of chemical or biochemical specifics and (2) that the average practising doctor is eminently suggestible I again ask Why should medical students have to study for five or six years at expensive training institutions when all the information really necessary for their practices could easily be purveyed to them by say a weekly news sheet issued by the reputable drug firms?—I am etc,

North Queensferry Fife July 3 A J BROCK

*** This correspondence is now closed—ED *B M J*

Assistance to Medical Students from Austria

SIR—The embittered protest of Dr Vincent Norman (June 25, p 1394) on the subject of assistance to medical students from Austria is perhaps not so surprising in an age when the teachings of Christ appear to be but a non-Aryan delusion but as one who frequently comes in touch with some of the refugees I would like to assure Dr Norman that he need not worry his head over the possible likelihood of enforced sacrifices on the part of himself or of his colleagues for nothing of a substantial nature has been done by anyone to help these wretched people and, indeed there is no reason to suppose that they ever will The political ramp to which Dr *Norman so dramatically refers is certainly mythical so* far as the refugees are concerned and one can only suppose that your correspondent has culled his information from a certain section of the sensational press—I am etc VICTOR CONSTAD

London S W 3 June 27

Medico-Legal

CHARGE OF PROCURING ABORTION

Mr Aleck Bourne at Marylebone Police Court

At Marylebone police court on July 1, before Mr Ivan E Snell Mr Aleck W Bourne obstetric surgeon to St Mary's Hospital London and consulting obstetric surgeon to Queen Charlotte's was summoned by the police on the charge of unlawfully using an instrument with intent to procure abortion Mr Bourne's defence was undertaken by the London and Counties Medical Protection Society and Mr G A Thesiger counsel appeared on his behalf The Director of Public Prosecutions was represented by Mr H A K Morgan counsel

The Charge

Mr Morgan said that this was a case of unusual character in that the defendant a surgeon very highly regarded in his profession had deliberately and openly defied the law for reasons which he thought good and sufficient On June 14 at St Mary's Hospital he procured the miscarriage of a woman by the unlawful use of an instrument The law of this country did not specifically recognize any interference with pregnancy as justifiable Such interference appeared to be permissible on two grounds only—first to save the life of the mother and secondly to save the life of the child It was not to be done for the sake of family health or other ethical reasons The defendant among other men and others held the view that the position ought to be altered or at any rate relaxed and in order to ventilate this opinion he had openly defied the and had committed a crime for which the maximum penalty prescribed *in the statute was penal servitude* for life He had been exceptionally fortunate in being able to find what from his point of view was an almost perfect case The girl was under 15 years of age and was pregnant through no fault of her own The was not the case of a loose woman who had got in the family way through carelessness or a married woman who did not want a child because it would be inconvenient It was not his business himself to discuss the arguments for or against abortion but merely on behalf of the Director of Prosecutions to ask that the case be sent for trial

The facts were undisputed On April 27 this girl then 14 years and 9 months of age was raped in a building near Whitehall The case had aroused great interest and her assailants had received long terms of imprisonment by sentence of the Central Criminal Court Following the rape the girl missed one of her periods and was taken to see Dr Joan Malleson who was a member of the medico legal council of the Abortion Law Reform Association Having seen the girl and heard the circumstances of her case she wrote to Mr Bourne who was a member of the same council and he replied

I shall be delighted to take her in at St Mary's and curette her I have done that before and shall have not the slightest hesitation in doing it again I have said that the next time I have the opportunity I will write to the Attorney General and invite him to take action On May 31 the girl was taken by her mother to see Mr Bourne a letter of consent to the operation was obtained from the girl's father and afterwards Mr Bourne saw Dr Wingate then resident obstetric officer at St Mary's told him about the case and gave him his reasons for doing what he was about to do—namely that the girl was under the age of consent and had been raped On June 6 she was admitted to St Mary's She underwent the Aschheim test for pregnancy which was positive and on June 14 Mr Bourne emptied her uterus On the same day in an interview with Chief Inspector Bridger at the hospital Mr Bourne related the facts and said I want you to arrest me The inspector said that he would report the matter to the proper authorities The only defence up to now which Dr Bourne had put in was that in his opinion as an obstetric surgeon it would be dangerous for a girl of her age to bear a full term child He did not think Mr Bourne put that forward seriously as a real defence As the law now stood if it were a defence then it might be held dangerous for any woman to go to term and the law of abortion would be a dead letter

Evidence

The girl whose name was suppressed then gave evidence Mr Morgan gave a guarantee on behalf of the Director that no proceedings against her would be brought as a result of her evidence and therefore she was not cautioned Her father however who was the next witness was told by the magistrate that there was a possibility—although almost negligible—that in answering certain questions he might lay himself open to a charge and therefore he was not compelled to answer those questions He stated that on May 31 he wrote to Mr Bourne giving his consent to the operation but he had asked that no publicity of any sort should be given to the case and Mr Bourne had replied I note what you say about secrecy and I can assure you that there will be no effort spared to keep the matter secret His reason for desiring secrecy was that the

GEORGES MARINESCO

Professor Georges Marinesco, the eminent Rumanian neurologist, known in his own country as Georghie Marinescu, of whose death a short notice appeared in the *Journal* of June 4 (p 1240), was born at Bucarest on February 23, 1863 He received his medical education at the Brancovan Hospital and then became assistant to Viktor Babes, the professor of pathology and bacteriology, with whom he collaborated in the publication of articles on transverse myelitis, hysterical mutism, and dilatation of the pupils in pneumonia At Babes s suggestion he was sent by the Rumanian Government to Paris in 1889, where he studied under Charcot at La Salpêtriere and became assistant to Pierre Marie, with whom he collaborated on acromegaly After visiting various European countries he returned to Bucarest, where in 1897 he was appointed professor of neurology in the medical faculty and head of the department for nervous diseases at the Pantelimon Hospital In addition to a monograph entitled *La Cellule*, published in 1909 with a preface by Ramon y Cajal, and articles in Gilbert and Ballet s *System of Medicine* on diseases of muscles (1910), and that of Roger, Widal, and Teissier, on trophic disorders and chronic rheumatism (1927), he was a prolific contributor to periodic literature on the finer structure of the nervous system, nerve regeneration, painful neuromata in amputation stumps, salvarsan treatment of syphilis of the nervous system, and many other neurological subjects Like his colleague the late Professor Cantacuzene, to whose memorial volume he contributed an article on rejuvenation, Marinesco was an excellent example of the saying that every man has two countries, his own and France In recognition of his contributions to French medicine he was elected a member of the Academie de Medecine and of the Societe Medicale des Hôpitaux de Paris Marinesco had also many friends in this country, where he was elected a corresponding member of the Section of Neurology of the Royal Society of Medicine in 1935 and Honorary Fellow of the Society in 1936 He worked with Mott in the laboratories at Claybury Asylum and the Maudsley Hospital, and in 1918 published an article in the Local Government Board Reports (N S 121) on the pathological histology of encephalitis lethargica The high esteem in which he was held in his own country was shown by the fact that not only was he made professor of neurology for life but also had dedicated to him by the Rumanian Society of Neurology, Psychiatry, and Endocrinology on the occasion of his seventieth birthday in 1933 a jubilee volume with a preface by Ramon y Cajal, to which contributions had been made by the principal neurologists of Europe Marinesco remained active until the end, his death taking place on May 14 within a fortnight after delivering an address on the life and work of Babes on the occasion of the celebration of the fiftieth anniversary of the opening of the first Pasteur Institute in Rumania by his old master

Dr JOHN WATTERSON MILLER who died at Llandrindod Wells on June 19, took his M B Ch B degrees in 1899, his M D Vict in 1903, and his M D Liverpool in 1904, having obtained the Cambridge D P H in 1901 He also qualified as a barrister-at-law (Middle Temple) in 1915 and was the Junior Lyon Jones Scholar During the earlier part of his career he served as plague medical officer for the Punjab Government and subsequently entered the public health services at home, first in the West Riding of Yorkshire later becoming M O H of Blackburn of the City of Hereford, and in 1921 of Radnorshire Dr F A Anderson writes The death of Dr J W Miller at the age of 62 came as a great shock to many of us who remember him so recently as an active member of the Shropshire and Mid Wales Branch of the British Medical Association As medical officer of health for Radnorshire and school medical officer he devoted himself with untiring energy to the public health services of the county, and at the time of his death was engaged on the development of the new service under the Midwives Act He was a keen and active member of the B M A, and was elected to the presidency of the Shropshire and Mid-Wales Branch in 1935 He was also a member of the Royal Sanitary Institute and a Fellow of the Society of Medical Officers of Health, serving as President of the Welsh Branch in 1933–4 Among his many interests were included the British Legion and the Boy Scout Association, to both of which he rendered valuable service Dr Miller was a man of great ability, undoubtedly well fitted for the executive work to which he devoted his life, and an excellent committeeman and chairman, indeed he was singled out for these positions in every movement with which he was associated To his widow and daughter will go out the heartfelt sympathy of a large circle of colleagues and friends

Dr EVAN WILLIAMS GRIFFITH, who died at his residence in Bath on June 4 after a long illness, had been a member of the Bath Division of the British Medical Association since 1922 He received his medical education at Cardiff and University College Hospital, obtaining the diplomas M R C S, L R C P in 1914 He served through the war in the R A M C (T) with the rank of captain He had been house-surgeon at the Bristol General Hospital Dr Griffith s later appointments included those of surgeon to the Western Dispensary and anaesthetist to the Eye, Nose and Throat Hospital at Bath He was also for some time assistant medical officer to the Monmouthshire County Council and assistant school medical officer for Newport In his youth he had been a keen athlete playing Rugby football for Christ s College Brecon, and winning many sports prizes, including the Victor Ludorum silver medal After the war he was to some extent incapacitated by illness, but he retained his athletic interests, and was a member of the Bath Rugby Football Club as well as a vice-president of the Lansdown Cricket Club He was very popular with his colleagues and a large circle of patients, many of whom attended his funeral at Westbury-on-Trym Parish Church on June 8

Medical Notes in Parliament

The Mental Deficiency Bill and the Registration of Stillbirths (Scotland) Bill were among the measures set down for consideration in the House of Lords this week

The British Museum Bill was read a first time in the House of Lords on June 30 Its purpose is to enable the Trustees of the British Museum to accept, under the will of the late Lord Rothschild, the museum at Tring and to administer as part of the Natural History Department the collections assembled there by him

On July 5 a return relative to experiments on living animals was presented to the House of Commons On the same day there were laid on the Table regulations under the Factories Act including the Night Work for Young Persons (Medical Examination) Regulations and the Protection of Eyes Regulations

The Parliamentary Medical Committee met at the House of Commons on July 5, Sir Francis Fremantle presiding, and considered a suggestion that an opportunity should be sought during the autumn for a debate on a motion in favour of a general medical service A discussion followed with Dr Copeman and Sir Morton Smart representing the Empire Rheumatism Council, and with Mr Tom Smith and Mr Parkinson M P s sitting

for coalmining constituencies The subject was rheumatism among coalminers From the discussion it appeared likely that the Miners Welfare Committee would be interested in the proposal of the Empire Rheumatism Council to establish clinics for immediate treatment of rheumatism occurring among miners The meeting agreed that it would be better to establish one experimental clinic first to prove its value for that purpose It was also agreed to ask the Secretary for Mines Captain Crookshank to receive a deputation from the Parliamentary Medical Committee the Empire Rheumatism Council and the M Ps for mining constituencies It was hoped to meet Captain Crookshank on July 12 for the purpose

Progress of Bills

The Baking Industry (Hours of Work) Bill was read a third time by the House of Lords on June 30

The second reading of the Nursing Homes Registration (Scotland) Bill in the House of Lords was set down for July 14

The House of Commons on June 28 agreed to the Lords amendments to the Street Playgrounds Bill

The Milk (Extension and Amendment) Bill was read a second time in the House of Commons this week

Milk *Permanent Legislation Postponed*

In the House of Commons on July 4, Mr W S MORRISON moved the second reading of the Milk (Extension and Amendment) Bill He explained that the Government's proposals for permanent legislation were issued in a White Paper and were in an advanced state of preparation but owing to pressure on Government business it would not be possible to pass this legislation this session The Government hoped to introduce the legislation early next session It was necessary to retain the present system of assistance to the milk industry for another twelve months and the present Bill did that The Exchequer grants were extended for twelve months and included that for the milk in schools scheme Before the scheme began about 900 000 children were receiving milk in schools and it was estimated that now about 2 750 000 children were participating Over 23 000 000 gallons of milk were consumed in England and Wales under the scheme during the year ended last September and it was likely that in the next twelve months the consumption of milk would be 25 000 000 gallons The scheme had undoubtedly proved its merits and the Government attached great importance to it

It was hoped to introduce in the autumn a scheme which had been foreshadowed in the White Paper whereby the local authorities would be able to secure milk at reduced prices for their maternity and child welfare arrangements Local authorities would thus be in a position to extend their present schemes and to make milk available to expectant and nursing mothers and to children under school age either free or at reduced prices as circumstances might require

The Bill was read a second time

Opium Imports into China

On July 4 Mr D ADAMS asked the Prime Minister whether his attention had been drawn to the reply by the Japanese delegate at the committee on traffic in opium at its meetings at Geneva during the present month to the effect that 1 500 chests of Iranian opium transported by a Japanese ship from the Persian Gulf to China were imported by the Manchukuo Government for consumption by the registered addicts of that country and if he would endeavour to ascertain whether the numbers of such registered addicts were increasing under Japanese guidance Mr BUTLER who replied said that this information was communicated to His Majesty's Ambassador at Tokyo by the Japanese Government He was not in a position to make any statement on the second part of the question nor was it likely to be possible to obtain the information desired

On July 4 Mr D ADAMS further asked the Prime Minister whether his attention had been drawn to statements by the Japanese delegate at the committee on traffic in opium that of 2 900 chests ordered by Japanese interests in the first three months of 1938 300 chests were imported by a Japanese firm through Shanghai the 2 700 chests being permitted by the North China Provisional Government in conformity with existing opium conventions and whether in view of the fact that existing conventions appeared to allow an increase import of dangerous drugs into parts of China under Japanese control the British Government would press for the most rigid interpretation of these conventions with a view to preventing a systematic demoralization of a very large number of people Mr BUTLER replied that this statement was made by the Japanese delegate at Geneva As however he declared that the Japanese firm acted solely as shipping agents no technical breach of the 1925 Convention had been committed by the Japanese Government. As also the Convention of 1931 which limited the amount of manufactured drugs that might be imported by each country during the year did not apply to raw opium the tightening up of existing regulations would not achieve Mr Adams's object.

Chemotherapy May and Baker's New Product

On July 4 Mr D ADAMS asked Lord Winterton if the firm of May and Baker Limited were obliged to refuse requests for supplies of newly discovered chemical compounds because of the dangers involved until further research had been carried out and what steps he was taking to expedite the necessary research in this and similar cases Lord WINTERTON said It is the ordinary and necessary practice in the case of new drugs that they should in the first place be subjected by specialists to carefully controlled trials as regards their value and safety to ascertain whether the medical results warrant production on a large scale for general distribution Mr Adams may have particularly in mind a new compound which is being tried in the treatment of pneumonia and about which the firm named recently published a statement that the work was still in an experimental stage The manufacturers have not so far thought it necessary to seek the aid of the Medical Research Council in this case but it is understood that the requisite investigations are in active progress

Registration of Stillbirths in Scotland

In the House of Lords on July 5 Lord ALNESS moved the second reading of the Registration of Stillbirths (Scotland) Bill which has passed the House of Commons He said that stillbirths to-day were registered by law in every civilized country with the exception of Palestine Ireland and Scotland The measure could be justified not only on statistical but on medical and humanitarian grounds

Lord DAWSON OF PENN in supporting the Bill said that every baby who died represented a failure and the cause could only be discovered by a study of the whys and wherefores of the failure In 1934 43 670 infants in England died at or soon after birth and in 1936 in Scotland it was estimated that there were 4 000 such deaths Civilization had brought down the death rate but it had also brought down the birth rate with the result that the turnover to-day was much smaller No one wanted a hopeless infant to survive but there were a number of potentially fit children who through want of knowledge and care were lost to the community The Bill would secure that more lives were saved The loss of children at or just after birth occurred in all classes of the community and was therefore in all probability due in large part to lack of knowledge In addition to obtaining more statistical information it would be of advantage if the Department of Health for Scotland would institute a close study of selected groups of children and would ask the Research Department to take action No investigation in connexion with these deaths was worth much unless post mortem examinations were carried out and it would be of value if post mortem examinations were encouraged

Lord STRATHCONA AND MOUNT ROYAL said that the Government viewed the Bill sympathetically and would welcome its passage He would bring Lord Dawson's observations on the question of research to the notice of the Department.

The Bill was read a second time

No 25

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended June 25 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for (1) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 13 principal towns in Eire (e) The 10 principal towns (9 in 1937) in Northern Ireland

A dash — denotes no cases, a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929-37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	23	2	9	1	—	19	1	6		—		
Deaths		1	—				1	3				
Diphtheria	989	146	191	41	22	958	104	184	41	26	882	161
Deaths	22	4	6	—	—	27	1	5	1	—		
Dysentery	39	15	37		—	26	3	8	2	—		
Deaths				—	—				—	—		
Encephalitis lethargica, acute	5	—	—		—	3	—	—		—		
Deaths		2					1					
Enteric (typhoid and paratyphoid) fever	20	—	7	3	1	21	5	6	6	—	31	—
Deaths	—	—	—	—	—	1	—	—	—	—		
Erysipelas			55	6	5			66	4	1		
Deaths		1					—					
Infective enteritis or diarrhoea under 2 years												
Deaths	32	9	11	5	4	50	12	12	6	2		
Measles			173		5*			142		3		
Deaths	10	1	—	2	—	14	4	1	1	—		
Ophthalmia neonatorum	97	10	34		—	96	10	47		1		
Deaths												
Pneumonia influenzal §	758	76	5		33	495	33	8		6	704	51
Deaths (from influenza)	20	2	2	1	1	14	6	1	1	1		
Pneumonia, primary			192	11				158	5			
Deaths		19		7	14		7		6	8		
Polio-encephalitis acute	3	—				—	—					
Deaths		—					—					
Poliomyelitis, acute	4	—	8		—	8	—	—		—		
Deaths		—					1					
Puerperal fever	1†	1	11	5	—	34	7	13	2	—		
Deaths		1‡					1‡					
Puerperal pyrexia	187	20	30		1	139	20			—		
Deaths												
Relapsing fever	—	—			—	—	—	—		—		
Deaths												
Scarlet fever	1,765	171	355	79	78	1,631	170	379	99	44	1,628	232
Deaths	3	1	3	—	—	2	—	—	—	—		
Small-pox	—	—	—		—	—	—	—		—		
Deaths	—	—		—	—	—	—		—	—		
Typhus fever	—	—	—	—	—	—	—	—	—	—		
Deaths				—					—	—		
Whooping cough			123		22			164		4		
Deaths	18	2	4	—	—	10	5	6	—	1		
Deaths (0-1 year)	301	45	58	23	21	285	51	86	29	21		
Infant mortality rate (per 1 000 live births)	49	37				47	42					
Deaths (excluding stillbirths)	4 084	789	607	160	130	3,905	752	585	185	145		
Annual death rate (per 1 000 persons living)	10 0	10 0	12 4	10 8	11 5	9 7	9 5	12 0	12 6	13 9		
ve births	7 397	1,407	949	396	254	6,902	1,294	977	346	232		
Annual rate per 1 000 persons living	18 2	17 9	19 3	26 8	22 5	17 1	16 3	20 0	23 6	22 2		
Stillbirths	276	42				296	45					
Rate per 1 000 total births (including stillborn)	36	29				41	34					

* 2 cases in Belfast alone

† After October 1 1937 puerperal fever was made notifiable only in the administrative county of London

‡ Death from puerperal sepsis

§ Includes primary form in figures for England and Wales London (administrative county) and Northern Ireland

EPIDEMIOLOGICAL NOTES*

Enteric Fever

Twenty cases of enteric fever were notified in England and Wales during the week under review compared with 15 in the previous week no cases were recorded in London In Scotland 6 cases of typhoid fever were notified—4 in Roxburgh County and 1 each in Ayr County and Lanark County—and 1 case of paratyphoid fever in Stirling County

Diphtheria and Scarlet Fever

In England and Wales notifications of diphtheria rose from 889 to 989 during the week under review and in London from 115 to 146 Increases were noted in Scotland and Northern Ireland but in Eire there was a marked drop in notifications Deaths in the 126 Great Towns of England and Wales fell from 29 to 22 while in London they rose from 3 to 4 Of the 22 deaths from diphtheria recorded in the 126 Great Towns 2 each occurred in Bradford (0) Liverpool (2) Wigan (0) There were 6 deaths from diphtheria in the 16 principal towns of Scotland during the week under review—4 (3) in Glasgow and 2 (0) in Edinburgh There was an increase in the number of notifications of scarlet fever in England and Wales during the week—1 765 as against 1 746—and in London where 171 cases were recorded compared with 156 in the previous week In England and Wales the figures were in excess of the median value for the last nine years but in London they were appreciably less There were 3 deaths from scarlet fever in the 126 Great Towns of England and Wales during the week under review compared with 5 in the previous week of these 1 occurred in London Notifications in Scotland fell from 383 to 355 with 3 deaths but in Eire and Northern Ireland they rose from 76 to 79 and 77 to 78 respectively

Primary and Influenzal Pneumonia

Notifications of primary and influenzal pneumonia in England and Wales fell from 787 to 758 during the week under review but in London they rose from 49 to 76 these figures were above the median values for the last nine years for England and Wales and for London There were 20 deaths from influenza in the 126 Great Towns of England and Wales during the week under review compared with 20 in the previous week while in London the number remained at 2 In the West Riding (Yorks) 103 (88) cases were notified of which 33 (27) were in Sheffield 25 (21) in the Administrative County 20 (13) in Leeds 9 (6) in Halifax In Warwickshire 39 (48) cases were notified of which 24 (29) were in Birmingham and 10 (10) in the Administrative County Of the 176 (167) cases reported in Lancashire 57 each occurred in Liverpool (42) and Manchester (42) Of the 20 deaths from influenza recorded in the 126 Great Towns of England and Wales during the week under review 2 each occurred in London (2) Willesden (0) Coventry (0) In Scotland 192 cases of primary pneumonia were notified compared with 205 in the previous week while there were 5 cases of influenzal pneumonia—as against 2 in the previous week—and 2 deaths 1 each in Greenock (0) and Kirkcaldy (0) In Eire there were 11 (17) cases of pneumonia and 7 (8) deaths 6 (6) of which occurred in Dublin There were 14 (11) deaths from pneumonia in the 10 principal towns of Northern Ireland during the week—11 (10) in Belfast 2 (0) in Portadown and 1 (0) in Larne

Measles and Whooping-cough

In the 126 Great Towns there were 10 deaths from measles compared with 14 in the previous week of these 1 (5) occurred in London 2 (0) in Barrow in Furness and 1 each in Barnsley (0) Blackburn (0) Keighley (0) South Shields (0) Tynemouth (0) Birmingham (0) During the week 422 cases were reported from the L C C elementary schools compared with 680 in the previous week The average daily admissions to the L C C fever hospitals were 18 compared with 24 in the previous week and the number of cases of measles under treatment in the fever hospitals on Friday June 24 was 860 compared with 971 on June 17 On the same day there were under treatment in the L C C fever hospitals 890 (954) cases of diphtheria 761 (776) cases of scarlet fever 26 (26) cases of whooping-cough Notifications for the week ended June 25 in the eleven metropolitan boroughs in which measles is notifiable were 241 (226) distributed as follows Bermondsey 11 (31) Finsbury 16 (27) Fulham 27 (30) Greenwich 47 (107) Hampstead 11 (17) Lambeth 6 (30) St Pancras 3 (23) Shoreditch 5 (6) Southwark 15 (12) Stepney 8 (13) In Scotland 173 cases of measles were notified compared with 208 in the previous week the figures for Glasgow were 7 (50) Dunfermline 0 (12) Falkirk 28 (43) Dundee 22 (40) Lanark County 21 (38) Edinburgh 8 (16) During the week there were no deaths from measles in the 16 principal towns of Scotland in Eire there were 2 deaths from measles in Dublin and in Northern Ireland there were no deaths

In England and Wales there were 18 (15) deaths from whooping cough during the week of which 2 (0) occurred in London In Scotland 123 cases of whooping-cough were notified compared with 119 in the previous week while there were 4 deaths—1 each in Glasgow Edinburgh Motherwell and Wishaw Hamilton In Northern Ireland 22 (34) cases of whooping-cough were recorded with no deaths

Cholera

The seasonal return of cholera was recorded at Shanghai and Swatow between May 15 and 21 and at Hong Kong and Hankow between May 22 and 28 During the week ended June 25 the number of cases notified at Shanghai rose abruptly from 66 to 319 with 39 deaths in Hong Kong 9 cases with 9 deaths were reported In the same week in Burma 10 cases with 10 deaths were notified in Calcutta 64 cases with 1 deaths in Bombay (Presidency) 66 cases with 3 deaths in Delhi 4 cases with 4 deaths In the Central Province 12 cases with 569 deaths were reported during the week under review in the North West Frontier Province 163 cases with 65 deaths in Madras (Presidency) 511 cases with 99 deaths in the Punjab 168 cases with 101 deaths in Sind 66 cases with 0 deaths and in the United Provinces 2 cases in Allahabad and 7 cases with 4 deaths in Cawnpore In French Indo China during the same week 153 cases of cholera were reported in Annam 184 in Tonking 16 in Hanoi

Plague

During the week ended June 25 in Burma 17 cases of plague with 9 deaths were reported In British India there were no cases in Bombay or the Central Provinces but in Madras (Presidency) there were 3 cases with 2 deaths

Small pox

During the week ended June 25 there was 1 case of small pox with 1 death in Hong Kong and in Shanghai 1 case with 1 death In the same week in Burma 5 cases of small pox were reported in Calcutta 26 cases with 25 deaths in Bombay (Presidency) 238 cases with 44 deaths in the Central Provinces 54 cases with 3 deaths in Madras (Presidency) 62 cases with 18 deaths in the North West Frontier Province 18 cases with 6 deaths in Sind 47 cases with 6 deaths In the same week in French Indo China 26 cases of small pox were reported in Tonking During the week ended June 18 276 cases were notified in the U S A

Typhus

During the week ended June 25 in Egypt 5 cases of typhus were reported in Cairo and 97 in the provinces In the same week 46 cases of typhus were notified in Shanghai with 13 deaths During the previous week in Morocco 166 cases with 21 deaths were notified mainly distributed as follows Marrakesh 6 cases 2 deaths Chaouia 28 cases 4 deaths 2 each in Central Atlas (6 deaths) and Dukkala (4 deaths) Rabat 17 cases Casablanca 15 cases Sous 6 cases During the same week in Tunisia 77 (102) cases of typhus were reported distributed mainly as follows Tozeur 14 Thala 13 Sfax 12 Kairwan 11 Souk-el Arba 10 Beja 5 During the week ended June 11 in Algeria 43 cases of typhus were notified distributed as follows Algiers (department) 16 cases Constantine (department) 23 In the week ended June 11 in Poland 67 (97) cases with 4 (5) deaths were reported mainly distributed as follows Polesia 23 cases, 1 death Wilno

*Except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

cases Wolhynia 7 cases Brialystok 6 cases Warsaw 5 cases, 1 death, Lwow 4 cases Stanislawow 4 cases 2 deaths In Yugoslavia during the same week there were 39 cases of typhus with 2 deaths In the U S A during the week ended May 28, 26 cases were reported Georgia 15, Alabama 3 Florida 3, Texas 2, Louisiana 1 North Carolina 1, Tennessee 1

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

The Appointments Committee of the Faculty of Biology "B" will shortly proceed to appoint a University Lecturer in Anatomy, and also a University Lecturer in Physiology if a suitable candidate applies The person appointed to the latter post will be expected to take part in teaching and research in mammalian physiology, and should possess a medical qualification Further particulars of both appointments may be obtained from the secretary of the Appointments Committee, Dr F J W Roughton Department of Physiology Cambridge to whom applications should be sent by July 25

The Board of Management of the Frank Edward Elmore Fund will shortly proceed to the award of a studentship for medical research It is open to male graduates of any university in any country who were born at any place within the British Empire other than Scotland The student appointed will work in the Department of Medicine of the University of Cambridge under the direction of the Regius Professor of Physic, commencing salary £300 a year, appointment for two years in the first instance Further information may be had from the Regius Professor to whom applications together with three testimonials, a statement of previous appointments, and copies of published papers, should be sent by August 1

The Benn W Levy research studentship in biochemistry has become vacant Applications for its tenure should be addressed to the Professor of Biochemistry, Sir F G Hopkins at the School of Biochemistry before July 16

At a Congregation held on June 21 the degrees of M B, B Chir were conferred on H J Wallace

UNIVERSITY OF BIRMINGHAM

At a Congregation held on July 2 the honorary degree of LL D was conferred on Dr Robert Hutchison President of the Royal College of Physicians of London Sir Cuthbert Wallace Bt President of the Royal College of Surgeons of England, and Sir Edward Mellanby F R S Secretary to the Medical Research Council also on Viscount Nuffield Sir Bertram Ford and Mr Harry Vincent

The following medical degrees were conferred

M D—J F Shrewsbury (*ex officio*) J H Ebbs

M B, Ch B—*‡W G Mills, †‖A G Arnold †Katharine M Banks, †‖J D C Gowans, †‖D R Humphreys †P Parry, †¶A B Watson J O D Alexander, C S Ashwell L W Blundell A E Chaplin Dorothy M Cooper, T W B Cull, ‖J E B Elliott J B Farquhar, R E Gibbins, Rita Gleiberman H W Hickman J H Hicks, D B Jagger P H Kendall, Dorothy E Markham A T Marshall T J Montgomerie J F Newman G R Newns Catherine M Osler Marian L Owen, A M Wadsworth J F Wilkinson, Winifred Wynne

* First class honours † Second class honours ‡ Distinction in medicine and surgery ‖ Distinction in medicine ¶ Distinction in midwifery and diseases of women

The following scholarships medals and prizes have been awarded

A E Hills Postgraduate Scholarship in Medicine C Parsons *Queen's Scholarship* (third year), M C Binnie, (fourth year) J C White, (fifth year) P H Davison (final year) W G Mills *Ingleby Scholarship* A B Watson *Arthur Foxwell Memorial Medal Sampson Gamgee Memorial Medal* and *Russell Memorial Prize* W G Mills *Priestley Smith Prize in Ophthalmology* P Parry *Leith Neumann Prizes in Pathology* (fourth year) Medical J C White Dental I H Jones *Peter Thompson Prize in Anatomy* (third year) M C Binnie and Evelyn M Roe (equally divided) *John Barritt Melson Gold Medal in Physiology* (third year) M C Binnie

UNIVERSITY OF LIVERPOOL

The following candidates have been approved at the examinations indicated

M D—A Dodd Jannett C Hay C H Stewart Hess

M B Ch B— D A Hunt [1]E L Salingar *Part III* H G A Almond H Alstead H Angelman C T Baynes Patricia M Bennett Jones A L Black D W Bracey H Brodsky B H Brindle, B Carruthers, J W Crowther H Dikin R B Davies J Donnelly, D W Forgan, Mary W Gaskell K B Gibson, J Griffith Anne F M Heaney D R Holden R S Holgate, E P Houghton G O Hughes Brenda M Jones P Jones, R J Keating, J C Kee, J C Kitchin E Leather J Mills J Moroney A Nachmanovitz J H Newmark P J O Flynn, E N Owen R A C Owen Geraldine M H Paul B I Phillips, Hilda C Podmore J G Pritchard W Pritchard, E B Riding D J Roberts R H Roberts G M S Ryan G Sanderson Joyce M Scholefield V K Summers R J D Temple, Lucy H E Walker, R Watson, J H D Wetherell R H White Jones A H Williams, C J Williams Gwendoline Williams, I P Williams John S Wood, E G Wright G Wynne Griffith M Wynroe *Part II* C D Alergant, G E Bidman [1]Frances E Brierton R F Browne J Collins, E H L Cook E T Downham Margaret Edge, [1]T S Emerl, R M Evans H B Forrest [1]D M I Freeman Thelma R Gaunt, C M Gregory, G C Griffiths H Hall [1]J Harders F Hedley Bessie Howarth, [1]H Ingham C T Jenkins, W Kulke [1]A L Latner P C Lawson Pearl Lyons [1]Anne E McCandless D H MacCormack, Sylvia Makin, Eileen E V Martin E F Mason R J Miller G W H Millington [1]J D Muir T Murdoch A G O Malley Margaret E Parry Edwards R Paul Eleanor M Pearson L G Poole A G Porterfield, T Price D Prysor Jones V A Rogers C Rowlands C R Sluming W O Spence Lucy M Sutcliffe Catherine S Thomas, Megan E Thomas J N Threlfall Olwen S Turner, Gertrude O W Watson J A Wethered K M Wilby Emilie M Winter *Passed in Separate Subjects* J S Hindley, G O Thomas and John P Thomson (Public Health), R J Parry and Kathleen M Pugh Jones (Forensic Medicine) *Part I* I Ansell S C Barnes, H N C Blenkiron D J Browne, Helen M Carmichael J L Chisnall E A Cookson N A G Covell, G H Daglish Grace T Dawson L Fletcher W E Gill J G Gow H G Griffin E L Hamm J B Hannah R Hermon [1]J R Hughes, W J Hughes Jean G Huntley C Ibbotson, [1]C N Iland I Levinson M G McColl J H H MacRae, A K Mitting, J G Mott, G V Osborne [1]W H Patridge R Paul Lettice M Robertson Kate E Rymer T A Sale [1]C C Slack R A Smith F L Thomas E E Vaughan G R Wadsworth Mair Williams [1]E H Winterbottom *Passed in Separate Subjects* Catherine W L Harries S B Nelles and C W R Roseby (Pharmacology and General Therapeutics)

D P H—*Part I* E W Evans *Part II* A B Concannon L R L Edwards A J Gill A L Smallwood Margaret C Winter

Diploma in Tropical Medicine—P B Pillay M H Shah

Diploma in Tropical Hygiene—F Jacusiel K Jilani J L Lanceley, J R Robertson

Diploma in Medical Radiology and Electrology—*Part I* B O Jarrette *Part B* G E Church B O Jarrette N A Lawler F Pygott

[1] Second class honours Distinction in Surgery [2] Distinction in Obstetrics and Gynæcology [3] Distinction in Public Health [4] Distinction in Forensic Medicine and Toxicology [5] Distinction in Pharmacology and General Therapeutics [6] With distinction

UNIVERSITY OF MANCHESTER

Dr Rupert Sykes has been appointed warden of Ilster House and Dr S T Cowan lecturer in bacteriology

The Sheridan Delepine Fellowship in Preventive Medicine has been awarded to H L Settle M B Ch B

UNIVERSITY OF WALES

The following candidates have satisfied the examiners at the examination indicated

D P H—*Part I* Jennet Evans S H Graham Anne E M Herbert E W Kinsey Mary M M Llewellyn

UNIVERSITY OF GLASGOW

At a graduation ceremony held on July 1 the following medical degrees were conferred

M D—*R Macl Millen *J P J Paton

M B, Ch B—C A Kilpatrick, Jean D McMillan

* With commendation

UNIVERSITY OF ST ANDREWS

At the graduation ceremony on June 30 presided over by the Vice Chancellor, the honorary degree of LL D was conferred upon Edgar Douglas Adrian M D F R C P F R S Professor of Physiology in the University of Cambridge and Fellow of Trinity College

SOCIETY OF APOTHECARIES OF LONDON

The following candidates have passed in the subjects indicated

Surgery—M Becker P H Davies R E D Ellis R P Parkinson T G Vilgoen

Medicine—J Brewis I J Mathias, O Rochlin

Forensic Medicine—I J Mathias O Rochlin

Midwifery—E M E Decottignies R E D Ellis H Francis N A Jevons D Macpherson J R Rose, R Rowland on H Woolwich

The diploma of the Society has been granted to O Rochlin

The Services

EFFICIENCY DECORATION

The King has conferred the Efficiency Decoration of the Territorial Army upon Lieutenant Colonel J T Kyle and Majors D C Maclachlan J W Wayte, R G Addenbrooke and G W Wigg R A M C (T A)

DEATHS IN THE SERVICES

Major HERBERT STUART BLACKMORE O B E R A M C (ret) died at East Sheen on June 25 aged 51 He was born on July 2 1886 was educated at University College London and took the L D S R C S in 1910 the M R C S L R C P in 1911 and the D P H of the Royal Colleges in 1913 Entering the R A M C as lieutenant on July 28 1911 he became major on July 28 1923 and retired on July 28 1931 He served in the war of 1914–18 in Iraq and Afghanistan and on the North West Frontier of India receiving the O B E for his services After the war he served for seven years in the Chemical Defence Research Department Porton and afterwards in the Air Raid Precautions Department of the Home Office to which he was appointed in March 1936 He also served in 1936–7 on the British Medical Association's Committee for the Recruitment of Medical Practitioners in Time of War

Medical News

On the occasion of the forthcoming visit of the King and Queen to France the Academie de Medecine has sent its greetings to the Royal Society of Medicine and the whole medical profession of the British Empire

The next meeting of the Paddington Medical Society will be held at Paddington Town Hall on Tuesday July 12 at 9 p m when there will be a discussion on The Place of the Medical Practitioner in Air Raid Precautions Schemes to be opened by Dr N W Hammer Dr J Nairn Dobbie and Mr E W Thorn Bannister

The twentieth annual meeting of the Mental Hospitals Association will be held at the Guildhall on Tuesday July 12 at 11 a m After the Lord Mayor of London has opened the proceedings the report of the Executive Committee will be presented and difficulties in connexion with the provisions of the Matrimonial Causes Act 1937 will be discussed at the request of the visiting committee of the Durham County Mental Hospital Dr Edward Larkin will then read a paper on insulin and cardiazol treatments of schizophrenia

The French Association for the Advancement of Science will meet in Paris from September 22 to 27 under the presidency of Professor Guilhermond Further information can be obtained from the secretary 28 Rue Serpente Paris

The report for 1937 of Papworth Village Settlement will be presented at the Park Lane Hotel Piccadilly W on Tuesday July 12 at 3 15 p m The Marquess of Willingdon chairman of Papworth will preside and a new Papworth film will be shown Communications should be addressed to the Organizing Secretary Papworth Village Settlement 16 Grosvenor Place S W 1

Dr W J Vickers and Dr Carol Sims (Inner Temple) and Dr C F Brockington (Middle Temple) were called to the Bar on June 29

The issue of the *Bulletin de l Office International d'Hygiene Publique* for May contains articles on the epidemiology of poliomyelitis supply of infecting material for malariotherapy in England and Wales prophylaxis of tuberculosis in schools in England and Wales France and Germany legislation concerning tuberculous teachers in Norway and comparative rural and urban mortality in France in 1933

Several cases of psittacosis have recently occurred at La Rochelle so that the exhibition and sale of parrots have been prohibited there

Immunization against diphtheria with anatoxin has been made compulsory in Hungary for all children aged from 2 to 6 years and in France for all children in the second and third years of life

The New York banker Mr W Child has left the University of Yale ten million dollars for cancer research

Dr F de Quervain the well known professor of surgery and director of the surgical clinic at Berne will retire this year and be succeeded by Dr Hermann Matti

Thirty radio coast stations of the United States are provided with a doctor to give medical advice to passing ships

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary B M A House Tavistock Square W C 1 on receipt of proofs Authors overseas should indicate on MSS if reprints are required as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary B M A House Tavistock Square W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are

EDITOR OF THE *BRITISH MEDICAL JOURNAL* *Aitiology Westcent London*

SECRETARY *Medisecra Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Irish Free State Medical Union (I M A and B M A) 18 Kildare Street Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Case for Diagnosis

FAG has a patient aged 77 He is of spare build and has been very active all his life Twenty years ago he suddenly became alarmed at a constant worrying colic which appeared on sitting down but disappeared when walking It disappeared as suddenly as it came Twelve years ago this condition reappeared palpation auscultation and a variety of x ray examinations revealed nothing The tongue is clean but there is some anorexia Except for some constipation—relieved by salines—there is no evidence of obstruction Three weeks ago these symptoms recurred and the same investigations have been undertaken with the same negative results It should be added that the patient has been a martyr to many forms of rheumatism fibrositis etc Fag asks for suggestions as to diagnosis and treatment

Recurrent Ulcers

Mr C A MOORE (Bristol) writes I should have no hesitation in offering to "Borderer" (*Journal* July 2 p 51) the suggestion that the mysterious ulcers he describes are artefacts In two similar cases of my own each patient indignantly denied having tampered with her tissues but in neither case was there any further ulceration after she discovered the game was up "Borderer" may well earn the admiration real but unexpressed of his patient for being astute enough to make the correct diagnosis

Income Tax

Additional Expense of Residence

'CLAIM holds an appointment under the terms of which he must reside in the borough of X The only house available there costs him £30 a year more in rent than one otherwise quite as suitable in a neighbouring borough Can he claim to treat that £30 as an expense of his office?

*** 'Claim is assessable under Schedule E and the allowance under that schedule is very restricted—that is to "expenses wholly, exclusively, and necessarily incurred in the performance of the duties of the office There is of course a debatable field with regard to which Rowlatt, J said (in Nalder v Walters) 'it is the duty of the Commissioners to watch claims of this kind very carefully' The point raised by our correspondent has not been dealt with specifically in the courts and he might succeed before the Commissioners, but we think that that prospect is not a good one

Replacement of Medical Instruments

'PRACTITIONER inquires 'whether the full cost replacement of a medical instrument by one more up to date and four times as expensive is allowed'

*** The cost of *replacement* is allowable, but not the cost of *improving* the equipment—the latter expense represents further capital outlay and not running costs of the practice Where a single transaction includes both elements—as in the case put by Practitioner—the total net cost must be divided and the replacement portion only allowed That amount would usually be the cost of a similar instrument at the time the new one was purchased, less the amount, if any, obtained by its sale

Irish Free State—Savings Certificates

MEDICO is residing and has always resided in the Irish Free State He asks whether he is liable to income tax there in respect of the additions accruing on British War Savings Certificates, and if so when the liability becomes effective

*** The interest—for the annual accretions are of the nature of interest—to such certificates are specifically exempted from British income tax, but would be liable to Irish Free State tax in the hands of a resident there We agree with Medico that as the interest cannot be drawn without the encashment of the certificate itself, it does not arise to the holder so as to make him liable to assessment until the certificate is cashed In that respect it is analogous to interest accruing on deposit receipt—the Scottish form of bank deposit—which is not liable to assessment until it is uplifted"

Earned Income Relief

'S J asks what is the basis on which earned income relief is calculated If, for instance the gross earnings of a practice are £1 600 the expenses £900 and wear and tear allowance £100 is the one fifth based on £1,600, £700, or £600?

*** On £600 The matter is governed by Sec 15 of the Finance Act 1925 which provides for a deduction from the amount of his earned income of a sum equal to one fifth of the amount of that income Any other basis would be at variance with the phrase of that income

Life Insurance Relief

LONICERA took out an endowment policy on April 2 1938, and inquires which is the earliest financial year for which he can obtain income tax relief

*** The year ending April 5, 1938 The local inspector should be informed at once so that the appropriate deduction can be made from the second instalment of tax now becoming due

LETTERS, NOTES, ETC

Sterilization of Hypodermic Needles

Dr O ECCLES (London W 12) writes with reference to Dr J Sandison Crabbe's letter in the *Journal* of May 14 (p 1070) I recently adopted the boiling olive oil and bread crumb method which Sir Almroth Wright showed me many years ago and to my surprise I found that the solder of the needle melted The firm that had supplied the needles then informed me that the metal lining had a melting point of 215° C and advised me to use a thermometer and not to allow the temperature of the oil bath to exceed 160° C, but difficulties in the way of high temperature thermometry prevented me from following this advice It would be more convenient to employ a liquid with a boiling point of about 160° C, but I cannot think of one suitable for the purpose Alternatively some other indicator than a bread crumb might be employed I have not tried the method of sterilizing the syringe with boiling oil for fear of cracking the glass, and I should explain that I immersed the needle in a small oil bath Is there not also a risk of melting the soldering material when a platinum needle is flamed?

Histidine in Peptic Ulcer

Dr SEYMOUR W DAVIES (Wallasey) writes After reading Dr A H Douthwaite's remarks on the treatment of peptic ulcer by histidine (*Journal* May 28 p 1143) I am tempted to record a case A man in his fifties had had symptoms suggestive of duodenal ulcer since 1923 He had undergone x-ray examination four times but definite signs of ulcer were lacking though his gall bladder was said to be pathological Upon the advice of a consultant he was treated dietetically and medicinally as for an ulcer In 1936, after the radiologist had reported duodenal irritation with a normally emptying stomach he was started upon a twenty one day course of histidine with the approval of the consultant After thirteen doses he said that he was no better but suddenly began to improve, and, on completion of the course said that he had never felt better In September 1937 he had a recurrence of pain etc and it was arranged that he should be x rayed on September 17 Late on the night of September 16 at operation a perforated duodenal ulcer was found near the pylorus After a somewhat stormy convalescence he recovered he is now about 65

Death from a Wasp Sting

Surgeon Commander A E P CHEESMAN R N writes from H M Dockyard Malta With reference to Dr F Alexander's letter in the *Journal* of June 18 (p 1348) I would suggest that the cause of death may have been anaphylaxis While in the West Indies a few years ago a doctor a friend of mine told me that he had found a man unconscious by the side of the road there was no apparent cause for this Eventually the man recovered and stated that a bee had flown into his open mouth and had stung him The mark of the puncture was on the inner surface of his lower lip without any obvious swelling So far as I can remember the man explained that he had had a similar seizure some years before when stung by a wasp and that he had trouble with injections under his skin' There was no added cardiac disease or hyperpiesis in his case

Aspirin Poisoning

Dr M C ANDREWS (Wembley) writes The note by Dr F Biddle in the *Journal* of June 25 (p 1365) reminds me of two cases of aspirin poisoning which I saw about ten years ago In each case the patient claimed to have taken 625 grains of aspirin Both patients recovered completely in a few days after a short period of restlessness sweating thirst nausea and oliguria There may be something in the claim that the potency of different makes of aspirin varies!

Disclaimer

Dr J NEIL LEITCH writes I notice that my name was mentioned in a certain case which came before the General Medical Council recently and was reported in your *Supplement* I had no connexion whatever with the rheumatism clinics mentioned I met one of the gentlemen named on three occasions of short duration during which some general conversation took place The other gentleman I met twice merely telling him of an opening which he might care to avail himself of I deny absolutely the whole story put forward in the case so far as it concerns me The newspaper report quoted in the case did not refer to me in any way

We have just received a well prepared booklet on sex hormones in gynaecology and obstetrics issued by the British Drug Houses who will supply the booklet on application

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Deutsche Medizinische Wochenschrift

Berlin — vol. 64 — April 9, 1938

Various Clinical Types of Haemorrhage: Hints on Recognition of a Liability to Thrombosis.—R. Jurgens.
Forensic Significance of Haemorrhagic Diathesis in Childhood.—G. Schrader.
Operations and Pregnancy.—A. Benthin.
Winter Peak of Diphtheria due to Diminution of Specific Immunity.—E. Haesler.
Carbon Monoxide Pseudo-haemoglobin: Late Demonstration of Carbon Monoxide Poisoning and Action of Carbon Monoxide on the Animal Organism.—G. Barkan.
Unusual Course of a Breslau Enteritis with a Sudden Late Death.—K. Riethmuller.
Instillations for Acute Middle-ear Inflammation.—K. Ganter.
New Views on Consumption of Alcohol and Capacity to Work.—J. Faig.
Virus Diseases.—E. Gildemeister.
Experiments on Living Animals.—H. Neupert.
Right to Work in a Doctor's Home.—C. Lommel.

Haemorrhage.—It is clinically possible clearly to distinguish from each other six different types of haemorrhage. There are those due to vitamin deficiency and to haemophilia and those which may be classed as thrombopathic thrombopenic capillary toxic or hormonal in origin.

Diphtheria.—No confirmation is found of the Gallenkamp theory that the winter peak of diphtheria is due to a diminution of specific immunity. The fundamental causes of this peak remain as obscure as those of the late summer peak of poliomyelitis.

Journal of the American Medical Association

Chicago — vol. 110 — April 30, 1938

Statistics on Deaths from Rheumatic Heart Disease.—H. L. Lunn and O. F. Hedley.
Post-operative Coronary Occlusion.—A. M. Master, S. Dack and H. L. Jaffe.
Basal Anaesthesia: Evipal Soluble by Rectum.—A. E. Jones.
Emergency Treatment in Asthma.—G. L. Waldbott.
Lop Ear.—D. W. MacCollum.
Obesity in Adolescents.—H. Gray.
Action of Hypoglycaemia on Central Nervous System.—E. Geilhorn.
Tuberculosis Epidemic: Sixty-four Cases.—T. L. Ferenbaugh, L. Segal and H. A. Schulze.

Adolescent Obesity.—Obesity in adolescents is being treated often indiscriminately according to Gray by pituitary or testicular extracts. In certain cases good results are obtained but it should be remembered that this may be due to natural causes and not the injections and that deleterious by effects may occur. Diets for obesity of carbohydrate 80 grammes protein 60 grammes and fat 40 grammes daily have given excellent results.

Klinische Wochenschrift

Berlin — vol. 17 — April 30, 1938

Vitamins and Premature Senility.—W. Kollath.
Variability of Automatic Vasomotor Regulation.—W. Fahrenbach and H. J. Oettel.
Collapse as a Result of Erect Posture.—R. Janzen.
Fatigue-electrocardiogram in Children.—P. Laurentius and K. Schuler.
Influence of Acetone on Oxybutyric Acid Content of the Blood.—M. Emmerich and F. Pollak.
Elimination of Potassium and Sodium by Diseased Kidneys.—H. Sedeke and R. Herbst.
Elimination of Ceramine in Animal.—M. Hartmann and H. Iler.
Value of Precipitation Reaction for Demonstration of Adulteration of Human with Animal Milk.—H. Urbach.
Dysentery Bacilli and Targesin.—H. Lippelt.
Japanese Contributions to Study of Regulation of Blood Supply to Central Nervous System.—F. Hoff.

Dysentery.—Targesin (a complex colloidal diacetyl tannin silver albumen compound) has been tried in two cases of bacterial dysentery with remarkable success. The preparation when given by the mouth was well tolerated the general symptoms cleared up in a few days.

Lancet

London — vol. 231 — April 16, 1938

Malignant Hepatic Jaundice.—A. Ellis.
Nutrition and the Nervous System with Special Reference to Pernicious Anaemia and Subacute Combined Degeneration.—C. C. Lucas.
Treatment of Meningococcal Meningitis with Sulphapyridine.—T. Cramer and G. B. Fleming.
Action of Testosterone Propionate in the Female.—G. L. Foss.
Unusual Case of Lead Poisoning.—J. N. M. Chalmers and S. L. Thompson.
Prevention of Complications during Gold Therapy in Tuberculous Arthritis.—K. Secher.

Complications of Gold Therapy.—According to Secher toxic symptoms arising during treatment with gold of tuberculosis and arthritis are not due to the metal but to the liberation of toxins from the lesion itself. After explaining his reasons for this belief he states that toxic reactions can be prevented or checked by the energetic administration at the same time as the gold of vitamins A, B, B, and C. In 150 patients so treated he has seen no case of thrombopenia and two only of dermatitis.

Medical Journal of Australia

Sydney — vol. 1 — April 16, 1938

Maternity and Some of its Problems.—H. S. M. Leonard.
Refractometry and Concentration of the Blood.—W. J. Penfold and J. Sutherland.
Medical Organization with Mechanized Formations.—C. G. Shaw.
Pituitrin and Carbohydrate Metabolism: Influence of Protein.—C. S. Anderson.

Medizinische Klinik

Berlin — vol. 34 — April 9, 1938

Normal and Pathological Anatomy.—O. Lubarsch.
Changes in the Treatment of Hypertrophy of the Prostate.—T. Hrabak.
Liver and Bile Ducts in Septic Conditions.—K. Bingold.
Symptomatology and Treatment of Lambliasis.—O. Porges.
Achlorhydria treated by Erzymin.—R. Bauer.
Sweat Secretion in Psoriasis.—W. Kleinschmidt.
Treatment of Inflammatory and Purulent Infections with Leukhaemia.—W. D. Mund.
Nomenclature of Pharmaceutical-Generic Preparations.—A. Mayrhofer.
Agranulocytosis.—A. Kuhnstoff.
Role of Causes of Iodism Personified.—R. Bunken.

Medizinische Welt

Berlin — vol. 12 — April 9, 1938

Natural and Local Remedies and Local Climate in the Process of Healing.—W. Pfannenstiel.
Future of Bacteriology.—H. Lampert.
New Knowledge and Problems in Balneology.—J. Kuhnau.
Sun-bath at the Sea.—H. Curschmann.
Diet at the Spa.—H. Rose.
Advances in Diagnosis of Cardiac Conditions.—A. Weber.
Human Bioclimatology.—E. v. Philipsborn.
Bioclimatic Research.—H. Pfannenstiel.
Pneumatic Patient at Aachen.—A. Slatick.
Balneological Institute at Bad Pyrmont.—H. Reichel.

Münchener Medizinische Wochenschrift

Munich — vol. 85 — April 29, 1938

Suitability of Race Horses.—G. Lemmel.
Treatment of Bronchial Asthma.—C. Stracke.
Ulcer.—H. Edgar Eder.
X-Ray Examination of the Alimentary Canal.—G. Groedel, Pfahler and S. Kaufmann.
Emotional Factor in Epilepsy.—P. Feldmann.
Treatment of Vaccinosis by Extract.—R. Trumpp.
Necessity of Declaring Diseases of Prematurity and Congenital Debility as Claims from Public Health Insurance.—H. Finkelstein.
Movement Impairment in Children.—A. Peiper.
Medical School in Vienna.—O. Hamperl.

Nature

London vol 141 April 9 1938

Social Relations of Science —F Soddy
Complex Formation in Lipoid Films —J H Schulman E Stenhagen and E K Rideal
Deuteron induced Radioactivity in Oxygen —T Yasaki and S Watanabe
Amino derivatives of Penta erythritol —I G Mann and A Rutherland
Purified Urease —J N Davidson
Lactoflavin in Fish Eyes —E Adler and H v Euler
Spore Formation in a *Vibrio* —R L Starkey
Salaries in Soviet Universities —M Ruhemann
A Binocular Illusion —H H Dixon

New England Journal of Medicine

Boston vol 218 April 28 1938

*Familial Aspects of Cancer —H L Lombard
Peritoneoscopy —E B Benedict
*Condition of Cervix on Vaginal Examination A True Index of the End of Pregnancy —R S Titus
An Unusual Case of Gout in a Woman —J A Halsted

Cancer —As the result of an extensive statistical study, Lombard considers that individuals among whose immediate relatives cancer has occurred have a slightly greater chance of contracting the condition than has the remainder of the population The difference between the two groups is not sufficient to cause undue worry, but further statistical studies are desirable

Cervix in Pregnancy —Titus urges the advisability of routine vaginal examinations in the last few weeks of pregnancy This is a safe procedure when properly performed When labour is imminent the cervix is an obliterated soft patulous organ this condition of the cervix is the only index upon which induction should be based and the only true index of the end of pregnancy

Nordisk Medicinsk Tidskrift

Helsingfors vol 15 April 9 1938

Vitamin C Content of Cabbages and Brussel Sprouts —H Lieck
Liver Rupture Among the Newborn after Normal Parturition —H L Kottmeier

Norsk Magasin for Laegevidenskapen

Oslo vol 99 May 1938

*Was Radesyken a Vitamin deficiency Disease?—F Gron
Case of Paradoxical Air Embolism —K Thomassen
*Blood in Respiratory Passages after Tonsillectomy —T Leegaard
Gastric Acidity Determined by Fractional Aspiration of a Test Meal —B Fretheim
Tumours in the Posterior Cranial Fossa —A Torkildsen
Psoriasis Bacillus—a *Corynebacterium*?—E Asser

'Radesyken —This chronic disease was a national scourge in Norway from the beginning of the eighteenth till about the middle of the nineteenth century It was more important than leprosy and was at one time thought to be a manifestation of tertiary syphilis Gron however, thinks it may have been scurvy

Blood in Respiratory Passages after Tonsillectomy —Indirect laryngoscopy of 109 patients on whom tonsillectomy was performed under local anaesthesia mostly in the sitting posture, showed that a large amount of blood and pharyngeal secretion flows down into the lower respiratory tract This process is to a certain extent prevented when tonsillectomy is performed in the recumbent posture Only two cases of slight bronchopneumonia followed a total of 1 007 tonsillectomies

Policlinico

Rome vol 45 April 25 1938 (Sez Prat)

Treatment of Chronic Mono-articular Rheumatism by Novocain Infiltration —M Tripodi
Pancreatic Lithiasis —M Cace

Presse Medicale

Paris vol 46 April 27, 1938

SPECIAL NUMBER ON RUMANIAN CZECHOSLOVAK AND YUGOSLAV MEDICINE

Rumania

*Electro encephalogram in Certain Pathological Conditions —C Marinesco O Siger and A Kreindler
Total Extirpation of Pancreatic Cysts —I Iacobovici
Anatomo physiological Outline of Vegetative Nervous System Regulating Mechanism of Vegetative Tonus —Dantchopolu
Drainage of the Hypophysis towards the Hypothalamus —G T Topa

Czechoslovakia

Case of Adenoma of Islands of Langerhans —A Jirasek and O Postranecky
Cancer of Lung in Miners of Joachimstal —H Sikl
So called Haemolytic Icterus —M Netousek
Quantitative Determination of Lead in Blood —J Teisinger

Yugoslavia

Newly Ascertained Experimental Data on Function of Spleen —V Kostitch
Paratyphoid C Kunzendorf —K Todorovitch
Treatment of Spastic Paralysis Posterior Rhizotomy —M Voytchitch
Neurinomata of Peripheral Nerves —S Davidovic

Electro encephalography —The authors describe the results of their examination by means of electro encephalography of eight cases of epilepsy one of tetany one of hemiplegia fourteen of aphasia thirteen of cerebral tumour (of which eight were verified at operation or necropsy) and ten of coma

Paris vol 46 April 30 1938

*Urea Clearance Test (Van Slyke's Coefficient) in Study of Renal Function —P Vallery Radot P Delafontaine and J F Forge
Shortening of Mean Period between Age Incidence of Primary Tuberculous Infection and Age Incidence of Pulmonary Tuberculosis as a Dietetic Practical Consequences —E Bernard and J Weil

Urea Clearance Test —The authors, after a detailed account of the urea clearance test and a comparative study of Van Slyke's coefficient and Ambard's constant conclude that these tests are complementary One of the chief advantages of the urea clearance test is that it is easy to carry out and furnishes evidence of the functional elasticity of the normal as against the "rigidity of the diseased, kidney

Schweizerische Medizinische Wochenschrift

Basle vol 68 April 30 1938

FESTSCHRIFT TO PROFESSOR F DE QUERVAIN

Symptomatology of Gastrocolic Fistula —B Breitner
Wire extension —M Kirschner
*Late Symptomatology of Paget's Osteodystrophy of the Spine —G Woytek
Sarcomata of Muscles —C Lenormant
*Excision of First Lumbar Ganglion for Painful Sequelae of Lower Limb Phlebitis —R Leriche
Two Cases of Gastric Tuberculosis —R Alessandri
Post operative Illness —M Donati
Infection or Verminous Protection of Wounds?—D Giordano
Case of Cerebral Prolapse into Frontal Sinus —O Uffreduzzi
Histopathology of Synovial Diseases —T von Verebély
Return to Billroth I in Secondary Operations on Stomach —P Clairmont
Abdomino perineal Excision of Rectum —P Decker
Simple Analysis of Methaemoglobin by Pulfrich's Stufophotometer —A Gigon and M Noverraz
Operation for Dislocation of Ulna at Inferior Radio ulnar Joint —C Henschen
Destruction of Femoral Neck by Aberrant Pseudo-arthrosis Restoration —H Iselin
Cure by Castration of Invert and Exhibitionists —A Jentzer
Non iodine Treatment of Experimental Hyperthyroidism —R Abelin
Nervous Regulation of Thyroid Activity —L Asher
Rare Abnormalities of Arteries of Thigh and Pelvic Floor —H Blumenschli
Effect of Chlorophyll on Healing of Wounds —E Burgi
Ergot Extracts —P Casparis and J Bullet
Expression Injuries of Skull —J Dettling
Indications for Osteotomy at Upper End of Femur —M Dubois
Epidemic Infantile Paralysis and Trauma —W Frey
*Larsen Johansson Disease of Patella and Schlatter's Disease —E Glanzmann
Exact Localization of Ocular Foreign Bodies —H Goldmann
Methods of Operative Sterilization in Females —H Guggisberg
Origin and Purpose of Self mutilation —J Klaesi
Detection of Small Pleural Effusions —A Liechti
Developments in Oto laryngology —E Lüscher
Embolectomy in High Origin of Arteria Profunda Femoris within Pelvis —H Matti
Endophlebitis Obliterans Hepatica —V Schilphach
Traumatic Internal Haemorrhagic Pachymeningitis —C Wegelin
Results of Transurethral Electric Prostatic Resection —H Wildbolz
Gastro enterostomy on Pylonic Side of Lowest Point in Dilated Stomach —T Johner
Lipoid and Cancer —H Buchler
Heparin in Prevention of Post-operative Thromboses —J de Puoz

Paget's Spinal Osteodystrophy.—The cases illustrated include (1) fusion of bodies and arches of cervical vertebrae with radicular pain (2) gibbus and fused thoracic vertebrae (3) spastic paraplegia from advanced thoracic vertebral Paget's disease. Pathological fractures occur at a much earlier stage when porosis predominates over sclerosis.

Lumbar Ganglionectomy for Post-phlebitic Pain.—Leriche describes a special extraperitoneal approach to the first lumbar ganglion which he has removed with lastingly good results in three cases in which very severe crural pain accompanied by cutaneous atrophy threatening ulceration followed phlebitis dating some years back. On the other hand no operative treatment he finds permanently relieves post-phlebitic ulceration.

Patellar Osteochondritis.—Glanzmann describes the essential features of juvenile osteochondritis of the patella which was described independently by Larsen and Johansson in 1921. Both their patients had in addition Schlatter's disease of the tibial apophysis. Other cases in the literature are summarized. Some were complicated by Perthes's disease. A cousin of Glanzmann's own patient with patellar osteochondritis had Schlatter's disease; the cousin's father had cartilaginous exostoses of the lower ends of the femora. The clinical signs and relation to trauma are discussed.

Science

New York vol. 87 April 29 1938

Physiological Study of Rind Colour of Certain Citrus Fruits.—E. V. Miller.
Molecular Weights of Urease, Canavalin, Concanavalin A, and Concanavalin B.—J. B. Sumner, N. Gralen, and I. B. Eriksson-Quensel.
Some Effects of Androsterone on Sexual Development of Female Rats.—R. R. Greene, M. W. Burrill, and A. C. Ivy.

Ugeskrift for Laeger

Copenhagen vol. 100 April 28 1938

Treatment of Epidermomycoses of Hands and Feet with Jeresids (Ichthyol-esters).—A. Kaymeyer.
Are Available Facilities for Diagnosing Gonorrhœa in Women always Exploited to the Extent they Deserve?—E. Lomholt.
Greasy and Dry Hair: A Statistical Survey.—A. Poulsen.

Case of Fielder-Mercier-Dermatitis.—T. Jerger.
Attempt to treat Acute Ulcerative Gingivitis with Internal Remedies.—O. Kastrup-Jørgensen.
Lesion and Deepened Gingival Pocket.—E. Thomsen-Jacobsen.
Ultraviolet Irradiation in the Treatment of Gonorrhœa.—V. Gerner.

Diagnosis of Gonorrhœa.—A study of the material available at the Rigshospital in Copenhagen showed that inadequate use is still made of a careful history record of symptoms, bacteriological examination of the discharge from the cervix and urethra, and of the complement-fixation test. In spite of the general agreement as to the great diagnostic value of this test in gonorrhœa it is still the exception rather than the rule for it to be applied to just those cases in which it would be particularly valuable—namely those in which other evidence of gonorrhœa is doubtful or inadequate.

Wiener Klinische Wochenschrift

Vienna vol. 51 April 16

Symptomatic and Pathogenetic Basis of Fever.—E. Neubauer.
Congenital Anaemias.—A. Zimmermann.
Treatment of Urinary Infections with Mandelic Acid.—T. Hahn.
Clinical Picture of Tuberculosis.—O. Bloch.
Simple Reaction for Decortication of Arterial Wall.—W. Lehnert.
Advances in Urology.—R. Chwalla.
Which Fractures of Ankle and Foot require Operative Treatment?—P. Bohler.
Treatment of Tuberculosis.—Lundsgaard, Fibiger, Jacobaeus, Moltchanoff, Wessely.

Acetonuria.—A simple reagent consisting of 1 gramme of 2·4 dinitrophenylhydrazine with 20 c.cm. of concentrated hydrochloric acid and 200 c.cm. of distilled water is useful in detecting the presence of acetone in the urine. 2 c.cm. of reagent is mixed with 2 c.cm. of urine and in the presence of acetone a thick yellow cloud appears. Libbrecht gives the sensitivity of the test as 1 in 5,000.

Wiener Medizinische Wochenschrift

Vienna vol. 88 April 9 1938

Bronchial Asthma.—G. Hoyer.
Sunlight and Other Forms of Radiation Therapy in Skin Diseases in General Practice.—J. Konrad.
Alleviation of Pain in Obstetrics.—L. Kreul.
Therapy of Female Gonorrhœa.—R. Hofstätter.

SPECIAL JOURNALS

Acta Chirurgica Scandinavica

Stockholm vol. 80 April 1 1938

Anastomosis of Biliary Passages for Obstructive Jaundice: Thirty-seven Cases.—L. Nordin.
Post-operative Phlegmonous Gastritis.—M. Persson.
Back and Dislocation of Atlas-Axis Joint with Fracture of Odontoid.—G. Sundelin.
Spina Bifida: Prognosis and Heredity.—S. Hinderson Nielsen.

Spina Bifida.—The author's material consists of 357 cases collected from Danish hospitals. The prognosis and pathogenesis of the disease were investigated. Only meningoceles should be submitted to operation and as a rule the children should be transferred to neurosurgical department. It is very probable that a complicated hereditary factor plays an important part in the causation of the condition.

American Journal of Public Health

New York vol. 28 April 1938

Certain Criteria in Qualifications and Preparation of Health Officers.—Henry E. Meleney.
Physician's Statement of Cause of Death.—A. Hardisty Sellers.
Organisms involved in Pollution of Water from Long-used Faucets.—L. W. Parr.
Preventive Aspects of Crippling Diseases.—H. E. Hilleboe.
Public Health Nurse and Orthopædic Nursing Care.—Dorothy J. Carter.
Social Work and the Physically Handicapped Child in Development of a New State Programme.—Dorothy Burlingame.
Acquired Tuberculosis in Privates in Laboratories and Z. oor-ical Centres.—C. R. Schroeder.

Industrial Hygiene applied to Clothing Manufacturing Industry.—Wilmer H. Schulze.
Neurasthenic Exhaustion Reaction following Smoky Atmospheres at Fire-fighting.—Samuel R. Haythorn and Harry B. Meier.
Physique and Health.—Jesse Feiring Williams.
Problem of Causes of Stillbirth.—Ethel C. Dobbin, Elizabeth C. Tarbell, Edith F. Daly, and Clara E. Hayes.
Extent and Seasonal Variations of Intermittent Growth.—C. E. Turner and Alfred Nordtvedt.

Qualifications of Health Officers.—A survey of medical and other qualifications held by whole-time and part-time medical officers in counties districts large cities and small cities. A large proportion of men have medical degrees only and no public health qualification. Some (up to 8 per cent. in two groups) have no degree at all others hold degrees in sanitary engineering veterinary science and even pharmacy. Upon this analysis is based a plea for basic qualification specialist training post-graduate courses and full-time service for those well qualified.

Clothing Industry.—A survey of the hazards to health common to factories in general showing that the danger of carbon monoxide poisoning from gas-fired hardening etc.) is highest in the clothing industry. Hygiene service over a period of five years (1932–7) has reduced this hazard from 7 per cent. to 2 per cent. Similar reductions in other risks and dangers except that of glare from artificial lighting have been effected.

Smoky Atmosphere and Pneumonia.—Pittsburgh has a comparatively high pneumonia rate and an atmosphere laden with

dust and smoke As a result of 3 000 necropsies nothing tangible was found to connect pigment deposition in the lungs with the high incidence and high mortality of pneumonia The association of severe anthracosis and healing by organization was verified

Causes of Stillbirth—In the U S A 77 000 stillbirths are registered annually Products of conception previous to the fifth month are not registered as stillbirths in most States In addition there are 63 000 infant deaths of which 89 per cent occur in the first month and are largely due to natal and prenatal causes A plea for uniform reporting a standard certificate post mortem examinations an acceptable method of classification, and co operation between physicians is made

Annales de Dermatologie et de Syphiligraphie

Paris vol 9 April 1938

Syphilis causing Rupture of Viscera Spontaneous Rupture of Gummatous Kidney—M Favre P Croizat and R Martine
*Subacute Cutaneous Lymphogranulomatosis—S Nicolau

Subacute Cutaneous Lymphogranulomatosis—Nicolau points out that lymphogranuloma inguinale is rarely a skin disease and in fact only seven cases of subacute cutaneous lymphogranulomatosis could be found in the literature He himself describes fully a case (with photographs) with involvement of a large area of skin over the left lower part of the abdomen left inguinal region and the upper part of the left thigh The first signs of inguinal bubo occurred in February but the skin did not begin to show infiltration till the following September In the case described the affection did not spread along the lymphatic channels but seemed to traverse the reticular tissue, and in this respect presented an analogy with those cases in which lymphogranuloma inguinale causes long fistulous tracks in the depths of the subcutaneous tissue

Annales d Hygiene Publique, Industrielle et Sociale

Paris vol 16 April 1938

*Report on Apparatus for Tendering Meat—Albert Besson
Clarification of Waters of the Loire Conditions of Usage and Comparison between Sulphate of Alumina and Perchloride of Iron as Flocculation Agents—O Dudevant M E Lasnune and L Frocrain
*Two Epidemics of Diphtheria at a Berujeu Preventorium at an Interval of Five Years—Marcel Brongniart
Training of Hygienists and Medico social Control of Public Assistance—A Dupuy

Tendering Meat—It is customary among French butchers to use an instrument furnished with numerous small thin steel blades for beating meat so that the tough fibres are cut thereby producing tenderness It is submitted that meat thus tendered is sold by misrepresentation, and that such an instrument may readily convey infection The use of these instruments has been prohibited in the Somme district and a plea is entered for extension of the prohibition throughout the country

Two Diphtheria Epidemics—The Preventorium is a country convalescent home for delicate (city) children In spite of preliminary examination of the throats of entrants, outbreaks of diphtheria occurred in 1931 and 1937 The results of bacterial and other investigations the effect of immunization with Ramon's anatoxine the part played by carriers and suggestions for preventive measures of a practical nature are discussed in detail

Annals of Internal Medicine

Baltimore vol 11 April 1938

Grave Sequelae of Blood Transfusions Thirteen Cases in 3 500 Transfusions—E L DeGowin
Chronic Atrophic Arthritis—H E Thompson B L Wyatt and R A Hicks
Tumours of Pulmonary Apice and Adjacent Regions involving Brachial Plexus—H C Habein J M Miller and J C Henthorne
Circulation Time Diagnostic Aid in Hyperthyroidism—S J Goldberg
*Therapeutic Experiences with Cobra Venom—D I Macht
Gastric Secretion in Pernicious Anaemia—H M Rozendral and R N Washburn
Ulcerative New Therapeutic Approach—H A Rush and B D Kennamore
*Upper Lobe Pneumonia in Adults—M B Rosenblatt and A Bachman
Heliotherapy of Tuberculosis—E Mayer
Syndrome of Extrarenal Azotaemia—H Jeghers and H J Baker
Large Pericardial Effusion complicating Acute Coronary Thrombosis—E S Nichol
Hyperinsulinism Associated with Hyperthyroidism Two Cases—J L Carmichael
Musculospiral Paralysis after Serum Injection (Recurring after Second Injection)—L Brahdy

Cobra Venom—The claims of French workers that cobra venom has a valuable analgesic action are confirmed and extended In the doses employed cobra venom is no more toxic than many widely used alkaloids In comparison with morphine its action is of slower onset but much more enduring, lasting for one or more days It is of especial use in cases of intractable pain due to inoperable cancer It is also claimed that the venom is useful in relieving the pain and rigidity of Parkinson's disease

Upper Lobe Pneumonia—Upper lobe pneumonia was found in 24 per cent of a series of 180 cases of lobar pneumonia and the mortality rate was 42 per cent The condition is remarkable for the infrequency of physical signs of consolidation and the simulation of pulmonary tuberculosis the marked toxicity and the frequent occurrence of meningitic symptoms, and the infrequency with which pneumococci of a definite type could be isolated Excellent radiographs of typical cases are given

Archives of Internal Medicine

Chicago vol 61 April 1938

*Laurence Moon Biedl Syndrome Relation to General Problem of Retinitis Pigmentosa—J Marmor and R K Lambert
Metabolism of Vitamin C in Rheumatoid Arthritis—J F Rinehart L D Greenberg F Baker S R Mettler F Bruckman and F Choy
Metabolism of Vitamin C in Rheumatic Fever—J F Rinehart L D Greenberg M Olney and F Choy
*Comparative Evaluation in Clinical Practice Complement Fixation in Amoebiasis—M Paulson and J Andrews
Hyperinsulinism and Cerebral Changes Case of Islet Cell Adenoma of Pancreas—N Malmud and L C Grosh
Clinical Studies in Circulatory Adjustments IV Obliterating Pulmonary Arteritis with Secondary Pulmonary Changes and Right Ventricular Hypertrophy Case Report with Necropsy—M A Rothschild and A A Goldbloom
Renal Insufficiency from Blood Transfusion II Anatomical Changes in Man compared with those in Dogs with Experimental Haemoglobinuria—L L DeGowin F D Warner and W I Randall
Hyperthyroidism and Pulmonary Tuberculosis Review of Literature and Twenty three Cases—E Rose and H U Hopkins
*Prolonged Meningococcaemia Three Cases—A Carbonell and E P Campbell
Liver and Biliary Tract Review for 1937—C H Greene M Plotz and S A Locallo

Laurence-Moon Biedl Syndrome—Two cases of this syndrome are reported and the present knowledge of the condition is reviewed and its association with retinitis pigmentosa discussed The view is put forward that the syndrome is a congenital anomaly dependent on an inherited chromosomal factor

Complement Fixation in Amoebiasis—The results of this test and of clinical examination with microscopical inspection of the stools were compared on a series of cases of amoebic dysentery and of diarrhoea due to other conditions It is concluded that in the individual case microscopical examination of the stools is still the most reliable diagnostic method

Prolonged Meningococcal Septicaemia—Three cases are reported and the American literature on this condition is reviewed Fever of tertian or quartan type of prolonged duration associated with myalgia multiform erythematous rashes and the absence of cachexia are significant features Meningococcal endocarditis is distinguished by a high and sustained temperature

Archives of Neurology and Psychiatry

Chicago vol 39 April 1938

Periarteritis Nodosa Clinico-pathological Study with Special Reference to Nervous System—J W Kernohan and H W Woltman
Nucleus Lateralis Medullae Experimental Study of its Anatomical Connections in *Macacus rhesus*—G A Blakeslee J S Freeman and S E Barrera
Insulin Shock Therapy in Schizophrenia—H ns H Reese and A VanderVeer
Metrazol Shock Treatment of Functional Psychoses—A A Low J R Sonenthal M F Blaurock M Caplan I Sherman and F C Whitcomb
Mechanism of Migraine Headache and Action of Ergotamine Tartrate—J R Graham and H G Wolff
Restlessness in Children—P M Levin
Bad Taste (Cacogeusia)—H H Hart
Human Autonomic Pharmacology VI *Effect of Benzedrine Sulphate on Argyll Robertson Pupil*—Abraham Myerson and W Thau
Autonomic and Motor Localization in the Hypothalamus—L Ectors N L Booker and R W Gerard
Experimental Encephalitis produced by Intravenous Injection of Various Coagulants—P F A Hoefer T J Putnam and M G Gra

Peri arteritis Nodosa—In this paper after a general discussion of the disease Kernohan and Woltman give a detailed clinical and pathological discussion of five cases of peri arteritis nodosa with neurological symptoms They conclude that the degeneration of the peripheral nerves appears to be the result of the occlusion or marked narrowing of the lumen of the nutrient arteries and is not due to inflammation in the nerve or to the effects of the toxins of the disease

Experimental Encephalitis—Hoefer and his co workers have produced in animals neurological symptoms and pathological changes in the nervous system by means of sublethal doses of coagulants given intravenously In the successful experiments such symptoms as blindness and paralysis of the limbs were produced and an intense degenerative reparative and exudative process involving both the grey and white matter was found in the cerebral hemispheres These changes were most intense round the venules and it is stated that the lesions closely resemble those of post vaccinal and post measles encephalitis

Archives of Ophthalmology

Chicago vol 19 April 1938

Case of Choroidal Sclerosis in Coronary Arteriosclerosis—Martin Cohen
Pyretotherapy in Ophthalmology—L Hambresin
Problem of Glaucoma—Benjamin L Gordon
Intracapsular Cataract Extraction Further Series of Cases—Leighton F Appleman
Dominant Eye *Clinical Significance*—W H Fink

Pyretotherapy—The difference between pyretotherapy and shock therapy is emphasized *The former may be produced* by malarial therapy Dmelcos vaccine pyrifer sulphur in oil short waves and the hypertherm of Kettering It is the only treatment of any value in syphilitic optic atrophy though the results are only fair sulphur and malarial therapy are most efficacious Dmelcos vaccine is useful for acute and subacute inflammations it being sometimes helpful to use shock therapy at the same time Short waves and the Kettering hypertherm are still in the experimental stage

Archives of Pediatrics

New York vol 4 April 1938

Sodium Thiosulphate Treatment in Six Cases of Allergy—J E Klein
Vitamins and Minerals in Nutrition of Children—A T Proctor
Hereditary Ectodermal *Dysplasia Anhidrotic, Non-sex linked Type*—C G Kerley
Improved Sanitary Cap for Nursing Bottles—O J Kahn
Variability of Findings in Tuberculous Meningitis—H E. Thelander and J Baldwin
Outline for Diagnosis and Treatment of Allergic Diseases of Children—A E. Kahlstrom R E Cutting and A V Stoesser

Sodium Thiosulphate Treatment of Allergy—This brief series of clinical studies indicates that sodium thiosulphate is a valuable drug in the treatment of allergic reactions It may be given intravenously and orally for migraine urticaria and such severe serum reactions as occasionally arise after immunization against scarlet fever The relief of symptoms is quick and often dramatic Cases are described where the drug was given with good results its mode of action in allergy is doubtful

British Journal of Experimental Pathology

London vol 19 April 1938

Meningococcal Bretheculture Filtrates Future Prospects Experience B G Macgrath
Tumours in Rats and Mice following Intravenous Injection of Inert Particles—F Bullock and H Orr
High power Microscopy of Living Vascular Endothelium—V Menkin and H Himmelweit
Chemical Composition of Active Agent of Rous Sarcoma—J A Carr
Formamide Method for Extraction of Proteins from Human Cancers—A T Fuller
Effect of Sulphonamide Compounds on Certain Bacteria—F C Happold and Brittain
Preparation of Protective Serum against Haemophilus Streptococcus—H Lowenstein
Specific Complement Fixation with Streptococcus Pyogenes Antigens Relationship to Virulence stalizing Properties of Immune Sera—E Pulvertaft
Serological Properties of Streptococcal Nucleoprotein Haemolysin Streptococci—H Lowenstein

Meningococcus Antitoxin—So-called meningococcus antitoxin from both commercial and other source does not inhibit the lethal action of the toxic substance in filtrates of meningococcus broth cultures when the two are injected together intracerebrally into guinea pigs The toxic filtrate have a poor capacity for exciting antibody formation of other kinds in the rabbit and horse The author criticizes the work of Ferry on this subject and submits that there is no reliable experimental evidence at present in support of the use of such toxic filtrates for the preparation of therapeutic sera

Effects of Thorotrast—Rats and mice were given two doses of 0·5 c.cm and 0·1 c.cm respectively of thorotrast by subcutaneous injection with an interval of a fortnight Among survivors for one year or more 28 per cent of rats and 26 per cent of mice developed a tumour at the site of inoculation many of these tumours were malignant and of several different types although a spindle-celled sarcoma occurred most commonly The structural changes preceding this result were studied and it is suggested that the malignancy is the combined result of radio activity and of the inflammatory reaction caused by the presence of thorotrast

Gynecologie et Obstetrique

Paris vol 37 April 1938

Treatment of Puerperal Infection by Intravenous Injection of Glucose and Autoserum—P Truffaut and R Bathaut
Kymograph Apparatus for Tubal Insufflation—Louis Bucura
Clinical Method for Determining Dosage of Follicular Hormones—A Doyle
Bacterial Invasion of Foetus in Labour—O Couvelaire
Congenital Disease of Kidney in Three Sisters complicating Pregnancy—J Iber
Therapeutic Value of Hysterosalpingography in Tubal Obstruction—R Kettle and J Haldre
Pregnancy at Term and Cancer of the Cervix—S I Stern

Hysterosalpingography—The authors lay stress on the therapeutic as complementary to the diagnostic value of lipiodol injection of the Fallopian tubes and quote several cases in which the operation has been succeeded by pregnancy

Journal of Bone and Joint Surgery

Boston vol 20 April 1938

Opposition of the Thumb—Sterling Bunnell
Disease of the Apophyseal (Intervertebral) Articulation—A Oppenheimer
Operative Improvement in Operations for Fracture—C C Yeo
Spondylolisthesis Lesion of the Superior Articular Process—J deM Lanman Otterson
Encasement of the Lumbar Spine A Case Report Low Back Pain Sciatica Radiculitis—H Wilson A Pierson
Correction of Internal Rotation of the Thigh in Spastic Paralysis—Herbert A Dittmer
Experimental Neoplasia Production of Carcinoma of Various Types in the Rabbit by Tar Application—Ernest Tracy Carl Hamilton
Present treatment of Fracture of the Knee Cap Quadriceps

Radiology

St Paul Minnesota vol 30 April 1938

Bedside Manner in Radiology—B H Orndoff
Integration of Clinical and Radiological Findings in Diagnosis of Carcinoma of Oesophagus 100 Cases—J T Farrell jun
Radiological Demonstration of Tissues (Normal and Pathological) having a Relatively Low Differential Absorption—J Russell Carty
*Immediate and End Results of Radiation Therapy in Certain Benign Bone Tumours—H P Doub F W Hartman and C L Mitchell
Skin Metastasis in Post operative Irradiated Breast Cancer—F W O Brien
Biological Basis of Fractionated Method of Irradiation of Malignant Tumours—J Borak
Tissue Necrosis—A G Schnack
Radiological Studies of Twins and Triplets—L G Rigler
Spontaneous Pneumothorax—D F Ehrlich and A Schomer
Racial Variations in Incidence of Cancer—Sir G Lenthal Cheatle and M Cutler
Clinical Observations in Treatment of Cancer by Supervoltage X Rays—S G Mudd C K Emery and L M Levi
Sharpness of Shadows in Radiography of Lungs—R R Newell
Peritoneal Injections of Gas in Radiological Study of Adrenals—C Granturco and C H Drenckhahn

Radiotherapy of Benign Bone Tumours—The major part of this paper is devoted to a description of the technique and results of radiotherapy in giant cell tumours of bone The statistics show a high proportion of cures with the method recommended A benign giant cell tumour may degenerate into osteogenetic sarcoma in some cases the degeneration can be traced to injury It is possible that frequently repeated small doses of x rays may have a stimulating effect on the growth It would therefore seem advisable to use less frequent larger doses at longer intervals The authors are against the combination of surgery and x rays for giant cell tumours as this may possibly favour malignant degeneration The paper includes also a short discussion on bone cysts with special reference to x-ray therapy In the case reported malignant degeneration occurred after eighteen months in spite of extensive calcification of the original tumour under the influence of radiotherapy Benign chondromata are also discussed these tumours are seen to be radio resistant and large doses of x rays are required to destroy them

Schmerz Narkose-Anaesthesie

Leipzig vol 11 April 1938

*Scope and Indications for Positive Pressure Pathological and Physiological Foundations—Killian
Present Position of Gas Anaesthesia II Ethylene—B Wilde

Positive Pressure Anaesthesia—The conditions present in open and closed pneumothorax and their effects on the difficulties and dangers of chest operations are fully discussed The mobility of the mediastinum is the most important factor and means for estimating this before operation are outlined The effects of the analeptics coramine cardiazol, etc on the respiratory system are shown to consist of a general increase in muscle tone with consequent enlargement of available lung area as well as central alterations of the rate and depth of breathing Recent work has shown the Breuer Hering reflexes to be similarly concerned with alterations in muscular tone rather than with automatic working of the respiratory cycle The starting position of the muscles of respiration is thus modified in order to correlate the available lung area with the oxygen needs of the body

Transactions of the Royal Society of Tropical Medicine and Hygiene

London vol 31 April 20 1938

*Climatic Bubo or Lymphogranuloma Inguinale—H M Hinschell
*Climatic Bubo or Lymphogranuloma Inguinale in African Natives—Clement C Chesterman
*Climatic Bubo or Lymphogranuloma Inguinale Experimental Investigation—G M Findlay
Antimony Resistance in Ulcerative Granuloma—K Vigors Earle
Scorpion Poisoning in Trinidad—J A Waterman
Cerebrospinal Fluid of Patients with Chinese Strain of Relapsing Fever—Hue Tan Chung
Death Rate and Epidemiology of Small pox in Hong Kong—K H Bailey
Tropical Phagedaenic Ulcer in the Pacific—R Kirk
Some Cases of Disseminated Sclerosis—N A Dyce Sharp
Schistosomiasis in Kavirondo District of Kenya Colony—R M Dowdeswell
Amoebic Hepatic Abscess and Associated Pericarditis—F M Purcell

Climatic Bubo—During the last twenty years out of 17 900 male cases of genito inguinal lesions 130 cases of climatic bubo have been diagnosed only in four was the primary lesion present An account is given of the general and special diagnostic points If response to protein shock therapy is not obvious within a fortnight excision of the affected glands should be considered operation may be necessary in 15 per cent of cases

In African native women the primary lesion is an ulcer on the labia or vestibule Subsequent evolution occurs by chronic ulceration with induration and but little epithelialization producing perforations adhesions, or stricture Inguinal adenopathy is rare and rectal stricture and various fistulae are commonly associated with the vulval lesions

Twenty six strains of virus have been isolated by intracerebral injection into mice The small cytoplasmic granules found in the inguinal lesion of man in the brains of infected mice and monkeys and in experimental buboes in guinea pigs almost certainly represent the aetiological agent Similar granules are found in the chorio allantoic membrane of the developing chick embryo infected with lymphogranuloma inguinale in the cells of the rabbit's cornea grown in tissue culture and in Tyrode tissue cultures of the virus The dimensions of the virus as shown by filtration through graded collodion membranes appear to be about 0·125 μ to 0·175 μ but larger forms occur and it is possible that the virus may undergo a cycle comparable to that of the psittacosis virus An antiserum prepared by injection of material from which the elementary corpuscles have been removed by differential centrifugation contains no virucidal immune bodies on the other hand an antiserum prepared by the injection of concentrated suspensions of elementary bodies relatively free from tissue elements contains virucidal immune bodies It thus appears that the presence of elementary bodies is essential for the production of virucidal immune bodies

Zeitschrift fur Kinderheilkunde

Berlin vol 59 April 2 1938

Further Report on Ustilaginism (Maize Poisoning) in Children—E Mayerhofer and B Dragisic
Treatment of Dietetic Disturbances in Infants with Ascorbic Acid—E Urbantschitzky
Sinus Thrombosis following Birth Trauma—A Meier
Experimental Research on Diphtheria of Mucous Membranes in Animals (III)—F v Bormann and H Dutton
Allergic Manifestations in Rheumatic Infections—J Duken
Existence of Lobar Pneumonias of Allergic or Non allergic Character—H v Simon
Inverse Anaphylaxis—E Voss
Cerebral Diseases and Tumours or Anomalies of the Blood Vessels—F Koch
Carbohydrate Tolerance in Diabetic Children on Different Diet—H Herrmann

Zeitschrift fur Krebsforschung

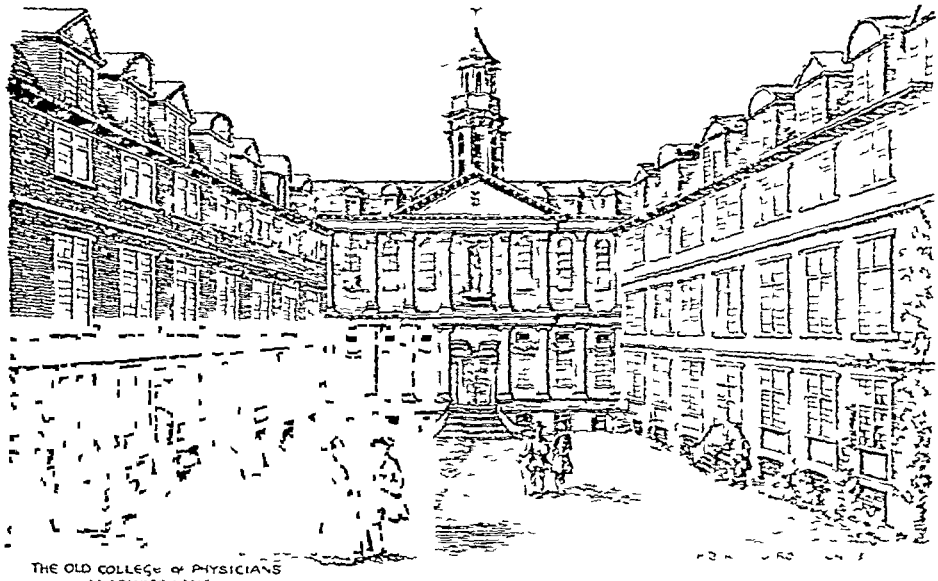
Berlin vol 47 April 27 1938

Experimental Investigations of Schneeberg Lung Cancer—H R Dohnert
Significance of Proteins in Production of Cancer—R Reding
*Multiple Tumours and Tissue Malformation Statistical Investigation—I Holmqvist and A Nelson
Improved Inoculation Method for Cancer Research—St Konsuloff
Clinical Consideration of Occupational Cancer of Asbestos Workers—F Hornig
*Occupational Cancer of Asbestos Workers—M Nordmann

Multiple Tumours—In a series of 4 000 necropsies 55 per cent were cases of tumour formation and in 40 per cent of these there were multiple tumours The frequency of multiple tumours was greater in women than in men and increased with age Multiple tumours were more often benign than malignant and there was evidence of a connexion between benign tumours and malformations The theoretical implications of the results are discussed

Lung Cancer in Asbestos Workers—Nordmann reviews the previously recorded cases of lung cancer associated with asbestosis adds two new cases (the clinical features of one of them are described in detail in the paper by Hornig) and discusses the connexion between asbestos and the cancers

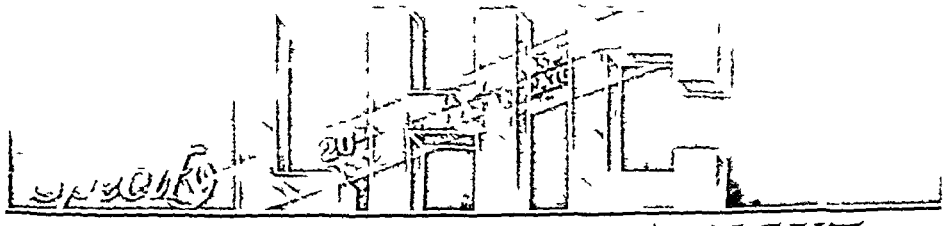
TRADITIONAL LONDON



THE OLD COLLEGE OF PHYSICIANS
WARWICK LANE

The College was founded by Linacre, Henry VIII's physician and incorporated in 1518 and until 1560 the College met in his house. From that date it migrated to Amen Corner and eventually occupied the fine quadrangular building shown above designed by Wren in Warwick Lane, until 1825. Wren's building was pulled down in 1866

London Hospital Catgut has no less finer traditions behind its development to a leading place in the esteem of Surgeons the world over. It is a product of scientific research, made throughout at the London Hospital under licence of the Ministry of Health.



LONDON HOSPITAL CATGUT

OBTAINABLE FROM ALL LEADING SURGICAL EQUIPMENT HOUSES

MILTON AS A DOUCHE

Patients often ask for advice on a suitable antiseptic In the many cases where a douche is indicated, Milton is particularly suitable

1 It is alkaline with a pH of about 10, due to sodium carbonate and not to caustic soda On dilution it forms a mildly alkaline solution which corrects any acidity, but does not harm mucous membranes

2 Even at considerable dilutions, it is still a hypertonic solution

3 It is miscible with mucus and pus and dissolves semi-solid proteid matter, thus acting as a cleansing agent

4 As will be readily appreciated from its content of 1 per cent of hypochlorite, it has a powerful germicidal action on any micro-organisms likely to be found in the vagina or uterus For B coli for example, it has a R W Coefficient of 2 12

5 It is a deodorant with immediate action, destroying the organic gases by oxidation

Owing to its reasonable price—Milton is sold by all chemists from 6d per bottle upwards—it can be recommended even when expense is a main consideration

A copy of the Pease Laboratories' Report on Milton, some notes on the value of Milton in Gynaecology, and a generous professional sample bottle of Milton will be sent to any medical practitioner

MILTON PROPRIETARY LTD,
JOHN MILTON HOUSE,
LONDON, N 7

S
Schi
Amol
10

AS AN ANTACID OR IN FEBRILE CONDITIONS



LEMBAR JUSTIFIES THE DOCTOR'S HIGHEST RECOMMENDATION

See our Exhibit at the B M A. Exhibition, also Diabetic Lembar

RAYNER'S

LEMBAR

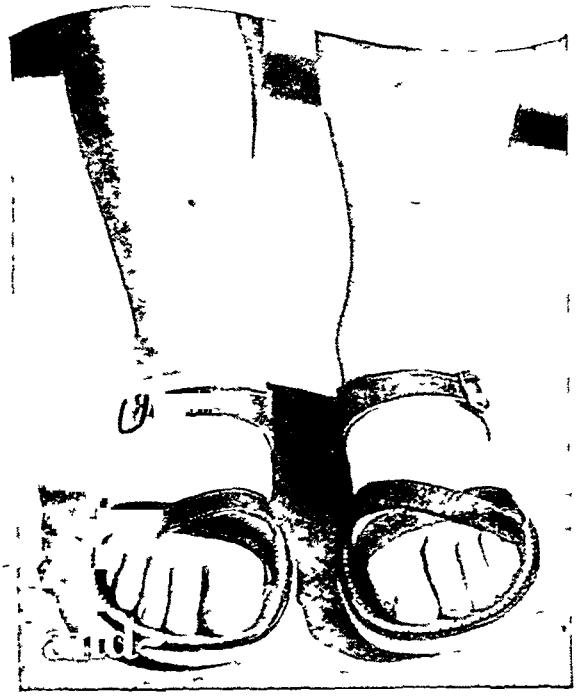
Made from finest fresh lemons, good Scotch barley and Glucose (with cane sugar) More efficient, better flavour and more economical than ordinary lemon and barley *A bottle makes a gallon* It keeps indefinitely

Tested and approved by a leading London Hospital Prescribe it for any condition in which lemon juice and barley water are allowed

SAMPLE sent with pleasure also useful booklet with special diet sheets and sickroom recipes from a London Hospital Write to Rayner & Co, Ltd, Medical Dept B, London N 18

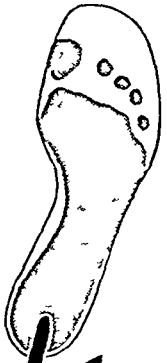
2/- a bottle at all leading chemists and grocers

Sunshine, air...



formative fitting...

Notice how perfectly little feet fit into the natural 'ground plan' of Clarks shoes. This sandal photograph clearly shows the principle upon which *all* Clarks 'formative fitting' shoes and sandals are modelled. There is adequate support, the *shape* is right, and there is *ample length for the fast growing toes*.

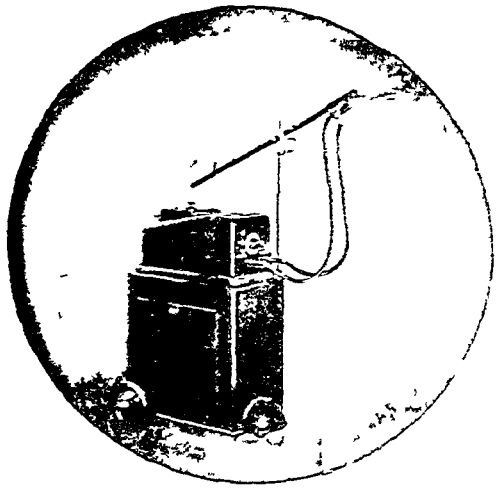


Clarks

SHOES AND SANDALS

safe for growing feet!

Illustrated leaflet B 3 and name of local agent gladly supplied on request. CLARKS STREET SOMERSET



INDUCTOTHERMY—

To-day's *Most Efficient Method* Of Producing Therapeutic Heat

THE consensus of recent papers on therapeutic heat is that Inductothermy is the method of choice not only because it is more effective clinically but also because it is safe and comfortable for the patient. These prominent physiotherapists prove clearly that Inductothermy (a short wave circuit utilising *electromagnetic* and *electronic*) is more effective because it develops deep heat and functions where it is *most useful*—in the vascular tissues. Because Inductothermy heats tissues selectively according to their conductivity, gentle soothing warmth is induced without the discomfort of other methods, and refined control permits adjusting this deep heat instantly to perfect tolerance. You will find too that Inductothermy relieves pain quickly, giving patients immediate evidence of the kind they understand that you are benefiting them.

The story of Inductothermy is given in an illustrated booklet that is free for the asking: simply write for Pub. AL 2—you will not be obligated.

What Your Colleagues Say about Inductothermy

Best Form of Heat

the I da t ... ea l ... e ... f t ... en ... ef d s ... —M. L. A. ... L. S. ...

Most Effective

It ... cat ... deep ... d ... t ... — du ... t ... — f ... o d s ... f ... t ... f ... f ... l ... t s s ... —E. ... T. ... Dr. ... M. ... L. ...

Safe Simple Silent

I ... t ... f ... f ... con ... t s—r ... (1) ... f ... c t (-) ... c ... r ... —E. ... M. ...

VICTOR X-RAY CORPORATION, Ltd

15 19 CAVENDISH PLACE LONDON W 1

BELFAST BIRMINGHAM BRISTOL CARDIFF DUBLIN GLASGOW LEEDS LIVERPOOL MANCHESTER

THE NATURAL MINERAL WATERS
OF

KARLSBAD

Sprudel Muhlbrunnen, and Schlossbrunnen



These waters act

(1) By immediate contact with the mucous membrane of the stomach and alimentary canal, allaying pains and spasms in these organs, and stimulating the digestive organs into activity

(2) Through the blood That is, they change its condition by increasing the proportion of alkali in the blood as well as in all derivative secretions (gall, urine, etc)

Largely prescribed in cases of

Chronic Gastric Catarrh, Hyperaemia of the Liver, Diabetes, Gout, Gall stones, Renal Calculi, Diseases of the Spleen, and of the Kidney and Urinary Organs

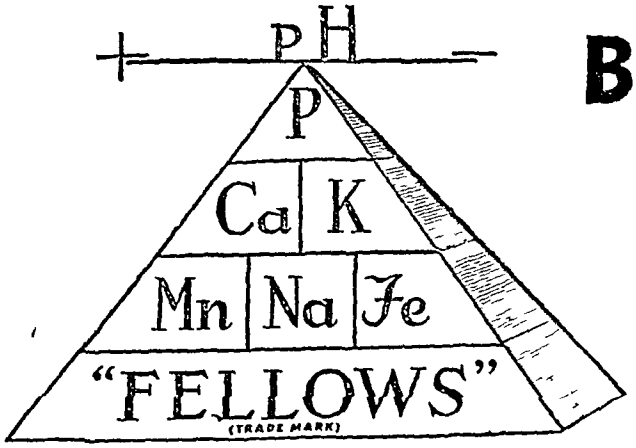
Bottled under Official Supervision at Karlsbad and regularly imported by the Sole Agents

INGRAM & ROYLE, Ltd.,

BANGOR WHARF, 45, BELVEDERE ROAD, LONDON, S E 1.

And at LIVERPOOL and BRISTOL

Samples and Descriptive Pamphlet forwarded on application



BALANCE THE pH

and tone up the entire system with

COMPOUND SYRUP OF HYPOPHOSPHITES "FELLOWS"

Scientifically compounded to correct mineral deficiency; and as an unequalled tonic.

Samples on request

FELLOWS MEDICAL MANUFACTURING CO., Ltd.

286 ST. PAUL STREET WEST MONTREAL, CANADA

Specially recommended for Nursing Homes and Institutions

Borwick's Cold Water Lemon Barley is made in a few seconds needs no boiling nor the addition of anything except cold water Refreshing invigorating and is guaranteed absolutely pure

IT IS MADE FROM PURE NATURAL BARLEY AND LEMONS AND CONTAINS NO ARTIFICIAL ESSENCE WHATSOEVER (*Public Analyst's Report*)

BORWICK'S LEMON BARLEY

COLD WATER POWDER

In 7d 10d 1/- and 2/- tins Larger sizes for Institution Obtainable from leading Chemists and Stores

Samples will be sent free on application to

GEORGE BORWICK & SONS LTD 1 Bunhill Row London E C 1 (Established nearly a Century)

NOVOCAIN

Brand Ethocain

The Original Preparation

English Trade Mark No 276477 (1905)

The Safest and most Reliable Local Anaesthetic for all Surgical Cases

The oldest and still the best



Does not come under the restrictions of the Dangerous Drugs Act

Cocaine Free Local Anaesthetic

Write for Literature

Sold under agreement

THE SACCHARIN CORPORATION LTD, 72, Oxford Street, London, W 1

Telegrams SACARINO RATH LONDON Telephone MUSEUM 8090

Australian Agents J L BROWN & CO 271 Morland Road Moorland S 13 Melbourne New Zealand Agent THE DENTAL & MEDICAL SUPPLY CO LTD 18 Wakefield Street Wellington

For the Comfort of your Patients

Long years of experience allied to a modern conception of comfort have given Curtis medical appliances a reputation second to none Our products are designed to the medical practitioner's exact instructions with careful attention to details and strict compliance with ethical rules Doctors and surgeons will find the Curtis Book of Appliances a useful guide to our comprehensive range It gives full information measurement forms and prices of —

Abdominal Supports
Special Corsets
Colostomy Appliances
Abdominal Belts
Surgical Trusses
Elastic Hosiery

If you have not already received a copy of the latest edition, we should be pleased to send you one on receipt of a card

Curtis appliances will again be exhibited at the British Medical Association, Plymouth, July 18 to 22, 1938 Our Stand No is 51, and we will gladly welcome all visitors

H. E. CURTIS & SON, LTD

7, Mandeville Place, Wigmore Street, London, W 1

Specialists in Abdominal Appliances

Telegrams Curtis Welbeck 2921 Telephone Welbeck 2921

Valentine's Meat-Juice

IN Typhoid and other Fevers, Extreme Exhaustion, Critical Conditions, Before and After Surgical Operations, when Other Food Fails to be Retained, Valentine's Meat-Juice demonstrates its Ease of Assimilation and Power to Restore and Strengthen.

Clinical Reports from Hospitals and General Practitioners of Europe and America posted on application



For Sale by European and American Chemists and Druggists

VALENTINE'S MEAT-JUICE COMPANY
RICHMOND, VIRGINIA, U S A

JB 98

FOOTWEAR
& NATIONAL FITNESS

MEDICAL men have of course long realised the importance to fitness of properly made and accurately fitted footwear

It has been said that manufacturers and shoe retailers have failed in the past to provide such footwear and that retailers have lacked the necessary knowledge and skill to fit shoes correctly

We would draw attention to the fact that we have long been alive to the importance of this matter and have concentrated for many years upon the production of shoes the correct construction of which meets with the approval of medical men and which can be fitted with great accuracy by properly trained assistants

There are more than 300 retailers who are fully trained and qualified to fit our shoes correctly

Church's Arch Moulded Shoes are made in a wide variety of styles for men and women (there is nothing of the 'surgical' shoe about them) They contain fixed supports for the longitudinal and metatarsal arches, and they are available in a full range of graded fittings which include six different widths in sizes and half sizes—upwards of 100 fittings in all

We will gladly send particulars to anyone interested

Church's
ARCH-MOULDED
SHOES



"Like a firm supporting hand"

CHURCH & CO LTD NORTHAMPTON

Medical Men supervised the design of the Linia Belt

The Belt for correction of Ptosis Obesity Faulty Posture and for post-operation wear

It was on the advice of medical men that the Linia Belt was evolved Frequent tests by doctors were carried out before it was made available for sale That is why it is the recognised belt for men's wear

Made to measure for every case the Linia Belt is prescribed for obesity for various ptotic conditions for post operation wear for wear by the older man during golf and so on The front is of thin non elastic tricot the back of strong elastic It is fully adjustable by slide buckles



YOU CAN ORDER BY POST

Perfect fitting guaranteed or money refunded in full We make a reduction of 5/- in the £ on purchases for personal use to members of the Medical Profession May we send you a fully explanatory booklet

PRICES

Linia Belt including a Linia Jock Strap Popular Model 31 cm (Black 4 gns) De Luxe Model in pure all extra light quality 6 gns (Black 7 gns) Standard Model 2 gns C O D 1/- extra

★ We shall be pleased to forward specimen Linia Belt for your examination or approval

The Linia Belt is on Sale Only at

J Roussel, Ltd (Dept ME),
177, Regent Street London, W 1

Telephone

Also at—Belfast Bournemouth Bristol Edinburgh Glasgow Hove Leicester Liverpool Manchester Nottingham Southport

J Roussel Ltd (Dept ME) 177 Regent Street London W 1

★ Please send a Linia Belt

Jock Strap Measurement round the hips

inches

I enclose (Postal Order) (Cheque) value

★ Please arrange a fitting at the Linia Salon at 177 Regent Street London W 1 on

My name and full address are attached.

BMF

A Comprehensive Financial Service for Medical Men

THE scope of the facilities offered by the Company has been greatly extended and finance can now be obtained by a doctor for ANY purpose connected with the running of his practice or his house. The charges are unusually low and the service is strictly confidential as between the Company and the doctor. Further particulars and proposal forms may be obtained from the Company.

BRITISH MEDICAL FINANCE LTD.
TAVISTOCK HOUSE SOUTH, TAVISTOCK SQUARE, LONDON, W.C.1

ALUZYME
NON-AUTOLYSED YEAST

Professional samples descriptive matter and prices on request

ALUZYME PRODUCTS,
PARK ROYAL ROAD LONDON N.W.10

TOTAL VITAMIN B ACTION

Aluzyme supplies *all* the members of the Vitamin B Complex in a fully active state. The B Vitamins form a synergy, the separate factors of which accentuate or facilitate the action of the others (*Med. Research Council's Special Report* 167). In all B deficiency conditions, the best results may be anticipated from administration of the entire Complex which Aluzyme provides. B_1 potency 1140 International Units per ounce. Active response to tests for nicotinic acid, flavin and glutathione.

CATALOGUE OF SECOND-HAND SURGICAL INSTRUMENTS



OSTEOLOGY, MICROSCOPES, POST FREE Telephone Temple Bar 2406

Half Sets of Osteology, Articulated Skeletons and Disarticulated Skulls and Microscopes

MILLIKIN & LAWLEY, 67 & 68, CHANDOS ST., STRAND, W.C.2
(Adjacent to Charing Cross Hospital Medical School)

FURNITURE OF QUALITY AND DISTINCTION

The contents of Famous Mansions, the elegant appointments of numerous Town Flats, etc., removed for convenience of Sale by Private Treaty, now being disposed of at enormous sacrifice. On Sale Daily 9 till 7. Stored and delivered free.

The entire contents of 500 Bedrooms comprising suites of super quality in Walnut, Mahogany, Oak, Lacquer, Satinwood, etc., *including* **An Exceptionally Fine Full Figured Walnut Suite of Exquisite Design and of Finest make, comprising Fully Fitted Wardrobe with Bow Centre, large Pedestal Dressing Table with Shaped Triple Mirrors, Fully Fitted Gent's Wardrobe, Double Bedstead. The complete set 45 gns.** (Is less than ½ cost 15 months ago.) Enormous selection of fine old Wardrobes from £8 10/. Bow and Square Chests, Dressing Tables in Walnut and Mahogany, Pullboys, Toilet Mirrors at 25/. Double and Single Bedsteads in Walnut, Mahogany and Oak at 27/6.

The Dining Rooms, Libraries and Halls comprise suites and pieces of every period. Tudor, Queen Anne, Georgian and modern styles including some exceptionally fine sets in Figured Oak, comprising **Old Dresser, Refectory Table and set of 6 Old Rush Seat Ladder Back Chairs** at 28 gns. Rare old Serpentine Mahogany Sideboard 10 gns. Old Georgian Dining Tables £8/15/, together with 150 sets of fine Chairs of all period, *including* **a rare set of 4 small and 2 Arm Wheelbacks in Elm on Cabriole Legs at 15 gns. Fine Selection Super Sprung Luxuriously Upholstered Settees and Club Chairs** in Tapestry, Hide and Silk Damasks, including **Elegant Knowle Suite in Beige Damask as new at 42 gns.** Super Sets in Brown Hide at 15 gns. Also a **Magnificent Spoon Back Suite in Real Morocco of Rare Quality 50 Guinea Easy Chairs at 27/6. Settees to match at £3 15/.** Fully Guaranteed. **Super Library Furnishings.** Bedroom Pedestal Desk Bureaux together with the complete bouchell effect. Pature China Tea Set, Cut Crystal, etc., etc.

Carpets of Every Description including Plain Wilton in all Colours made up and laid Free. **Phone CAN 2141. Buses 4 19 30 143 pass door.**

THE FURNITURE & FINE ART DEPOSITORIES
Islington Park St., Upper St., Islington, N.1

GO **Motor Boating**



Do you know that motor boating costs very little? Surprisingly little! And of all pastimes it is the healthiest and most exhilarating.

FREE MAGAZINE. *Send post card for free copy of our motor boating magazine "Pleasures Afloat."*

BRITISH MOTOR BOAT MFG. CO. LTD.,
Dept. 2, Britannia House, Upton St., London, W.C.1

BRITAIN'S LEADING MOTOR BOAT HOUSE

NAMEPLATES Brass, Bronze, Stainless Steel
REDUCED PRICES
Send for List IF to the actual Maker
F. OSBORNE & Co., Ltd. Tel. Euston 4824
117, Gower Street, London, W.C.1

NAME PLATES in Bronze and Enamel
Stainless Steel, Brass or Chromium
Actual Makers. Quick Delivery. Low Price.
The WHITE BRONZE Co. 196 London Rd., CROYDON

NAMEPLATES of character in Brass & Bronze
Send for Illustrated Brochure and Price List
F. B. HALL & CO. 445 New Cross Rd., S.E.14 *TiDeptford 3818*

Five books on
OBSTETRICS AND GYNAECOLOGY

A SHORT TEXTBOOK OF MIDWIFERY
By G. F. GIBBERD, M.S., F.R.C.S., M.C.O.G. 187 Illustrations. 15s.

TEXTBOOK OF GYNAECOLOGY
By WILFRID SHAW, M.D., F.R.C.S., M.C.O.G. *2nd Edition.* 4 Col. Plates and 253 Text figures. 18s.

EDEN AND HOLLAND'S MANUAL OF OBSTETRICS
5th Edition. 12 Plates (5 Col.) and 198 Text figures. 24s.

THE QUEEN CHARLOTTE'S TEXTBOOK OF OBSTETRICS
4th Edition. 4 Col. Plates and 291 Text figures. 18s.

ANTENATAL AND POSTNATAL CARE
By J. T. BROWNE, M.D., F.R.C.S., M.C.O.G. *2nd Edition.* 79 Illustrations. 18s.

Visitors welcomed to our Stand No. 91 at the R.W.A. Exhibition, Ilfracombe.

J. & A. CHURCHILL, LTD.
104 Gloucester Place, London, W.1

For 100% Glucose Barley Sugar
and other confections including the incorporation of HALIBUT LIVER OIL physiologically standardised

INSIST ON **Simpkin's** From 6d. per packet FROM CHEMISTS ONLY

Samples gladly sent on request

ADVANCE NEWS

GLUCOSE POWDER

In compressed Tablets. Delightfully flavoured. 1d per 6d packet

Write A. L. SIMPKIN & CO. LTD.
Barley Sugar Works (Dept. B.M.J.), Hunter Rd., Sheffield 6

Addimeter Money ADDING MACHINES 77 6 net
TAYLOR'S TYPEWRITERS
SELL HIRE HIRE PURCHASE, EXCHANGE, BUY and REPAIR ALL MAKES of Typewriters, Duplicators and Calculating Machines.
Write for Bargain List 32 or 'Phone—Holborn 3793
BUY A BIJOU FOR 15/- a Month
74 CHANCERY LANE

Desks, Tables and Chairs



Est. 1884
THE QUIET BIJOU
The best portable Typewriter. Complete in Travelling Case £13 13s.
(Holborn End) W.C.2

OUR 50 YEARS' REPUTATION

& a 10 years' guarantee



FRANKLAND'S VITAL PULSE WATCH (Reed)
(For Doctors) Fully jewelled lever movement
Silver chrome 60 or 13 payments of 5/- Gold £5 17 6 or 16 down and 11 payments of 10/ 10 YEARS GUARANTEE

stand behind these watches Offered to Doctors and Nurses for immediate possession without deposit or payment of capital thus representing the highest possible value and perfection of workmanship and are made especially for your professional need

Visit our showroom or select on approval

DEPARTMENTS—Furs Fur Coats Jewellery Plate Cutlery Furniture etc
Write for Catalogue

PROTECTIVE MONTHLY PAYMENT TERMS

E J FRANKLAND & Co Ltd (Dept M) 42 5 Imperial Buildings
Estab 1885 *Phone Central* 4188 Ludgate Circus London E.C.4

CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy Cases of alcoholism and drug addiction are admitted. The Physiotherapy Department has separate units fully equipped for X ray work heliotherapy short wave therapy electro-therapy and hydrotherapy (swimming bath prolonged baths Scotch and Vichy douches Plombières treatment, electric and Turkish bath cabinets etc) There is a fully equipped gymnasium and trained instructors Facilities are provided under special recreational therapists for all indoor and outdoor games including golf course cricket football and hockey ground lawn tennis and squash courts croquet and bowling greens

The Hospital has its own Cinema Library and Hairdressing Saloon Terms include regular motor drives.

Private rooms suites or villas are available, and special nurses can be provided

The Hospital grounds extending to nearly 1 000 acres are situated in delightful country and include an extensive farm (T T herd) gardens and orchards

As the Hospital is well endowed terms are exceptionally moderate e g First Department 3 to 30 guineas per week Second Department 2 and 2½ guineas per week Voluntary and certified patients are received Medical Certificates given anywhere in the British Isles are valid for admission of patients For prospectus necessary forms and further information apply to

Physician Superintendent P K McGOWAN J P M D F R C P D P M Barrister at Law
July 1st. Tel Dumfries 1119

SHAFTESBURY HOUSE, FORMBY BY THE SEA Nr Liverpool

Specially built and licensed for the care and treatment of a limited number of Ladies and Gentlemen suffering from Nervous and Mental breakdown Voluntary and certified patients received. Ladies also admitted as Temporary Patients without Certification Terms moderate.

Apply RESIDENT PHYSICIAN who may be seen at 31 Rodney Street, Liverpool by appointment.
Tel No 8 Formby

FREQUENT MICTURITION

"YBWET ABSORBENT BAGS
Male day pattern 35/
New Model Female day pattern 42/
"DUPLEX" BAGS
Male or Female day and night 70/
"SANITUBE"
For helpless bedridden patients 70/

Our bags catch all leakage easing mind and body Invisible under clothing and easily emptied Now worn world wide Special patterns for motorists and aviators

Diagrams etc on request from
HILLIARD 143 Douglas Street Glasgow C.2

NAME PLATES

in BRONZE and ENAMEL or BRASS
Send details for sketch or leaflet.
S J SAWARD Tel Clerkenwell 2441
30 CLERKENWELL ROAD E.C.1

HALLIFORD HOUSE, UPPER HALLIFORD, SHEPPERTON *Established in 1841*

This handsome secluded residence, standing in a park of 16 acres situated 16 miles from London is licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections.

Voluntary or certified cases received Terms moderate Patients are under the constant personal care of the Resident Medical Superintendent Dr R A Stewart from whom full particulars can be obtained Tel Sunbury-on-Thames 0

SPRINGFIELD HOUSE
Near BEDFORD (Phone 341")

For Mental Disorders with or without Certificates
Resident Physician CLDRIC W BOWER
Ordinary Terms £4 4 0 per week
(Including Separate Bedrooms where suitable)
Interviews in London by Appointment

CHISWICK HOUSE, PINNER, MIDDLESEX

Telephone PINNER 234

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes

A modern country house 12 miles from Marble Arch in beautiful secluded grounds

Fees from 10 guineas per week inclusive Cases under Certificate Voluntary and Temporary patients received for treatment

Douglas Macaulay M D D P M

THE GRANGE, near ROTHERHAM

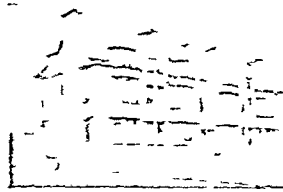
A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental disorders Both certified and voluntary patients received Approved for temporary Patients The house is a large country house with beautiful grounds and is five miles from Sheffield Tel No 4000 Ecclesfield Res Phys GILBERT E MOULD L R C P M R C S Station Grange Lane L N E Rly

WYE HOUSE, BUXTON

For the treatment of Ladies and Gentlemen mentally afflicted Voluntary Boarders received Situated 1 000 ft above sea level Grounds 14 acres of grounds—Fee terms apply to the Resident Medical Superintendent W W HASTON M D Nat Tel

THE GROVE HOUSE
CHURCH STRETTON SHROPSHIRE.

A Private Home for the treatment of a limited number of Ladies and Gentlemen suffering from Voluntary Patients Temporary Patients received under the new Mental Treatment Act 19
Medical Superintendent Dr McCLINTOCK.



HOME FOR EPILEPTICS
MAGHULL (near LIVERPOOL)
FARMING and OPEN AIR OCCUPATION for PATIENTS
A few vacancies in 1st and 2nd Class House
FEES 1st Class [illegible] per week
ward [illegible] Class [illegible] per week
For [illegible]
C EDGAR GRISEWOOD A.C.A.
Secretary 20 Exchange Street East Liverpool 2

ALCOHOLISM,
OTHER DRUG HABITS,
FUNCTIONAL NERVOUS
DISORDERS, INSOMNIA

Old Hill House Chislehurst (25 mins from London) is charmingly situated in quiet, secluded grounds Billiards and outdoor recreations Under new management, with added accommodation ladies and gentlemen are *admitted for treatment* Fees 6 to 8 guineas Special terms for long periods For illustrated prospectus write to the Medical Superintendent or Matron Phone Chislehurst 451

OLD HILL HOUSE
CHISLEHURST - KENT

ASHWOOD HOUSE, KINGSWINFORD STAFFORDSHIRE

An old-established PRIVATE HOME for the care and treatment of Ladies and Gentlemen mentally affected Probationary cases and convalescent patients are received as well as those requiring certified

The home is beautifully situated in its own grounds of 40 acres

Full particulars as to reception terms etc may be obtained from the Resident Medical Officer

RUSSELLS
HEMEL HEMPSTEAD RD WATFORD
Telephone WATFORD 591"

A convalescent home for the care and treatment of mild and recoverable nervous conditions in both sexes The house is situated high up in 40 acres of grounds 17 miles from London at the termination of the Watford by pass One Medical Officer is in residence and two others are in the vicinity Fees from ten guineas a week inclusive.

Apply RESIDENT MEDICAL OFFICER

ECCLESFIELD Staplehurst Kent
(Removed from Ashford Kent)

PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large [illegible] beautifully situated in 11 acres of park Land Extensive Home farm R C Chapel Under the management of the Sisters of the Good Shepherd Apply Reverend Mother Tel Staplehurst 61

Telegrams Telegrams "Haydon Bridge"
LITTLETON HALL PRINTWOOD [illegible]
[illegible] HOME for Ladies Mental [illegible] Voluntary Patients received [illegible] Private [illegible] Dr HAS

BISHOPSTONE HOUSE BEDFORD
[illegible] Medical Home for Ladies Certified Voluntary Boarders received Large grounds Home farm Resident Medical Superintendent Dr J L WILSON M.D.
Bedford

ST. ANDREW'S HOSPITAL

FOR MENTAL DISORDERS

NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

President THE MOST HON THE MARQUESS OF EXETER C.M.G. A.D.C.

Medical Superintendent THOMAS TENNENT M.D. M.R.C.P. D.P.H. D.P.M.

This Registered Hospital is situated in 120 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or wish to prevent *recurrent attacks of mental* trouble, temporary patients and certified patients of both sexes are received for treatment. Careful clinical, biochemical, bacteriological and pathological examinations. Private rooms with special nurses, male or female, in the Hospital or in one of the numerous villas in the grounds of the various branches can be provided.

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted. It is equipped *with all the apparatus* for the most modern treatment of Mental and Nervous Disorders. It contains special departments for hydrotherapy by various methods including Turkish and Russian baths, the prolonged immersion bath, Vichy Douche, Scotch Douche, Electrical bath, *Plombières* treatment, etc. There is an Operating Theatre, a Dental Surgery, an X-ray room, an Ultra-Violet Apparatus and a Department for Diathermy and High Frequency treatment. It also contains Laboratories for biochemical, bacteriological and pathological research.

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres. Milk, meat, fruit and vegetables are supplied to the Hospital from the farm, gardens and orchards of Moulton Park. Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves in farming, gardening and fruit growing.

BRYN-Y-NEUADD HALL

The seaside house of St. Andrew's Hospital is beautifully situated in a park of 330 acres, Llanfairfechan, amidst the finest scenery in North Wales. On the North West side of the Estate a mile of sea coast forms the boundary. Patients may visit this Branch for a short seaside change or for longer periods. The Hospital has its own private bathing house on the seashore. There is trout fishing in the park.

At all the branches of the Hospital there are cricket grounds, football and hockey grounds, lawn tennis courts (grass and hard courts), croquet grounds, golf courses and bowling greens. Ladies and gentlemen have their own gardens, and facilities are provided for handicrafts such as carpentry, etc.

For terms and further particulars apply to the Medical Superintendent (Telephone No. 2356 and 2357 Northampton), who can be seen in London by appointment.

THE COPPICE, NOTTINGHAM

HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment. It is beautifully situated in its own grounds on an eminence a short distance from Nottingham, and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted. Occupational Therapy. Voluntary and Temporary Patients received.

Tel. 64117. *For terms etc. apply to the Medical Superintendent.*

HAYDOCK LODGE

NEWTON-LE-WILLOWS LANCASHIRE

Telegs Street Ashton in Makerfield. *Phone* Ashton in Makerfield 7311

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntary temporarily or under Certificate. Patients are classified in separate buildings according to their mental condition.

Situated in park and grounds of 400 acres. Self supported by its own farm and gardens in which patients are encouraged to occupy themselves. Every facility for indoor and outdoor recreation. For terms prospectus etc. apply MEDICAL SUPERINTENDENT.

NORTHUMBERLAND HOUSE,

GREEN LANES FINSBURY PARK, N.4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses. Conveniently situated and easy of access from all parts. Six acres of ground highly situated facing Finsbury Park. Voluntary and Temporary Patients received without certification. Occupational Therapy [illegible] and other modern forms of treatment.

Telephone ST. Convalescent Home. *Telegrams* SUBSIDIARY LONDON. ER. For further particulars apply to the Medical Superintendent.

COURT HALL, KENTON, near EXETER,

for the treatment of eight Ladies, voluntary, temporary, or certified patients. Large gardens and own dairy.

CLIFFDEN TEIGNMOUTH for early and convalescent cases. A well appointed house with spacious balconies and extensive views of the South Devon coast. Sub-tropical gardens, own dairy, 25 acres. Private road to beach.

Telephones

Resident Physicians: BERTHA M. MULES M.D. B.S. Starcross 59; ANNE S. MULES, M.R.C.S., L.R.C.P. Teignmouth 289

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS

(20 miles from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on modern lines as Voluntary, Temporary or Certified Private Patients at the Hill End Hospital. Convalescent or mild cases can be treated in a delightful country mansion with extensive grounds known as

HIGHFIELD HALL,

situate about a mile away from the Hospital. FEES TWO TO THREE GUINEAS PER WEEK. For further particulars apply to the Medical Supt. W. J. F. KINDER L.R.C.P. D.P.M.

ST. ALBANS, HERTS.

BARNWOOD HOUSE

GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS. Within two miles of the G.W. Railway and L.M.S. Railway Stations at Gloucester the Hospital is easily accessible by rail from London and all parts of the United Kingdom. It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres. Voluntary Patients of both sexes are also received for treatment. Special accommodation for Lady Voluntary Patients is also provided at the MANOR HOUSE which has its own private grounds and is entirely separate from the Main Hospital. For particulars as to terms, etc. apply to G. W. T. H. FLEMING M.R.C.S., L.R.C.P., D.P.M., Medical Supt.

Telephone No. 6707 Barnwood.

STRETTON HOUSE,

Church Stretton, Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness, including the allied disorders of Alcoholism and the Drug Habit. All types of *early Mental and Nervous cases are received* without certificates as Voluntary Patients under the provisions of the Mental Treatment Act, 1930. Bracing hill country. *See Medical Directory* p. 2328.—Apply to the Medical Superintendent. Phone 10 P.O. Church Stretton.

FENSTANTON,

CHRISTCHURCH ROAD,

Streatham Hill, S.W.2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders. Certified, Voluntary and Temporary Patients received. Large Mansion with 12 acre of grounds. (See *Medical Directory* p. 2312.) Apply Resident Physician. *Telephone* Tulse Hill 7181.

BAILBROOK HOUSE, BATH.

For sufferers from Nervous and Mental Disorders with or without certificates.

The house is gloriously situated in wooded grounds of 20 acres with magnificent views of the City and the Avon Valley. (See *Medical Directory* page 2322.)

For terms apply A. GUIRDHAM M.A., D.M., B.Ch., D.P.M., Resident *Physician*.

Telephone Batheaston 8189.

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in [illegible] acres of well wooded grounds. For Ladies and Gentlemen suffering from Nervous or Mental Illness. Voluntary Patients, Temporary Patients and Patients under Certificate are admitted for treatment. Fees from 4 guineas a week upwards. A few vacancies at reduced fees on the patient's own *Physician*.

Apply to Dr. J. A. SMALL. *Telephone* 80 Norwich. *Telegrams* Small 80 Norwich.

TYKEFORD ABBEY,

NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical [illegible] standing in 15 acres of garden and grounds and is situated 14 miles from Northampton and 12 miles from Bedford on the main London to Northampton Road, fifty miles from London. Both sexes are accommodated. Hydrotherapeutic Treatment is used extensively in suitable cases. Radiant Heat, X-rays and Ultra Violet Light, Diathermy and Foam Baths. Tennis, etc.

Apply Dr. D. E. M. DOUGLAS-MOFFIT. Telephone Newport Pagnell 171.

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date Lovely house and grounds (18 acres) Certified and uncertified cases taken Facilities for going to the seaside

ESTABLISHED OVER 200 YEARS

Apply to Med Supt for illustrated brochure Tel SALISBURY 2012

CHEADLE ROYAL HOSPITAL

CHEADLE, CHESHIRE

This REGISTERED HOSPITAL, with a SEASIDE BRANCH at Colwyn Bay N Wales is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES

The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary

In addition to the Main Building there are separate villas Extensive grounds Hard and grass tennis courts cricket and croquet grounds and a court for badminton. There are also wireless installations Golf may be had within easy distance Occupational therapy

VOLUNTARY TEMPORARY AND CERTIFIED PATIENTS received

The Hospital is nine miles from Manchester 40 minutes by rail from Liverpool and 3½ hours from London

For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT

Telephone GATLEY 2231 (3 lines)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds Detached Villas Chapel Garden and dairy produce from own farm Terms very moderate

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds with tennis courts etc which Voluntary Temporary or Certified Patients may visit by arrangement for long or short periods

Illustrated Brochure on application to the Medical Superintendent The Old Manor Salisbury 'Phone Salisbury 2251

CALDECOTE HALL

NUNEATON

WARWICKSHIRE

(Phone Nuneaton 241)

Residential treatment of

FUNCTIONAL NERVOUS DISORDERS

Including Alcoholism and other Addictions

(Certifiable Cases are not received)

The beautiful mansion situated in the heart of the country (less than London by L M S R) and surrounded by charming pleasure grounds and outdoor occupational therapy are available as directed Functional Nervous Disorders by psychotherapeutic and

Illustrated booklet and particulars obtainable from A. E. CARTER M.D., D.P.M., Resident Medical Supt.

CAMBERWELL HOUSE, 33, Peckham Road, [illegible] S.E.5.

Telegrams PSYCHOLIA LONDON

FOR THE TREATMENT OF MENTAL DISORDERS

Also completely detached villas for mild cases with private suites if desired Voluntary patients [illegible] Hard and Grass Tennis Courts Putting Greens Bowls Croquet Squash Rackets Recreation Hall indoor amusements including Wireless and other Concerts Occupational Therapy Callisthenics Actino therapy Prolonged Immersion Baths Operating Theatre Pathological Laboratory [illegible] Chapel Senior Physician Dr HUBERT JAMES NORMAN assisted by three Medical Officers [illegible]

An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the [illegible]

The Convalescent Branch is HOVE VILLA BRIGHTON *and is* [illegible]

PECKHAM HOUSE, 112, Peckham Road, [illegible] S.E.5.

Telegrams Alleviated London"

The above House is for the care and treatment of persons suffering from [illegible] voluntary and temporary patients are received Separate houses for [illegible] the Institution Occupational therapy physical drill and other forms of [illegible] Court near Dover to which patients may be sent for treatment or [illegible] Tennis courts Entertainments dances and indoor amusements [illegible] Illustrated prospectus and further particulars can be obtained from [illegible]

NEW LODGE CLINIC, [illegible]

This Clinic was founded in 1921 in order to provide for the [illegible] of physicians and specialists

All forms of non infectious medical cases are admitted [illegible] metabolism arthritis anaemias asthma heart and [illegible]

Particulars can be obtained on application [illegible]

Telephone [illegible]

per day inclusive board. [illegible] M.J. on request.

[illegible] ON M.B. B.Ch. B.A.O. [illegible] LELLAND M.D. C.M. [illegible]

Grams Smeetzers [illegible]

THE CLINIC

20 Devonshire Place London, W.1

Tel. Welbeck 4444 (20 Lines)

A NURSING [illegible]

TORQUAY

[illegible] IAM C HOTEL

[illegible] NTLY Luxurious [illegible] rest

[illegible] ent, [illegible] help [illegible] pecial [illegible] ofes [illegible] J.B.

MINERAL 88 SPRINGS

HARROGATE specialises in the treatment of Disorders of the Liver—congestion, cirrhosis, jaundice, cholecystitis, cholelithiasis, and tropical liver Also in Diseases of the Skin — eczema, psoriasis, the coccal infections of the skin etc Other types of cases suitable for Harrogate treatments are — The Chronic Rheumatic Diseases — Arthritis, Fibrositis, Neuritis, Gout, Hyperpiesis, Mucous Colitis, Functional Disorders of the Heart, Pelvic Disorders of Women, Convalescence from acute illness

At Harrogate a wide range of Sulphur waters, strong and mild, and of Iron waters, both saline and pure chalybeate, is available for dealing with the large group of disorders amenable to Spa treatment The Royal Baths at Harrogate is one of the finest Spa establishments in Europe, and the Corporation has embarked upon still further extension at a cost of £66,000

DIET Prescribed diets for Spa patients may be obtained at hotels and boarding houses without extra charge **Complimentary and reduced price facilities for the Cure, Accommodation, and Amusements are available for Members of the Medical Profession**

Full details of Harrogate for Cure and Holiday will be sent free upon application to Spa Manager, Information Bureau, Harrogate, I

"IT'S QUICKER BY RAIL"
Cheap monthly return fares to Harrogate from all parts Any train, any day

HARROGATE

TOR-NA-DEE SANATORIUM
MURTLE DEESIDE ABERDEENSHIRE
FOR THE DIAGNOSIS AND TREATMENT OF ALL FORMS OF TUBERCULOSIS

Managing Director DAVID LAWSON, M.D., F.R.S.E.

Southern aspect Low rainfall Pure bracing air Sheltered grounds Beautiful surroundings All modern equipment for diagnosis and treatment including operating theatre **No extra charge for X Rays, Artificial Pneumothorax Ultra-Violet Light, or other special treatment**

Day and Night Nursing Staff All bedrooms have central heating electric light hot and cold running water and wireless (headphones) Comfortable and airy public rooms

Medical Superintendent J. M. JOHNSTON, M.B., M.R.C.S., D.P.H. For terms and prospectus apply to the Secretary Telephone CULTS 107

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S.S.W. sheltered from North and East elevation 800 feet Pure bracing air **Special Treatment by Artificial Pneumothorax** (X-ray controlled) **Tuberculins and Ultra-violet Rays** are available when necessary without extra charge **X-ray plant** Fully equipped Dental Department Electric light Radiators, hot and cold basins and Wireless in all rooms Up to date main drainage

Full day and night Nursing Staff *Term* — gns to —1 gn a week inclusive
Med Supt GEOFFREY A. HOFFMAN, B.A., M.B., T.C.Dub *Asst Phys* MARGARET A. HARRISON, M.B., B.S.Lond *Pathol and* EDGAR DAVEY, M.B., B.Ch *Consult Laryngologist* CASSIDY DE W. GIBB, F.R.C.S.Edin *Consulting Dental Surg* GEORGE V. SAUNDERS, L.D.S., R.C.S.Lond Apply Secretary The Cotswold Sanatorium Cranham Gloucester *Tel* 81 and 82 WITCOMBE *Grams* HOFFMAN Birdlip

PENDYFFRYN HALL SANATORIUM
PENMAENMAWR, NORTH WALES
All Modern Methods of Treatment Available

Ideally situated for the treatment of Tuberculosis Sheltered from E. and N.E. winds Climate mild and bracing *Low rainfall* high average of sunshine The Sanatorium is situated in its own park There are miles of graduated walks through pine gorse and heather rising to 1,000 ft and commanding extensive sea and mountain views Central heating electric light X-ray installation Wireless in all rooms Full day and night nursing staff Special milk supply from a tuberculin tested herd Easily accessible from LONDON (4 hours) MANCHESTER LIVERPOOL *Birmingham and the North*

Resident Physicians ***Dennison Pickering*** M.D., J. W. Pugh, M.B., B.Ch

For particulars apply to the Secretary Pendyffryn Hall Penmaenmawr North Wales

Choose a Spa in

Czechoslovakia

The Spas and Health Resorts of Czechoslovakia with their centuries old tradition of healing reinforced by the experience and researches of local specialists invite your serious consideration

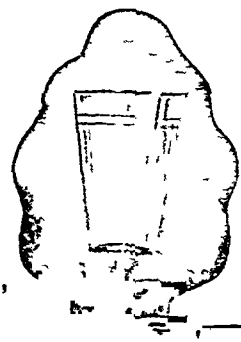
In addition to places of world wide repute such as

PISTANY (Piestany) **CARLSBAD** (Karlovy Vary) **MARIENBAD** (Marianske Lazne) **FRANZENSBAD** (Frantiskovy Lázne)

ST JOACHIMSTHAL (Jáchymov) **TEPLICE-SANOV** (Teplitz Schönau) **LUHACOVICE SLIAC TRENCIANSKE-TEPLICE**

with their medicinal springs and mud baths there are numerous smaller spas and health resorts admirably equipped for the treatment of many diseases including those in the following groups

Anaemia and Chlorosis Basedow s Disease Bronchial Catarrh Constitutional Diseases Scrofula Rickets Digestive Diseases Diseases of the Bladder and Urinary Organs Diseases of the Kidneys Diseases of the Nose and Throat. Diseases of Women Disorders of Bones Muscles, and Joints Disorders of the Heart Disorders of Metabolism and Gout. Gallstones. Leucaemia Nervous Diseases and Post Hemiplegic Conditions Tuberculosis of the Lungs



The arrangements in the bath establishments are up to date in every way the cleanliness and neatness proverbial the service attentive and courteous

It is accepted that a spa cure to be fully beneficial should provide a complete change of surroundings, and a break with the patient s normal everyday life

The Czechoslovak Spas fulfil the purpose admirably comfortable hotels first class orchestra and dance bands every facility for sport—tennis golf swimming riding fishing etc

There are also numerous fully up to date homes for convalescence and rest cures

Further information from any Office of

THOS COOK & SON, LTD,

and other leading Tourist Agencies

and at

CZECHOSLOVAK TOURIST INFORMATION OFFICES

—in London 21 Regent Street S W 1 —

DOCTORS OWN SPA for RHEUMATISM

Sunny Pistany

Mud from P stany in packs ready for home use S mplest safest and most economical treatment may be entrusted to any patient Cost 20s. for 20 treatments. Literature on request from Pistany Agency

SEND YOUR PATIENT BY AIR

has been specially founded to facilitate the transport of invalids equipped planes Apply for special folder

The smoothest most restful way of travelling is a modern Air Liner The K L M Medical Service regular services in especially

VOLCANIC-SULPHURIC MUD SPRINGS

in delightful surroundings

21 DAYS

INCLUSIVE CURE

Special facilities for doctors and their wives

Fly there by the

BLUE DANUBE AIR EXPRESS

London to Pistany £L 10 0 *single* 70 **REDUCTION** *on return* £20 *under* ALA *scheme*

K L M ROYAL DUTCH AIR LINES and C L S CESKOSLOVENSKA LETECKA SPOLECNOST

Part culars from

PISTANY AGENCY LTD 210 Regent Street London W 1 *Tel* LANgham 4214 or PISTANY SPA BUREAU 25 Cockspur Street S W 1 *Tel* WHitehall 2294

A SPA UNDER ONE ROOF

In Rockside are combined all the amenities of a modern spa, including treatment rest and entertainment

SHELTERED SITUATION SPACIOUS GROUNDS HIGHLY QUALIFIED STAFF

The Baths and Treatment Rooms occupy a special wing accessible by lift from all floors and are fully equipped for every form of physical treatment including the most modern hydrological and electrical methods massage and remedial exercises, dietetic and occupational therapy Terms £4 4s 0d to £6 6s 0d

Inclusive terms for consultation fees treatment board residence and attendance from £6 6s

Write for Tariff to the Secretary

Consultant Physician

C R L ESTRANGE ORME M B B Ch (Camb) M R C P (Lond)



ROCKSIDE PHYSIOTHERAPEUTIC ESTABLISHMENT

MATLOCK

CITY OF LONDON MENTAL HOSPITAL DARTFORD KENT

Ladies and Gentlemen received for treatment under certificates and without certificates either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upwards.

Smedley's

Great Britain's Greatest Hydro

Matlock

Terms 13/ to 18 6 per day inclusive board Illustrated Brochure M J on request.

Resident Physicians

G C R HARBINSON M B B Ch B A O (R U I) R MacLELLAND M D C M

Phone No 1 *Grams* Smedleys Matlock

HOLIDAYS ON THE NORFOLK BROADS OR NORFOLK COAST

BRITAIN'S DRIEST CLIMATE

Mr J R E Draper Land Agent Wroxham Norfolk (*Late Governor* N F U *and Norwich Hotels*) will send free on application a List of Broads of Furnished Houses and Riverside Bungalows to Let for the Holiday Season Also a few Houses and Bungalows for Sale Grams Draper Wroxham Phone Wroxham 35

TORQUAY GRESHAM COURT HOTEL

RECENTLY OPENED Luxurious comfort combined with an earnest desire to please

The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure M TEL 658



Rheuma Spa of Wales

KINMEL HALL
ABERGELE

SITUATED between the lovely Welsh foothills and the sea, Kinmel Hall commands a thousand acres of its own parkland and golf course

Exquisitely furnished and equipped with every aid to comfort it is an ideal residence for those needing rest, recreation or modern Spa treatment, including the Continental Pistany Mud and Scotch Douche

All Spa treatments for Rheumatic and similar disabilities are given in a separate wing of the building under the supervision of a fully qualified Resident Physician

The cuisine is first class and careful attention given to special diets

A visit of inspection is invited

• *Recreation facilities include own golf course tennis squash badminton riding fishing open air swimming pool Country Club adjoining (licensed)*

Brochure, photographs and full particulars from Secretary (Rheuma Spa Ltd) Kinmel Hall Abergele N Wales

Resident Physician C Noel Davis M D (London) D P H (Camb

THE CHOICE OF a suitable resort for convalescence and recuperation will be made easier by frequent reference to this section of the Journal

Please mention the § B M J when writing § to advertisers

Chartered Society of Massage and Medical Gymnastics

CHARTERED MASSEUSES and MASSEURS receive Hospital Training They are qualified to administer MASSAGE REMEDIAL EXERCISES ELECTRICAL and LIGHT TREATMENTS

The Society was granted a Royal Charter in 1920 in recognition of the high standard of work maintained C S M M G Members do not advertise individually and pledge themselves to treat patients only under medical direction All members of the Society are eligible for enrolment on the National Register of Medical Auxiliary Services

Names and addresses of members practising in any district in this Country or abroad can be obtained from
THE SECRETARY, C S M M G, TAVISTOCK HOUSE (NORTH) TAVISTOCK SQUARE LONDON W C 1
Phone Euston 1676 7 8

GLASGOW POST-GRADUATE MEDICAL ASSOCIATION

POST-GRADUATE TEACHING in Glasgow during the Summer of 1938 comprises principally

A **General Practitioner's Medical and Surgical Courses** from July 18th to August 27th, and

B **Clinical Assistantships** in General and Special Hospitals

Syllabuses and any other information may be had on application to the Secretary, Post Graduate Medical Association, The University Glasgow

CITY OF LONDON MATERNITY HOSPITAL
(Incorporated by Royal Charter)
CITY ROAD E C 1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Dental Clinics and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Residential) Nearly 2 000 patients annually

RALPH B CANNINGS Secretary

M.D. THESIS
(Camb Edin Clas Durham Sc) SKILLED COACHING GUIDANCE and ADVICE from Special Tutors in conformity with the Regulations of the various Universities Apply for particulars and free booklet Hints on Writing a Thesis for the M D Degree to the SECRETARY Medical Correspondence College 19 Wimbeck Street London W 1

STAMMERING SPEECH DEFECTS
BEHNKE METHOD Estab 1880 Cases non resident treated at 39 Earls Court Sq S W 5 and in residence in the Summer holidays at MISS BEHNKE'S house on the Chilterns Pre eminent success in education and treatment of stammering and other speech defect — Times Thoroughly physiological principle — Lancet The method is scientifically correct and perfectly effective — Guy's Hospital Gazette
Stammering, Cleft Palate Speech, Lisping 3/9 of MISS BEHNKE 39 Earls Court Sq S W 5

ADVICE ON THE CHOICE OF SUITABLE **SCHOOLS AND TUTORS**
for BOYS and GIRLS with prospectuses of recommended establishments will be given free of charge to parents stating age of pupil district preferred range of fees and type of school required
J & J PATON,
143 Cannon Street London E C 4
Publishers of
Paton's List of Schools & Tutors Post free 5/6

NORTH-EAST LONDON POST-GRADUATE COLLEGE
PRINCE OF WALES'S GENERAL HOSPITAL N 15
The Practice of the Hospital is open to Medical Practitioners Particulars from
BROWN SC ALEXANDER M D Dean

F.R.C.S (Edin)
EDINBURGH POSTAL COURSES
Full details of above and Oral Classes H C ORRIN F R C S Surgeon's Hall Edinburgh

MEDICAL CORRESPONDENCE COLLEGE,

19 Welbeck Street London W 1

M.B., B.S. LONDON

Candidates entering for Part I in November 1938 or for Parts II and III in May 1939 under the New Regulations should write for full details of new courses of postal preparation conforming to the new requirements of the syllabus

Highly qualified Tutors with accurate knowledge of the special features of these examinations

Write at once for booklet The Problem of the Final M.B.B.S. London Sent free on application

Address The Secretary,
MEDICAL CORRESPONDENCE COLLEGE,
19 Welbeck Street, London W 1

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE

INCORPORATING THE ROSS INSTITUTE

POSTS OVERSEAS FOR MEDICAL MEN

A register is kept in the School of medical men who are prepared to be considered for posts overseas and the School is frequently asked to advise plantation and mining companies when such posts fall vacant.

The salaries offered are attractive conditions of service are governed by standardised forms of contract and many of the posts offer to medical men a most interesting field in which to practise their profession

It is desirable that candidates for posts overseas should hold a diploma in tropical medicine and hygiene The course provided by the London School for the Conjoint Board's Diploma lasts six months and the tuition fee is £40 The course may be taken from October to March or from January to June. There are generally more vacancies in the course commencing in January

The Director of the Ross Institute is always glad to interview medical men who would like information regarding the possibilities of a career overseas if they will be good enough to make an appointment to call on him Enquiries may be addressed to

The Director
Ross Institute of Tropical Hygiene
London School of Hygiene & Tropical Medicine
KEPPEL STREET GOWER STREET W C 1

UNIVERSITY EXAMINATION POSTAL INSTITUTION

FOUNDED IN 1882
17 RED LION SQ., LONDON W C 1

EXPERT PREPARATION FOR ALL MEDICAL EXAMINATIONS

ORAL CLASSES

POSTAL COURSES

PRIVATE TUITION

THESIS GUIDANCE

MUSEUM DEMONSTRATIONS

THE PRINCIPAL WILL ADVISE ON ANY DIFFICULTY THOSE WHO CARE TO WRITE OR CALL

MEDICAL PROSPECTUS (4" pp.)

CONTENTS The method and the cost of entering the Medical Profession *Particulars of all Medical Examinations* Postal Courses and Oral Classes Suggestions for the Higher Medical Examinations Suggestions for the Higher Surgical Examinations Suggestions for the Special Diploma Examinations Refresher Courses Openings for Women Hints for writing theses

Medical Prospectus gratis along with list of Tutors etc on application to the Principal 17 Red Lion Sq London W C 1 (Telephone Holborn 6513)

ST MARY'S HOSPITAL MEDICAL SCHOOL, W 2

(UNIVERSITY OF LONDON)

THE WINTER SESSION WILL BEGIN ON OCTOBER 1st 1938

The Medical School provides Courses in Preliminary Intermediate and Final Subjects, and Students can join at once after Matriculation

SITUATION.—Between a large population providing Clinical material and one of the best residential districts thus enabling Students to live in close proximity to their work

NEW BUILDINGS.—The new buildings which cost £2,000 are now in use

CLINICAL UNITS IN MEDICINE AND SURGERY.—Certain members of the Medical and Surgical Staff devote their whole time to teaching and research

NEARLY 1,000 BEDS available for teaching—additional Clinical material being provided by affiliation to an Infirmary and other Institution

ENTRANCE AND RESEARCH SCHOLARSHIPS to the value of £100 are awarded annually

APPOINTMENTS paying in value up to £70 per annum open to Students after qualification

For further particulars and illustrated prospectus apply to the School Secretary

C. M. WILSON (M.C.) M.D. F.R.S.P. Dean

RADIUM BEAM THERAPY RESEARCH
At the Radium Institute
1 Riding House Street London W 1

ASSISTANT MEDICAL OFFICER (resident) Salary £150 per annum Next month's appointment

Applications, stating age, qualifications, and experience, with copies of two testimonials, to be sent to the Secretary, Radium Beam Therapy Research Trust, not later than Monday, July 18th.

It is possible for a candidate to hold this post and at the same time to carry on some post-graduate studies, the morning being free.

UNIVERSITY COLLEGE LONDON FACULTY OF MEDICAL SCIENCES

SPECIAL COURSE FOR THE FINAL FELLOWSHIP EXAMINATION OF THE ROYAL COLLEGE OF SURGEONS

Special Short Courses in ANATOMY PHYSIOLOGY etc. commence THIS DAY SEPTEMBER [illegible]
December Examination
ANATOMY [illegible] M.B., B.S., M.D., D.Sc., F.R.S.
PHYSIOLOGY [illegible] M.D., F.R.S.

The Course [illegible]
Candidates [illegible]
Resident Diploma [illegible] of the Course [illegible]
The Course [illegible] and Hall [illegible] demonstrations [illegible] September 6th.
Full particulars [illegible]
C. C. DOBIE, Secretary.

University College London [illegible]

UNIVERSITY COLLEGE HOSPITAL MEDICAL SCHOOL

RADCLIFFE CROCKER TRAVELLING SCHOLARSHIP IN DERMATOLOGY

The Committee of UNIVERSITY COLLEGE HOSPITAL invite applications for the Radcliffe Crocker Travelling Scholarship in Dermatology.

The Scholarship [illegible] annum of the value of £[illegible] tenable for a period of twelve months, to be spent at some place [illegible] approved by the Scholarship Committee outside the United Kingdom.

Candidates must be British subjects [illegible] a London Medical School and graduates of a University in the United Kingdom.

Applications must be submitted [illegible] Tuesday, July 19th, 1938.

For further particulars apply to the Dean.

R. SLOLEY, Secretary.

COUNTY BOROUGH OF SOUTHPORT

DEPUTY MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER

The Council of the County Borough of Southport invites application for the post of Deputy Medical Officer of Health and School Medical Officer from gentlemen duly qualified holding a Diploma in Public Health or a degree in State Medicine and not over 40 years of age

The salary will be at the rate of £600 per annum with two annual increments of £25 each and one of £50 to a maximum of £750 per annum

The appointment will be subject to three months' notice on either side. The person appointed will not be allowed to engage in private practice

An allowance of £50 per annum will be made for the maintenance of a motor car if used in the service of the Corporation

The person appointed will be required to pass a medical examination and to contribute to the Corporation's Superannuation Scheme

Experience in the diagnosis and treatment of external eye diseases and errors of refraction will be regarded as an additional qualification

Application on the prescribed form obtainable from the Medical Officer of Health Cambridge Street Southport should be addressed to the undersigned and endorsed Deputy Medical Officer of Health and delivered not later than July 18th 1938. Canvassing directly or indirectly will disqualify.

Town Hall R. EDGAR PERKINS,
Southport Town Clerk
June 29th 1938

CITY OF PLYMOUTH

MOUNT GOLD ORTHOPAEDIC HOSPITAL

(Orthopaedic Section EMS Post)

Applications are invited for the post of ASSISTANT ORTHOPAEDIC SURGEON who will visit the above hospital twice weekly. This session may include work with the Physical Treatment Department and Out-patient clinic. Remuneration at the rate of £[illegible] per annum.

Applications must be delivered at the Public Buildings, Plymouth, on the prescribed form which may be obtained from the undersigned, who will receive applications from duly qualified medical practitioners who are members of the Orthopaedic Association.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937.

Further particulars may be obtained from the undersigned, to whom applications must be delivered not later than July 18th, 1938.

J. WARD HALL, J. PEARSON,
Town Clerk's Office, Municipal Offices,
Plymouth

LANCASHIRE COUNTY COUNCIL

PUBLIC ASSISTANCE COMMITTEE

LAKE HOSPITAL AND DARNTON HOUSE INSTITUTION
Ashton under Lyne near Manchester

APPOINTMENT OF SENIOR RESIDENT MEDICAL OFFICER

Salary £300 per annum together with the usual residential emoluments The person appointed will be required to take up duty on September 1st 1938

Applications are invited from Registered Medical Practitioners for the above appointment at the Lake Hospital and Darnton House Institution Ashton under Lyne comprising 300 and 525 beds respectively The Hospital is recognized as a complete Training School for Nurses

Candidates must be unmarried Preference will be given to candidates having previous hospital experience especially in the administration of anaesthetics

The appointment will in the first instance be for a period of six months the successful candidate being eligible for reappointment for a further period of six months at the end of that period

Forms of application may be obtained from the *County Medical Officer of Health Public Assistance (Hospital and Medical) Department County Offices Preston* to whom all applications accompanied by copies of not more than two recent testimonials must be forwarded not later than *Saturday July 16th* 1938

County Offices GEORGE ETHERTON
Preston Clerk of the County Council
June 24th 1938

LANCASHIRE COUNTY COUNCIL

PUBLIC ASSISTANCE COMMITTEE

WHISTON COUNTY HOSPITAL
Near Prescot

RESIDENT MEDICAL OFFICER

Applications are invited from Registered Medical Practitioners for the appointment of Resident Medical Officer at the above Institution (500 Beds) Candidates must be unmarried

Preference will be given to candidates having previous Hospital experience particularly in Midwifery

Salary at the rate of *£350 per annum together* with the usual residential emoluments

The appointment will in the first instance be for a period of six months the successful applicant being eligible for reappointment for a further period of six months at the end of that period

Forms of application may be obtained from the *County Medical Officer of Health Public Assistance (Hospital and Medical) Department County Offices Preston* to whom all applications accompanied by copies of not more than two recent testimonials must be forwarded so as to be received not later than *Saturday July 16th* 1938

County Offices GEORGE ETHERTON
Preston Clerk of the County Council
June 27th 1938

LANCASHIRE COUNTY COUNCIL

APPOINTMENT OF DENTAL SURGEON

The Lancashire County Council propose to appoint a *full time Dental Surgeon* and invite applications from fully qualified and registered Dental Surgeons who must not be over 40 years of age The duties of the post include the *dental* inspection and treatment of school children work under the Maternity and Child Welfare Acts and such other duties as may from time to time be imposed by the *County Council*

The salary will be at the rate of £550 per annum rising subject to satisfactory service by annual increments of £25 to a maximum of £700 per annum together with allowances for travelling etc The person appointed will be required to pass a *medical examination and to contribute towards the Council's Superannuation Scheme*

Applications must be made upon a form which can be obtained together with further particulars *from County Medical Officer of Health School* Medical and Child Welfare Department County Offices Preston to whom the completed form should be returned not later than July 25th 1938 All communications must be endorsed Dental Surgeon Canvassing is strictly forbidden and will disqualify

County Offices GEORGE ETHERTON
Preston Clerk of the County Council

CORPORATION OF GLASGOW SERVICE

JUNIOR ASSISTANT MEDICAL OFFICER (male) wanted for the Hawkhead Mental Hospital *previous mental hospital experience unnecessary* but preference will be given to one who has engaged in pathological work or has been house physician *ample opportunity* afforded for research salary to commence at £300 per annum with board lodging and laundry

Full particulars on application to the Medical Superintendent Hawkhead Mental Hospital 510 Crookston Road Glasgow S W 2

LANCASHIRE MENTAL DEFICIENCY ACTS COMMITTEE

An ADDITIONAL ASSISTANT MEDICAL OFFICER age not to exceed 35 years is required by the above Committee for the purpose of visiting and certifying Mental Defectives throughout the County of Lancashire the supervision of Occupation Centres and the carrying out of such other duties as the Committee may from time to time require

Salary £600 per annum (with an additional £50 for a Diploma in Psychological Medicine or a Degree in Psychological Medicine of the London University) rising by annual increments of £50 to a maximum of £750 per annum

The appointment will be subject to three months notice on either side

Form of application and further particulars of duties etc may be obtained from the undersigned and applications accompanied by copies of not more than three testimonials must be delivered not later than July 23rd 1938

County Offices GEORGE ETHERTON
Preston Clerk of the Committee

SURREY COUNTY COUNCIL

PUBLIC ASSISTANCE DEPARTMENT

RICHMOND INSTITUTION
(280 Beds)

APPOINTMENT OF RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the appointment of Resident Assistant Medical Officer at the Grove Road Institution Richmond The Institution is administered by the Public Assistance Committee of the Council

Applicants should have had experience as a House Surgeon or Physician The appointment is for a period of six months renewable for a further period of six months and the salary is at the rate of £250 per annum together with full residential emoluments valued at £125 per annum

Applications stating qualifications and experience and enclosing copies of not more than three recent testimonials should be endorsed Resident Assistant Medical Officer and sent to the County *Medical Officer County Hall* Kingston on Thames so as to reach him not later than July 13th 1938

County Hall DUDLEY AUKLAND
Kingston on Thames Clerk of the Council
June 25th 1938

SURREY COUNTY COUNCIL

PUBLIC HEALTH DEPARTMENT

REDHILL COUNTY HOSPITAL (300 Beds)

RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from registered Medical Practitioners for the appointment of Resident Assistant Medical Officer at the Redhill County Hospital Earlswood Common Redhill

The Medical Officer appointed must have had previous experience as House Surgeon

The appointment is for a period of six months renewable for a further period of six months and the salary is at the rate of *£250 per annum* together with full residential emoluments valued at £125 per annum

Applications stating age qualifications and experience and enclosing copies of not more than three recent testimonials should be addressed to the Medical Superintendent Redhill County Hospital Earlswood Common Redhill so as to be received not later than July 13th 1938

DUDLEY AUKLAND
County Hall Clerk of the Council
Kingston upon Thames
June 27th 1938

COUNTY BOROUGH OF READING

BATTLE HOSPITAL

APPOINTMENT OF RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the appointment of Resident Assistant Medical Officer (male) at the above Hospital at a salary of £300 per annum with board residence etc Candidates must be single and should not be more than 30 years of age The selected candidate will be required to work under the direction of the Medical Superintendent

The appointment (which will be determinable by one month's notice on either side) will be for a period of one year and preference will be given to candidates who are reading for higher qualifications

Forms of application may be obtained from and must be returned duly completed to the undersigned *with copies* of three recent testimonials not later than Thursday 28th instant Canvassing either directly or indirectly will disqualify

Town Hall C S JOHNSON
Reading Town Clerk
July 5th 1938

MIDDLESEX COUNTY COUNCIL

NORTH MIDDLESEX COUNTY HOSPITAL
Silver Street Edmonton N 18

ASSISTANT MEDICAL OFFICER required for Casualty and Receiving Room duties Candidates must be registered medical practitioners have held posts as House Physicians and House Surgeons and with considerable general experience

Salary £350 p a with board lodging and laundry or cash allowance of £100 p a in lieu of *residential emoluments* Appointment non pensionable but subject to medical examination for period of six months with possibility of extension for further six months and is terminable by one month's notice on either side

Whole-time services required under direction of Medical Superintendent Hours of duty 10 a m to 6 p m daily with Saturday afternoons and Sundays free

Application forms not provided Applications stating age qualifications and experience together with copies of not more than three recent testimonials must be received by the undersigned not later than July 16th in envelopes endorsed C M D North Middlesex Relationship to any member or officer of the Council must be disclosed in the application and canvassing directly or indirectly a disqualification

C W RADCLIFFE 7
Clerk of the County Council
Middlesex Guildhall
Westminster S W 1
June 20th 1938

ROYAL N Z SOCIETY FOR THE HEALTH OF WOMEN AND CHILDREN (INC) (PLUNKET SOCIETY)

APPOINTMENT OF MEDICAL ADVISER TO THE DOMINION COUNCIL OF THE SOCIETY

The Dominion Council of the Royal N Z Society for the Health of Women and Children (Inc) (Plunket Society) invites applications from members of the British Medical Association for the appointment of a Medical Adviser to the Society

The successful applicant will require to reside at Dunedin New Zealand to enter into a contract for a period of five years and to devote his whole time to the work

Salary £1 200 per annum New Zealand currency

Further particulars may be obtained from Dr R C JEWESBURY M D F R C P 5 Wimpole Street Cavendish Square London W or from the HIGH COMMISSIONER FOR NEW ZEALAND *New Zealand House 415 Strand London W C 2*

The successful applicant will be required to take up duty early in *1939*

Applications giving full particulars as to age experience and qualifications together with copies of recent testimonials will be received not later than *September 30th 1938* and should be addressed to the DOMINION PRESIDENT Plunket Society Queen's Buildings Princes Street Dunedin New Zealand

COUNTY BOROUGH OF ROTHERHAM

MEDICAL SERVICES COMMITTEE

JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER

Applications are invited for the post of Junior *Assistant Resident Medical Officer* at the Alma Road Hospital Rotherham at a salary of £150 per annum together with the usual emoluments *The appointment will be for a period not exceeding* twelve months determinable by one months notice on either side

The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination

The person appointed will be required to act under the general direction of the Medical Superintendent

Forms of application may be obtained from the Medical Officer of Health Town Hall Rotherham and must be returned to the undersigned endorsed with the title of the appointment not later than *noon on July 20th 1938*

Municipal Office CHAS I DES FORGES
Rotherham Town Clerk

ROYAL BURGH OF KIRKCALDY

Applications are invited for the appointment of a RESIDENT MEDICAL OFFICER at the Master Hospital Kirkcaldy at a commencing salary of £300 per annum with board residence and laundry Preference will be given to candidates with experience or qualifications in *obstetrics* The appointment is subject to the Corporation conditions of Service and Superannuation Scheme and the successful candidate will be required to pass a medical examination

Forms of application and further particulars may be obtained from the undersigned to whom applications should be returned not later than July 19th 1938

Public Health Department J R W HAY
Kirkcaldy Medical Officer of Health

ROYAL NAVAL MEDICAL SERVICE.

Vacancies exist for Medical Officers in the Royal Navy, and applications are invited for entry in September, 1938

Candidates below the age of 28 years are preferred and they must be registered under the Medical Acts No examination in professional subjects will be held but candidates will be required to attend for interview by a Selection Board

Selected candidates will be entered for Service for a period of three years, which if desired is usually extended to five years at the discretion of the Admiralty

At the end of three years service, officers may retire with a gratuity of £400 but those who serve for five years will receive £1,000

At the end of five years' Short Service, permanent commissions will be given to selected officers who wish to make the Naval Medical Service their permanent career Officers transferred to the permanent list will receive a gratuity of £1,000 (less Income Tax)

Full opportunities exist for transfer to the permanent list, and periods of unemployed or half pay are very rare The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Opportunities are available for officers on the permanent list for post graduate study to specialise to take higher examinations and to obtain further qualifications

Naval Medical Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers

Copies of the regulations for entry and conditions of service, including rates of pay allowances and retired pay, may be obtained from the Medical Director General of the Navy, Admiralty S W 1, and from the Deans of all Medical Schools

Applications for entry from intending candidates must be received not later than 31st August, 1938

CITY AND COUNTY OF NEWCASTLE UPON TYNE

APPOINTMENT OF ASSISTANT CHILD WELFARE MEDICAL OFFICER (MALE OR FEMALE)

Applications are invited from duly registered Medical Practitioners for the post of Assistant Child Welfare Medical Officer The person appointed will take part in the ordinary routine work of the child welfare centres but will not be required to assist in the working of the maternity services

Applicants will be required to have held a post as House Physician in a recognized teaching hospital (General or Children) and some experience of methods of medical or pathological research is desirable The possession of the Diploma in Child Health granted jointly by the Royal College of Physicians and the Royal College of Surgeons will be regarded as an additional qualification Salary £500 rising to £700 per annum by annual increments of £25

The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 19 and the successful candidate will be required to pass the necessary medical examination

Applications on the prescribed form which can be obtained on application to the MEDICAL OFFICER OF HEALTH Health Department Town Hall Newcastle-upon-Tyne 1 must be submitted not later than Saturday July 16th 19 8

HULL CORPORATION HEALTH DEPARTMENT

BEVERLEY ROAD INSTITUTION (HOSPITAL) (100 Beds)

ASSISTANT MEDICAL OFFICER (WOMAN)

Applications are invited from unmarried or widowed Women Medical Practitioners for the above appointment for a period of one year

Salary £350 per annum to either with board residence and laundry

The Hospital is equipped with X ray and Ultra Violet Light Departments

Application forms etc may be obtained from and should be returned duly completed to the undersigned not later than 10 a m on Monday July 18th 1938

NICOLAS GEBBIE M D
Medical Officer of Health

Health Department
Guildhall Hull
June 27th 19 8

COUNTY OF SOMERSET

APPOINTMENTS OF MEDICAL OFFICER OF HEALTH FOR THE URBAN DISTRICTS OF FROME AND KEYNSHAM AND THE RURAL DISTRICTS OF FROME AND BATHAVON AND ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from duly qualified Medical Practitioners who are registered in the Medical Register as holder of diplomas in Sanitary Science Public Health or State Medicine for the above appointment which it is intended shall be held by the same person

The duties as Assistant County Medical Officer will include school medical inspection and venereal disease work

The officer appointed will be required to devote his whole time to the duties of the above mentioned appointments and will be restricted from engaging in private practice as a medical practitioner He will be required to perform all the duties prescribed by statute or regulation and such other duties as may from time to time be assigned to him by the County Council

The aggregate commencing salary will be £600 rising by annual increments of £25 to £900 a year

Travelling allowance for the use of the officer's motor car will be paid in accordance with the County scale and office accommodation and clerical assistance will be provided

The successful candidate who must pass satisfactorily a medical examination will be required to reside in or near the City of Bath

Applications stating age qualifications dioma and experience must be accompanied by copies of not more than three recent testimonials and must be sent to the Clerk of the County Council County Hall Taunton so as to reach him not later than July 15th 19 in envelopes endorsed District Medical Officer

Further particulars and conditions of appointment may be obtained from the Clerk of the County Council on receipt of a stamped addressed foolscap envelope

Canvassing directly or indirectly will be deemed a disqualification

HAROLD KING Clerk of the Somerset County Council
H J ALLARD Clerk to the Frome Urban District Council
W B KENT Clerk to the Frome Rural District Council
GEORGE R ASHTON Clerk to the Keynsham Urban District Council
R H WHITTINGTON Clerk to the Bathavon Rural District Council

June 19 8

BAPPY URBAN DISTRICT COUNCIL

ACCIDENT AND SURGICAL HOSPITAL

Applications are invited for the post of RESIDENT SURGICAL OFFICER to commence duties in October next Salary at the rate of £[illegible] per annum rising by two increments of £50 per annum to £[illegible] together with board and lodging the appointment to be terminated by three months notice on either side

Candidates must not be over [illegible] years of age and must be capable of performing major surgical operations Preference will be given to candidates holding higher surgical qualifications and able to assist in carrying out the X ray work of the Hospital The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 19 and the successful candidate will be required to pass a medical examination

The successful candidate will act under the direction of the Medical Superintendent and the Surgeon

Applications stating age and full particulars with regard to experience with copies of three recent testimonials to be sent to D E I DAVIS Medical Officer of Health Public Health Offices Barry Glam so as to reach him not later than July 16th 19

Council Offices T D HOWELLS
Barry Clerk to the Council
June 27th 19 8

CITY OF MANCHESTER

CRUMPSALL HOSPITAL ([illegible] Beds)

The Public Health Committee [illegible] from registered medical practitioners for the post of RESIDENT SURGICAL OFFICER at the above named hospital

The salary [illegible] per annum [illegible] per annum [illegible] which board residence and laundry [illegible] subject to the Manchester Corporation superannuation scheme

Applications [illegible] experience [illegible] recent testimonials [illegible] Public Health Department Town Hall Manchester [illegible] July 16th 19

Town Hall F E WADDECK J P
Manchester Town Clerk
June [illegible] 19

COUNTY BOROUGH OF BIRKENHEAD
DEPARTMENT OF THE MEDICAL OFFICER OF HEALTH

BIRKENHEAD MUNICIPAL HOSPITAL
(560 Beds)

RESIDENT SURGICAL OFFICER
RESIDENT MEDICAL OFFICER

Applications are invited for the above posts which will fall vacant on October 1st 1938 The appointments are for twelve months

Candidates must be male unmarried and fully qualified registered medical practitioners

The duties attached to the post of Resident Surgical Officer are mainly surgical and obstetrical and preference will be given to candidates who have had previous post graduate surgical (including operative surgery) experience either in a Municipal or Voluntary General Hospital

The duties attached to the post of Resident Medical Officer are mainly medical and preference will be given to candidates who have had previous post graduate medical experience

Salary £300 per annum with board residence and laundry

Applications must be made on forms to be obtained from Dr D Morley Matheson Medical Officer of Health 9 Hamilton Square Birkenhead

Applications endorsed Resident Medical Officer to be received by the undersigned not later than July 25th 1938

Town Hall E W TAME
Birkenhead Town Clerk

CITY OF MANCHESTER

ASSISTANT TUBERCULOSIS OFFICER

The Public Health Committee invites applications for the position of Assistant Tuberculosis Officer at a commencing salary of £650 per annum rising by annual increments of £25 to £750 per annum

Candidates must be registered Medical Practitioners having special knowledge of Medical and Surgical Tuberculosis and should state whether they possess the Diploma of Public Health

Applications (no special form is issued) stating age qualifications and experience with copies of not more than three recent testimonials and endorsed on the envelope Assistant Tuberculosis Officer must be addressed to the Medical Officer of Health Town Hall Manchester 2 and not to members of the Committee or Council and must be received by him not later than July 27th 1938

The gentleman appointed will be under the administrative control of the Medical Officer of Health and the immediate control of the Senior Tuberculosis Officer He will be required to devote the whole of his time to the duties of his position to execute the Deed of Service and to contribute to the Corporation Superannuation Fund

Canvassing in any form direct or indirect oral or written is prohibited

Town Hall T L WARBRECK HOWELL
Manchester 2 Town Clerk
July 4th 1938

CITY OF MANCHESTER

CRUMPSALL HOSPITAL (1 543 Beds)

The Public Health Committee invites applications from registered medical practitioners for the post of RESIDENT ASSISTANT MEDICAL OFFICER (Grade 2) at the above named hospital

The salary for the appointment is £250 per annum with board residence and laundry in addition subject to the Manchester Corporation conditions of service The duties of the appointment are of a surgical nature and candidates must have had previous experience in surgery

The appointment will be made in the first instance for a period of six months renewable for a further six months but not renewable thereafter

Full information and forms of application may be obtained from the Medical Officer of Health Town Hall Manchester 2 and applications for the post must be received by him not later than July 20th 1938

Town Hall T L WARBRECK HOWELL
Manchester 2 Town Clerk
July 2nd 1938

CITY OF BIRMINGHAM

ROMSLEY HILL SANATORIUM (120 Beds)

RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited for a Resident Assistant Medical Officer Candidates must be unmarried and have held a resident hospital appointment since qualifying Experience in the diagnosis and treatment of tuberculosis will be a recommendation

The appointment will be limited in the first instance to six months and subject to satisfactory service may be extended for a further six months The salary will be at the rate of £240 per annum for the first six months and £275 per annum for the second six months with board and residence in each case

Forms of application may be obtained from the Medical Superintendent Romsley Hill Sanatorium Halesowen near Birmingham and should be returned to him not later than July 23rd 1938

T H C WILTSHIRE
Town Clerk

THE UNIVERSITY OF LIVERPOOL

The Council invites applications for the post of LECTURER (Ungraded) in the DEPARTMENT OF PATHOLOGY Salary £600 rising by annual increments of £25 to £700

The duties of the Lecturer will commence on October 1st 1938 The appointment is a whole time one and the Lecturer will be required to comply with the conditions of the Federated Superannuation System for Universities

Four typewritten applications together with three references and (if the candidate so desires) copies of testimonials should be forwarded not later than Saturday September 3rd 1938 to the Registrar

Enquiries for further information should be addressed to the George Holt Professor of Pathology The University of Liverpool

STANLEY DUMBELL
July 1938 Registrar

ESSEX COUNTY COUNCIL

SECOND ASSISTANT MEDICAL OFFICER

The County Council of the Administrative County of Essex invite applications for the appointment of Second Assistant Medical Officer at the Black Notley Sanatorium near Braintree

This Sanatorium contains 300 beds for the treatment of pulmonary and non pulmonary tuberculosis in men women and children and possesses all modern facilities for diagnosis and treatment and a staff of visiting specialists

The appointment is limited to a period of four years The salary will be at the rate of £350 per annum and will rise subject to satisfactory service by annual increments of £25 to £425 per annum together with residential emoluments valued at £160 per annum Applicants must have held a resident appointment in a general hospital The successful applicant will be required to pass a medical examination and will be subject to the Council's Sick Pay Rules and Regulations a copy of which will be forwarded on application

Applications stating age qualifications and experience accompanied by copies of not more than three recent testimonials (which will not be returned) should be addressed to me and delivered at the County Hall Chelmsford not later than 10 a.m. on Thursday July 21st 1938

County Hall E S HOLCROFT
Chelmsford Clerk of the County Council
July 5th 1938

COUNTY MENTAL HOSPITAL
WHITTINGHAM near PRESTON

Applications are invited for the whole time appointment of SENIOR ASSISTANT MEDICAL OFFICER at the above Mental Hospital The salary is £700 per annum An additional £50 per annum will be paid for the possession of a Diploma in Psychological Medicine The selected candidate if single will be required to live in the Hospital and will be provided with board lodgings etc for which a charge of £150 per annum is made If the selected candidate is married he may be required to live within reasonable distance of the Hospital until a house or married quarters is available The appointment will be subject to the provisions of the Asylums Officers Superannuation Act 1909 and the successful candidate will be required to pass a medical examination

Applications giving full particulars with testimonials (copies only) should be forwarded so as to reach the Medical Superintendent on or before July 20th 1938

COUNTY BOROUGH OF PRESTON

SHAROE GREEN HOSPITAL
(250 Beds)

JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER (FEMALE)

Applications are invited from fully qualified and registered practitioners for the above appointment Salary at the rate of £100 per annum with full board and residence The appointment will be for a period of six months and can be renewed for a period not exceeding six months

Applications stating age qualifications and experience together with copies of three recent testimonials should reach the Medical Superintendent not later than first post on July 23rd 1938

THE LIVERPOOL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST
Mount Pleasant Liverpool

Applications are invited for a FULL TIME RESIDENT MEDICAL OFFICER to the Hospital for Consumption and Diseases of the Chest Previous hospital experience desirable Both Medical and Surgical Treatment of Pulmonary Tuberculosis are undertaken at this Hospital

The appointment will be for a period of one year Salary £150 per annum with board and residence

Applications stating age nationality qualifications and experience together with copies of three recent testimonials or names of two local referees to be sent to the Secretary not later than July 20th 1938

COUNTY BOROUGH OF ST HELENS

ASSISTANT MEDICAL OFFICER OF HEALTH
(Female)

Applications are invited for the post of Assistant Medical Officer of Health (female)

The duties will be mainly in connexion with Maternity and Child Welfare and the School Medical Service together with such other duties as the Medical Officer of Health may direct Candidates must have special experience in Midwifery and in the diseases of children

The salary will be at the rate of £500 per annum plus travelling expenses rising by annual increments of £25 to a maximum of £700 per annum and in the case of a candidate now in the service of another Authority on a rising scale recognition may be given to past service with such Authority in fixing the commencing salary

The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and to the successful candidate passing the necessary medical examination

Forms of application may be obtained from the Medical Officer of Health Town Hall St Helens and completed applications accompanied by copies of not more than three recent testimonials should reach him not later than July 14th 1938

Canvassing members of the Council or Committees of the Corporation will be a disqualification

Town Hall FRANK HAUXWELL
St Helens Medical Officer of Health
June 24th 1938

GLAMORGAN COUNTY COUNCIL

COMMITTEE FOR THE CARE OF THE MENTALLY DEFECTIVE

APPOINTMENT OF JUNIOR MEDICAL OFFICER
At Hensol Castle near Pontyclun

Applications are invited for the appointment for a period of one year of a Junior Medical Officer at Hensol Castle Certified Institution near Pontyclun Glam at a salary of £150 per annum together with emoluments consisting of board apartments and laundry valued for superannuation purposes at £170 per annum

It will be an advantage if candidates have had at least one year's experience in general medicine after qualifying

The appointment will be subject to the provisions of the Asylums and Certified Institutions (Officers Pensions) Act 1918

Applications on the prescribed form obtainable from the Medical Superintendent of Hensol Castle are to be received by him not later than the first post on Saturday July 16th 1938

HENRY ROWLAND
Clerk of the County Council
Glamorgan County Hall
Cardiff July 4th 1938

BOROUGH OF WORTHING

DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited for the above appointment from duly registered medical practitioners possessing a diploma in Sanitary Science Public Health or State Medicine Salary £650 per annum rising by annual increments of £75 to a maximum of £700 per annum

Terms and conditions of appointment and forms of application will be supplied on receipt of a stamped and addressed foolscap envelope

Applications with not more than three recent testimonials must be received by the undersigned not later than July 16th 1938

Town Hall J KENNEDY ALLERTON
Worthing Town Clerk
June 1938

THE ROYAL INFIRMARY SUNDERLAND
(358 Beds)

ASSISTANT PATHOLOGIST

Applications are invited from Registered Medical Practitioners for the above post at a commencing salary of £400 per annum Previous interest in experience after graduation is essential

The successful candidate will work under the direction of the Pathologist and will be required to devote the whole of his time to the Laboratory

Applications stating age and experience and accompanied by copies of testimonials should be sent to the undersigned from whom further details can be obtained not later than July 25th 1938

M J HUNTLEY
House Governor and Secretary

WEST SUFFOLK GENERAL HOSPITAL
Bury St Edmunds (112 Beds)

HOUSE PHYSICIAN wanted Duties to be in the charge of the Medical Beds Maternity Ward Casualty and the Administration of Anæsthetics Six months post Salary £150 per annum with usual emoluments

Applicants must be registered Practitioners

Applications stating age experience and nationality with copies of three recent testimonials to be sent to the Secretary

July 4th 1938

DURHAM COUNTY COUNCIL AND CHESTER LE STREET URBAN DISTRICT COUNCIL

DISTRICT TUBERCULOSIS MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH (MALE)

Applications are invited for the above appointments. Candidates must be registered in the Medical Register as holding a Diploma in Sanitary Science Public Health or State Medicine and must have had a satisfactory experience in the diagnosis and treatment of Tuberculosis.

The salary will be £500 per annum in the proportion of £5/7ths payable by the County Council and £2/7ths payable by the Chester le Street Urban District Council.

The officer appointed must either have held a previous appointment as Tuberculosis Medical Officer with the approval of the Minister of Health or

(i) have had at least three years experience in the practice of his profession

(ii) have spent in general clinical work a period not less than eighteen months of which not less than six months have been spent in a Hospital as Resident Officer in charge of beds occupied by general medical and surgical cases and

(iii) have received special training for a period of not less than six months in the diagnosis and treatment of tuberculosis.

Travelling and subsistence allowances according to a scale from time to time in force will be paid by the County Council in respect of the duties of District Tuberculosis Medical Officer and the officer will subject to the directions of the County Medical Officer be under the control of the Central Tuberculosis Medical Officer.

It will be a condition of the appointment that if either post is terminated the other post will be automatically vacated.

The appointments will be subject to the approval of the Minister of Health and the officer will not be permitted to take part in private practice.

The person appointed will be required to live in or near Chester le-Street.

Applications endorsed TMO and MOH and accompanied by copies of not more than three recent testimonials must be addressed to the County Medical Officer Shire Hall Durham and must be received by him not later than July 23rd 1938.

Shire Hall J. K. HOPE
Durham Clerk of the County Council
July 4th 1938

COUNTY BOROUGH OF CROYDON

JUNIOR RESIDENT ASSISTANT MEDICAL OFFICER

Application are invited from registered Medical Practitioners for the post of Junior Resident Assistant Medical Officer at the Maydas Hospital a general hospital of 455 beds. The person appointed will have charge of medical beds and will be required to act as Anaesthetist when necessary. The person appointed may also be required in an emergency to act as Assistant Medical Officer of Health. The appointment is for a period of twelve months.

Salary £300 per annum with furnished quarters and board at the Hospital.

Applications must be made on forms to be obtained from the Medical Officer of Health Town Hall Croydon and returned to him together with copies of three recent testimonials not later than 11 a.m. on Monday July 18th 1938 endorsed Assistant Medical Officer.

Town Hall E. TABERNER
Croydon Town Clerk
June 29th 1938

WORCESTER COUNTY AND CITY HOSPITAL

Powick near Worcester

Applications are invited for the post of ASSISTANT MEDICAL OFFICER.

Applicants must be male single under thirty five years of age and duly qualified in medicine and surgery. Commencing salary £350 rising by annual increments of £25 to a maximum salary of £450 per annum together with furnished apartment board laundry and attendance. A further £50 per annum will be paid if the selected candidate holds or obtains a Diploma in Psychological Medicine. Experience in Anaesthetics will be a recommendation. The appointment is subject to the provisions of the Asylums Officers Superannuation Act 1909.

Application stating age and full particulars of qualifications and experience accompanied by copies of three recent testimonials to be forwarded to the Medical Superintendent not later than Thursday July 14th 1938.

HAMPSTEAD GENERAL HOSPITAL

Haverstock Hill N.W.3

Applications are invited from single registered persons for the following posts (a) HOUSE PHYSICIAN (b) HOUSE SURGEON for six months' appointment. Salary £100 per annum with board residence and laundry.

Applications on the prescribed form with three testimonials to be received by the Secretary by July 18th.

HERTFORDSHIRE COUNTY COUNCIL

MATERNITY AND CHILD WELFARE

ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited for the post of Medical Officer for Maternity and Child Welfare work in the County of Hertford. Applicants must be registered Medical Practitioners and have had special experience in Maternity and Child Welfare and Ante natal work and have had at least three years' experience in the practice of their profession. Commencing salary £400 per annum rising by annual increments of £25 to a maximum of £500 per annum.

The post is subject to the provisions of the Local Government and Other Officers Superannuation Act 19— and the successful applicant will have to pass a medical examination.

The Officer appointed should possess a car for the use of which a mileage allowance according to the County Scale will be paid.

Particulars of experience qualifications and copies of three recent testimonials should be sent to the Clerk of the County Council Clerk of the Peace Office Hertford not later than Monday July 18th 1938.

ELTON LONGMORE
Hertford *Clerk of the County Council*
July 1938

HAMPSHIRE COUNTY COUNCIL

ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited for the post of Assistant County Medical Officer. Possession of a Diploma or Degree in Public Health is essential and previous experience in the various branches of public health work especially tuberculosis and school medical service is desirable.

The successful candidate will devote a portion of his time to the work of Medical Officer of Health of a County District. The salary will be £760 rising on approved service to a minimum of £900 a year (subject to deductions for pension) in addition to travelling expenses.

Application with copies of not more than three recent testimonials upon a form which with the condition of appointment may be obtained from the County Medical Officer The Castle Winchester should be sent to him as soon as possible and not later than July 18th 1938. Canvassing is prohibited.

The Castle F. V. BARBER
Winchester *Clerk of the County Council*
July 2nd 1938

THE LIVERPOOL SANATORIUM

Delamere Forest Frodsham via Warrington

(178 Beds *for the treatment of patients suffering from pulmonary tuberculosis*)

ASSISTANT TO THE MEDICAL SUPERINTENDENT

Applications are invited from male practitioners with suitable qualifications for the above named appointment. Candidates must be unmarried and preference will be given to applicants who have held resident medical appointments since qualification and have had practical institutional experience in the treatment of pulmonary tuberculosis.

Salary will be at the rate of £225 per annum with board quarters and laundry.

The appointment is normally tenable for twelve months but may be extended.

Particular of duties and full information together with forms of application can be obtained from the Secretary Hospital for Consumption Mount Pleasant Liverpool 3. Form completed with copies of three recent testimonials should be returned July 15th 1938 to the Secretary Hospital for Consumption Mount Pleasant Liverpool 3.

BOLINGBROKE HOSPITAL,

Wandsworth Common S.W.11

(135 Beds)

HOUSE PHYSICIAN (*male unmarried*) *required*

The appointment is for six months commencing on August 1st 1938. Salary £120 per annum with board residence and laundry.

Candidates must be fully qualified and registered. Applications stating age qualifications and experience with copies of not more than three testimonials should be sent to the undersigned on or before July 13th 1938.

W. S. RANDOLPH BISS
Secretary Superintendent.

CONNAUGHT HOSPITAL WALTHAMSTOW E.17

(115 Beds with Four Resident Medical Officers)

CASUALTY OFFICER (male) required to commence duties July 4th

The appointment will be for six months with remuneration at the rate of £110 per annum with board residence and laundry.

Applicants stating age qualifications and experience accompanied by copies of not more than three testimonials must be received by the undersigned not later than July 14th 1938.

R. HALTON HARRISON
Acting Secretary

CITY OF SALFORD

HOPE HOSPITAL

Applications are invited for the post of RESIDENT OBSTETRIC OFFICER at Hope Hospital Salford to commence duties about the 1st September next. Commencing salary £200 per annum rising by £25 per annum to £250 per annum. Board residence and laundry. A deduction of 5 per cent will be made from salary and emoluments of all appointments for superannuation purposes.

The Hospital contains 110 beds and is recognised by the Central Midwives Board for Pupil Training. Good opportunity for research work.

The Resident Officers Staff consists of five Senior Residents and will be responsible for the work in the obstetric and gynaecological wards. Candidates must have had recent experience in midwifery and must possess the MCOG Diploma. Preference will be given to applicants with a higher surgical qualification.

Further particulars and forms of application may be obtained from the Medical Officer of Health Regent Road Salford to whom they should be returned accompanied by not more than three recent testimonials not later than Monday July 18th 1938.

H. H. TOMLINSON Town Clerk

BOROUGH OF BARKING

ASSISTANT MEDICAL OFFICER

(Male or Female)

Applications are invited from qualified medical practitioners with experience in public health work especially tuberculosis and school medical service for the position of Assistant Medical Officer of Health and School Medical Officer.

Salary scale £400–£450–£500 per annum.

Full particulars of duties and forms may be obtained from the undersigned.

Town Hall S. A. JEWERS
Barking Town Clerk

MILLER GENERAL HOSPITAL

Greenwich Road S.E.10

ANAESTHETIST

Applications are invited for the post of Anaesthetist to attend on Thursday afternoons from the end of July next on receipt of the present holder's resignation.

Honorarium at the rate of two guineas per month for one attendance a week. Further attendances if required will be paid.

Fuller particulars may be had of the Secretary.

Applications to either with copies of not more than three recent testimonials must be sent not later before July 19th 1938.

July 5th 1938

LONDON HOSPITAL E.1

Applications are invited for the post of MEDICAL FIRST ASSISTANT AND REGISTRAR. The appointment is for one year but is renewable annually on application for two further periods of one year. Salary £400 per annum payable by the Hospital and Medical Committee jointly.

Candidates must be fully qualified medically.

Applications should be at the Hospital not later than by the first post on Saturday July 16th.

Further particulars may be obtained from the House Governor.

ARTHUR G. ELLIOTT
House Governor

LONDON HOSPITAL E.1

Applications are invited for the post of MEDICAL OUT PATIENTS FIRST ASSISTANT.

Candidates must be fully qualified medically.

The salary of the post is £100 per annum.

The duties involve attendance in the Medical Out patient Department on every weekday afternoon.

Applications with testimonials should be sent to the House Governor from whom further particulars may be obtained. Applications must be received not later than *June 16th*.

ARTHUR G. ELLIOTT
House Governor

EAST HAM MEMORIAL HOSPITAL

Shrewsbury Road E. (185 Beds)

The General Committee invite applications for the post of HONORARY GYNAECOLOGIST.

Candidates must be Fellows of the Royal College of Surgeons and registered by the General Medical Council.

Applications stating particulars of training with copies of three testimonials should be received by the undersigned on or before July 14th.

Canvassing will be considered a disqualification and candidates and testimonials will be submitted to members of the Honorary Medical Staff.

REGINALD PERRY
Secretary

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL

Applications are invited from duly registered candidates (male and unmarried) for
a HOUSE SURGEON salary £150 per annum from August 1st
a HOUSE PHYSICIAN salary £125 per annum from July 1st
The appointments are for six months and include apartments board and laundry The House Surgeon must be an experienced anæsthetist
All applications stating age etc with copies of testimonials to be sent to me at once
FRANK H TOONE
9 Leicester Road Secretary
Loughborough

LIVERPOOL OPEN-AIR HOSPITAL FOR CHILDREN
Leasowe Cheshire

Applications are invited for the post of JUNIOR RESIDENT MEDICAL OFFICER at the above hospital for a period of six months commencing *August 1st next* Salary at the rate of £200 per annum plus board residence and laundry
The hospital has 240 beds for treatment of Surgical Tuberculosis and orthopædic conditions and has one ward for adult patients
Applications stating age sex nationality qualifications and experience together with copies of three recent testimonials to be addressed to the SECRETARY not later than July 16th next

GENERAL HOSPITAL NOTTINGHAM
(389 Beds)

A RESIDENT CASUALTY OFFICER (Male) is required at the above Institution The appointment is for six months with salary at the rate of £150 a year with board residence and laundry
Candidates are desired to send applications *stating age qualifications and experience together* with copies of testimonials to the undersigned at once
Duties to commence on July 14th 1938
HENRY M STANLEY
House Governor and Secretary

HUDDERSFIELD ROYAL INFIRMARY
(321 Beds)

MALE HOUSE PHYSICIAN required to com*mence duty on August 8th 1938*
Salary £150 per annum with board residence and laundry *Appointment for six months subject* to renewal at the discretion of the Board of Management
Applications with copies of three recent testimonials to be addressed to the undersigned immediately
H J JOHNSON
Gen Supt and Sec

BARNWOOD HOUSE HOSPITAL FOR MENTAL AND NERVOUS DISORDERS
Near Gloucester

Required SECOND ASSISTANT MEDICAL OFFICER (male single) Commencing salary £500 per annum with board residence and laundry *Experience in Psychotherapy a recommendation* Applicants must possess the D P M The hospital has its own non contributory Pensions Scheme
Applications with copies of three recent testimonials to reach the *Medical Superintendent* not later than July 15th 1938

BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY

RESIDENT SURGICAL OFFICER (Male) required Salary £250 per annum with board residence and laundry
Preference will be given to applicants holding the F R C S Diploma
Applications stating nationality qualifications and experience together with copies of recent testimonials to be sent to the undersigned
Royal Infirmary T DEWHURST
Blackburn General Supt and Secretary

DONCASTER ROYAL INFIRMARY
(185 Beds)
(Recognised under the regulations for the D O and D L O)

HOUSE SURGEON (male) to Eye and Ear Nose and Throat Departments required
Salary at the rate of £150 per annum with board residence and laundry
Applications accompanied by not more than three testimonials to be sent to the undersigned
R LANCASTER
Secretary Superintendent

DURHAM COUNTY AND SUNDERLAND EYE INFIRMARY

HOUSE SURGEON required immediately Must have Ophthalmic experience Salary £350 per annum rising by two annual increments of £50 Non resident Must devote whole time to the duties of the Institution Applications with copies of recent testimonials to be sent to JOHN BUTTERFIELD Eye Infirmary Stockton Road Sunderland

THE RETREAT YORK
A REGISTERED MENTAL HOSPITAL
under the Management of a Committee of the Society of Friends

A MEDICAL SUPERINTENDENT will shortly be required at the above Hospital and applications are invited for the position
The initial salary will not be less than £1 000 per annum with *a house and other emoluments* valued at £300 p a for Pension purposes
Facilities will be given if desired for obtaining some special experience prior to taking up the appointment The doctor appointed will be expected to work in sympathy with the ideals of the Society of Friends
Applications with not more than three testimonials should be sent before August 27th to the Chairman of the Committee The Retreat York

SALFORD ROYAL HOSPITAL
(256 Beds)

Applications are invited from duly qualified practitioners for the post of RADIOLOGIST (non resident) for attendance each morning (Sundays excepted) and at such times as may be required Salary £300 per annum Twelve months appointment renewable The successful candidate will be required to work under the supervision of the Honorary Radiologist
Applications stating age and qualifications together with copies of testimonials, and certificate of registration should be addressed at once to the undersigned from whom all particulars may be obtained
By Order of the Board
H B SHELSWELL
General Superintendent and Secretary
July 2nd 1938

THE GLOUCESTERSHIRE ROYAL INFIRMARY AND EYE INSTITUTION
Gloucester
(232 Beds Six Residents)

Applications are invited for the post of RESIDENT SURGICAL OFFICER (male) Salary at *the rate of £200 per annum with board residence* and laundry Candidates must be fully qualified and unmarried and have held previous house appointments The appointment is for twelve months which may be extended
Applications stating age qualifications and nationality together with not less than three recent testimonials should be sent to the undersigned
The elected candidate will be required to enter upon his duties at once
F J SYMONS
June 30th 1938 Secretary

THE WEST NORFOLK AND KING'S LYNN GENERAL HOSPITAL (112 Beds)

RESIDENT HOUSE SURGEON

The Governing Board invite applications for the above post The appointed applicant will have charge of Casualty Department and one Surgical Ward Salary £120 per annum The appointment is for six months in the first instance Preference if suitable will be given to the Resident House Surgeon when the post of Resident House Physician falls vacant Applications stating age nationality qualifications should be accompanied by testimonials and reach the undersigned as soon as possible
JOSEPH E SEARJEANT F C C S
House Governor and Secretary

STROUD GENERAL HOSPITAL
Stroud Glos

RESIDENT MEDICAL OFFICER required *Candidates must be fully qualified and registered* Six months appointment duties to commence as soon as possible *Salary £160 per annum with* board and laundry
Applications stating age nationality etc together with copies of three recent testimonials to be sent to the undersigned from whom further particulars may be obtained
C FORD SPENCER Secretary

THE HARTLEPOOLS HOSPITAL
(95 Beds)

Applications are invited for the position of HOUSE SURGEON at a salary of £150 p a plus board residence and laundry
Appointment for six months subject to renewal and duties to commence July 15th
Applications to be made to the undermentioned
NORMAN O DEANS
Secretary

ROTHERHAM HOSPITAL

Wanted CASUALTY HOUSE SURGEON (male) *qualified* Salary £150 per annum with board residence and laundry To have charge of Out patients (130 beds)
Applications with copies of recent testimonials to be sent to the Secretary G W ROBERTS 8 Moorgate Street Rotherham

THE ROYAL HOSPITAL WOLVERHAMPTON
(Incorporated under Charter)

HOUSE SURGEON required (General Surgery) duties to commence August 1st The Hospital contains 300 beds includes the usual special departments and is recognized by the various Examining Bodies for a part of the requisite attendance on Medical and Surgical Practice
Candidates must be registered under the Medical *Acts* and unmarried
The appointment is for six months Salary at the rate of £100 per annum Board furnished rooms and laundry *provided*
Applications with copies of testimonials to be forwarded to the undersigned
Wolverhampton W H HARPER
June 27th 1938 House Governor

WEST NORFOLK AND KING'S LYNN GENERAL HOSPITAL (112 Beds)

RESIDENT HOUSE PHYSICIAN

Applications are invited for the above post Salary £130 per annum To have charge of Medical and Ophthalmic beds also to act as Resident Anæsthetist
The post is for six months in the first instance— offers valuable experience in both In patient and *Out patient work*
Application with copies of recent testimonials should be sent to the undersigned as early as possible
JOSEPH E SEARJEANT F C C S
House Governor and Secretary

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL
Cheetham
(Non Sectarian 102 Beds)

Applications are invited for the post of RESIDENT SURGICAL OFFICER (male) Salary £250 per annum including board residence and laundry The appointment is for twelve *months*
Applications stating age and qualifications together with copies of three recent testimonials to be forwarded to the undersigned not later than July 22nd 1938
By Order of the Board of Management
K C HARDING
Assistant Secretary

THE ROYAL INFIRMARY SHEFFIELD
(500 Beds)

Applications are invited for the post of CLINICAL ASSISTANT to the Ophthalmic Department (male or female) The Ophthalmic Department contains 68 Beds and an Out Patient Department which is open daily
Salary £300 per annum
The appointment will be for one year subject to two months notice and the officer elected will be eligible for reappointment Letters stating age and giving full *qualifications* previous hospital experience etc to be forwarded to the General Superintendent and Secretary immediately
June 14th 1938

WALSALL GENERAL HOSPITAL

The Committee invite applications from men for the post of HOUSE SURGEON
Candidates who must be registered under the Medical Act must produce three recent testi*monials* The appointment will be for six months Salary at the rate of £150 per annum The Hospital contains 145 beds and is equipped in all special departments
Applications to be sent at once to the undersigned
WALTER FRANCOMBE
June 8th 1938 House Governor

THE LIVERPOOL EYE EAR AND THROAT INFIRMARY
Myrtle Street Liverpool 7

HOUSE SURGEON (Ear Nose and Throat) wanted to commence duties August 1st
Salary £120 per annum with board residence and laundry
Applications stating age and nationality together with copies of three recent testimonials should be sent before July 20th to J PENN GRAY Esq (Chairman) 9 Harrington Street Liverpool 2

LONGTON HOSPITAL STOKE ON TRENT
(50 Beds)

HOUSE SURGEON required Salary £150 rising to £200 after six months with board residence and laundry plus certain fees
Applications with copies of recent testimonials and stating nationality to be sent to the Chairman of Directors Longton Hospital Stoke on Trent

MANCHESTER ROYAL EYE HOSPITAL

JUNIOR HOUSE SURGEON required Salary £120 per annum with residence *board* etc
Applications (with copies of testimonials) endorsed House Surgeon to be addressed to the undermentioned
H R NORTH
Gen Supt and *Secretary*

MANCHESTER ROYAL INFIRMARY

RESIDENT REGISTRAR TO SURGICAL OUT PATIENT DEPARTMENT

The Board of Management of the Manchester Royal Infirmary invite applications for the above appointment Vacant on August 15th 1938

Applicants must be registered and hold a Medical and Surgical qualification and have had a hospital appointment

The appointment is for six months (renewable for further periods of six months) subject to the provisions of the Bye-laws as to notice etc Salary £150 per annum with board residence and allowance for laundry

Applications stating age to be sent to the Chairman of the Medical Board not later than Wednesday July 20th 1938

By Order
F J CABLE
Gen Supt and Secretary

July 2nd 1938

MANCHESTER ROYAL INFIRMARY

HOUSE SURGEON—AURAL GYNAECOLOGICAL AND OPHTHALMIC DEPARTMENTS

The Board of Management of the Manchester Royal Infirmary invite applications for the above appointment which becomes vacant on August 15th 1938

Applicant must hold a Medical and Surgical qualification and be registered

The appointment is for six months subject to the By laws as to notice etc Salary at the rate of £50 per annum with board residence and allowance for laundry

Applications stating age to be sent to the Chairman of the Medical Board not later than Wednesday July 20th 1938

By Order
F J CABLE
Gen Supt and Secretary

July 2nd 1938

MANCHESTER ROYAL INFIRMARY

HOUSE PHYSICIANS (Four Vacancies)

The Board of Management of the Manchester Royal Infirmary invite application for the above appointments which become vacant as follows Two on August 15th and two on September 15th 1938 Applications will be considered to be for any of those posts unless it is specially stated to the contrary

Applicants must hold a medical and surgical qualification and be registered

The appointments are for six months subject to the provisions of the Bye-laws as to notice etc Salary at the rate of £50 per annum with board residence and allowance for laundry

Applications stating age to be sent to the Chairman of the Medical Board not later than Wednesday July 20th 1938

By Order
F J CABLE
July 2nd 1938 Gen Supt and Secretary

MANCHESTER ROYAL INFIRMARY

HOUSE SURGEON (Neuro Surgical Department)
HOUSE SURGEON (Orthopaedic Department)

The Board of Management of the Manchester Royal Infirmary invite application for the above appointments which become vacant on August 15th 1938 Applicants must be registered and hold a Medical and Surgical Qualification

The appointments are for six months subject to the provisions of the Bye laws as to notice etc Salaries at the rate of £50 per annum with board residence and allowance for laundry

Applications stating age to be sent to the Chairman of the Medical Board not later than Wednesday July 20th 1938

By Order
F J CABLE
July 2nd 1938 Gen Supt and Secretary

ROYAL HALIFAX INFIRMARY

Hospital Recognized by the Royal College of Surgeons (England)

Wanted a THIRD HOUSE SURGEON (male unmarried) Candidates must be duly qualified and registered The appointment will be for six months followed by promotion if suitable Salary including all services required in connection with Paying Patients Ward £150 per annum with residence board and laundry The Resident Staff consists of a Resident Surgical Officer and three House Surgeons The Hospital contains Maternity and Paying Patient Blocks Also a Pathological Department a Large Eye Ear Nose and Throat Department Radiological Department and Radium Clinic

Particulars of the duties may be obtained from the undersigned to whom applications stating age and nationality together with testimonials should be sent on or before the 19th instant

A MIDGLEY
July 4th 1938 Secretary

MANCHESTER ROYAL INFIRMARY

HOUSE SURGEONS (Four Vacancies)

The Board of Management of the Manchester Royal Infirmary invite application for the above appointments vacant on August 15th 1938

Applicants must be registered and hold a Medical and Surgical qualification and be registered

The appointments are for nine months subject to the provisions of the Bye Laws as to notice etc Salary at the rate of £50 per annum with board residence and allowance for laundry

Applications stating age to be sent to the Chairman of the Medical Board not later than Wednesday July 20th 1938

By Order
F J CABLE
July 2nd 1938 Gen Supt and Secretary

BERKSHIRE MENTAL HOSPITAL Wallingford

Applications are invited from registered medical practitioners for the post of SECOND ASSISTANT MEDICAL OFFICER (male or female) at the above Mental Hospital Salary £250 rising by annual increments of £25 to £450 per annum together with furnished apartment board and laundry valued at £170 per annum An additional amount of £50 per annum is payable if in possession of D P M Experience in the treatment of mental disorders would be a recommendation The appointment is subject to the provisions of the Asylum Officers Superannuation Act 1909

Applications in writing together with copies of three testimonials should reach the Medical Superintendent by first post on Thursday July 21st

KING GEORGES SANATORIUM FOR SAILORS LIPHOOK HANTS

(Seamen Hospital Society) For the Treatment of Pulmonary and Non Pulmonary Tuberculosis

ASSISTANT MEDICAL OFFICER (unmarried male or female) required as from August 1st for six months Salary at the rate of £200 per annum in the first instance Applications with copies of not less than three testimonials to be sent immediately to the undersigned

F A LYON
Secretary Seamen Hospital Society Greenwich S E 10

Greenwich July 4th 1938

ROYAL LANCASTER INFIRMARY Lancaster

(140 Beds) Four Residents

Applications are invited for the post of HOUSE SURGEON Salary £100 per annum with board residence and laundry The appointment is for six months

Applications stating age qualifications experience and nationality together with copies of three recent testimonials to be sent to the undersigned

FRANK A MILNES
Superintendent Secretary

ROYAL NORTHERN INFIRMARY Inverness

(200 Beds)

Applications are invited for the post of HOUSE PHYSICIAN (male) to the Physician Consultant (Highland and Island Scheme) and to the Honorary Visiting Physician Applicants must be Graduates of a University and have had six months H P experience in a large hospital The appointment will be for six months and is renewable Salary £150 p a

Applications with copies of testimonials should be sent to Medical Superintendent

DISTRICT INFIRMARY Ashton under Lyne

(200 Beds)

RESIDENT SURGICAL OFFICER required immediately Six months appointment with possibility of renewal Salary at the rate of £200 per annum with the usual residential emolument

Application with testimonial to be sent at once to
FRANK OLIVER
General Superintendent and Secretary

ESSEX COUNTY HOSPITAL COLCHESTER

(174 Beds)

Wanted immediately an ASSISTANT HOUSE SURGEON (male) Salary £110 per annum with board washing and residence Medical and Surgical qualifications required

Application with three recent testimonial to be sent on or before Wednesday July 13th to—
ERNEST R HANCHET
Secretary

BURTON-ON TRENT GENERAL INFIRMARY

Applications are invited for the position of CASUALTY OFFICER AND HOUSE PHYSICIAN Salary at the rate of £150 per annum with board residence and laundry

Applications giving age qualifications and nationality together with copies of testimonial to be sent to E W THORNLEY Secretary

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST Ventnor Isle of Wight

SECOND ASSISTANT RESIDENT MEDICAL OFFICER (male) unmarried required for six months commencing August 15th 1938 Salary at the rate of £200 per annum with board residence and laundry allowance The successful candidate will be eligible for promotion to First Assistant Resident Medical Officer for a further six months at a salary at the rate of £200 per annum with similar emoluments Candidates must be fully qualified in Medicine and Surgery and previous experience in Tuberculosis and Bacteriological work will be an advantage

Applications in candidates own handwriting stating age qualifications and experience (with names of three recent testimonials) to be sent to the Medical Superintendent Royal National Hospital for Consumption Ventnor Isle of Wight not later than Saturday July 23rd 1938

ROYAL SALOP INFIRMARY SHREWSBURY

(110 Beds)

APPOINTMENT OF RESIDENT HOUSE PHYSICIAN

Applications are invited from fully qualified unmarried men for the appointment of Resident House Physician vacant immediately Salary £160 per annum with board residence etc The appointment is for six months subject to renewal

Resident Staff comprises Resident Surgical Officer Resident House Physician and two Resident House Surgeons

The Resident House Physician is Resident Officer to the Medical Ward of the Hospital under the direction of three Honorary Physicians

Applications stating age qualifications experience nationality and accompanied by copies of three recent testimonials to be sent to the undersigned forthwith

Board Room J W NOBLE
July 4 1938 Secretary Superintendent

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL

(120 Surgical and Medical Beds)

HOUSE SURGEON TO OPHTHALMIC AND EAR NOSE AND THROAT DEPARTMENTS

Applications are invited from fully qualified men for the above post The appointment is for six months from July 20th 1938

Salary at the rate of £150 per annum

Applications stating age together with copies of three recent testimonials should be sent to the undersigned as soon as possible

M H BOONE
June 1st 1938 Superintendent and Secretary

ROYAL SALOP INFIRMARY SHREWSBURY

(150 Beds)

APPOINTMENT OF RESIDENT HOUSE SURGEON

Applications are invited from fully qualified unmarried men for the post of Resident House Surgeon vacant immediately Salary £160 per annum with board residence etc The appointment is for six months subject to reappointment

Applications stating age qualifications experience and nationality accompanied by copies of three recent testimonials to be sent to the undersigned immediately

Board Room J W NOBLE
July 4 1938 Secretary Superintendent

ROYAL BERKSHIRE HOSPITAL READING

(138 Beds)

Applications are invited for the post of RESIDENT ANAESTHETIST (male) which will fall vacant on August 16th 1938

The appointment is for six months in the first instance Candidates must be fully qualified and registered and have had considerable experience in the administration of anaesthetics

A salary of £200 p a with board residence and laundry will be paid to a candidate possessing suitable qualifications for the post

Applications stating age and experience with copies of not more than three recent testimonials to be sent to the undersigned as soon as possible

H E RYAN
Secretary and House Governor

WARRINGTON INFIRMARY AND DISPENSARY

HONORARY DERMATOLOGIST

Applications are invited by the Board of Management for the above position Candidates who must be specializing in Skin Diseases should send in their applications to the undersigned giving particulars of experience etc Particulars of duties etc will be sent on application

By Order
HENRY L BOOT
July 4th 1938 Superintendent and Secretary

KEIGHLEY AND DISTRICT VICTORIA HOSPITAL YORKSHIRE (WEST RIDING)
(124 Beds) (Two Residents)

APPOINTMENT OF RESIDENT MEDICAL OFFICERS

Applications are invited from Registered Medical Practitioners (female) for the following posts
First Resident Medical Officer salary £160 per annum to commence August 15th 1938
Second Resident Medical Officer salary £120 per annum to commence September 1st 1938
Proof of registration to be furnished before appointment Full residential emoluments Term six months renewable
Applications with particulars of age experience and nationality together with copies of two recent testimonials to be sent to the undersigned not later than July 20th 1938

J YOUNG
Secretary Superintendent

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke on Trent

REGIONAL RADIUM CENTRE

APPOINTMENT OF PHYSICIST

The Committee invite applications for the position of a full time Physicist to the Radium and Deep X Ray Department Applicants must possess the Degree of M Sc and have had previous experience Salary £350 per annum
Applications to be sent immediately to the undersigned giving particulars of qualifications experience age etc accompanied by copies of three recent testimonials

W STEVENSON
July 4th 1938 Secretary and House Governor

GRIMSBY AND DISTRICT HOSPITAL
(164 Beds)

HOUSE PHYSICIAN (Male)

Applications are invited for the post of House Physician Remuneration £150 per annum with board residence etc Candidates must be fully qualified and registered and previous hospital appointment experience is desirable Duties to commence August 1st 1938 The successful candidate will be appointed for six months and may apply for re election
Applications stating age qualifications experience together with three recent testimonials to be forwarded to the undersigned immediately

H B COATES
Secretary Superintendent

GRIMSBY AND DISTRICT HOSPITAL
(164 Beds)

Applications are invited for the post of RESIDENT ORTHOPAEDIC OFFICER Salary £225 per annum with board residence The appointment is for twelve months subject to renewal Duties to commence August 1st 1938 Candidates must be registered under the Medical Acts reside in the Hospital and have had experience in Orthopaedic and Fracture work
Applications with copies of not more than three testimonials to the undersigned immediately

H B COATES
Secretary Superintendent

SWINDON AND NORTH WILTS VICTORIA HOSPITAL

Applications are invited for the post of HOUSE SURGEON male British or Irish unmarried Salary £125 per annum with board residence and laundry Appointment is for six months in the first instance There are two residents The hospital is fully equipped for general work and the specialities Private bed no obstetrics
The post is suitable for a recent qualified man and there is time for reading Applicants must be registered under the Medical Acts
Applications stating age and qualifications with copies of three recent testimonials to reach the undersigned by July 18th

KENNETH N KNAPP Secretary

ROYAL CORNWALL INFIRMARY TRURO
(84 Beds)

HOUSE SURGEON (male) required with experience of Anæsthetics to commence duties on August 1st next Salary £170 per annum rooms board and washing
Apply with copies of three recent testimonials to the Secretary of whom further particulars may be obtained

Truro W E GRENFELL
July 4th 1938 Hon Secretary

BRADFORD CHILDREN'S HOSPITAL

HOUSE SURGEON (lady) required immediately Fully qualified Salary £150 with board residence and laundry
Applications with recent testimonials and stating age to

J W LONGLEY
Secretary Superintendent

THE GLOU[illegible] INFIRMARY [illegible]
(232 Beds Six Residents)

Applications are invited for the post of CASUALTY OFFICER (male) Salary at the rate of £150 per annum with board residence and laundry
The appointment is for six months which may be extended for similar periods by re election from time to time
Applicants must have held a resident appointment and have had experience in fracture work The elected candidate will also be required to deputise for the Resident Surgical Officer during his absence
Applications stating age qualifications experience and nationality with copies of not less than three recent testimonials should be sent to the undersigned
The elected candidate will be required to enter upon his duties at once

[illegible] J SYMONS
July [illegible]th 1938 Secretary

THE PRINCE OF WALES'S HOSPITAL
Greenbank Road Plymouth
(Formerly South Devon and East Cornwall Hospital) (264 Beds)

Applications are invited for the posts of HOUSE PHYSICIAN and HOUSE SURGEON Salary £120 per annum with board residence and laundry Appointments are tenable for six months and are subject to renewal Duties to commence August 10th
The Hospital is officially recognized for the surgical practice required before admission to the Final Fellowship Examinations of the Royal College of Physicians and Surgeons of England
Applicants must be registered under the Medical Acts and be members of either the Medical Defence Union or the London Counties Medical Protection Society
Applications stating age and qualifications with copies of three recent testimonials to reach the undersigned by July 22nd

ARTHUR R CASH
July 5th 1938 Secretary

THE BIRMINGHAM UNITED HOSPITAL

THE QUEEN'S HOSPITAL BIRMINGHAM 15

REGISTRAR to the Ear Nose and Throat Department required part time non resident
The duties are in connexion with the In patient and Out patient Departments The appointment is for six months in the first instance
Candidates must be registered medical practitioners and for preference should hold higher degrees
Salary will be at the rate of £150 per annum
Applications with copies of three testimonials should reach the undersigned not later than first post on July 16th

P CROCKER
July 5th 1938 House Governor

THE KING EDWARD VII WELSH NATIONAL MEMORIAL ASSOCIATION

Applications are invited from duly registered medical practitioners (male or female) for the post of ASSISTANT RESIDENT MEDICAL OFFICER at the South Wales Sanatorium (256 beds for male pulmonary cases) Talgarth Brecs
Salary £200 per annum plus maintenance
The appointment is limited to a period of one year
Applications stating age qualifications experience etc together with copies of three recent testimonials should reach the undersigned not later than Wednesday July 20th 1938

D A POWELL
Principal Medical Officer
Memorial Offices Westgate Street Cardiff

THE BOLTON ROYAL INFIRMARY
(315 Beds including two Auxiliary Hospitals)

Applications are invited from Ladies and Gentlemen for the post of HOUSE SURGEON
The duties of the post include ear nose and throat work and gynæcology
Salary £150 per annum with board residence and laundry
Applications for the post stating age nationality and experience together with copies of testimonials should be forwarded to the undersigned as soon as possible

H CORLESS
Secretary

THE GENERAL HOSPITAL BIRMINGHAM

OPEN APPOINTMENT

Applications are invited for the post of HOUSE SURGEON to the Throat and Ear Department for six months from July 15th Salary £70 per annum plus board residence and laundry
Applications giving full details of qualifications should reach the undersigned as soon as possible

A H LENNEY
House Governor

PRESTON AND COUNTY OF LANCASTER QUEEN VICTORIA ROYAL INFIRMARY

The Board of Management invites application for the following posts
HOUSE SURGEON to Consulting Surgeon Duties in Male Female and Children Ward vacant August 1st This post is recognized by the Royal College of Surgeons England as approved experience in connexion with the FRCS examination
HOUSE SURGEON to the EYE AND EAR NOSE AND THROAT DEPARTMENTS under Ophthalmic and Aural Surgeons now vacant
Salary in each case at the rate of £150 per annum with board residence and laundry
Application stating age training and qualifications to be addressed to Mr JOHN CIBSON Superintendent and Secretary Royal Infirmary Preston

ROYAL VICTORIA INFIRMARY
Newcastle upon Tyne (785 Beds)

Applications are invited for the post of SENIOR SURGICAL OFFICER to the Leazes Hospital (Pay bed Section of the Royal Victoria Infirmary)
Candidates must be registered in Medicine and in Surgery The term of appointment is for one year beginning August 8th 1938 and is renewable for a further period
Salary £200 per annum with board and residence
Applications stating age experience and accompanied by copies of not more than three recent testimonials must be received on or before Monday July 18th 1938 by the undersigned from whom further particulars may be obtained

S DUNSTAN
House Governor and Secretary
July 2nd 1938

ROYAL INFIRMARY OF EDINBURGH

Applications are invited for appointment as CLINICAL ASSISTANT (non resident) in the Eye Department for a period of not less than twelve months A salary at the rate of £200 per annum is attached to the post The candidates must be duly qualified and registered The post is a most valuable one for graduates wishing to specialize in Diseases of the Eye
Applications should be sent without delay to the undersigned at the Royal Infirmary

HENRY MAW
Secretary and Treasurer

THE LADY CHICHESTER HOSPITAL HOVE
For Functional Nervous Diseases
(60 Beds)

JUNIOR HOUSE PHYSICIAN (woman) required Six months appointment at £75 per annum all found Valuable experience for Diploma in Psychological Medicine Duties to commence middle of July
Applications with testimonials to be sent to the Secretary Mr P F Spooner 33 West Street Brighton
July 2nd 1938

VICTORIA HOSPITAL DEAL
(50 Beds)

Applications are invited for the post of RESIDENT MEDICAL OFFICER (male) British nationality unmarried The appointment to commence immediately for six months Salary £150 per with board lodging and laundry Special knowledge of Anæsthetics is desirable
Applications stating age and qualifications together with copies of three recent testimonials to be sent to the Secretary Medical Board Victoria Hospital Deal Kent

WEYMOUTH AND DISTRICT HOSPITAL
Weymouth

Wanted July 25th HOUSE SURGEON (European) Salary £150 per annum with board residence and laundry
Applications stating age qualifications and copies of testimonials to be sent to the undersigned not later than July 13th

MORRIS LODGE
Honorary Secretary

KENT AND CANTERBURY HOSPITAL
(153 Beds 4 R M O s)

HOUSE PHYSICIAN required male unmarried Six months appointment commencing July 1938 Salary £125 per annum with board residence and laundry
Applications together with copies of testimonials should be sent to the undersigned

J J KENT
Superintendent and Secretary

PRINCESS ALICE HOSPITAL EASTBOURNE
(Voluntary General Hospital 101 Beds
Two House Surgeons)

RESIDENT HOUSE SURGEON required July 16th Salary £150 per annum
Applications should be sent at once to undersigned with copies of three recent testimonials

W RUSSELL JUDAH
Secretary
July 5th 1938

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association B M A House Tavistock Square W C 1 (in the case of Scottish appointments with the Scottish Secretary 7, Drumsheugh Gardens Edinburgh)

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—*(contd.)*	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY *(Medical Officer)*	MID RHONDDA MEDICAL AID SOCIETY *(Assistant Medical Officer)*	COUNTY OF ROXBURGH *(Assistant Medical Officer of Health)*
BLAENAVON MEDICAL SOCIETY *(Chief Medical Officer)*	NEATH AND DISTRICT *(Medical Aid Association)*	**DISPENSARY APPOINTMENTS**
GILFACH GOCH GLAMORGAN *(Workmen's Medical Scheme)*	OGMORE VALLEY GLAMORGAN *(Llynfi am Collieries Medical Aid Society)* *(Workmen's Medical Scheme)*	LIMERICK CITY *(Whole-time Dispensary Medical Officers)*
LLWYNYPIA CLYDACH VALE, PENYGRAIG GLAMORGAN *(Workmen's Medical Scheme)*	OAKDALE MON *(Medical Officer for Medical Aid Association)*	

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association, B M A House Tavistock Square, W C 1

Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch
NEW SOUTH WALES *(All Friendly Societies Appointments)*	The Medical Secretary New South Wales Branch 135 Macquarie Street Sydney N S W	**VICTORIA** *(All Institute or Medical Dispensaries)*	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria	**WESTERN AUSTRALIA** *(Contract and Lodge Practices)*	The Hon Sec Western Australian Branch British Medical Association Shell House 205 St Georges Terrace Perth Western Australia
QUEENSLAND *(Brisbane Associate Friendly Societies Institute)*	The Hon Sec Queensland Branch British Medical Association B M A House 5 Wickham Terrace Brisbane B 17				

July 6 1938 By Order of the Council G C ANDERSON, *Secretary*

BRISTOL ROYAL INFIRMARY

Applications are invited for the following Resident Medical Appointments (for the six months commencing September 1st 1938

Three HOUSE PHYSICIANS (one of whom also acts as House Physician to the Cancer Department)

Four HOUSE SURGEONS and One ASSISTANT HOUSE SURGEON

One HOUSE SURGEON to the Casualty Department

One HOUSE SURGEON to the Ear Nose and Throat Department

One HOUSE SURGEON to the Fracture Department

One SENIOR OBSTETRIC HOUSE SURGEON

One JUNIOR OBSTETRIC HOUSE SURGEON

Salaries at the rate of £80 per annum except in the case of the Senior Obstetric House Surgeon who will receive a salary at the rate of £100 per annum and the Senior Casualty House Surgeon who will receive a salary at the rate of £1 0 per annum

Candidates who must be duly qualified to send in their applications on forms to be obtained from the undersigned which must be returned on or before July 15th 193 to either with copies of not more than three testimonials

The elected candidates must become members of the Medical Defence Union before taking up their appointments

ELLIS C SMITH F C I S
Secretary and House Governor

MIDLAND HOSPITAL
Easy Row Birmingham (50 Beds)

Applications are invited for the post of HOUSE SURGEON Duties to commence August 1st Salary £ 00 per annum with board residence and laundry

Applications stating when at liberty and qualifications together with copies of recent testimonials to be addressed to the undersigned

OLIVE FURNEAUX Secretary

MANCHESTER NORTHERN HOSPITAL
Cheetham Hill Road Manchester 8
(General Hospital—113 Beds)

Applications are invited for the posts of RESIDENT HOUSE PHYSICIAN and RESIDENT HOUSE SURGEON Salary £100 per annum with board and residence

The appointments are for six months from mid August 1938 (successful candidates are eligible for reappointment for a further six months)

Applications stating age qualifications and nationality with copies of not less than three recent testimonials should be sent to Mr JAMES C DANIELS Secretary 38 Barton Arcade Manchester 3 by July 13th

---

MANCHESTER NORTHERN HOSPITAL
Cheetham Hill Road Manchester 8
(General Hospital—113 Beds)

Applications are invited for the post of RESIDENT SURGICAL OFFICER commencing salary £150 per annum with board and residence The appointment is for twelve months from mid August 1938

Applications stating age qualifications and nationality with copies of not less than three recent testimonials to be sent to the Secretary Mr JAMES C DANIELS 38 Barton Arcade Manchester 3 not later than July 13th

---

VICTORIA HOSPITAL BLACKPOOL
(182 Beds)

HOUSE SURGEON (MALE) TO THE SPECIAL DEPARTMENTS
(Eye Ear Nose and Throat and Obstetrics)

Applications are invited for the above appointment There are four resident officers

Appointment is for six months Salary at the rate of £175 per annum with board residence and laundry

Application with copies of three recent testimonials should be sent immediately to the
General Superintendent

CITY HOSPITAL CHESTER

JUNIOR RESIDENT MEDICAL OFFICER (male) required for the above general hospital

Salary will be £150 per annum plus full residential emoluments The appointment will be for six months only and will be terminable at any time by one month's notice on either side

Application stating age qualifications and previous experience together with copies of three recent testimonials should be sent to the Medical Officer of Health Town Hall Chester by Wednesday July 13th 1938

J H DICKSON
Town Clerk

COSSHAM MEMORIAL HOSPITAL
Kingswood Bristol

A vacancy will appear at the end of July for a JUNIOR RESIDENT MEDICAL OFFICER Salary £1 0 per annum with board and laundry to remain for six months in the first instance Applicants (male) should be British nationality fully qualified and registered

Applications with copies of recent testimonial to be sent to the Secretary

---

COSSHAM MEMORIAL HOSPITAL
Kingswood Bristol

Wanted an additional HONORARY SURGEON for general surgical work

Apply with full particulars to the Secretary

CAERNARVONSHIRE AND ANGLESEY INFIRMARY BANGOR
(A General Hospital)

SENIOR HOUSE SURGEON wanted (male) Salary £1 0 per annum with residence board and laundry Duties to commence August 1st

Applications stating age qualifications and nationality with two recent testimonials to reach the Secretary not later than July 13th

(Appointments continued on p 67)

TO ADVERTISERS

The BRITISH MEDICAL JOURNAL has a larger circulation than that of all other British weekly medical periodicals combined

CIRCULATION OF THIS ISSUE—41,000

TERMS FOR ADVERTISING

SMALL PREPAID ADVERTISEMENTS

The MINIMUM charge is 9s., which covers up to 30 words. Extra words are charged 1s 6d for 5 or less, *e.g.*, 33 words would be charged as for 35. Name and address should be included when counting words for cost.

If BOX NUMBER is used, it should be reckoned as 5 words in the total.

Advertisements, accompanied by remittance, should reach this office not later than NOON, TUESDAY, for insertion in ensuing number.

DISPLAYED ADVERTISEMENTS Whole page, £24 and *pro rata* to one eighth page.

Special positions, dates and rates on application.

EVERY EFFORT IS MADE TO ENSURE THE ACCURACY OF ADVERTISEMENTS APPEARING IN THE JOURNAL. NO RECOMMENDATION IS IMPLIED BY ACCEPTANCE AND THE BRITISH MEDICAL ASSOCIATION RESERVES THE *RIGHT TO REFUSE OR INTERRUPT* THE INSERTION OF ANY ADVERTISEMENT.

ADVERTISEMENT MANAGER
BRITISH MEDICAL JOURNAL
B.M.A. House, Tavistock Square,
London, W.C.1
Telephone EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA TOBACCO. GOOD SMOKES at a low price; quality guaranteed. Box of 50 for 25/- post free.—Sole Manufacturers J. J. FREEMAN & Co. LTD., 90 Piccadilly, London, W.1. (GRO 1529.)

"BIZIM" CIGARETTES THESE luxurious deliciously satisfying smokes 50's or 100's at 6/3 per 100. 58/6 per 1,000 post free.—Sole Manufacturers J. J. FREEMAN & Co. LTD., 90 Piccadilly, London, W.1. (GRO 1529.)

"SOLACE CIRCLES" TOBACCO THE finest combination ever discovered of Choice Natural Tobaccos. Every pipeful an indescribable pleasure. 12/6 per 4 lb. tin post free.—Sole Manufacturers J. J. FREEMAN & Co. LTD., 90 Piccadilly, London, W.1. (GRO 1529.)

ARDARA.—LEAST KNOWN, MOST LOVELY holiday resort in Ireland. Best free fishing, rough shooting, golf, bathing, an artist's paradise. First class ACCOMMODATION provided by doctor's widow. Few guests taken. Vacancies now.—Address No. 7005, B.M.A. House, Tavistock Square, W.C.1.

FOR ALL INCOME TAX COMPLICATIONS or difficulties consult or communicate with Mr. C. G. C. KILNER (late H.M. Inspector of Taxes), 7, St. James's Street, Piccadilly, London, S.W.1. Telephone Whitehall 9278 for appointment.

REFRACTION AND THE ORDERING OF GLASSES.—Practical work taught to Medical Practitioners by practising London Ophthalmic Surgeon. £8 8s. for 10 lessons.—Address No. 7136, B.M.A. House, Tavistock Square, W.C.1.

TYPEWRITING, DUPLICATING, TRANSLATIONS.—Experts in Medical work. THESIS, MONIALS, THESES, etc., accurately copied in style that commands attention.—WOBURN BUREAU, Drayton House, Gordon Street, London, W.C.1 (close B.M.A. House). EUSton 1775.

TYPEWRITING.—SPECIALISTS IN TYPING Medical and scientific papers, lectures, theses and books. Shorthand typists always available. Proof reading, indexing.—MARGARET WATSON, LTD., 16, Palace Chambers, Bridge Street, S.W.1. WHItehall 3838.

ASSISTANCIES

WANTED IMMEDIATELY INDOOR AND Outdoor ASSISTANTS for Town and Country Practices with and without view to Partnership. Good salaries offered. State full particulars.—BRITISH MEDICAL BUREAU, 33, Cross Street, Manchester, 2.

WANTED IMMEDIATELY OUTDOOR ASSISTANT for easily worked Panel and Private Practice near Birmingham. Dispenser kept. Salary £450 p.a. If own car extra £50 allowance. Usual bond.—Address No. 7119, B.M.A. House, Tavistock Square, W.C.1.

WANTED IMMEDIATELY ASSISTANT Panel and private practice in coastal town in Devon. Salary £300 p.a. plus £50 car allowance.—Address No. 7131, B.M.A. House, Tavistock Square, W.C.1.

WANTED IMMEDIATELY ASSISTANT FOR private and panel practice, Manchester. Salary £300 to £400 per annum according to experience. All found, car allowance extra. Suit newly qualified man.—Address No. 7259, B.M.A. House, Tavistock Square, W.C.1.

WANTED EARLY AUTUMN FOR PARTNERSHIP country practice 30 miles north of London an OUTDOOR ASSISTANT. Must be well qualified and under 35 years of age. Appointment for six months or by arrangement. No view to partnership. Unfurnished flat to let. Suit married man. Must possess own car. Salary £420 p.a. including car.—Address No. 7124, B.M.A. House, Tavistock Square, W.C.1.

WANTED ASSISTANT IN EAR, NOSE AND Throat Practice with view to early succession.—Address No. 7253, B.M.A. House, Tavistock Square, W.C.1.

WANTED.—MALE ASSISTANT INDOOR for mixed London practice. Salary £350 per annum. Recently qualified man considered.—Address No. 7133, B.M.A. House, Tavistock Square, W.C.1.

WANTED IN COUNTRY TOWN IN MIDlands male Outdoor ASSISTANT. Salary £400 to £450 according to experience. Car provided. Ample time for reading.—Address No. 7121, B.M.A. House, Tavistock Square, W.C.1.

WANTED ASSISTANT IN LEEDS MIXED practice. Salary £350, all found. Application to REYNOLDS AND BRANSON, LTD., 13, Briggate, Leeds.

WANTED OUTDOOR MALE ASSISTANT for panel and private practice in the Midlands. Salary £400 per annum. Must be reliable. Car supplied. Usual bond.—Address No. 6825, B.M.A. House, Tavistock Square, W.C.1.

WANTED INDOOR MALE ASSISTANT FOR practice near Cardiff. Salary £360 p.a. Car allowance if required £52 p.a. State age and other particulars to.—Address No. 7128, B.M.A. House, Tavistock Square, W.C.1.

FOR CARDIFF MIDDLE CLASS PRACTICE Outdoor ASSISTANT wanted immediately. Own car preferred. Salary £400 and £50 car allowance. Time to read.—Address No. 7275, B.M.A. House, Tavistock Square, W.C.1.

INDOOR MALE ASSISTANT BRITISH wanted September for Middle class Practice 20 miles London. Salary £400 with view. Car provided.—Address No. 7118, B.M.A. House, Tavistock Square, W.C.1.

MALE ASSISTANT WANTED IN GOOD class Gloucestershire practice from Aug. 1st to Jan. 1st. Seven guineas weekly, all found, must have own car, car allowance.—Address No. 7265, B.M.A. House, Tavistock Square, W.C.1.

PERMANENT ASSISTANT FOR OCTOBER. Suitable for married man. House provided. State experience and all essential particulars.—Address No. 6160, B.M.A. House, Tavistock Square, W.C.1.

OUTDOOR MALE (UNMARRIED) ASSISTANT wanted in agreeable South Wales colliery district near Cardiff. Principal young, work not onerous, car provided. Salary £350 to £400 (according to experience) with furnished rooms and attendance.—Applications to Address No. 7016, B.M.A. House, Tavistock Square, W.C.1.

PART TIME ASSISTANT WANTED SE. Live out. Male or female. British Dr. locum second half August. Suit postgraduate.—Address No. 7117, B.M.A. House, Tavistock Square, W.C.1.

PART TIME ASSISTANT WANTED FOR practice S.E. London. Suit semi-retired or postgraduate.—Address No. 7278, B.M.A. House, Tavistock Square, W.C.1.

SOUTH HAMPSHIRE.—WANTED ASSISTANT with early view. British. Charming house and garden available. Salary to be arranged. Good hospitals and social amenities. Five miles sea.—Address No. 7101, B.M.A. House, Tavistock Square, W.C.1.

LOCUMS

WANTED POSITION AS LOCUM ASSISTANT/SHIP or PART TIME WORK. Experienced in panel and private practice. Free now. Will go anywhere.—Phone Term 4750 (London) or address No. 7134, B.M.A. House, Tavistock Square, W.C.1.

WANTED LOCUM FOR SMALL S. LONDON Practice from July 29th to Aug. 16th. Light work, no mids, few visits. Possibility of part or full time work later.—Address No. 7131, B.M.A. House, Tavistock Square, W.C.1.

WANTED LOCUM AUGUST 5th TO 23rd for compact practice South London. Man or woman experienced in general and panel work. State age. Usual terms.—Address No. 7151, B.M.A. House, Tavistock Square, W.C.1.

WANTED INDOOR LOCUM REQUIRING semi-holiday August. Derbyshire, easy north Dales. Work light. 6 guineas plus 1 guinea weekly transport.—Address No. 7255, B.M.A. House, Tavistock Square, W.C.1.

WANTED LOCUM MAN OR WOMAN for Sept. 3rd to 18th approx. County, South Midlands. Car available. References.—Address No. 7267, B.M.A. House, Tavistock Square, W.C.1.

WANTED HOSPITALITY LOCUM FOR self, wife and boy for two or three weeks between last week July and last week August. Bring own car.—Address No. 7107, B.M.A. House, Tavistock Square, W.C.1.

WANTED LADY TO ACT AS LOCUM IN busy London practice from night of August 5th to night of August 28th. Must be British and must be able to drive car.—Address No. 7177, B.M.A. House, Tavistock Square, W.C.1.

EXPERIENCED PRACTITIONER HAVING sold practice is now free to act as LOCUM at present near Warwick. South or West coast preferred.—Address No. 7264, B.M.A. House, Tavistock Square, W.C.1.

EXPERIENCED G.P. WANTS LOCUM ENGAGEMENT hospitality for wife or entry preferred. Own car. Free now until July 16th.—Address No. 7127, B.M.A. House, Tavistock Square, W.C.1.

HOLIDAY LOCUMS AND ASSISTANTS.—Experienced ladies and gentlemen available immediately or near future are invited to communicate with—THE MEDICAL AGENCY, LTD., 1, Southampton Street, Strand, W.C.2.

HP., FREE END OF MONTH. SEEKS position as LOCUM during Aug. Sept. in South West Devon. MB, BS (Lond.).—Address No. 7263, B.M.A. House, Tavistock Square, W.C.1.

LOCUM TENENS (MALE) REQUIRED FOR A period of several weeks commencing August 8th 1938 The person appointed will be required to reside in the Borough and work under the direction of the Medical Officer of Health Accommodation could be provided at the Infectious Diseases Hospital Salary will be at the rate of £10 guineas per week less deduction for board and residence if provided Experience in treatment of infectious diseases and tuberculosis desirable —Apply Medical Officer of Health Town Hall East Ham E 6

LOCUM OR MORNING AND EVENING SURGERIES required by elderly practitioner who has recently sold his practice —Address No 7116 B M A House Tavistock Square W C 1

LOCUM WORK WANTED BY EXPERIenced G P July 6th to September 1st Englishman London Hospital Excellent testimonials Accustomed to good-class private practice and industrial Own car —Address No 7116 B M A House Tavistock Square W C 1

WOMAN DOCTOR REQUIRED AS LOCUM from August 1st for about six weeks one guinea a day and travelling allowance —Address No 7119 B M A House Tavistock Square W C 1

WOMAN LOCUM WANTED FIRST THREE weeks August Hospitality offered two people besides locum House sea front Work light Own car desirable though not essential —Address No 7120 B M A House Tavistock Square W C 1

YOUNG DOCTOR THREE YEARS G P experience will be free to undertake LOCUM WORK for July to October preferably extended engagements in vicinity of Birmingham Own car Ten guineas per week Excellent references —Address No 7113 B M A House Tavistock Square W C 1

MEDICAL POSTS DISPENSERS

WANTED IMMEDIATELY FOR COUNTRY practice 10 miles north of London LADY SECRETARY DISPENSER under 25 years of age expert shorthand typist with good knowledge of dispensing Must be keen and of good appearance Possession of own car and fondness for golf tennis etc will add to the amenities of the job Second dispenser already employed —Address No 7113 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY RADIOGRAPHER male or female for 2 months Salary £5 per week plus travelling expenses Knowledge of Deep Therapy desirable —Apply to the HOUSE GOVERNOR AND SECRETARY Royal Victoria Infirmary Newcastle upon-Tyne

WANTED YOUNG QUALIFIED DISPENSER (Hall) for two weeks LOCUM August 8th or 15th not quite full time possible permanency later Send full particulars experience photo —Address No 7111 B M A House Tavistock Square W C 1

WANTED PART TIME SECRETARY RECEPTIONIST West End practice After noon work References —Address No 7110 B M A House Tavistock Square W C 1

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request qualified and with practical experience in private practice and dispensary work also trained in Bacteriological Laboratories of the LONDON COLLEGE OF PHARMACY FOR WOMEN Preparations for Examinations —Write wire or phone (Bayswater 0969) Secretary 7 Westbourne Park Road W 2

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY and Secretarial Dispensers can be supplied to Doctors Sessions January April and September —Apply Principal School of Pharmacy Drayton House Gordon Street W C 1 Phone Euston 3930

BRITISH COLONY —ASSISTANT REQUIRED as soon as possible Commencing salary £ 00 p a increasing by £ 0 p a Contract 3 years Passage paid Applicant must be of German or Austrian nationality holding British qualification not over 38 years of age and preferably unmarried —Apply BRITISH MEDICAL BUREAU Tavistock House South Tavistock Square W C 1

WANTED FOR A FEW WEEKS IN LONDON a medical man to help in DRAWING UP A MEDICAL WORK Must be very efficient Exceptional time considered —Address No 7127 B M A House Tavistock Square W C 1

DISPENSING CAREER FOR YOUNG LADIES FULL TRAINING for Apothecaries Hall Certificate Enrolments every three months —Apply The Principal Central School of Pharmacy 5 Moreton Street London S W 1 Telephone Victoria 1641

DISPENSER QUALIFIED 16 YEARS EXperience seeks post with Doctor Disengaged now —Mrs M K Farr 135 Brunstock Road Thornton Heath Surrey

DISPENSER HALL QUALIFICATION SEEKS full time post Hospital Surgeon or Pharmacy Quick neat and accurate dispenser with good references Central doctor's work —Address No 7103 B M A House Tavistock Square W C 1

DOCTORS REQUIRING QUALIFIED Dispensers Nurse Dispenser Secretary Dispensers or Chauffeuse Dispensers are invited to write wire or phone Temple Bar 5555 THE DISPENSERS BUREAU 3 Lindsay House 11 Shaftesbury Avenue London W C

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed

Applications should be separately enclosed and clearly addressed

Address No
B M A House
Tavistock Square W C 1

All communications are forwarded to advertisers under plain cover

FULL TIME LADY PATHOLOGIST REquired British nationality for private practice in West End Write for further details to —Address No 7138 B M A House Tavistock Square W C 1

EXPERIENCED LADY DISPENSER SECRETARY required end of July London N W Apply stating age and experience (with testimonials) —Address No 7122 B M A House Tavistock Square W C 1

EXPERIENCED LADY SECRETARY SEEKS post with doctor Well educated usual qualification familiarity medical terms accustomed using initiative quick versatile thorough drive any car disengaged now —Address No 7160 B M A House Tavistock Square W C 1

LADY DOCTOR WANTED FOR PRIVATE Mental Home near London Salary £300 Experience essential —Address No 7135 B M A House Tavistock Square W C 1

MRCS, LRCP 41 YEARS GOOD family socially inclined partially crippled left wrist through illness desires suitable EMPLOYMENT business or professional —Address No 7032 B M A House Tavistock Square W C 1

POSTGRADUATE DOCTOR AND WIFE offered convenient FURNISHED HOUSE in RETURN for LIGHT DUTIES Near London and local Hospital or would sell practice Premium £4 0 —Address No 7130 B M A House Tavistock Square W C 1

PRACTITIONER AGE 50 AT PRESENT having own practice wants LIGHTER WORK in or near country North or South West preferred N midwifery Active and can work Write—Address No 7131 B M A House Tavistock Square W C 1

SECRETARYSHIP DAILY OR RESIDENT TO doctor or other professional desired by Oxford Graduate Capable reliable good address —Box A R 711 55 Bryanston Street London W 1

SECRETARY DISPENSER REQUIRES POST with firm of doctors Hall qualification experienced efficient and reliable Typing and knowledge of nursing —Address No 7161 B M A House Tavistock Square W C 1

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION 85 Eccleston Square S W 1 (Telephone Victoria 7722) supplies qualified Dispensers Bookkeepers Laboratory Assistants Sanitary Assistants Male Nurses Mental and Special Treatment Orderlies Dental Clerk Orderlies Porters Caretakers etc without charge to prospective employers

PARTNERSHIPS

WANTED BY CAMB GRADUATE AGED 28 PARTNERSHIP in better-class Practice South of England preferably in Home County Cross income not less than £1 00 Two years postgraduate Hospital experience in London —Address No 7105 B M A House Tavistock Square W C 1

WANTED PARTNER AFTER PRELIMinary Assistantship for suburban practice Midlands Third to half share in £3 000 practice at two years purchase Prospect attractive Should be British well-qualified and energetic —Address No 7125 B M A House Tavistock Square W C 1

MEDICAL PARTNER MALE PROTESTANT wanted for Ayrshire Glasgow Practice Share over £1 100 per annum Good prospects Apply with full particulars to CRAWFORD HERRON AND CAMERON Solicitors 25 West George Street, Glasgow

MD OR MRCP WANTED TO JOIN three others in large better-class practice in delightful Midland town SHARE £1 1 0 at two years purchase rising to equality Modern house at low rental Must have wide hospital experience Hospital facilities available —Address No 7127 B M A House Tavistock Square W C 1

PARTNERSHIP EXCHANGE SOUTH COAST resort 60 miles London —HALF SHARE of £ 00 Easily worked Exchange with Larger Partnership anywhere Beautiful modern house and garden best locality good schools all sports —Address No 7123 B M A House Tavistock Square W C 1

SHARE VALUE £1 000-£1 00 IN FIRST class country practice in West Wales near sea coast Welsh or Scotch preferred Price 14 years purchase —Address No 6810 B M A House Tavistock Square, W C 1

SOUTH MIDLANDS —THIRD SHARE OF £1 500 in growing town practice —Address No 7226 B M A House Tavistock Square W C 1

PRACTICES

WANTED PRACTICE OR PARTNERSHIP £1 00 upward surgical cope desirable South Coast North or Central Wales Border Counties Cumberland or Lake District preferred —Address No 7125 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY IN SOUTHERN Midland or Home Counties unopposed country PRACTICE £1 000-£1 00 Panel and good house and garden essential —Address No 7057 B M A House Tavistock Square W C 1

WANTED TO PURCHASE IN LONDON S E. district small PRACTICE with Panel —Address No 7114 B M A House Tavistock Square W C 1

COMPACT PRACTICE OF £ 00 IN NORTH London with scope easily run expenses low Also nine-roomed house and garden in good repair in pleasant road accessible to all parts Suit young practitioner or semi-retired Price £2 000 including drugs instruments furniture and fixtures Mortgage arranged —Address No 7106 B M A House Tavistock Square W C 1

FOR IMMEDIATE DISPOSAL—COUNTRY PRACTICE in S W England averaging nearly £1 000 p a panel 635 Choice of two excellent modernized houses to let charming village and district Introduction as required Price practice £2 000—Address No 7271 B M A House Tavistock Square W C 1

FOR SALE ON RETIRAL OLD ESTABlished coast PRACTICE with retention of panel and appointments unopposed very desirable district in West of Scotland small but capable of development might specially suit semi retired practitioner—Apply DOWNIE AITON AND Co Solicitors 190 West George Street Glasgow

FOR SALE ATTRACTIVE PRACTICE IN Midland suburb Average receipts last three years £3 000 panel 1 850 increasing steadily Excellent house specially built separate professional rooms five bedrooms double garage Also branch surgery Introduction as required Price for practice £6 000—Address No 7258 B M A House Tavistock Square W C 1

FOR SALE PRACTICE S LANCASHIRE town Receipts average £3 000 panel approx 1 800 Good house with surgery also branch surgery let or sell Premium for practice 1 years purchase—Address No 7254 B M A House Tavistock Square W C 1

LONDON L 8—OLD ESTABLISHED PRACTICE averaging £500 panel 750 Premium £850 Also corner house with garden near surgery for sale Excellent scope numerous L C C flats—Address No 7268 B M A House Tavistock Square W C 1

LONDON S W—FOR SALE LOCK UP SURGERY panel 150 Premium £120 for quick sale—Address No 7256 B M A House Tavistock Square W C 1

LIVERPOOL—OLD ESTABLISHED PRIVATE and panel PRACTICE for disposal Working and middle class Panel approximately 1 100 units increasing Approximate gross income around £900 per annum Low expenses Good scope House on lease Disposing owing to ill health—Address No 7129 B M A House Tavistock Square W C 1

NUCLEUS—RAPIDLY GROWING RESIdential district coast town Lancs Small panel suitable semi retirement or active young man or woman work up Good house rent Three golf courses near Leaving due ill health Premium very moderate—Address No 7269 B M A House Tavistock Square W C 1

NUCLEUS IN BOURNEMOUTH FOR SALE Moderate panel Capable of expansion Suitable small house to rent Centrally situated—Address No 7274 B M A House Tavistock Square W C 1

OLD ESTABLISHED PRACTICE NORTH Manchester averaging £1 300 Panel 1 450 Considerable increase possible by branch in adjoining suburb Good location available Good house four bedrooms two reception attic garage excellent professional rooms with separate entrance Vendor accepting full time appointment House and Practice priced low Sale urgent—Address No 7104 B M A House Tavistock Square W C 1

SUSSEX—COUNTRY PRACTICE AVERAGE over £3 000 increasing Panel 1 200 House to rent £80 Good neighbourhood and schools Premium two fifths share (with increase later) two years purchase—Address No 7126 B M A House Tavistock Square W C 1

WOMAN DOCTOR S NUCLEUS CENTRAL Middlesex for sale £370 last year including £108 panel and P M S Scope Small house and garden for sale or would be let One years purchase—Address No 6824 B M A House Tavistock Square W C 1

WITHIN EASY DISTANCE OF LONDON small NUCLEUS with scope together with very attractive house Residential area Cottage Hospital House and Nucleus £2 500—Address No 7111 B M A House Tavistock Square W C 1

WOMAN DOCTOR WISHES SMALL PRACTICE or NUCLEUS with scope preferably London S coast or country accessible from London Panel and living accommodation on rental essential—Address No 7116 B M A House Tavistock Square W C 1

HOUSES, CONSULTING ROOMS

ESTABLISHED 1860

BEDFORD & CO.

Surveyors Auctioneers and Estate Agents

10 WIGMORE STREET
CAVENDISH SQUARE W 1

Specialists in Professional Houses, Flats, and Consulting Rooms

in Harley Street and leading Medical Positions

Telephone Langham 3927 and 3928

COMMANDING POSITION ADJACENT TO West Kensington Station in modern block of flats—SELF CONTAINED SUITE on Ground and First floor front door opens on to prominent thoroughfare Constant hot water central heating decorations to choice—Apply JOHNSTON EVANS I A I 17 St George Street W 1 or The Letting Office West Kensington Court North End Road W 14 Fulham 4277

DEVONSHIRE ST W 1—AN EXCELLENT CONSULTING ROOM in one of the finest houses in the street available five sessions per week Rent £125 p a inclusive—Address No 6356 B M A House Tavistock Square W C 1

DENTAL SURGERY TO LET OVER Doctor s Surgery main road Elephant and Castle Established ten years—Address No 7107 B M A House Tavistock Square W C 1

ESTABLISHED 1845

ELLIOTT, SON & BOYTON

(H C ROWE F S I)

VEREST, CAVENDISH SQUARE, W 1

Estate Agents Auctioneers and Surveyors

are the BEST LOCAL AGENTS for HOUSES and CONSULTING ROOMS in the Harley Wimpole Queen Anne and other streets in the Cavendish Square district Valuations for all purposes

Telephone 3204 MAYFAIR

EMINENTLY SUITABLE AS NURSING HOME OR SIMILAR INSTITUTION—For Sale Freehold A substantially built Residence pleasantly situated in a convenient position near Epping Forest 3 reception rooms and loggia excellent domestic offices 7 bed and dressing rooms 2 bathrooms all conveniences services central heating attractive garden with tennis court and garage at rear frontage to two roads Moderate price—Further particulars from CURTIS AND HENSON 5 Mount Street W 1 Tel No Grosvenor 3131

HARLEY STREET—EXCEPTIONALLY LARGE consulting room in one of the finest houses in the street rent £250 p a Another on second floor (lift) at £150 p a To view and for all particulars—Address No 7110 B M A House Tavistock Square W C 1

FOR SALE ONE OF THE FINEST HOUSES in the Harley Street district Income from lettings of consulting rooms over £1 000 p a Excellent residential and consulting room accommodation available for purchaser Long lease for sale at low price—Address No 7109 B M A House Tavistock Square W C 1

FOR SALE OR LEASE—DOCTOR S COMmodious HOUSE 147 Narborough Road Leicester £1 000 or £125 p a rent—Address No 7038 B M A House Tavistock Square W C 1

HARLEY STREET AND MEDICAL DISTRICT

For all types of available accommodation

BERTRAM & CO, Surveyors and Estate Agents

59, Connaught Street, W 2 Paddington 1642 3

HARLEY STREET AND DISTRICT—A NUMber of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application—ELCOCK AND Co 10 Henrietta Place Cavendish Square W 1 Lang 2601

HARLEY STREET—LARGE CONSULTING ROOM beautifully decorated will be converted into suite to requirements all amenities and services Also furnished treatment rooms available—Address No 7043 B M A House Tavistock Square W C 1

NEWTON COURT LEINSTER SQUARE W 2—H and c basins bright and comfortable Full board from 2 guineas Special student rates Bays 1624

OPHTHALMIC SURGEON HAVING RETIRED from practice now wishes TO LET his HOUSE The house is modern and situated in a charming residential district on the Lancashire coast A suitable oculist would soon recover the practice Full particulars—Address No 6965 B M A House Tavistock Square W C 1

PORTHCAWL—LICHFIELD HOUSE West Drive A modern detached FREEHOLD RESIDENCE delightfully situated directly facing the sea and near Lock s Common and Royal Golf Course Accommodation Spacious Hall two front Reception Rooms kitchen and usual offices seven Bedrooms Bathroom and Lavatory Central heating (electric) Large Garage Sunken Lawn at front Also valuable FREEHOLD PLOT OF LAND adjoining 40 ft by 100 ft Full Particulars from Sole Agents DEERE SON AND GRIZZELL (F A I P A) Estate Offices Porthcawl (Tel 78) and 119 St Mary Street Cardiff (Tel 3476)

PARK LANE—ADVERTISER WISHES TO meet consultant with view to LETTING ROOM Use of waiting and ladies room also small flat £155 p a References—Address No 7011 B M A House Tavistock Square W C 1

PART TIME USE OF CONSULTING ROOM and LIVING Harley Street Pic 7139 B M A House

QUEEN ANNE STREET—ONLY £40 P A secures exceptionally fine CONSULTING ROOM for use when required with attendance and all services Residential accommodation available—Address No 6355 B M A House Tavistock Square W C 1

STREATHAM HILL—MODERN CORNER HOUSE in central position in good residential district near station 5 bed bath 2 recep 2 in hall In excellent repair expensively fitted Detached garage also built in garage suitable for conversion into surgery Price £2 100 freehold—Apply GOODALLS 4 High Road Streatham

BY ORDER OF THE PUBLIC TRUSTEE TO BE SOLD BY AUCTION BY ARTHUR LAWSON & MASKILL F A I at their Estate Sale Rooms 12 New Street York on THURSDAY JULY 14TH 1938 at 7 p m subject to conditions of sale to be then produced and read

LOT 1

FREEHOLD DWELLING HOUSE with separate entrance to surgery and waiting room 3 East Mount Road York occupying a commanding position in a prominent central position for many years in the occupation of a Member of the Medical Profession

For further information apply to the Auctioneers as above or to Messrs JOHNSTON WILLIAMS AND WALKER Solicitors 6 Weekday Cross Nottingham

MISCELLANEOUS SALES etc

INCOME TAX

YOUR burden is OUR business

Tax Specialists to the Medical Profession

HARDY & HARDY

19 CHANCERY LANE LONDON W C

Telephone Holborn 1613

Write for free copy of Advice on Income Tax

DUNLOPILLO MATTRESS 6 ft by 3 ft unused cost £7 10s Price £5 or nearest carriage paid—Address No 7105 B M A House Tavistock Square W C 1

DELAGE D8 85 3½ LITRE FOUR SEATER SALOON by Figoni last price approx £1 800 Doctor owner will consider offer of less than one third original cost—Address No 7117 B M A House Tavistock Square W C 1

FOR SALE—FULL TRIAL SET LENS walnut case (Curry and Paxton) as new trial frame etc in good condition—Address No 7097 B M A House Tavistock Square W C 1

IMPORTANT

to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE. Smart Cut and Style at Moderate Prices. Patterns and Self-Measurement Forms Free. Quick Service. Perfect Fit Guaranteed. Every garment made on the premises.

The Secret of Personal Experience in Over 14 Exclusive West End Centres and Letters Always at your Personal Disposal.

ALL HALLZONE Products are HAND FINISHED IN EVERY ESSENTIAL DETAIL.

SPECIAL OFFER.

JACKET & VEST (in Hallzone grey) £4 4
Finest best quality Irish Tweeds & Serges
SOLID FANCY WORSTED TROUSERS £2 2
The Hallzone for Professional & Business wear.
LOUNGE SUITS to measure from £6 6s
OVERCOATS " £5
DINNER SUITS " £8 8
DRESS SUITS from £10 10
PLUS FOUR SUITS from £6 6
THE IDEAL Suit for Country and Sporting Wear.
COLD MEDAL RIDING BREECHES from £2 2
RIDING HABITS £8 8
RIDING BOOTS " £3 3
COSTUMES & LONG COATS " £6 6s

UNSOLICITED APPRECIATION

"I am very glad to say that my husband has got on splendidly since Harry Hall has dressed him. All the clothes I have had from them during 3 years have been perfect in Fit, Cut and Finish."
(Signed) S. J. A. MA. M.B. F.R.C.P.S.

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self-measurement Form or Pattern Cheques.

Visitors to London can be fitted and Special Letters would then be sent and Perfect Fitting Clothes supplied after without trying on.

HARRY HALL, LTD.

Contractors to Harry Hall
"THE" Coat Breeches, Habit and Costume Specialists
181 OXFORD ST., W.1 (1 DOOR FROM BOND ST.) & 11 CHEAPSIDE, E.C.2
Two Houses
CERrard 4455 (3 lines) and 4456 NATional 6087
Makers of Finest Quality Breeches, Sporting and Hunting Clothes for Ladies and Gentlemen
Highest Awards—12 Gold Medals
Estd. over 30 years

APPOINTMENTS—*Contd*

ROYAL LONDON OPHTHALMIC HOSPITAL
(Moorfields Eye Hospital)
City Road, E.C.1

HONORARY ASSISTANT SURGEONS (TWO)

Applications are invited to fill two vacancies on the HONORARY SURGICAL STAFF at the above Hospital.

Candidates must be Fellows of the Royal College of Surgeons of England.

Canvassing is not permitted. Candidates are however requested to send copies of their applications and testimonials to the Member of the Committee of Management and the acting Medical and Surgical Staff whose names and addresses can be obtained on application to the Secretary.

Applications, stating age, with copies of testimonials must be received not later than July 18th 1938.

ARTHUR J. M. TARRANT
Secretary

EVELINA HOSPITAL FOR SICK CHILDREN
Southwark, S.E.1

Applications are invited for the post of HOUSE SURGEON (male) for six months from August 1st (first two months in the Casualty Department). Salary at the rate of £100 per annum with board and residence.

Application with copies of three recent testimonials should be sent to the undersigned not later than first post on July 18th.

W. H. SIDNELL
House Governor

HOSPITAL FOR TROPICAL DISEASES
Gordon Street, W.C.1 (Seamen's Hospital Society)

HOUSE PHYSICIAN (male) required for six months from August 1st 1938. Salary £100 per annum with board, residence and laundry.

Applications with copies of three testimonials to be sent in on or before July 16th 1938 to the undersigned.

D. A. C. PRICE, Secretary
Hospital for Tropical Diseases
Gordon Street, W.C.1
June 28th 1938

VICTORIA HOSPITAL FOR CHILDREN
Tite Street, Chelsea, S.W.3
(135 Beds)

The Committee of Management invite applications for the post of

(a) HOUSE PHYSICIAN
(b) HOUSE SURGEON

both to start August 1st 1938. The appointments are for six months. Salaries at the rate of £100 per annum with board, lodging and washing.

(c) CASUALTY OFFICER (non-resident)

for a period of three months. Duties to commence on August 1st 1938.

Hours 2 p.m. to 4.30 p.m. daily (including Saturdays). Salary at the rate of £40 per annum with lunch.

Candidates are expected to attend a Sub-Committee for an interview and should send their applications and copies of three testimonials to the Secretary not later than first post on Wednesday 13th instant.

D. ST. JOHN BAMFORD
Secretary

ROYAL LONDON OPHTHALMIC HOSPITAL
(MOORFIELDS EYE HOSPITAL)
City Road, E.C.1

Applications are invited for the post of OUT-PATIENT OFFICER to attend on Tuesdays and Thursdays from 2 to 4 p.m. each week. Candidates must be registered Medical Practitioners.

Salary at the rate of £100 per annum. The Out-patient Officer will be appointed for a period of one year and will be eligible for reappointment.

Copies of testimonials can be obtained on application.

Applications with testimonials, stating age and qualifications, together with photograph, must be received by the undersigned not later than first post on Wednesday, July 13th, 1938.

A. J. M. TARRANT, Secretary

LONDON JEWISH HOSPITAL
Stepney Green, E.1
(General Hospital—109 Beds)

The Council of Management are about to appoint an HONORARY ASSISTANT SURGEON to the Ear, Nose and Throat Department. Candidates who should be Fellows of the Royal College of Surgeons of England, Edinburgh or Ireland or Masters of Surgery of a British University, should send twenty-four copies of their applications with copies of three recent testimonials to the Secretary of the Hospital, from whom particulars of the office may be obtained on or before July 23rd 1938.

QUEEN MARY'S HOSPITAL FOR THE EAST END
Stratford, E.15

An investigation is being undertaken in cases of Chronic Rheumatic Diseases at the above Hospital and a CLINICAL ASSISTANT is required for the special purpose of assisting the Physician in charge of this work.

Attendance at the Hospital on either Monday or Thursday afternoon is required from 2 p.m.

Applications to be sent to the undersigned as early as possible.

RAPHAEL JACKSON, Major
Secretary

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL

Applications are invited for the posts of HOUSE SURGEON (two Male unmarried) at this Hospital's country branch at Brockley Hill, Stanmore, Middlesex. 8 Beds (160 cases of surgical tuberculosis).

Salary £100 per annum with board, quarters and laundry. The appointments are for six months. Duties to commence one on August 1st and one on September 1st. Applications with copies of testimonials should be sent to the Secretary, 234 Great Portland Street, London, W.1 not later than July 13th.

THE LONDON CHEST HOSPITAL
Victoria Park, E.2
(By Tram and Rail Cambridge Heath, London & N.E. Railway)

A vacancy for a HOUSE PHYSICIAN (male) will occur on September 1st. Six months' appointment. Salary at the rate of £100 per annum. Board, residence and laundry provided.

Application with copies of three testimonials should be sent to the undersigned on or before Wednesday, August 3rd.

THOMAS BROWN
Secretary

WEST LONDON HOSPITAL
Hammersmith, W.6 (319 Beds)

There is a vacancy for the newly-created post of HONORARY PHYSICIAN for Psychological Medicine. Candidates who may be men or women should be Members or Fellows of the Royal College of Physicians, London, and should have had some experience in Child Psychiatry. A Diploma in Psychological Medicine is desirable. The candidate appointed would be expected to undertake at least one Out-patient Session per week and such teaching as may be required by the Medical School. The appointment does not carry with it the charge of any Hospital beds.

Applications are invited by copies of testimonials, which must reach me not later than Thursday, August 4th. Candidates must attend a meeting of the Medical Council at 4.30 p.m. on Friday, August 5th, and prior to that date call upon and send copies of their application and testimonials to each member thereof. They must not canvass a member of the Board, but nevertheless must send copies of their applications and testimonials to each member thereof, and if so requested be in attendance at a meeting of the Board at 5 p.m. on Tuesday, August 9th, when the appointment will be made.

H. V. MADGE, Secretary

WEST END HOSPITAL FOR NERVOUS DISEASES
IN-PATIENT DEPARTMENT
Gloucester Gate, Regent's Park, N.W.1

The Committee of Management invites application for the post of RESIDENT HOUSE PHYSICIAN (male). Duties to commence September 1st 1938. Salary at the rate of £150 per annum with board, residence and laundry.

Preference will be given to candidates who have held a resident appointment in a general hospital.

Applications with copies of three recent testimonials must be received by the undersigned not later than Monday, July 18th 1938.

J. P. WETENHALL
Secretary and House Governor
73 Welbeck Street, W.1

WEST END HOSPITAL FOR NERVOUS DISEASES
Out-Patient Department
73 Welbeck Street, W.1

The Committee of Management invites immediate application for TWO HONORARY CLINICAL ASSISTANTS for the Child Guidance Department. Candidates are requested to obtain further particulars as to clinic times etc. from the undersigned to whom applications with copies of not more than three recent testimonials should be posted not later than Monday, July 18th.

J. P. WETENHALL
Secretary and House Governor

THE ROYAL WATERLOO HOSPITAL FOR CHILDREN AND WOMEN
Waterloo Road, S.E.1

HONORARY ASSISTANT PHYSICIAN

There is a vacancy for an Hon. Assistant Physician at the above Hospital. The candidate should be a Fellow or Member of the Royal College of Physicians and a graduate of a University recognised by the General Medical Council. He should also have special knowledge of the diseases of children.

Applications accompanied by three testimonials should be sent to the undersigned from whom further particulars can be obtained not later than July 18th. J. H. TEASDALE, Secretary.

KING EDWARD MEMORIAL HOSPITAL, Ealing (145 Beds)

CASUALTY OFFICER AND DEPUTY RESIDENT MEDICAL OFFICER (male) required. Six months' appointment with possibility of re-election for a further period. Salary £—5 per annum with actual residential emoluments.

Applications, stating age, experience and qualifications, together with copies of two recent testimonials, should be sent to the undersigned immediately.

R. A. MICKELWRIGHT
House Governor

THE QUEEN'S HOSPITAL FOR CHILDREN
Hackney Road, E.2

A Temporary Vacancy has occurred in the DEPARTMENT OF PSYCHOLOGICAL MEDICINE. Applications are invited and should be sent with copies of recent testimonials to the undersigned as soon as possible. Six months' appointment. Attendance two half-days weekly. Honorarium of one guinea per session. Candidates must be medically qualified.

CHARLES H. BESSELL
June 21st 1938 Secretary

DEVONSHIRE ROYAL HOSPITAL
Buxton Derbyshire (300 Beds)
(A National Hospital for Rheumatism and Allied Diseases)

HOUSE PHYSICIAN (male) Salary £150 rising to £175 after three months service (and prospects of promotion to Resident Medical Officer) with board residence and laundry
Candidates must be fully qualified and registered The appointment is for a minimum period of six months and may be extended for a further period of six months
Applications endorsed Medical Appointment stating age experience and qualifications together with copies of three recent testimonials must be forwarded without delay to the undersigned from whom any further particulars may be obtained
Considerable orthopaedic experience is available and the appointments offer special facilities for a gentleman preparing a thesis or wishing to undertake special work as the Hospital contains all the necessary laboratory and other facilities for research
Canvassing will disqualify
By Order of the Committee of Management
A PRESTON TURNER
General Superintendent and Secretary

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL
(144 Beds)

Applications are invited for the following posts for a period of six months commencing August 1st 1938
HOUSE SURGEON (female)
HOUSE PHYSICIAN (female)
Salary at the rate of £150 per annum with board and laundry
Applications stating age nationality and qualifications together with three testimonials to be forwarded to the undersigned forthwith
T H FLETCHER Secretary

BUTE HOSPITAL LUTON

HOUSE SURGEON (male) wanted to commence duties on July 1st or as soon after as possible Salary £150 per annum with board residence and laundry
Applications stating age nationality and experience together with copies of not more than three recent testimonials should be sent immediately to the Secretary of the Medical Advisory Committee at the Hospital
R E LINGARD
Secretary Bute Hospital

THE DOCTOR IN PRACTICE OR ABOUT TO ENTER THERIN SHOULD BE ADEQUATELY PROTECTED BY INSURANCE IN RESPECT OF

HIS LIFE
HIS HEALTH
HIS HOME
HIS PRACTICE
AND
HIS CAR

FOR ALL THESE CONSULT
The
Medical Insurance Agency
(Limited by Guarantee)
BRITISH MEDICAL ASSOCIATION HOUSE
TAVISTOCK SQUARE, W C 1

WE CAN ALSO ARRANGE ADDITIONAL CAPITAL FOR THE PURCHASE OF A PRACTICE OR PARTNERSHIP

State age next birthday when writing

THE MEDICAL AGENCY, Ltd
DUDLEY HOUSE 36 38, SOUTHAMPTON ST STRAND W C 2
Telephones—Temple Bar 1034 1054
Established in 1893 by J A Rivers

LOCUMS AND ASSISTANTS ALWAYS AVAILABLE

LONDON S W 12—Old established middle class G P Residential locality Large house splendid garden Receipts approx £1 500 Select panel nearly 420 Fees 3 6 up Premium 14 years purchase or near offer
LONDON S E (10 mins Charing Cross)—Working class G P Main thoroughfare House to rent Receipts £700 Panel nearly 900 Premium 2 years purchase or near offer
HERTS (Border)—Middle-class PRACTICE Residential locality Corner house garden garage Receipts nearly £1 700 Panel over 300 Fees 3/6 up Premium 2 years purchase or near offer
SURREY—Mixed G P Residential locality Small house to rent Receipts approx £1 250 Panel over 400 Premium £1 800
SURREY (Near Croydon)—Middle-class PRACTICE Residential locality Modern house for sale or rental Receipts nearly £1 Panel 500 Fees 2 6 up Premium open
LONDON S W 18—Middle and working class G P Well situated locality Semi-detached fronted premises Receipts approx £900 Panel Premium 14 years purchase
LONDON N E—Middle class G P Receipts approx £2 500 Panel 1 200 Premium purchase or near offer
LONDON E 11—Mixed G P Corner house Receipts £700 Panel 620 Premium £1 inclusive Scope for Eye work

MANY OTHERS FOR SALE DETAILS ON REQUEST

ESTABLISHED 1868
PEACOCK & HADLEY, Ltd,
MEDICAL TRANSFER AGENCY,
67 68, Chandos St Bedford St Strand, W C 2
Telegrams Herbaria Lesquare London
Telephone Temple Bar 5564
LOCUM TENENS and ASSISTANTS supplied free of charge to principals

FOR DISPOSAL

1 LARGE MIDLAND TOWN (Suburb)—PRACTICE held 16 years by Vendor Receipts average nearly £800 p a good panel Attractive house on rental Premium about £1 500
2 NEAR FULHAM S W — Well established mixed-class PRACTICE Receipts last year over £900 panel nearly 500 increasing Nice house on rental Premium £1 250
3 GLAMORGAN COAST—HALF SHARE of old established PRACTICE Receipts average over £3 000 p a Large panel Very fine house with good grounds for sale Premium for share 2 years purchase payable part by instalments
4 KENT—Developing part Very promising NUCLEUS Receipts last 5 months £135 Panel 140 increasing Fine corner house easy terms of mortgage Premium for Practice £275 Excellent opportunity Great scope
5 A number of small PRACTICES at low premiums Excellent opportunities for practitioners living to get a practice with scope
6 NEAR VICTORIA S W — Well established mixed-class PRACTICE Receipts last year nearly £1 000 fair increasing panel Nice flat on rental Premium £850 payable £600 down
7 NEAR HOLBORN W C — Well established PRACTICE Receipts average £1 000 p a panel 1 104 Splendid surgery accommodation only Long introduction if desired Premium £2 000
8 ESSEX—DEATH VACANCY Old established PRACTICE held 30 years by late vendor Receipts £1 000 p a panel 900 Very nice house for sale Premium 2 years purchase
9 WANTED IN LONDON OR PROVINCES PRACTICES with incomes £600 to £2 000 p a Many purchasers waiting and quick transactions for immediate cash

No charge made to purchasers or for inquiries

ESTABLISHED 1877
LEE & MARTIN, LTD,
The Birmingham Medical Agency
71, TEMPLE ROW, BIRMINGHAM
Telegrams Locum Birmingham Telephone 5963 Midland Birm

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED
MAXIMUM FEE £50 if exclusively entrusted to us
ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED
RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORT NOTICE also ASSISTANTS

WANTED TO PURCHASE

1 BIRMINGHAM (or within 50 miles thereof) Good Mixed PRACTICE with a Panel of over and receipts of from £1 500 £1 URGENTLY REQUIRED CAPITAL AVAILABLE
2 REQUIRED—Good English Scotch and Irish LOCUMS at once Also ASSISTANTS Good posts to offer immediately with or without view

FOR DISPOSAL

1 GLOUCESTERSHIRE—Well established and working class PRACTICE Receipts £1 250 p a Panel 1 700 Scope to increase and good house
2 STAFFS—Rapidly increasing mixed Panel and Panel PRACTICE Receipts last year £1 050 Panel 1 230 Excellent house with services Pleasant locality
3 MIDLANDS—Partnership with early succession in well established Ear Nose and Throat PRACTICE Receipts now £1 350 p a Appointments of £850 p a Incoming must have F R C S and specialist experience Excellent house to rent
4 YORKS—Old established mixed Panel PRACTICE Receipts last year £1 Panel 1 354 Good house which may be
5 LONDON—Old established mixed Panel PRACTICE Receipts £1 458 p a 966 Ample scope and good house
6 LANCS—Old established middle and working class PRACTICE Receipts £1 000 approximately Panel 1 500 Good house

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices and Partnerships on very reasonable terms Full particulars on application
RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE

THE WESTERN MEDICAL AGENCY
Dr K H BENNETT and Dr W J PARAMORE who give personal attention to every client
22 CLARE STREET, BRISTOL 1
Teles Medgen Bristol Tel Bristol 22659
15 BEDFORD ST, STRAND, W C 2
Tel Temple Bar 2532

COVERS FOR BINDING
Vols I and II of the BRITISH MEDICAL JOURNAL for 1937 and previous years can be had price 2s 6d or post free 2s 10d each Orders with appropriate remittance should be addressed to
THE MANAGER
BRITISH MEDICAL JOURNAL
B M A HOUSE TAVISTOCK SQUARE
LONDON W C 1

Telephone Welbeck
Telegrams ASSISTIAMO LESQ
NURSES
MALE OR FEMALE

TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES
Nurses reside on the premises and are available for urgent calls Day and Night

THE NURSES ASSOCIATION
(In connection with the MALE NURSES ASSOCIATION)
29 York St Baker St London W 1
Mrs MILLICENT HICKS
Mrs J HICKS

BRITISH MEDICAL BUREAU

(The Scholastic, Clerical and Medical Association Ltd.)

(*FOUNDED* 1880)

NORTHERN BRANCH

33, CROSS ST., MANCHESTER, 2.

Telephones {Manchester - Blackfriars 3925
{Manchester - Rusholme 2549 (*Night Calls*)

Telegrams "Locum, Manchester"

Branch Offices at Leeds and Belfast

Recommended with every confidence to the profession by the BRITISH MEDICAL ASSOCIATION as a thoroughly trustworthy medium for the transaction of all Medical Agency business

TRANSFER OF PRACTICES AND PARTNERSHIPS INTRODUCTION OF RELIABLE ASSISTANTS AND LOCUM TENENS at Short Notice VALUATION and INVESTIGATION OF PRACTICES, Etc

Practices and Partnerships wanted Large list of bona fide purchasers with ample capital available Enquiries invited from prospective vendors All information treated in strict confidence

FOR DISPOSAL

Full particulars free on request

CHESHIRE TOWN near Manchester —DEATH VACANCY —Old-established mixed Panel and Private PRACTICE Cash receipts last year £3,446. Panel 2,13 Scope Excellent detached house (own ground) 4 reception rooms, study 4 bedrooms 3 Professional rooms, garage, chauffeur's and servant's quarters and garden For sale at valuation Premium—Practice—best offer —No 1136

NEAR MANCHESTER —We have established middle and better working class PRACTICE in pleasant suburban district in present hands 15 years A genuine cash receiver over £3,000 p.a. Panel 1,500 Good scope Good corner house, 2 reception 4 bedrooms Professional rooms, garage and garden also Branch Surgery premises Both may be retained on lease Premium—1½ years purchase —No 1138

LINCOLNSHIRE.—Very old-established PRACTICE in pleasant country town Cash receipts last year £2,411 Panel about 1,100 Cottage Hospital Good house 5 bedrooms small garden garage etc Premium—practice—£3,150 for quick sale—No 113.

NORTH EAST COAST —Old-established mixed Panel and Private PRACTICE. Cash receipts last year £2,160 Panel 2,220 Appointments and Clubs (transferable) approximately £464 p.a. Good house 2 reception 3 bedrooms Professional rooms, garage and small garden. Price £700 Premium—2 years purchase or near offer —No 109

NEAR MANCHESTER —Very old-established mixed and working-class PRACTICE in prosperous town Very suitable for two friends in partnership (or may be run by one man and an Assistant) Cash receipts last year £3,340 Panel 1,000 Nice modern house 4 reception 4 bedrooms separate Professional rooms, garage and large garden For sale at valuation Premium—best offer —No 1137

SOUTH YORKSHIRE.—Well established *mixed and better working class PRACTICE on outskirts of town* Scope for increase as district developing Cash receipts last year £1,471 Panel 1,000 Excellent house (built 3 years ago) 2 reception 3 bedrooms garage garden 3 Professional rooms (separate entrance) Price £1,400 Premium—1½ years purchase or near offer —No 1112

SOUTH COAST —PARTNERSHIP (after preliminary Assistantship) in old established good mixed class PRACTICE in pleasant Seaport town Average cash receipts last 2 years £3,100 p.a. Panel 1,700 and appointments £450 p.a. Scope for great increase Suitable a commodation for incoming man Salary as Assistant £450 p.a. Premium—one half or one third share—2 years purchase —No 1129

NEAR LEEDS —Old-established middle and working-class PRACTICE Cash receipts average £1,400 p.a. Panel 900 Excellent detached house, 2 reception 4 bedrooms Professional rooms (separate entrance) garage and garden. Price £1,000 Mortgage can be arranged Premium—Practice —1½ years purchase or near offer —No 115

MANCHESTER —Well-established mixed Panel and Private PRACTICE in pleasant suburban district adjacent to new Housing Estate Cash receipts approximately £1,100 Panel about 1,000 Excellent modern house 2 reception 4 bedrooms, garage and nice garden For sale or may be rented Premium—1½ years purchase —No 1115

DERBYSHIRE.—Old-established PRACTICE capable of great increase Cash receipts last year £740 (increasing) Panel 862 Excellent house 2 reception 4 bedrooms, 3 Professional rooms (separate entrance) garage and good garden Premium—Practice and house £1,600 —No 989

NORTH WEST LANCS —Old-established mixed Panel and Private PRACTICE in large town Cash receipts last year £1,102 Panel over 1,000 Good House pleasantly situated 2 reception 5 bedrooms garage and small garden Premium—Practice—1½ years purchase —No 1105

MANCHESTER —Very old-established mixed Panel and Private PRACTICE Cash receipts last year £1,519 Panel 1,350 Scope Good house 2 reception 4 bedrooms garage and garden Rent £90 p.a. Premium—1½ years purchase (to include debts bringing in £6 per week) Urgent sale owing to illness of Vendor —No 1134

SHROPSHIRE.—Old-established unopposed Country PRACTICE. Cash receipts last year £648 Panel 450 Modern house 2 reception 5 bedrooms 3 Professional rooms garage and large garden Electric light Rent £80 p.a. Premium—best offer —No 1086

YORKSHIRE (W.R.) —Old-established mixed Panel and Private PRACTICE in better working-class and rural district Cash receipts last year £1,186 Panel 1,354 Scope Good house 2 reception 3 bedrooms maid's room 3 Professional rooms (separate entrance) garden with tennis court Rent £45 p.a. Carpets required Premium—1½ years purchase —No 1122.

NEAR MANCHESTER —PARTNERSHIP in old-established mixed-class Practice wanted to record death of senior partner Average cash receipts £1,446 p.a. (increasing) Panel 2,300 Scope for increase Good house to rent 2 reception, 4-5 bedrooms 3 Professional rooms garage and small garden Premium—one half share—1½ years purchase —No 1114

NORTH LANCS —YORKSHIRE BORDER —Old-established unopposed Country PRACTICE in pleasant district 20 cars Cash receipts £1,000 p.a. Panel and appointments approximately £400 p.a. Well built house with ample accommodation central heating electric light garage and garden of 2 acres Rent £75 p.a. Premium—£1,500 Vendor retiring —No 1119

SCOTLAND —Mixed Panel and Private PRACTICE in manufacturing town east of Scotland Cash receipts approximately £1,250 p.a. Panel 1,400 Excellent house reception 4 bedrooms Professional room garage and garden For sale Premium—1½ years purchase or near offer part by arrangement —No 1135

CHESHIRE.—Old established mixed Panel and Private PRACTICE in pleasant County town Average cash receipts £627 p.a. Panel 1,500. Attractive house 3 reception 5 bedrooms garage and large garden with tennis courts Premium—1½ years purchase —No 1140

MIDLAND HEALTH RESORT —PARTNERSHIP in very old-established middle and better working class Practice Cash receipts last year £1,600 Panel 1,400 Excellent house with ample accommodation garage and garden *Premium* —one half share—2 years purchase —No 1144

MIDLANDS —Very old-established PRACTICE in pleasant Country district near large town Cash receipts last year £2,845 Appointments *about £430 p.a. and Panel 1,600* Scope Excellent detached house 3 reception 7 bedrooms 3 Professional rooms, garage and large garden Premium—2 years purchase —No 1093

NEAR MANCHESTER —PARTNERSHIP in very old-established middle and better working-class PRACTICE WITH SUCCESSION in one or two years Cash receipts £2,600 p.a. Panel 1,450 Good scope Suitable accommodation available Preliminary Assistantship if desired Premium—2 5th share—2 years purchase —No 1105

LIVERPOOL.—Steadily increasing mixed-class PRACTICE in suburbs Cash receipts last year £758 Panel 650 Excellent detached house 2 reception 6 bedrooms garage and garden Premium—Practice—best offer —No 1036.

INLAND SEA —Increasing mixed Panel and Private PRACTICE Cash receipts last year £400 Panel 200 Good flat to rent at £50 p.a. Premium—best offer —No 1057

MANCHESTER —Mixed Panel and Private PRACTICE. Cash receipts last year £700 Panel 125 Good house 3 bedrooms 2 living rooms 2 Professional rooms small garden Rent £63 p.a. (including rates) Premium—£1,550 (to include drugs and dispensary furniture) —No 1127

LANCS TOWN —Very old-established mixed Panel and Private PRACTICE. Cash receipts last year £1,372 Panel 1,025 Scope Good house 2 reception 4 bedrooms 3 Professional rooms (separate entrance) Premium—Practice —1½ years purchase —No 1131

NORTH MIDLANDS —Old-established mixed Panel and Private PRACTICE in Country district near large town Average cash receipts £1,067 p.a. Panel 970 and transferable appointments £200 p.a. Excellent detached house 2 reception 6 bedrooms, Professional rooms garage and large garden Price £1,200 Premium—1½ years purchase —No 1117

NORTH STAFFS —Very old-established better working and middle-class PRACTICE Cash receipts last year £2,431 Panel 1,250 Scope as district developing Excellent house reception 4 bedrooms maid's room separate surgery premises, garage and garden For sale Freehold Premium—Practice —1½ years purchase or near offer —No 1120

MANCHESTER —Old-established PRACTICE in industrial district Cash receipts last year £1,230 including Vaccination appointment £125 p.a. Panel 1,150 Scope Good house 2 reception 3 bedrooms and 2 Professional rooms, garage Rent £70 p.a. Premium—£1,400 to include book debts (£300 £400) surgery fittings and drugs —No 1133

MIDLANDS —Increasing middle and working-class PRACTICE in large town Cash receipts last year £1,050 Panel over 1,000 Scope Excellent modern house 2 reception 4 bedrooms, garage and large garden For sale Freehold Premium—Practice—£2,000 —No 1123

— WANTED —

ASSISTANTS and LOCUMS

for Immediate Engagements

Apply with full particulars to above address

All communications to be addressed to the Branch Manager BRITISH MEDICAL BUREAU 33 CROSS STREET MANCHESTER 2.

British Medical Bureau

(The SCHOLASTIC, CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1880)

Tele Address
Triform, Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1

Telephone Euston {1614 1615

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical Scholastic and Accountant's business, and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult The Manager in all transactions requiring the services of a Medical Agent
Members of the British Medical Association may take advantage of a reduced scale of Charges applicable to them

REDUCTION IN FEES

In cases where the Bureau are sole Agents the commission in respect of any sale of goodwill, book debts furniture, drugs fittings and other effects (excluding sales of any freehold or lease hold property or of practices, effects etc, outside Great Britain) is limited to a maximum fee of Fifty Pounds

FULL TERMS ON APPLICATION

Practices and Partnerships for Disposal **Full Particulars sent free**

1 S COAST HEALTH RESORT—Non dispensing PRACTICE £1 250 p a No panel but ample scope Commodious house for sale Premium £2,500

2 DEATH VACANCY—ESSEX SUBURB—Receipts average £989 p a Panel 733 Well situated house for sale Scope

3 N WALES—Popular seaside resort Good class chiefly non dispensing PRACTICE averaging £870 p a No panel Excellently situated detached residence for sale Good scope Premium two years purchase

4 LONDON E—Cash and panel PRACTICE averaging £2 800 p a Panel 4 300 House (5 bedrooms) Rent £156 p a Scope Premium two and a half years purchase to include drugs etc

5 W MIDLANDS—PARTNERSHIP in Practice averaging £6 000 p a in market town Panel 3 500 One sixth share at first at two years purchase Incoming partner should be aged 28/30 and able to do general surgery and minor E N and T work Hospital Preliminary Assistantship

6 N MIDLANDS—PRACTICE in residential district near progressive town Receipts 1937 £770 Panel about 100 Choice of two houses for sale Good scope Premium £1 000

7 S OF ENGLAND—Well established SANATORIUM for the open air treatment Receipts at present at rate of about £3 000 p a Premium £1 000 to include furniture etc

8 MIDLANDS—Middle and upper class non-dispensing PRACTICE about £1 200 p a in prosperous town No panel House could be obtained Moderate premium

9 LONDON, S E—PRACTICE averaging £800 p a in populous suburb Panel 800 Detached double fronted house Price of leasehold £1 250 Scope Premium £1 750

10 FRENCH RIVIERA—Old-established PRACTICE M D essential Vendor at present in England

11 S COAST—Better-class non dispensing PRACTICE in favourite watering place Receipts £2 455 p a including general surgery and ear nose and throat work Excellent non basement house Purchaser should hold F R C S Hospital and chance of appointment Premium one and three quarter years purchase

12 S W ENGLAND—Country PRACTICE over £1 400 in best part Panel about 1 100 Exceptionally nice modern house six bedrooms own grounds for sale Hunting and shooting Scope Premium two years purchase

13 EASTERN COUNTIES—THIRD PARTNER required in Practice £5 200 p a in market town within 90 miles of London Panel over 4 000 House to rent One fifth or one fourth share two years purchase

14 CENTRAL LONDON PRACTICE—Better class part in comfortable West End family flat Larger look up branch 10 minutes distant Both more since Panel 1 650 Receipts per year £1 698 (average £1 460) 2 years purchase

15 S E COAST—PARTNERSHIP in Practice averaging £4 000 p a in growing resort Panel 1 50 Good house (6 bedrooms) to rent One fifth share at first at two years purchase

16 MIDDLESEX—PARTNERSHIP in Practice over £4 000 in growing town Panel 2 Modern detached house for sale or rent One fourth share at first at two and a quarter years purchase Preliminary Assistantship

17 Consulting Ear, Nose and Throat PRACTICE in industrial city Receipts average £1 350 p a (in addition appointments worth about £650 p a) Centrally situated house to rent Purchaser should hold F R C S and have specialist experience Premium two years purchase

18 KENT—PRACTICE in developing district 12 miles from London Receipts past year over £500 Panel about 465 House (3 bedrooms) to rent Ample scope Premium £750 to include drugs etc

19 BIRMINGHAM—Medical Woman's PRACTICE averaging £1 269 p a Panel nearly 400 Good house with garage and garden Price £500 leasehold Scope Premium one and three quarter years purchase

20 S AFRICA—PARTNERSHIP in lucrative Practice in Natal Share worth about £1 800 p a at one years purchase Applicant should be competent surgeon and preferably an F R C S

21 WEST END, near Lord's Cricket Ground—PRACTICE averaging about £1 900 p a in ideal residential part Panel about 1 300 with prospects of good increase Well built detached double fronted house with garage and nice sized garden Good introduction Premium £3 325

22 MIDLANDS—PARTNERSHIP in mixed Practice, £4,800 p a in prosperous town Panel over 3 500 Modern labour saving house to rent Premium one third share £3 500 to include drugs etc Hospital

23 S W OF ENGLAND—PARTNERSHIP in mixed country town Practice over £6 400 Panel 4 500 Share worth £1 200 at two years purchase Preliminary Assistantship

24 W MIDLANDS—PARTNERSHIP in non dispensing Practice about £3 750 p a in beautifully situated county town Panel 2 800 House to rent One fourth share at first at two years purchase Aged about 30 with F R C S preferred Preliminary Assistantship

25 MIDDLESEX—PARTNERSHIP in steadily increasing town Practice about £2 000 p a Panel 1 500 House to rent Premium one half share two years purchase Applicant should be English or Scottish

26 SURREY—Medical Woman's PRACTICE in outlying suburban district Receipts last year £3 0 House for sale or rent Scope Premium one years purchase

27 S AFRICA—Medical Woman holding D O M S required in Ophthalmic Practice Experienced in eye work and not over 40 preferred SHARE about £1 0 first ASSISTANTSHIP

28 SUSSEX—PARTNERSHIP in good class Practice nearly £3 000 in favourite market town Panel 1 200 House to rent Share of £1 000 at two years Preliminary Assistantship

29 S COAST—PARTNERSHIP in Practice £3 000 p a increased recently Panel about 2 000 Sound house (5 bedrooms) for sale or rent Premium £ 000 Excellent hospital and surgery

30 MIDLANDS—Country PRACTICE over £1 p a in hunting district Panel 5 6 Good house (8 rooms) garage and good garden Hunter Price £1 500 freehold Premium two years purchase

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)
(Est 1901)

Tele Address Triform Westcent—London
TAVISTOCK HOUSE SOUTH TAVISTOCK SQUARE W.C.1
Telephone Euston 1641 1642

Practices and Partnerships for Disposal (continued)

31 N E ENGLAND —PARTNERSHIP in non panel Practice doing about £6 000 in one of the chief towns House available One sixth share at two years purchase Partner should be surgically inclined

32 LONDON S E 1 —PRACTICE about £1 150 p a in populous district Panel 1 500 Corner house Rent £105 p a Scope Premium two years purchase

33 LONDON N W —Medical Woman's PRACTICE over £500 p a in growing district Panel 740 House for sale or rent Premium 12 years purchase Appointment worth £250 p a additional possibly transferable

34 S COAST HEALTH RESORT —PARTNERSHIP in Practice about £1 500 p a Panel over 1 100 House (7 bedrooms) garage and garden to rent Premium two fifths share £1 250 to include drugs etc

35 N OF ENGLAND INLAND SPA —PARTNERSHIP in Practice about £1 900 p a Panel 1 200 Excellent house (8 bedrooms etc) for sale Scope Premium one half share £1 500

36 S COAST —PARTNERSHIP in non-dispensing Practice over £5 600 p a in health resort Panel about 600 Share worth about £2 000 at two years purchase Further share in two years

37 S OF ENGLAND —Easily worked PRACTICE about £1 000 p a in Cathedral city (club worth about £100 and panel 1 065) House (7 bed and dressing rooms) for sale Premium 12 years purchase or very near offer

38 WEST END OF LONDON —Good class non dispensing PRACTICE about £1 150 No panel Large house to rent Premium lease and practice £3 000

39 BUCKS —PRACTICE in growing town Receipts last year £594 Panel about 700 House for sale Well equipped Hospital Premium £1 500

40 LONDON W 6 —Non-dispensing PRACTICE £1 000 p a Pleasant suburb No panel House (5 bedrooms) garage and garden Premium house and practice £2 500

41 ESSEX —Country PRACTICE about £700 p a Panel about 450 Very good house (5 bedrooms) garage and garden Rent £65 p a Premium £1 050

42 LONDON S W —Medical Woman's PRACTICE about £960 p a in outlying suburb No panel Suitable accommodation available Premium £950

43 SURREY —Medical Woman's PRACTICE about £500 in developing district No panel Rent of house £100 p a Scope Premium £500

44 SMALL RADIOLOGICAL PRACTICE in provincial town Good opportunity for young man Prospect of hospital appointment later Premium £1 600 to include modern plant (value about £1 100)

45 PARTNERSHIP in increasing Ear Nose and Throat Practice in provincial town Partner must be F R C S

46 MIDDLESEX —FOURTH PARTNER required in Practice over £7 600 p a in residential district on the Thames Panel 3 600 House (5 bedrooms) to rent Scope Premium (£1 300 by share) £3 100

47 LONDON N W —PARTNERSHIP in Practice averaging about £5 200 p a Panel about 6 000 Maisonette (2 bedrooms etc) to rent One fifth share at first at two years purchase

48 S N E COAST —Middle and better working class PRACTICE over £1 150 p a in seaport town No panel Private residence for sale Premium £750 to include furnishings etc of consulting rooms

49 LONDON W 9 —PRACTICE doing between £900/£950 p a in residential district Panel about 60 but plenty of scope Rent of maisonette (5 bedrooms) £200 p a Premium £1 000 or offer

50 S WALES —Chiefly non dispensing PRACTICE £800 p a in seaside town Panel 350 Centrally situated house Price £1 250 Good scope Premium £1 450

51 LONDON N W 4 —Middle-class PRACTICE about £500 p a in developing part Panel 300 House (5 bedrooms) for sale or rent Scope Premium £1 250

52 LONDON S W 16 —Medical Woman's PRACTICE over £1 000 p a Panel 450 Semi-detached house Price £950 freehold Scope Premium £1 500

53 HOME COUNTY —FOURTH PARTNER required in Practice in growing town Exam 3 000 Incoming partner must be energetic aged about 30 (married preferred) with a leaning toward medicine Initial share about £1 250 p a Premium £3 000 Preliminary Assistantship

54 S W OF ENGLAND —Non dispensing PRACTICE averaging £1 6 6 p a in favourite watering place Small panel Semi detached house for sale or rent Good hospital Premium £2 500

55 CORNWALL —PRACTICE averaging £655 in market town on West coast Panel 200 House (5 bedrooms) garage and garden for sale or rent Scope Premium one and a quarter years purchase (half down)

COLONIES —Number of Colonial PRACTICES *Incomes range from about £750 p a upwards*

Purchasers can raise additional capital for the purchase of approved practices or shares
Particulars will be forwarded on application

All communications to be addressed to The Manager

Manager W M SCOTT

SCOTTISH BRANCH, 21 Alva Street, Edinburgh, 2

Telephone Edinburgh 3969

FOR DISPOSAL

A SCOTLAND —Old established City PRACTICE Receipts approximately £2 400 Panel 2 500 House price £900 Premium two years purchase or near offer

B YORKSHIRE —Country PRACTICE Receipts £1 200 Panel 500 Excellent house with garage Price £1 200 freehold Premium one and three quarter years purchase

C E OF SCOTLAND —Manufacturing town Receipts about £1 250 Panel 1 250 Attractive house price £1 500 Premium one and three quarter years purchase or near offer

D EDINBURGH —DEATH VACANCY —PRACTICE averaging £635 Ample scope for private and panel Excellent house for sale Any reasonable offer

E E OF SCOTLAND —Country town Receipts last year £685 (appointments £112 panel 565) Excellent house with garage and garden Price £1 450 Premium £1 000

F EDINBURGH —Lady Doctor's PRACTICE Receipts last year £690 Panel 390 Suitable house for sale or might let Premium one and a half years purchase

G N OF SCOTLAND —Country PRACTICE Long established Receipts approximately £1 000 Panel 275

H WALES —PARTNERSHIP in country town Receipts £1 200 Panel over 1 000 Suitable house Price £800 One half share at one year's purchase

I EDINBURGH —PRACTICE doing £450 House must be bought Premium practice and house £1 650

K EDINBURGH —PRACTICE averaging £1 022 Panel 805 Price of house £1 500 might let on lease Premium one and three quarter years purchase or near offer

L EDINBURGH —PRACTICE about £400 Suitable house to rent Reasonable offer considered

For further details apply The Manager 21 Alva Street Edinburgh

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager, to whom all communications should be addressed

RELIABLE LOCUMS and ASSISTANTS are URGENTLY REQUIRED by ALL OFFICES of the BUREAU

BOVRIL MEDICAL AGENCY, LTD.

ALDINE HOUSE,
10 13 BEDFORD STREET, STRAND, LONDON, W C 2
Telegrams BOVMEDICAL, LESQUARE, LONDON Telephone TEMPLE BAR 1616 (3 lines)
Chairman and Managing Director, Dr J FIELD HALL

The maximum commission payable on the sale of any Practice or Partnership in Great Britain placed exclusively in the hands of this Agency is £50 (fifty pounds), which sum covers goodwill, drugs surgery fittings, fixtures and furniture, instruments and book debts, but not house property Schedule of Terms will be forwarded on application

Accountancy and legal services furnished by the Agency where desired, at moderate inclusive charges No charge is made to Principals for the introduction of Locum Tenens or Assistants

1 SURREY —Well-established increasing PRACTICE situated in developing residential district Gross cash receipts for last 12 months about £900 including panel of about 500 Small compact freehold house Price £550 part on mortgage or would rent at £85 p a Premium £1 500 *Ample scope* for energetic worker

2 GROWING RESIDENTIAL DISTRICT WITHIN 10 MILES OF LONDON —Recently established upper and middle class PRACTICE producing about £700 p a with definite scope for increase Selected panel of 72 Fees 5/ upwards Prominent corner house with 2 reception 5 bedrooms Separate entrance to Professional rooms Well laid out garden Freehold for sale substantial part on mortgage Good sport and schools *Purchaser should be about 40 and experienced*

3 SURREY —PARTNERSHIP —ONE HALF SHARE in developing middle and better working class Practice in favourite residential hospital town Gross cash receipts for last 12 months £1 860 Panel of 500 Low expenses Well built house with 2 reception 4 bedrooms etc Rent £100 p a Ingoing partner should be experienced aged 25-40 and able to do some surgery Premium 14 years purchase for quick sale

4 WITHIN 6 MILES WEST OF CHARING CROSS —Very sound old established PRACTICE in good residential district producing over £3 400 p a Panel of 2 230 Very nice house in prominent position with all modern conveniences on rental Definite scope for increase Suitable for two friends in partnership

5 NORFOLK —COUNTRY DISTRICT WITHIN 6 MILES OF GOOD TOWN —*Old established mixed class* PRACTICE *producing approximately* £1 800 p a including panel of about 1 400 and 2 appointments worth £160 p a *Fees from 3/6 Detached house in own grounds with ample accommodation* Rent £150 p a *Premium* £3 000

6 LONDON S W —WITHIN EASY REACH OF CITY AND WEST END — Well established chiefly middle and better class PRACTICE with surgical scope producing about £1 450 p a Selected panel of 45 Fees 5 and 7/6 Good sized first floor flat with all conveniences Purchaser should be able to do surgery and *F R C S would be advantageous*

7 LONDON W C —Well established PRACTICE producing nearly £1 500 p a including panel of 1 660 Suitable accommodation available and surgery premises used as lock up on rental Premium 2 years purchase

8 LONDON —WESTERN DISTRICT —Old established non dispensing non panel PRACTICE producing about £800 p a Capable of expansion especially if panel work undertaken Well situated corner house on main road with ample accommodation Premium 1 year s purchase Practice would be sold apart from house if wished

9 SOUTH WALES —Old established mainly contract PRACTICE producing last year £2 200 of which £2 050 is from contract work and panel Suitable house available Future [illegible] excellent as new works have recently been erected

10 LADY DOCTOR S PR [illegible] Old established PRACTICE producing [illegible] about £400 from *panel Fees 5 upwards* Midwifery usually 5 guineas about 12 20 cases p a Suitable house available Premium 1½ years purchase or would take £2 000 cash for quick sale

11 KENT COAST —FAVOURITE SEASIDE RESORT —Old established middle class PRACTICE producing about £670 p a Small panel 200 patients Very good house in best end of the town with ample accommodation Freehold available Premium £1 200 *Eminently suitable for retired* army officer wishing to augment pension or there is scope for younger man

12 SUSSEX —FAVOURITE COAST TOWN —Old established PRACTICE producing about £800 p a including panel which brings in about £150 p a Good house on two floors 2 reception 4 bedrooms etc *Freehold for sale* Premium 2 years purchase with income guaranteed for first year

13 SOUTH COAST SEAPORT —PARTNERSHIP —ONE THIRD SHARE available in old established and rapidly increasing Practice which last year produced approximately £3 385 including a panel of over 1 600 patients Purchaser can choose his own residence Practice is conducted from central surgery and the expenses are not high

14 LADY DOCTOR S PRACTICES —Several available Full details on application

15 NORTHANTS —ASSISTANTSHIP with view to Partnership in an old established country Practice with good future prospects Initial salary £500 p a including car allowance the assistant to live out Full details on application

16 MIDLANDS — FAVOURITE COUNTY TOWN — SURGICAL OPENING —A QUARTER SHARE (after preliminary assistantship of 3 months) is offered in old-established increasing Practice producing approximately £3 900 p a Panel of about 2 800 One appointment worth about £125 p a Fees 5 to 0 No dispensing Suitable house with garden and garage Rent £65 p a Premium 2 years purchase part by arrangement Ingoing partner should be under 35 experienced and able to do some surgery

17 SOUTH OF ENGLAND —COAST TOWN —PARTNERSHIP —A HALF SHARE in good mixed class Practice established over 100 years averaging approximately £ 000 p a with substantial panel Appointments worth about £300 p a Suitable house on rental at £100 p a Premium 2 years purchase

18 MIDDLESEX —PARTNERSHIP —ONE HALF SHARE in increasing Practice producing approximately £2 000 p a Panel of 600 and increasing House with reception 3 bedrooms etc Rent £100 p a Premium 2 years purchase

19 LONDON S E Old established chiefly middle class PRACTICE producing last 12 months £1 284 p a Panel of 1 625 Suitable house on rental Premium [illegible] years purchase

20 LADY DOCTOR S PRACTICE MIDDLESEX —Chiefly working class PRACTICE established 10 years and producing over £600 p a including panel of 1 [illegible] Two appointments worth about £50 p a at present included in terms Suitable house with reception rooms bedrooms Lease 11 for sale freehold reasonable Premium 12 years purchase Vendor specializing

21 SOUTH AFRICA —PARTNERSHIP —Good surgical opening [illegible] receipts about £2 000 p a with ample scope for expansion with aid of suitable partner Full details on application

22 WEST OF ENGLAND —ATTRACTIVE RESIDENTIAL TOWN —A sound non panel PRACTICE established about 40 years Average gross cash receipts for last 3 years over £2 000 p a Fees 3 6 to 1 gn C [illegible] part on mortgage in excellent position 3 reception 5 bedrooms etc Freehold for sale Premium 2 years purchase

23 FAVOURITE SOUTH COAST TOWN —Old established chiefly best class PRACTICE producing for last year over £1 300 Panel of 450 Fine detached house with 2 reception 6 bedrooms Well stocked garden Freehold for sale Premium 2 years purchase

24 HANTS —COUNTRY PRACTICE WITHIN EASY REACH OF LONDON —Good mixed-class PRACTICE producing approximately £2 500 p a including panel of 1 335 Suitable house with ample accommodation garden garage Can be leased Premium 2 years purchase

25 WEST OF ENGLAND COAST —VERY ATTRACTIVE DISTRICT — ONE THIRD SHARE (with increase later) in good mixed Practice producing £3 300 p a *Panel of about 1 400 Small* modern detached house with garden Rent £80 p a including rates and garage Good social and hunting facilities *Premium* £2 200

26 N W LONDON —Old established PRACTICE averaging £900 p a Panel of approximately 1 070 *Fees 3/6 to 21/* Very nice house with accommodation Freehold for sale *Premium 2 years purchase*

27 SOUTH WALSH COAST —PARTNERSHIP —ONE HALF SHARE in old established middle and working class Practice producing over £1 000 p a Panel of 2 300 *Good house with ample accommodation* Large part Freehold for sale Premium £3 500 part by arrangement

28 *NORTHANTS —Old established mixed class* PRACTICE *producing* [illegible] £1 000 p a Panel of 1 000 Fees 3/6 to 10 6 Detached house with garden Freehold for sale or might rent Premium £1 500

29 ESSEX —ATTRACTIVE COUNTRY DISTRICT —PARTNERSHIP — ONE HALF SHARE *of old-established mixed class* Practice producing approximately £1 200 p a with good scope Panel brings in about £ 0 p a Good house with 4 bedrooms etc Rent £50 p a Very reasonable price for quick sale

30 SOUTH CORNISH COAST —Old established PRACTICE producing about £900 p a including panel of 342 Fees 2/6 to 42/ *Good house with* [illegible] for sale Premium £1 500

31 [illegible] NTIAL TOWN WITHIN 30 MILES OF [illegible] ONE FOURTH SHARE (with [illegible] good mixed-class Practice producing [illegible] appointments worth over £300 p a [illegible] partner must be experienced in surgery and preferably hold [illegible] Preliminary assistantship if wished Premium 2 years purchase

32 LONDON W 9 —Chiefly better-class PRACTICE averaging £700 to £100 p a in residential district Panel (recently started) about 70 but very good scope Inclusive rent of maisonette £200 p a Premium £1 000 or [illegible] Vendor specializing

33 SOUTH MIDLANDS —PARTNERSHIP —A HALF SHARE in established good class country Practice in beautiful district Gross cash receipts approximately £3 000 p a including panel of about 2 000 Very nice house with garden and garage Freehold for sale Very good for *shooting and other sport* Premium 2 years purchase

34 SOUTH WEST ENGLAND —FAVOURITE SEASIDE RESORT —Old established *non dispensing* PRACTICE averaging for last 3 years £1 [illegible] Selected panel of 400 Good house with ample accommodation garden and garage *Freehold £1 700 or might rent* Premium £2 800

35 COUNTY TOWN WITHIN 150 MILES NORTH OF LONDON —Old established better class PRACTICE producing for last 12 months over £ [illegible] Panel recently started of 45 Corner house with 2 reception 5 bedrooms garden garage *Freehold for sale* Sport of all kinds Good schools hospital being enlarged prospect of vacancy within year or so Lease 14 years purchase

36 SURREY —Old established mixed-class PRACTICE in favourite [illegible] within easy reach of London Average gross cash receipts over £1 [illegible] Panel and clubs bring in about £680 p a Choice of house or [illegible] Premium 2 years purchase

37 WEST COAST —Old-established PRACTICE in residential and [illegible] resort Receipts for last 12 months nearly £1 900 Panel and appointments worth about £504 p a Well built house with ample accommodation [illegible] hold £1 100 Premium £3 300 Vendor specializing

38 MIDDLESEX — RIVERSIDE SUBURB — PARTNERSHIP — [illegible] FIFTH SHARE (with increase later) in very sound old-established increasing Practice producing for last 12 months approximately Panel of 600 Appointments worth about £270 p a Good [illegible] Premium 2 years purchase

39 MIDLANDS —Old established unopposed increasing PRACTICE [illegible] for last 12 months £740 Panel 1 500 Very nice detached house 4 bedrooms etc Good garden Price freehold £1 500 £1 000 Premium 14 years purchase

40 SCOTLAND — UNIVERSITY CITY — *Old established* [illegible] PRACTICE producing for last 12 months over £ 000 p a [illegible] from panel of about £70 from appointments Suitable house non 6 bedrooms etc Freehold for sale or may [illegible]

41 EAST ANGLIA —ATTRACTIVE COUNTRY DISTRICT — PRACTICE averaging for past 2 years over £1 [illegible] p a [illegible] £500 from panel 1 M S etc Good house with [illegible] modern conveniences garden garage Free [illegible] Premium £1 700

42 STAFFS —LARGE TOWN —Old established PRACTICE [illegible] last 12 months over £ 400 Part of [illegible] p a [illegible] 4 bedrooms garden garage [illegible] purchase or rental [illegible]

The Agency has made arrangements for special facilities on very favourable terms to be afforded to approved purchasers for the advance of part of the premium for any suitable practice or partnership *Full details on application*

PERCIVAL TURNER LTD.

MEDICAL AGENCY

Established 60 Years

25, MAIDEN LANE, STRAND, LONDON W.C.2

(CORNER OF BEDFORD STREET)

Telegrams UPSOMCY LONDON *Telephones* TEMPLE BAR 9011 (3 lines)
After 1 p.m. Saturday TEMPLE BAR 1750

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE
INCLUSIVE OF HOUSE PROPERTY £50 FULL TERMS ON APPLICATION

LOCUM TENENS AND ASSISTANTS PROVIDED WITHOUT FEE TO PRINCIPALS. PRACTICES INVESTIGATED
FINANCIAL ASSISTANCE ARRANGED IN APPROVED CASES. ACCOUNTANCY AND LEGAL SERVICES
PROVIDED WHEN REQUIRED

PRACTICES & PARTNERSHIPS FOR DISPOSAL

1 SOUTH COAST—Old-established medical practice. Main partnership £1,000 p.a. Income tax basis. Net profits £1,500 p.a. Premium £1,000.

2 COUNTY TOWN within 30 miles London—PARTNERSHIP with early succession. Present income £1,000 p.a. Appointment £150 p.a. Premium £1,000 p.a. Excellent prospects. Partner required. Have VACANCIES. Client pays.

DEVON—Long-established country practice £1,100 p.a. Main partnership with £450 p.a. Appointments. Premium £1,000. Excellent freehold house and garden and garage. Income £1,600. Must assume. Premium £1,000.

3 BIRMINGHAM NEAR—Well-established practice £1,000 p.a. Income expected £1,500. Panel 2,000. Compact modern house and garden. Sale at £2,000 or lease. Premium £1,000.

HANTS—Old-established practice £1,000 p.a. Panel 1,600. Appointments £150 p.a. Could be increased. Partnership to be arranged. Immediate transfer. Premium for goodwill.

4 CONTINENTAL PRACTICE—Attractive centre. Old-established good class. M.D. essential.

YORKSHIRE DALES—Picturesque old-established practice £1,500 p.a. Large house and garage. Income £1,000 p.a. Suit experienced single-handed man. Panel 1,800. Premium £1,500.

NEAR VICTORIA, S.W.1—Long-established practice £1,000 p.a. Income expected £1,500. Panel 1,000. Good class. Appointments £150 p.a. Consulting house. Partnership arranged. Premium £1,500. Excellent house. Keen partner. Premium 1 year's purchase.

5 MIDDLESEX SUBURB—PARTNERSHIP. Half share. Increasing. Present income £1,000 p.a. Panel 1,500. Appointments £100 p.a. Premium 2 years' purchase. House 3 reception, 6 bedrooms, separate surgery entrance, good garden, garage and outbuildings. For sale or might let.

6 GUILDFORD—Nearly £1,000 p.a. Partnership opening. Good scope. Increasing panel over 2,000. Compact house in good position on rental at £150 p.a.

7 LONDON, W.—Old-established practice £1,000 p.a. Panel 1,300 with middle and better class. Nice house with ample living accommodation. Suit professional couple. Premium 1 year's purchase.

8 LONDON, N.E.—PARTNERSHIP. Half share with early succession £1,400 p.a. Panel 1,300. Ample scope. Compact house on rent at £45 p.a. Premium 2 years' purchase.

9 LONDON, N.1.—Over £1,000 p.a. Increasing and good scope. Panel 3,000. Fees £5 to £10 6. Convenient house in excellent position to let. Premium 2 years' purchase.

10 SCOTLAND (N.)—Country practice over £1,000 p.a., including panel of £300 p.a. Terms £5,000 to £5,500. Vendor retiring. Good house for sale or rental. Premium 1½ year's purchase or offer.

11 KENT COAST TOWN—PARTNERSHIP one third or half share. Present receipts £1,650 p.a. Panel over 2,000. Good house on rental at £85 p.a. Premium 2 years' purchase.

12 MIDDLESEX SUBURB—£1,000 p.a. panel 1,600. PMS £100 p.a. Developing residential area. Compact modern house, garden and garage for sale at £1,000 or might let. Premium 2 years' purchase.

13 Lady Doctor. PRACTICE London S.W.6—Lock-up £465 p.a. Panel 1,000. Good professional accommodation on rental at £60 p.a. Premium 1½ years' purchase.

14 Lady Doctor's PRACTICE London E.11.—£1,500 £1,000 p.a. Panel 2,000. Mixed working and middle class. Well-equipped main and professional accommodation on lease at £150 p.a. Premium 1½ years' purchase.

15 LONDON, W.1.—A service about £1,000 p.a. Select panel of 1,000. Good scope. Vendor gives only part time. Nice house on main road for sale or rental. Premium 2 years' purchase.

16 NUCLEUS, N.1.—Developing residential area about £1,000 p.a. Panel 1,600. Scope. Nice double fronted house for sale or let. Premium £1,000.

17 JAMAICA, B.W.I.—About £500 p.a. increasing and scope for one with surgical experience. Large house 12 acres. On rental. District residential and good beach.

18 JAMAICA, B.W.I.—PARTNERSHIP half share after 6 months. Assistantship. Income £1,000 p.a. Surgical experience an advantage. Choice of house. Premium 2 years' purchase.

19 NORTHERN TOWN—Old-established middle-class non-panel non-dispensing average £1,500 p.a. good scope, better-class PRACTICE. Nice house 2 reception, 4 bedrooms and attics, garage etc. To be sold for £1,200. Premium £1,000.

20 KENT, under 20 miles from London—Country PRACTICE about £500 p.a. Panel 1,275, easily worked, scope. Nice house and garden for sale or let. Premium £1,000 or near offer.

21 CROYDON—Small increasing PRACTICE in thickly populated area £650 p.a. Increasing panel 1,400. Compact house on main road to be let at £104 p.a. Premium £600 or near offer.

22 LONDON, E.10.—Over £4,000 p.a. Panel 6,700. good scope. Thickly populated district. Nice house, ample accommodation, garden and garage. Lease 90 years at repayment of £5 p.a. Premium £500 or near offer.

SURREY SUBURB NEAR LONDON—Well-established practice, receipts £1,000 p.a. with increasing panel. Nice modern compact house with surgery and garage. Rent £52 p.a. Premium £1,000 or offers.

23 LONDON, W.—ONE THIRD SHARE available in long-established A.P.C. practice. Receipts over £1,000 p.a. DMRE preferred. Nice house with modern amenities. Rent £150 p.a.

24 LONDON, W. near Marble Arch—Better-class old-established practice. Income £1,000 p.a. Panel 1,000. Appointments £150 p.a. Nice house 3 reception, 6 bedrooms, bathroom, garage. Rent £150 p.a. Premium £1,000 or near offer.

25 S. AFRICA, near Durban—Old-established practice £1,000 p.a. Main partnership. Nice roomed house with garden and garage. Tennis, golf, bathing, fishing. Premium £1,000.

DEVON NUCLEUS—About £400 p.a. Beautiful country practice. Panel not encouraged. Nice house 3 reception, 4 bedrooms. Garage. Rent £65 p.a. Premium £1,000 to include fittings etc.

26 LONDON, W.6—Old-established middle and better-class practice. PRACTICE average £500 p.a. Nice freehold district. Detached house 3 reception, 5 bedrooms, 2 offices, consulting and waiting rooms, garden and garage. For sale at £1,000. Premium for Practice £1,000.

27 LONDON, S.W.18—Well-established increasing income residential area about £1,000 at present. Panel 400. Club £60 p.a. Ample scope for professional connection on rental at £75 p.a. Premium £1,000 or near offer.

28 LONDON, S.E.3—Old-established practice. Residential and increasing locality at present £1,500 p.a. Panel 3,000. Detached house 3 reception rooms, 6 bedrooms, consulting room, garage. For sale or to let at £70 p.a. Premium 1 year's purchase.

29 SOUTH WALES—PARTNERSHIP half share. Seaside town. Receipts £1,000. Panel 2,000. Appointments. Senior partner retiring. Nice house facing sea 3 reception, 5 bedrooms, usual offices, garden, tennis court, garage etc. For sale or rental. Premium for half share 3 years purchase.

30 HANTS—Country PRACTICE average receipts about £400 p.a. Panel 1,000. Nice house, reception, 4 bedrooms, consulting room and dispensary. 1 acre of garden, garage. For sale or let at £75 p.a. Premium £400.

31 SURREY, 15 miles from Town—Semi-country, receipts £400, panel 1,000. Nice house, reception room, 5 bedrooms, usual offices, consulting room, waiting room. 1 acre of garden, garage, to be let or sold. Premium for Practice £400.

32 LONDON, S.E.6—Fair increasing level practice area now producing about £1,000 p.a. panel 650 increasing. Ample accommodation on rental at £100 p.a. Branch nursery in thickly populated part. Premium £1,150 including drugs, book debts and fittings.

33 NOTTS—PARTNERSHIP share producing £1,000 p.a. to commence in rural Practice mixed with panel of 900 and appointments. Charming country surroundings, nice compact house on rental. Premium 2 years purchase. Suit lady practitioner.

34 GLAMORGAN—Small increasing PRACTICE near Cardiff about £600 p.a. growing panel over 1,000. Nice house with professional accommodation, good garden. To be sold for £1,500. Premium for Practice 1 years' purchase.

35 ESSEX COAST RESORT—OPHTHALMIC PRACTICE. Ill-health reason for sale. £1,000 p.a. excellent opportunity. Nice house in local Harley Street on rental £105 p.a. Premium for Practice £500.

36 MIDDLESEX SUBURB—PARTNERSHIP half share in fast increasing PRACTICE in developing suburb. Present £1,600 p.a. increasing at rate of £1,000 p.a. Panel 1,000. Suitable house available for sale or rent. Premium 2 years' purchase.

37 LINCS COAST TOWN—Well-established old average £1,400 p.a. panel 2,300 p.a. Large semi-detached house 5 mins. from sea, reception, 6 bedrooms, usual offices, garden and garage, for sale at £1,000. Premium for Practice £450.

38 LONDON, W.—Old-established practice mixed PRACTICE. Under receiving £1,000 p.a. Appointment £50 p.a. Must leave 5 to 10 gns. Corner residence consulting room, 3 reception and 6 bedrooms, double garage. Leasehold 36 years to run. Premium 2 years' purchase.

39 S.E. COAST—Old-established increasing town, good scope, mixed with middle and better class. Net income £1,000 p.a. Panel 1,000. Scope. Nice house for sale, modernized, 6 bedrooms, 1 acre, with garage. Premium £1,000.

40 DERBYSHIRE—Old established unopposed practice, country. Receipts £1,000 p.a. panel 1,966. Appt. £100 p.a. Good detached house, reception, 6 bedrooms, consulting and waiting room and dispensary. Grand lot, 1 acre with tennis court and garage. Freehold £1,500. Premium for Practice 11 years' purchase.

41 CORNWALL—Old-established unopposed country PRACTICE, average £911 p.a. last year £1,014. Panel 900. Excellent house 4 reception, 2 small, 5 bedrooms etc., surgery, waiting room, dispensary. Rent £50 p.a. Premium 2 years' purchase.

MANY OTHERS NOT ADVERTISED

WANTED—Purchasers waiting for PRACTICES in all parts. Incomes from £750 upwards

ASSISTANTS AND LOCUM TENENS WANTED—Many VACANCIES in Town and Country. List on application

INDEX TO ADVERTISEMENTS

PUBLISHERS

Bale Sons & Curnow Ltd 6
British Medical Assn Cover iii 2 8
Cassell & Co Ltd 9
Churchill J & A Ltd 48
Heinemann Wm Ltd 7
Lewis H K & Co, Ltd 10
Livingstone E & S 5
Murray John 8
Oxford University Press 4
Practitioner The 2
Saunders W B & Co Ltd 3
Stationery Office H M 8
Wright John & Sons Ltd 6

ASSURANCE & INSURANCE

London & Counties Med Prot Soc Ltd Supp i
Medical Insurance Agency 68

BANKS & FINANCE

British Medical Finance Ltd 48

CHEMISTS

Aluzyme Products 48
Armour & Co Ltd 34
Bell & Croyden 21
Boutalls Ltd 22
British Alkaloids Ltd 25
British Drug Houses Ltd 17 21, 23
Burroughs Wellcome & Co 37
Ciba Ltd Supp i
Denver Chemical Mfg Co 33
Duncan Flockhart & Co 20
Eli Lilly & Co Ltd 17
Evans Sons Lecher & Webb Ltd 29
Fellows Med Mfg Co Ltd 42
Gedeon Richter Labs 16
Genatosan Ltd 36
Glaxo Laboratories Ltd 19
Kaylene Ltd 24
Maw S Son & Sons Ltd 24
Menley & James Ltd 35
Milton Proprietary Ltd 40
Napp H R Ltd 18
Oppenheimer Son & Co Ltd 16
Oxo Ltd 20
Reckitt & Sons Ltd 23
Robinson & Son Ltd 74

Chemists—*continued*

Saccharine Corpn Ltd 43
S P Charges Co 47
Simpkin A L & Co Ltd 48
Thackray Chas F Ltd 28
Wander A Ltd 26
Warner W R & Co Ltd Supp iv
Wright Layman & Umney Ltd 0
Wyeth John & Bro Ltd 15

FOODS, BEVERAGES

Bemax Sales Ltd 38
Benger's Food Ltd 19
Borwick Geo & Sons Ltd 43
Gaymer Wm & Son Ltd 22
Ingram & Royle Ltd 42
Libby McNeill & Libby Ltd 31
Nestlé's Milk Products Ltd Supp ii
Peek Frean & Co Ltd 32
Rayner & Co Ltd 40
Schweppes Ltd 25
Sumner's Typhoo Tea Ltd 38
Valentine's Meat Juice Co 44

MOTORS & ACCESSORIES

Wakefield C C & Co Ltd 11

NAME PLATES, etc

Hall F B & Co 48
Herd S J & A 49
Osborne F & Co Ltd 48
White Bronze Co 48

SURGICAL APPARATUS

Allen & Hanburys Ltd Cover iv
Bailey W H & Son Ltd 47
Curtis H E & Son Ltd 47
Hinger & Co Ltd 12
Hawksley & Sons Ltd 11
Hilliard 49
Leslie's Ltd 46
London Hospital Cabinet 39
Millikin & Lawley 48
Robinson & Sons Ltd 74
Roussell J Ltd 45
Salmon Ody Ltd 11
Salt & Son Ltd Cover ii
Short & Mason Ltd 47
Spencer Corsets Ltd 13
Thermega Ltd 46

PRINTING, TYPEWRITERS, etc

Taylor's Typewriters 48

TAILORING & CLOTHING, etc

Baber Chas H 46
Church & Co Ltd 45
Clark & Co 41
Deimel Fabric Co 10
Dowie & Marshall Ltd Supp iii
Hardy's 5

TOBACCO & CIGARETTES

Wills's Capstan Cigarettes 10

X-RAYS & ELECTRO MEDICAL

General Radiological Ltd Supp iii
Gowlands Ltd 14
Ilford Ltd 15
Peto Scott Co Ltd 14
Victor X Ray Corporation Ltd 41

HOMES & INSTITUTIONS

Prices 49 50 51 53

HOUSE AGENTS

Page 66

HOSPITALS & CLINICS

London Clinic 51
New Lodge Clinic 51

SANATORIA

Cotswold Sanatorium 52
Pendysffryn Hall Sanatorium 52
Torquay Dee Sanatorium 52

SPAS, HEALTH RESORTS & HYDROS

Czechoslovakia
Harrogate
Kinmel Hall
Pistany Spa
Rockside Hydro
Smedley's Hydro

MEDICAL SCHOOLS, TUTORS & LECTURERS

Prices

NURSING, etc

Page

TRANSFER AGENTS

Bovril Medical Agency Ltd
British Medical Bureau
Lee & Martin Ltd
Medical Agency Ltd
Peacock & Hadley Ltd
Percival Turner Ltd
Western Medical Agency

CONTRACT PRACTICE

Page 63

HOSPITAL VACANCIES etc

Prices 55 56 57 58 59 60 61 62 63 64 65

CLASSIFIED ADVERTISEMENTS—(Wanted & Vacant)

Pages 64 65

GENERAL

British Motor Boat Mfg Co Ltd
Chartered Soc of Massage
Frankland
Furniture & Fine Art Co
Tampax Ltd

For use in the treatment of the

Chest *and* **Lungs**

and surgical uses generally . . .

"**Gamgee Tissue**"

REGD TRADE MARK

Made exactly according to the direction of its inventor, the late Sampson Gamgee, F.R.S.I. Consulting Surgeon to the Queen's Hospital, Birmingham. Composed of high grade cotton wool enclosed in absorbent gauze.

Obtainable in three qualities from all chemists

SOLE PROPRIETORS & MANUFACTURERS ROBINSON & SONS LTD OF CHESTERFIELD & 103 OLD ST LONDON EC

Published by the Proprietors the British Medical Association Tavistock Square London W.C.1 and printed by Ford and Son Limited Lea Hardinge St Fleet St London E.C.4 Printed in Great Britain Entered as Second Class at New York U.S.A. Post Office

ARCHIVES OF DISEASE IN CHILDHOOD

JUNE 1938

CONTENTS

Intracranial Haemorrhage in the New-born By W S Craig, M D , F R C P Ed

Vitamin C Excretion in Children, with Particular Reference to Rheumatic Fever By J D Keith, M D and Evelyn M Hickmans, Ph D , M Sc.

Otitis Media and Mastoiditis in Infancy By Grace McConkey, M B , B Ch , B A O D C H , and Edward C Ross Couper, M B , Ch B , F R F P S

Radiology in the Diagnosis of Hypertrophic Pyloric Stenosis By Leonard Findlay, D Sc , M D , F R C.P

The Blood Phosphorus in Egyptian Infants By I A Sabri, M R C P , D T M and H , and M A Abboud, M R C P , D C H

Osteopetrosis By A M Nussey, M D , M R C P

The Cooley Syndrome in an English Child By E G L Bywaters, M B , B S M R C P

Case Report A Case of Diabetes Mellitus in a Young Infant By John Devine M B , Ch B

PUBLISHED QUARTERLY

Yearly subscription (4 numbers), 25/- To members, 20/
Single Number, 7/6

Issued by the British Medical Association, Tavistock Square, London, W C 1

This cookery book is based on the latest scientific standards Medical practitioners can particularly recommend it to those of their patients who have to get a full pennyworth of food value from every penny of their outlay

THE DOCTORS' COOKERY BOOK

21 Menus and 82 Recipes for Family Meals

21 PAGES OF PHOTOGRAPHS

PUBLISHED BY THE BRITISH MEDICAL ASSOCIATION

Obtainable from all booksellers newsagents Smith's bookstalls and Co-operative Societies

All inquiries to the B M A Tavistock Square, London W C 1

PRICE 4D

THE IMPORTANCE OF PRECISION POLISHING

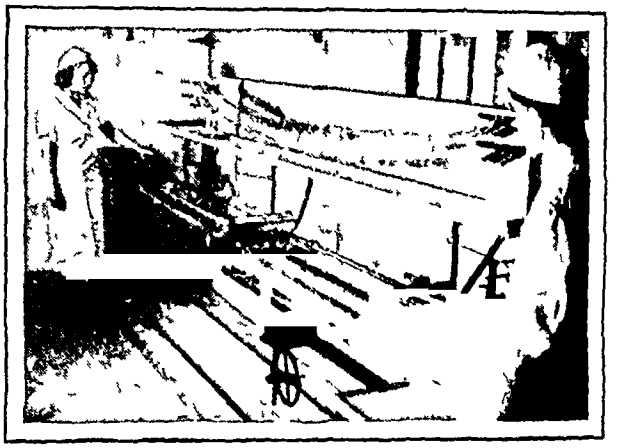
In order to obtain uniformity of calibre and complete roundness of strand along its entire length, A & H Catgut is polished by automatic machinery

Hand polishing of individual strands fails to obtain this desirable precision and uniformity in the production of surgical catgut strands

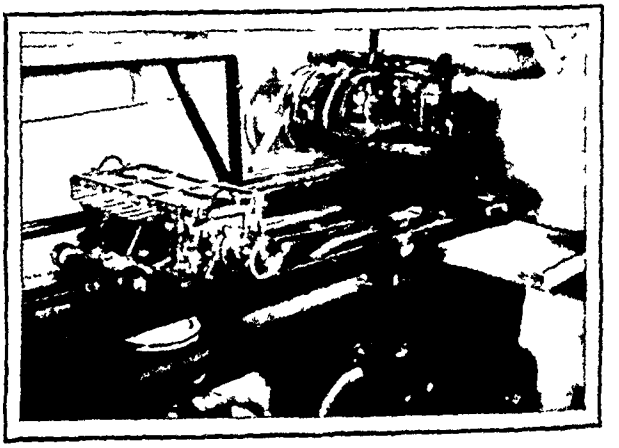
One of the modern advantages incorporated in the production of A & H Catgut.

The entire product manufactured in England

A descriptive booklet will be sent on application



Precision Automatic Polishing, in one operation, of twelve catgut strands, each 10 feet in length



A & H CATGUT

AZOULE BRAND Manufacturing Licence No 6B

ALLEN & HANBURYS LTD., LONDON, E.2

Manufacturers of Surgical Instruments and Appliances Sterilized Surgical Sutures, Hospital Furniture and Electro-Medical Apparatus

Showrooms · 48 WIGMORE STREET, W.1

BRITISH MEDICAL JOURNAL

JOURNAL OF THE

BRITISH MEDICAL ASSOCIATION



SATURDAY JULY 16 1938

PRINCIPAL CONTENTS

Cerebral Integration of Ocular Movements	p 107	Leading Articles	p 128
Chronic Mastitis and Breast Cancer	113	Correspondence	148
Uterine Bleeding treated with Progesterone	116	Surgery in General Practice Fracture of the Humerus	134
Brodie's Abscess and its Differential Diagnosis	119	Birmingham Hospitals Centre	138
Parasitic Foetus Successfully Removed by Operation	123	Epidemiology Section	158
		Reviews	125
		Photogravure Plate at Middle Opening	

WITH SUPPLEMENT AND EPITOME

LONDON

BRITISH MEDICAL ASSOCIATION

TAVISTOCK SQUARE

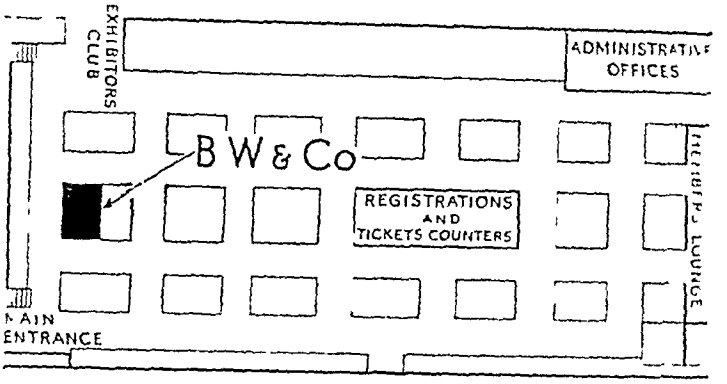
No 4045 WEEKLY PRICE 1/3

Copyright

REGISTERED AS A NEWSPAPER

BRITISH MEDICAL ASSOCIATION EXHIBITION, PLYMOUTH

An Invitation



Visitors are invited to inspect the Burroughs Wellcome & Co Exhibit

Stand No 41

TRADE MARK **'TABLOID'** REG. U.S. PAT. OFF.

SULPHONAMIDE-P

0·5 gramme

(SULPHANILAMIDE)

The successful bactericide for oral use in hæmolytic streptococcal infections. Its valuable action is due largely to the rapidity with which the drug is diffused throughout the tissues and fluids of the body.

Effects are marked in puerperal septicæmia, meningococcal and urinary tract (*B. coli*) infections. May be used also in gonococcal and certain other infections.

For Oral Use

"TABLOID" SULPHONAMIDE-P 0·5 GRAMME
Bottles of 25 products 1 4
Bottles of 100 products 4 -

For Parenteral or Oral use

WELLCOME SULPHONAMIDE-P
Bottle of 25 tablets 1 9
Bottle of 100 tablets 5 6

Literature on application



BURROUGHS WELLCOME & CO. LONDON

Works for all communications SNOW HILL BUILDINGS E.C.1

Export Offices 10 HENRIETTA PLACE CAVENDISH SQUARE W.1

Associated houses

NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI

BRITISH MEDICAL JOURNAL

JULY 16 1938

TABLE OF CONTENTS

ADDRESSES AND PAPERS

Cerebral Integration of the Ocular Movements GORDON HOLMES M.D., F.R.C.P., F.R.S. 107

Chronic Mastitis and Breast Cancer: A Family History of Five Cases W. SAMPSON HANDLEY M.S., F.R.C.S. 111

Dysfunctional Uterine Bleeding treated with Progesterone T. N. MACGREGOR M.D., F.R.C.S.Ed. 116

Brodie's Abscess and its Differential Diagnosis JAMES I. BRAILSFORD M.D., M.R.C.P. 119

Parasitic Foetus Successfully Removed by Operation MAX GREENBERG F.R.C.S.Ed. 123

SURGICAL SERIES

Fractures of Shaft and Subcapital Region of the Humerus T. P. McMURRAY M.Ch., F.R.C.S.Ed. 134

CLINICAL MEMORANDA

Recurrent Cerebral Thrombosis with Recovery G. LLEWELYN DAVIES M.R.C.S., L.R.C.P. 124

Orthoptic Cure of an External Squint of 35 Degrees in a Woman of Thirty W. H. DU PRE, M.B. 124

REVIEWS

Dietetic Malnutrition in the Tropics 125
Tumours in the Neck 125
Nutrition and Dietetics in Brief 125
Therapeutics of Antimony 126
Grinker's Neurology 126
Practical Anatomy 126
Notes on Books 126

GENERAL ARTICLES AND NEWS

The Birmingham Hospitals Centre: Royal Opening Ceremony 138
National Food Policy 139
Nova et Vetera: Surgical Forceps down the Ages 137
MEDICAL RESEARCH COUNCIL 141
A MEDICO-LEGAL INSTITUTE 142
MATERNITY AND CHILD WELFARE CONFERENCE 142
PREPARATIONS AND APPLIANCES 127
MEDICAL NOTES IN PARLIAMENT 155
UNIVERSITIES AND COLLEGES 160
MEDICAL NEWS 161

LEADING ARTICLES

Clinical Science 128
A Pioneer Hospitals Centre 129
Plans for Plymouth 129

ANNOTATIONS

Strepto-coccal Carrier Problem 130
Peckham Health Experiment 131
Fat Virus Cancer 131
Symptoms of Cardiac Standstill 132
Measuring Emotion 132
Immunization against Poliomyelitis 133
A Setback to Medico-legal Science 133
The Half-yearly Indexes 133

SUPPLEMENT

Medical Practice in Germany
By KARL HAEDENKAMP M.D.

The Mental Treatment Act (Section 1)
By L. H. WOOTTON M.B. and LOUIS MINSKI M.D.

UNEMPLOYMENT INSURANCE FOR DOCTORS' EMPLOYEES
PUBLIC HEALTH NOTES
INSURANCE MEDICAL SERVICE
CORRESPONDENCE
POSTGRADUATE NEWS
MEETINGS OF DIVISIONS
Association Notices Vacancies and Appointments Diary

LOCAL NEWS

ENGLAND AND WALES—
Association of Special Hospitals 146
West London Medico-chirurgical Society 146
Treloar Cripples Hospital 146
IRELAND—
Medical Research Council 146
Royal Maternity Hospital Belfast 146
SCOTLAND—
St. Andrew's Ambulance Association 147
Cremation in Scotland 147
Royal Blind Asylum 147
Princess Margaret Rose Hospital 147
Decreased Mortality in Fife 147

EPIDEMIOLOGY SECTION

TABLE OF INFECTIOUS DISEASES AND VITAL STATISTICS 158
EPIDEMIOLOGICAL NOTES 159

CORRESPONDENCE

Medical Relief in China H. GORDON THOMSEN F.D. 148
Anti-venereal Measure DOUGLAS WHITE M.D. 148
Ischio-pubic Osteochondritis H. A. I. FAIRBANK F.R.C.S. 148
Routine Incidence of Psychosomatic Illness A. E. CARVER M.D., W. V. HAPLE M.R.C.S. 149
Unconscious Mind and Medical Practice R. M. LADELL M.B. 150
Mental After-care REGINALD WOLFE M.B. 150
Treatment of Pneumonia H. H. BROWN F.R.C.S. 150
Psittacosis J. P. HASTINGS M.D. 151
Treatment of Placenta Praevia S. K. KERKAR, J. E. GIESEN M.B. and O. LLOYD M.B. 151
Small-pox and Compulsory Vaccination C. K. MILLARD M.D. 151
Porrigo WM. GILFILLAN M.B. 152
Complications of Gold Therapy GERALD SLOT M.D., J. B. BENNETT M.B. 152
Quinsy Peritonsillar Abscess H. M. DENHOLM YOUNG M.B. 152
The Final M.B., B.S. Lond. Sir F. GRAHAM LITTLE M.P., M.D. 153
The Medical Directory 1939 J. AND A. CHURCHILL LTD. 153

REPORTS OF SOCIETIES

ROYAL MEDICO-PSYCHOLOGICAL ASSOCIATION 143

OBITUARY

Harry Campbell M.D., F.R.C.P. 153
Charlton Hall B.Ch. 154
H. Ottridge Reik M.D. 154
J. Anthony McVea M.B. 154
A. E. W. Hird M.R.C.S. 154

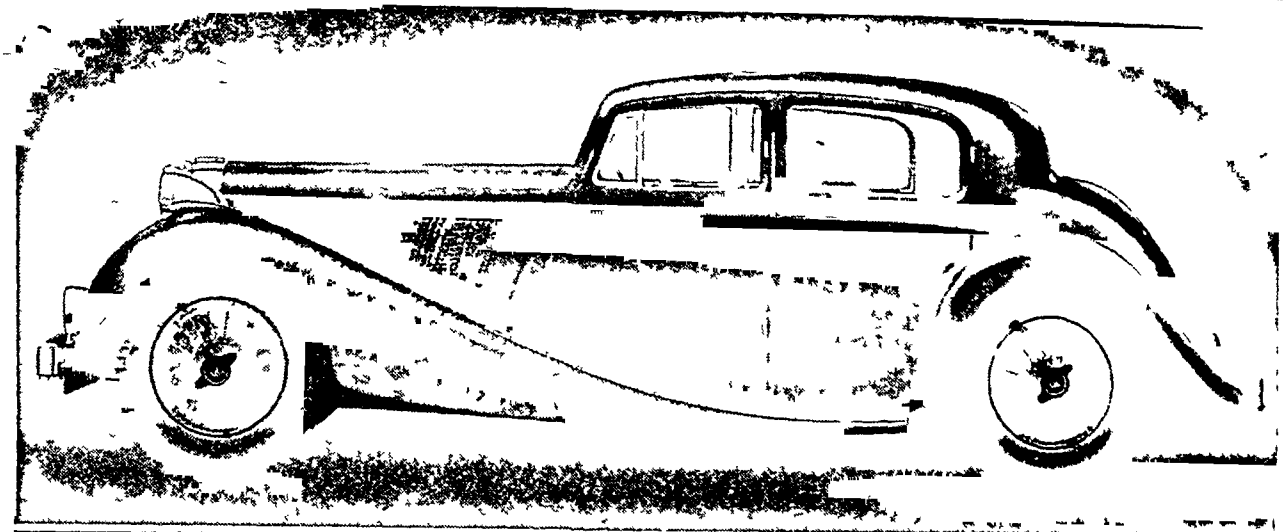
THE SERVICES

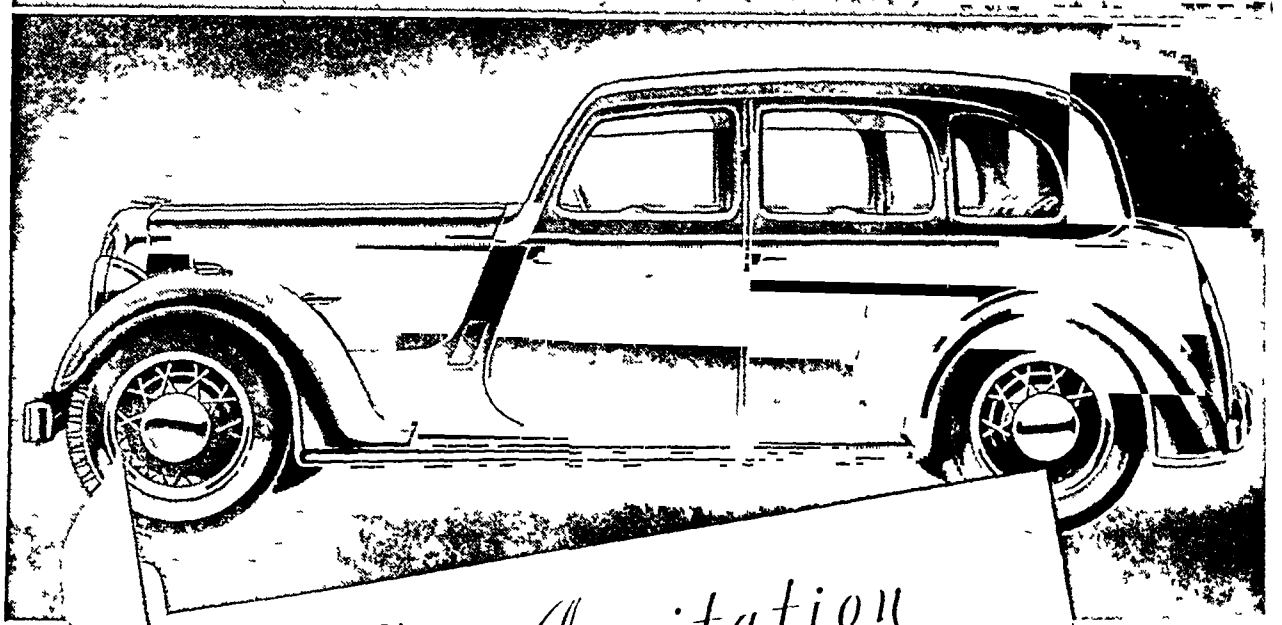
48th and 61st (S.M.) Divisions R.A.M.C. 160
Deaths in the Services 160

LETTERS AND ANSWERS

Cockroaches 161
Mosquito Bites 161
Income Tax 161
Nasal Sinusitis in Childhood 162
Appendicitis and a Meat Diet 162
Medical Tour to Soviet Russia 162
Collection of Old Medical Books 162

A KEY TO CURRENT MEDICAL LITERATURE will be found at the end of the JOURNAL





An Invitation

TO THE MEDICAL PROFESSION

Henlys England's Leading Motor Agents, invite the investigation by medical men of the many outstanding advantages to be gained by some to Henlys for new or used cars

If you prefer a new car Henlys are distributors for SS Jaguar Rover Alvis Austin and Studebaker and agents for other outstanding productions including Morris Riley, Daimler, Humber Hillman Armstrong etc

If your choice is a used car Henlys offer you the largest selection in the country—7 days' free trial and a guarantee with every example £100 and over

20 EQUAL MONTHLY PAYMENTS BUY ANY NEW CAR

To the medical profession Henlys offer special car purchase terms Any make of new car can be bought from Henlys and paid for by 20 equal monthly payments—the most favourable rate obtainable anywhere

Any car will be taken in part exchange Write phone or call now for further particulars

THE LARGEST & FINEST SELECTION OF NEW & USED CARS IN ENGLAND

HENLYS

HENLY HOUSE 397 EUSTON ROAD N.W.1 PHONE EUS 3333 DEVONSHIRE HOUSE PICCADILLY W.1 MANCHESTER BRISTOL AND BOURNEMOUTH

NEW BOOKS AND NEW EDITIONS

NUMBER FOUR JUST PUBLISHED With 5 Plate Pp xii + 160 Royal 8vo 10s 6d net postage 6d

CHRONIC RHEUMATIC DISEASES

Being the Fourth Annual Report of the British Committee on Chronic Rheumatic Diseases appointed by the Royal College of Physicians Edited by C W BUCKLEY MD FRCP

NUMBER ONE	With 8 Plat	Royal 8vo	12s 6d net postage 6d
NUMBER TWO		Royal 8vo	10s 6d net postage 6d
NUMBER THREE		Royal 8vo	10s 6d net postage 6d

all the articles will be well worth study the whole —BRITISH MEDICAL JOURNAL

NEW (SECOND) EDITION WITH REVISIONS AND ADDITIONS

TREATMENT IN GENERAL PRACTICE

THE MANAGEMENT OF SOME MAJOR MEDICAL DISORDERS

ARTICLES REPRINTED FROM THE BRITISH MEDICAL JOURNAL

VOLUME ONE With Illustrations Demy 8vo 8s 6d net postage 6d (JUST PUBLISHED)
Diseases of the Respiratory Tract Acute Specific Fevers Cardio Vascular Diseases

VOLUME TWO With Illustrations Demy 8vo 10s 6d net postage 6d (READY NEXT WEEK)
Diseases of the Nervous System Diseases of the Digestive System Some Diseases of the Blood
Rheumatic Diseases Metabolic Diseases Diseases of the Kidney

The two volumes are an invaluable treatment the high standard of medicine —THE LANCET (*Extract from first review*)

RECENTLY PUBLISHED

A TEXT-BOOK OF X-RAY DIAGNOSIS

BY BRITISH AUTHORS

Edited by S COCHRANE SHANKS MD MRCP PETER KERLEY MD MRCP DMRE and E W TWINING MRCS MRCP DMRE

VOLUME I Pp xii — 500 With 208 Illustrations Crown 4to 50s net
VOLUME II Pp xi — 456 With 307 Illustrations Crown 4to 42s net

IT IS EXPECTED THAT VOLUME III WILL BE ABOUT THE SAME SIZE AS VOLUME II

This excellent textbook will be welcomed it will undoubtedly prove a valuable reference book for those who desire to keep abreast of the latest developments in clinical radiology —THE LANCET

JUST PUBLISHED With 14 Plat including 74 Figure Demy 8vo 7s 6d net postage 6

ARTHRITIS, FIBROSITIS AND GOUT

By C W BUCKLEY MD FRCP

Fourth Number Published for the Royal Institute of Public Health

THIRD EDITION JUST PUBLISHED
With 2 Coloured Plates and 122 Illustrations in the Text Royal 8vo 12s 6d net postage 6d

A GUIDE TO HUMAN PARASITOLOGY

FOR MEDICAL PRACTITIONERS

By D B BLACKLOCK MD Edin DPH Lond DTM Liverpool Professor of Tropical Hygiene in the Liverpool School of Tropical Medicine etc and T SOUTHWELL DSc PhD Walter Myers Lecturer in Parasitology Liverpool School of Tropical Medicine

The book is clearly written and well illustrated descriptions of methods of diagnosis are clear are quickly learnt and easily carried out general excellence and reliability —LANCET (*Extract from review of second edition*)

NEW (NINTH) EDITION Thoroughly Revised and Enlarged
With 4 Plates and 208 other Illustrations Pp xiv — 965 6¾ins x 5¼ins 30s net postage 7d (abroad 1s 3d)

PRACTICAL BACTERIOLOGY, HÆMATOLOGY AND ANIMAL PARASITOLOGY

By E R STITT, M D Sc D LL D Rear Admiral Medical Corps and Surgeon General U S Navy retired etc PAUL W CLOUGH M D Chief of Diagnostic Clinic Johns Hopkins Hospital etc and MILDRED C CLOUGH M D formerly Fellow in Bacteriology and Instructor in Medicine Johns Hopkins University

has increased in size and one may truly say in usefulness —TROPICAL DISEASES BULLETIN

Complete Catalogues on request

LONDON H K LEWIS & Co Ltd, 136, GOWER STREET, W C 1

B.M.A. EXHIBITION, PLYMOUTH

JULY 18-22

STAND No. 9

H K LEWIS & Co Ltd, 136, GOWER STREET, LONDON, W C 1

Development of
HEARING AIDS

We, Multitone Electric Co, Ltd, do not believe ourselves to be the largest Deaf Aid manufacturers in this country We do believe, however, that we lead, and have led for several years, the development work of the Valve Amplifier Hearing Aid As *invariably happens in a new field* such is this numerous other manufacturers have from time to time endeavoured to copy our inventions, and the following list of some of our principal developments and patents will show the improvements which we have ourselves introduced, and may clear up misunderstanding

1932 **TONE CONTROL**

Developed and patented the TONE CONTROL TRANSFORMER The only practicable tone control then available for Deaf Aids Used at the time by practically all Deaf Aid manufacturers under licence BRITISH PATENT No 381,540

1933 **CLASS INSTALLATIONS FOR DEAF SCHOOLS AND RADIO FOR THE DEAF**

Developed and patented the DEAF AID RADIO SET, which provided deaf people with radio programmes as well as speech amplification This was supplied to a large number of Deaf Schools all over the world, including all the London County Council special schools BRITISH PATENT No 416,436

1934 **UNMASKED HEARING**

Developed and patented a system of overcoming the masking of high notes by low and middle notes in Deaf Aid amplifiers by employing a pair of telephones in one of which the intensity of low and middle notes is greatly reduced Thus, since the lower and middle notes heard in one ear cannot mask the high notes heard in the other a high order of intelligibility is obtained even at very high volume levels The same effect cannot be obtained by using only one telephone This system, which is protected by British Letters Patent No 434,294, has since 1934 been described by us and has come to be generally known by the Medical Profession and deaf people as UNMASKED HEARING

CRYSTAL MICROPHONE IN PORTABLE DEAF AIDS

We believe that our Portable Type P, first shown at the Radio Exhibition 1934, was the first commercial Deaf Aid to employ a crystal microphone

1935 **POCKET VALVE DEAF AID**

Introduced what we believe to be the first POCKET VALVE AID offered to the deaf

1936 **THE REACTOR DEAF AID**

Produced miniature 3-valve crystal microphone Deaf Aid Entirely dry battery operated and employing negative reaction for tone and volume control BRITISH PATENT No 476,877

AUTOMATIC VOLUME CONTROL

Introduced Automatic Volume Control in Deaf Aids

1937 **THE VEST POCKET MULTITONE**

Produced a 3-Valve Crystal microphone Deaf Aid for the pocket believed to be the first of its type

TELESONIC SYSTEM FOR THEATRES AND CINEMAS

Developed a form of inductive pick-up for theatres and cinemas which we gave the name of TELESONIC SYSTEM According to this system the Deaf Aid receives the recorded sound in the case of cinemas or the sounds on the stage in the case of theatres not through the microphone but through a pick-up coil which is energized by conductors disposed about the auditorium Thus the deaf person can hear from any seat in any part of the house without attaching the instrument to any fixed point and without being disturbed by the usual auditorium noises Some cinemas and theatres have already been fitted up by us and the system is being taken up by the Gaumont group of cinemas Negotiations with other groups are in progress Patent has been applied for
Since our first installation numerous attempts have been made to devise or market similar systems with which we are in no way concerned

1938 Developments during the current year will be dealt with in our next advertisement

MULTITONE ELECTRIC CO., LTD.

92, New Cavendish Street, W 1

And at 2, St John Street Manchester, 3 *Agents throughout the*

Visitors welcomed
Stand No. 41
Ilfracombe

J. & A. CHURCHILL

B.M.A.
Exhibition
18th to 22nd July

FOR PHYSICIANS

BEAUMONT'S MEDICINE
Essentials for Practitioners and Students
Fourth Edition. 4 Illustrations.

TAYLOR'S PRACTICE OF MEDICINE
Fourth Edition. Revised and Edited by E. P. POULTON, D.M., F.R.C.P. With 1 Plate (1 Coloured) and 104 Text Figures.

BROWNE'S ANTENATAL AND POSTNATAL CARE
Second Edition. 9 Illustrations.

PEARSON & WYLLIE'S RECENT ADVANCES IN DISEASES OF CHILDREN
Third Edition. With 2 Plates and 37 Figures. 15s.

LAWRENCE'S DIABETIC LIFE
Its Control by Diet and Insulin
Third Edition. Illustrations. 5s.

EAST & BAIN'S RECENT ADVANCES IN CARDIOLOGY
Third Edition. 14 Plates and 58 Text figures. 15s.

KERLEY'S RECENT ADVANCES IN RADIOLOGY
Second Edition. Illustrations. 7s.

FOR SURGEONS

ROMANIS & MITCHINER'S SCIENCE AND PRACTICE OF SURGERY
Sixth Edition. 898 Illustrations. Two Volumes. 25s.

ROWLANDS & TURNER'S OPERATIONS OF SURGERY
Edited by
Vol. I. 43 Illus. 38 in Colour. 30s.
Vol. II. 14 Illus. 4 in Colour. 5s.

MASSIE'S SURGICAL ANATOMY
Third Edition. 143 Illustrations, many in Colour. 18s.

BURNS & ELLIS' RECENT ADVANCES IN ORTHOPAEDIC SURGERY
103 Illustrations. 7s.

SCOTT STEVENSON'S RECENT ADVANCES IN LARYNGOLOGY AND OTOLOGY
128 Illus. including 13 Plates. 7s.

BRAILSFORD'S RADIOLOGY OF BONES AND JOINTS
Second Edition. 340 Illustrations. 30s.

EDEN & LOCKYER'S GYNAECOLOGY
Fourth Edition. Revised by Sir H. BECHWITH WHITEHOUSE, M.S., F.R.C.S., F.C.O.G. 36 Coloured Plates and 219 Text figures. 35s.

NEW BOOKS AND NEW EDITIONS

ILLINGWORTH & DICK'S TEXTBOOK OF SURGICAL PATHOLOGY
Second (Thirty-Fifth) Edition. 2 Illustrations. 30s.

ILLINGWORTH'S SHORT TEXTBOOK OF SURGERY
With Diseases and Injuries. Text figures. 21s.

SHELDON'S DISEASES OF INFANCY AND CHILDHOOD
Second (Seventh) Edition. Text figures and 13 Plates. 15s.

SYDNEY SMITH'S FORENSIC MEDICINE A Textbook for Students and Practitioners
New (Sixth) Edition. 109 Illustrations. 7s.

DARLING'S SURGICAL NURSING AND AFTER TREATMENT
Second (Sixth) Edition. Illustrations. 5s.

GIBBERD'S SHORT TEXTBOOK OF MIDWIFERY
Illustrations. 7s.

MICKS' ESSENTIALS OF MATERIA MEDICA, PHARMACOLOGY AND THERAPEUTICS
New (Second) Edition. 6s.

PINEY & WYARD'S CLINICAL ATLAS OF BLOOD DISEASES
New (Fourth) Edition. 44 Plates (38 Coloured). 63s.

MAGNER'S TEXTBOOK OF HAEMATOLOGY
29 Illustrations (including 3 Coloured Plates). 15s.

GOULDEN'S REFRACTION OF THE EYE Including Elementary Physiological Optics
New (Second) Edition. 111 Illustrations. 15s. 6d.

DUKE ELDER'S PRACTICE OF REFRACTION
New (Third) Edition. 105 Illustrations. 15s. 6d.

HADFIELD & GARROD'S RECENT ADVANCES IN PATHOLOGY
New (Third) Edition. 66 Illustrations. 7s.

WHITBY'S MEDICAL BACTERIOLOGY
(Descriptive and Applied)
Second (Third) Edition. 70 Illustrations. 21s. 6d.

GILL'S SEASONAL PERIODICITY OF MALARIA and the Mechanism of the Epidemic Wave.
18 Illustrations. 10s. 6d.

HAWK & BERGEIM'S PRACTICAL PHYSIOLOGICAL CHEMISTRY
New (Eleventh) Edition. 7 Coloured Plates and 281 Text figures. 35s.

MODERN WORKS

SHAW'S TEXTBOOK OF GYNAECOLOGY
Second Edition. 4 Coloured Plates and 7 Text figures. 18s.

EDEN & HOLLAND'S MANUAL OF OBSTETRICS
Fifth Edition. By EARDLEY HOLLAND, M.D., F.R.C.S., F.C.O.G. 12 Plates (5 Coloured) and 71 figures. 15s.

WHITBY & BRITTON'S DISORDERS OF THE BLOOD
Second Edition. 11 Plates (6 Coloured) and 61 Text figures. 25s.

CLARK'S APPLIED PHARMACOLOGY
Sixth Edition. 83 Illustrations. 12s.

HARRISON'S CHEMICAL METHODS IN CLINICAL MEDICINE
Second Edition. 3 Coloured Plates and Text figures. 15s.

POYNTON & SCHLESINGER'S RECENT ADVANCES IN THE STUDY OF RHEUMATISM
Second Edition. 11 Illustrations. 7s.

NEUSTATTER'S MODERN PSYCHOLOGY IN PRACTICE
With a Foreword by P. D. CHILESHE, M.D., F.F.C.P., D.P.M. 10s. 6d.

FOR STUDENTS

QUEEN CHARLOTTE'S TEXT BOOK OF OBSTETRICS
Fourth Edition. Coloured Plates and 291 Text figures. 18s.

BEAUMONT & DODDS' RECENT ADVANCES IN MEDICINE
Eighth Edition. 45 Illustrations. 7s. 6d.

CUSHNY'S TEXTBOOK OF PHARMACOLOGY AND THERAPEUTICS
Eleventh Edition. Revised by C. W. EDMUNDS, M.D., and T. CUNN, M.D., F.F.C.P. 70 Illustrations. 25s.

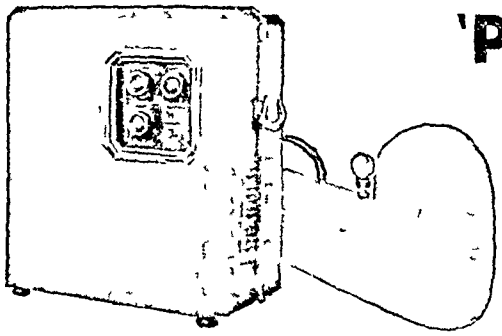
JAMESON & PARKINSON'S SYNOPSIS OF HYGIENE
Fifth Edition. 17 Illustrations. 5s.

WINTON & BAYLISS' HUMAN PHYSIOLOGY
Second Edition. 221 Illustrations. 7s.

JOHNSTON'S SYNOPSIS OF REGIONAL ANATOMY
Third Edition. 111 Illustrations. 12s. 6d.

NEAME & WILLIAMSON NOBLE'S HANDBOOK OF OPHTHALMOLOGY
Second Edition. 12 Plates containing 46 Coloured Illustrations and 14 Text figures. 12s. 6d.

104 GLOUCESTER PLACE, LONDON W.1



'PAVAEX' Passive Vascular Exerciser

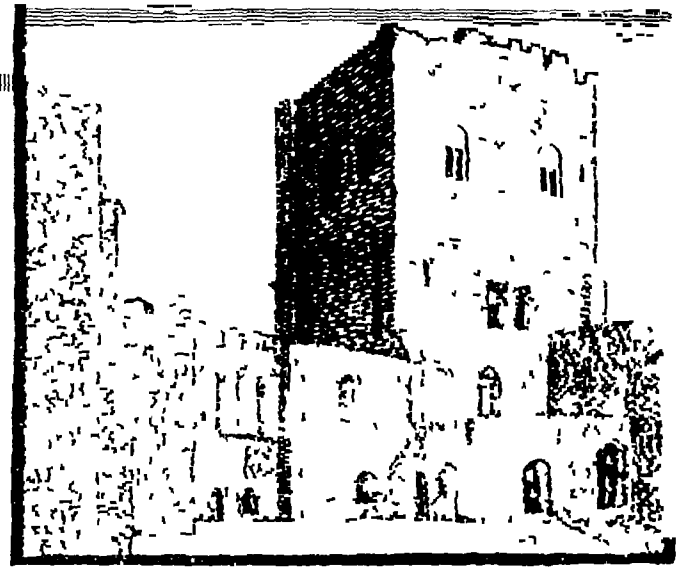
PRESSURE – HEAT – LIGHT

The Pavaex has for some time successfully promoted more rapid reconstruction of gangrenous tissue indolent ulcer etc It comprises a movable pressure mechanism and a boot of Pyrex Glass Controlled pressure and suction and artificial hyperthermia may thus be given concurrently to stimulate blood flow and local metabolism

Please write for case histories full details and operating instructions

DEMONSTRATIONS at the B M A EXHIBITION, PLYMOUTH, JULY 18th-22nd STAND No 50

SHORT & MASON, LTD., *The Instrument House,* **ANEROID WORKS, LONDON, E 17**



Porchester Castle, Hampshire

"There's no sweeter Tobacco comes from Virginia and no better brand than the 'Three Castles.'"
W M Thackeray—"THE VIRGINIANS"

10 FOR 8D
20 FOR 1/4
30 FOR 2/-
50 FOR 3/3
Handmade
20 FOR 1/6
Also obtainable in other packings

WILLS'S
THREE CASTLES
CIGARETTES

One expects to pay a little more for a cigarette of such excellent Quality

SECOND EDITION Pp xii + 132 Crown 8 o 6s net

THE TREATMENT OF RHEUMATOID ARTHRITIS AND SCIATICA

By A H DOUTHWAITE M D F R C P Physician to Guy's Hospital

clear and concise ... ful guide ... covers —MEDICAL PRESS
The inclusion of sciatica ... greatly enhances the value ... becomes ... already ... the credit ...
... well worth their while to procure the second ... MEDICAL JOURNAL OF AUSTRALIA

LONDON H K LEWIS & Co Ltd., 136, GOWER STREET, W C 1

Should be in the possession of every medical man —*Glasgow Medical Journal*

URINARY SURGERY A HANDBOOK FOR THE GENERAL PRACTITIONER

By **W. K IRWIN,** M D F R C S

Surgeon St Paul's Hospital for Genito Urinary Diseases

Clearly written ... furnishes the practitioner with information of great practical value in his everyday work —*The Lancet*

SECOND EDITION Revised and Enlarged Price 10s 6d (postage 6d)

BAILLIERE, TINDALL & COX, 7 & 8, Henrietta St., Lerden, W C 2

NAME PLATES
in BRONZE or BRASS
Estimates and Sketches sent free

H K LEWIS & Co Ltd
Medical and Scientific Stationers
136 Gower St London W C 1

• Textbook of

NEURO-RADIOLOGY

by Cecil P G Wakeley. DSc FRCS FRSL FACS FRACS (Hon) *Fellow of King's College London Senior Surgeon King's College Hospital and West End Hospital for Nervous Diseases London*

and Alexander Orley. MD DMRL *Fellow of the British Association of Radiologists Radiologist West End Hospital for Nervous Diseases London*

A large number of papers have been published in different countries on the different aspects of neuro radiology but there is no work dealing with the subject as a whole, and it is with the intention of filling this gap that this work has been written

Pp xvi + 336 *229 Illustrations*

Price 25/- Postage 6d

• Second Edition

THE FOOT

by Norman C Lake MD MS DSc (Lond) FRCS (Eng) *Senior Surgeon and Lecturer on Surgery Charing Cross Hospital London*

'The quality of information presented is high is so good that it should be read by everybody"

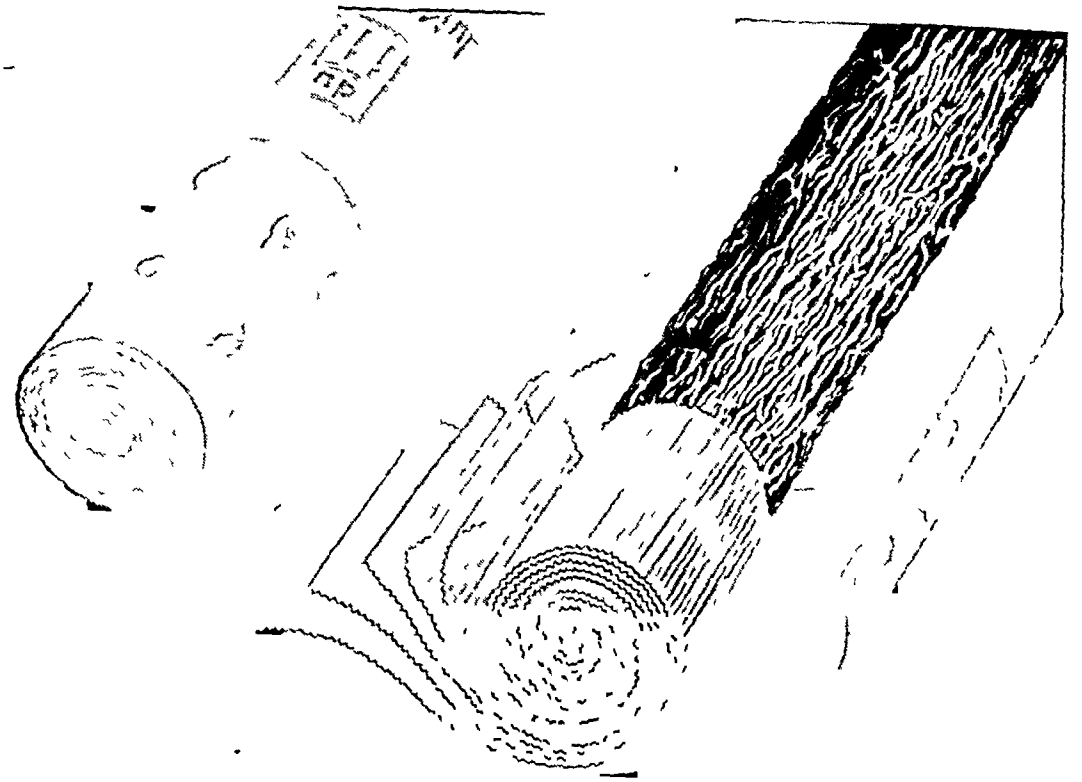
—British Medical Journal

Pp viii + 366 *113 Illustrations*

Price 12/6 Postage 6d

London: Baillière, Tindall and Cox

7 and 8 Henrietta Street Covent Garden, W C 2



PURE enjoyment with this filter tip

In du Maurier cigarettes the full flavour of Virginia tobacco can be enjoyed in the certainty that no throat irritants, no "bits" of tobacco, nothing in fact but the pure and fragrant smoke can pass through the filter tip. The five protective layers in the filter tip are there to guard the health of smokers. du Maurier can be bought either cork tipped in the red box or plain tipped in the blue box.

du MAURIER

the perfect cigarette with the exclusive filter tip

TEN FOR SIXPENCE—TWENTY FOR ONE SHILLING

The WOLSELEY 14/56 answers every need of the doctor

EASY STARTING—In the Wolseley 14 56 h p a thermo statically controlled water system does away with warming up delays and sluggish pulling A 12 volt electric system and twin batteries ensure ample starting energy

ROOMINESS—Quick and easy exit through wide doors fresh air renewal every 60 secs and anatomically correct seat ing mean lack of fatigue on even the longest day

NIGHTWORK — Powerful headlamps twin fog lamps stop and reversing lamps and duplex screen wipers lessen the strain of dark and rainy nights

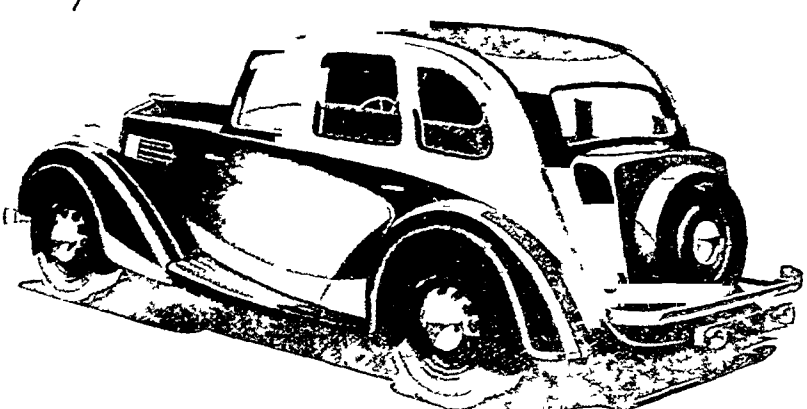
ECONOMY—25 to 28 miles per gallon is good for a 14 Wolseley stabilised production policy lowers deprecia tion

QUIET — Body door and floor are comple ely insulated from noise—the interior from fumes

APPEARANCE — The Wolseley 14 56 either as a Saloon or in its Salon de Ville form is a distinguished hand some car—very indicative of the s anding of its owner

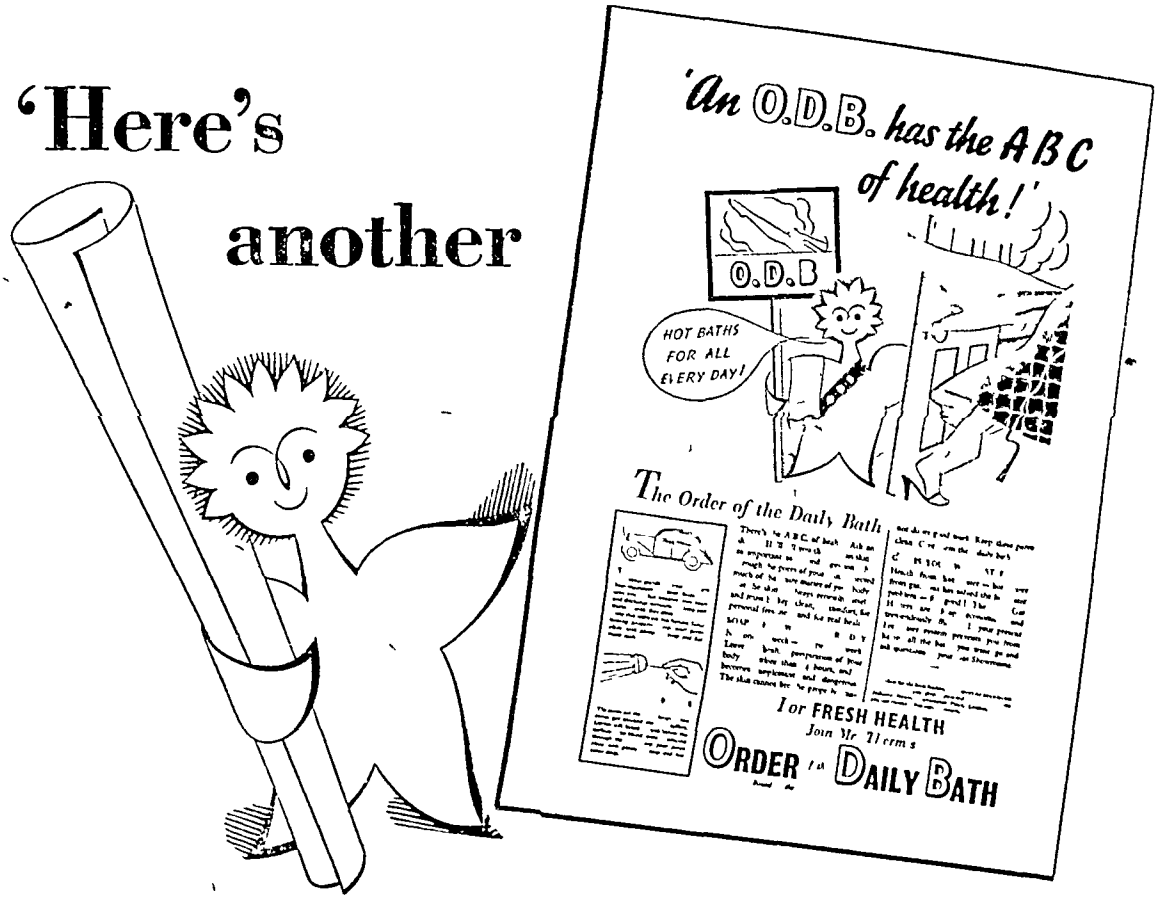
WOLSELEY 14/56 - "the doctor's car"

The p ice of the 14/56 h p Saloon i f om £204—the Salon de Ville £1 6 16/80 h p a e f om £2 0 Supe Sixes from £350 and the 1_/4- h p f om — Dunl p Tyres Tri p'ex Safety Class an f Jackall Jacks



WOLSELEY MOTORS LTD WARD END BIRMINGHAM 8 London Distributors Eust..ce Watkins Ltd Berkeley Street W1
Sole Exporters M I E Ltd., Cowley Oxford England BETTER BUILT—A BRITISH CAR

'Here's another



of my O.D.B advertisements'

says Mr. Therm

It's a bit small for you to read in this reduced form But you probably have seen it and others of the same series full-size in the daily press

Mr Therm's initials O D B stand for the Order of the Daily Bath In a restrained way Mr Therm is advocating a daily bath for all He is arguing along health lines, and he hopes he has the support of medical opinion He is saying that a daily bath keeps the skin clean and obviates some of the disorders of the body

Mr Therm would be delighted to know he had doctors behind him in principle

O.D.B. *is the* **ORDER of the DAILY BATH**

slogan used in a series of national press advertisements

COMMERCIAL GAS ASSOCIATION GAS INDUSTRY HOUSE 1 GROSVENOR PLACE LONDON

INSURANCE
FOR
NATIONAL HEALTH PRACTITIONERS

The Insurance Acts Committee of the British Medical Association after protracted negotiation secured for all Insurance Practitioners an opportunity of entering a

Pension and Insurance Scheme providing

(a) Pension at age 65
(b) Disablement Income
(c) Family Protection

at extraordinarily low rates which are available only until

September, 1942

Policies effected prior to that date will not be affected by any alteration made thereafter

The scheme was made available also to members of the Association not engaged in National Health Insurance practice

These policies are issued through the Medical Insurance Agency of B M A House Tavistock Square acting as agents of the Insurance Offices which adopted the scheme for the collection and receipt of quarterly premiums

All other insurances Motor Household Educational Life and Endowment etc are also available at specially favourable rates

In this as in all else

THE M I A EXISTS TO PROTECT YOUR INTERESTS AND SAVE YOUR MONEY

Medical Insurance Agency Ltd.

BRITISH MEDICAL ASSOCIATION HOUSE
TAVISTOCK SQUARE, LONDON, W C 1

Telephone Euston 1871

AS AN ANTACID OR IN FEBRILE CONDITIONS



LEMBAR JUSTIFIES THE DOCTOR'S HIGHEST RECOMMENDATION

See our Exhibit at the B M A Exhibition, also Diabetic Lembar

RAYNER'S

LEMBAR

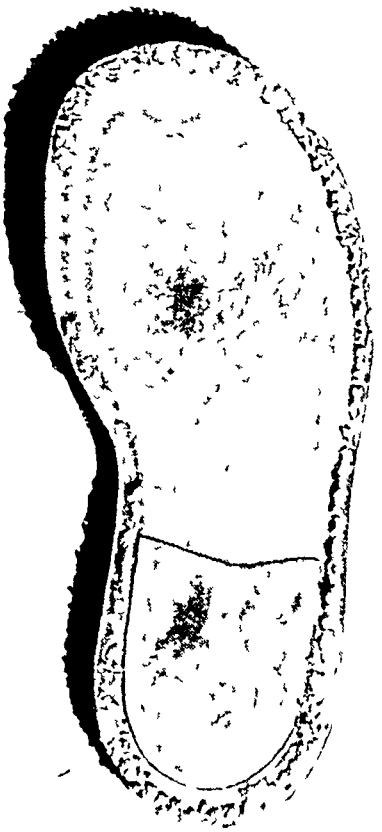
Made from finest fresh lemons, good Scotch barley and Glucose (with cane sugar) More efficient, better flavour and more economical than ordinary lemon and barley *1 bottle makes a gallon* It keeps indefinitely

Tested and approved by a leading London Hospital Prescribe it for any condition in which lemon juice and barley water are allowed

SAMPLE sent with pleasure also useful Lo Diet with recipe diet sheets and sick room recipes from a London Hospital Write to Rayner & Co Ltd Medical Dept B Bradford Y 18

2/- a bottle at all leading chemists and grocers

EVIDENCE



This sandal sole was cut away from a worn and discarded CLARKS sandal.

IT SHOWS the imprint of the child's foot, and demonstrates how faithfully a Clarks shoe is planned to follow the natural foot outline Although the sandals have been well worn, notice that the toes have not reached the end of the shoe, because Clarks shoes allow *extra room for toes to grow*

Clarks

SHOES AND SANDALS **safe** for growing feet!

Illustrated leaflet B4 and name of local agent supplied on request CLARKS STREET

OXYGEN AND NITROUS OXIDE

an important announcement

MEDICAL · BOC · SECTION

to physicians, anaesthetists and hospital authorities . . . .

OWING to the increasing demand for its Medical Gas Products, especially Oxygen and Nitrous Oxide, THE BRITISH OXYGEN COMPANY LTD has established a Medical Section which will control the distribution of Gases and Apparatus and the installation of Pipe Line Equipment throughout the United Kingdom

PRICES According to the consumption of the user and the size of cylinders prices have been established which are uniform throughout the country These prices in nearly all cases represent a considerable saving to Hospitals They are the same whether the Company's or privately owned cylinders are used Further saving can be effected by the use of larger cylinders Gases will be sold by "the cylinder" and not by the cubic foot

CYLINDERS Sizes are being standardised—the smaller and odd capacity cylinders are being withdrawn and Large numbers of new 20 40 100 and 150 cu ft cylinders are being put into circulation All are being treated in enamel finish and fitted with new easy working Chromium Plated Valves The larger sizes for Oxygen Tent and Pipe Line use are fitted with self supporting ring bases

NO HIRE CHARGES In future no Hire Charges will be made on Medical Gas Cylinder Many thousands of new cylinders are needed to make this important innovation possible and the co operation of customers is requested in the matter of the speedy return of empties

DELIVERY SERVICE Our fleet of vans has been considerably augmented so that almost every town in the Kingdom is covered by a Regular Guaranteed Delivery All gases are Delivered Free moreover intermediate requirements by Rail or Carrier are also (subject to certain conditions) delivered free Hospitals which already deal direct with the Company will receive automatically the benefits of the new conditions as from 1st July 1938 Others are invited to write for particulars

Allow the Medical Section to supply all your gas requirements—

OXYGEN OXYGEN + CO_2 CO_2 NITROUS OXIDE
GAUGES REGULATORS FLOWMETERS etc

GAS-AIR/GAS-OXYGEN ANALGESIA & ANÆSTHESIA APPARATUS
PIPE LINE INSTALLATIONS

THE MEDICAL SECTION

THE BRITISH OXYGEN COMPANY LTD.

Telephone
ARNOLD 1234 (10 lines)

WEMBLEY, MIDDLESEX

Telegrams
OXYGEN WEMBLEY



ROBUVAL

ELIXIR STRONTII BROMID et VALERIAN INODORAT

PALATABLE yet possessing all the CALMATIVE properties of VALERIAN and BROMIDE FREE FROM BARBITURATES

A HIGHLY EFFECTIVE SEDATIVE

For Prescribing - - - - 8 oz 3/6
For Dispensing - 40 oz 10/6 net, 80 oz 20/- net

TRIAL BOTTLE LITERATURE & FORMULA from

ROBERTS & CO., *Pharmaceutical Chemists* 76, New Bond Street, LONDON, W1

Phone MAYfair 4173

VICHY-CELESTINS

THE WORLD RENOWNED NATURAL MINERAL WATER



This Natural Alkaline Mineral Water may be prescribed with absolute confidence with regard to its purity and natural condition It is bottled at the Springs under the most careful supervision, and to ensure fresh supplies is imported with regular frequency

NATURAL VICHY SALT for Drinking and Baths

The VICHY WATERS, being almost devoid of Sulphates, are most agreeable to the taste, and are daily relied upon by Physicians the world over in the treatment of Gout and Rheumatism and for Affections of the Liver, Stomach, etc

VICHY DIGESTIVE PASTILLES prepared with Natural Vichy Salt

CAUTION —Each bottle from the STATE SPRINGS bears a neck label with the word "VICHY ETAT" and the name of the SOLE AGENTS

INGRAM & ROYLE, Ltd.

Bangor Wharf, 45, Belvedere Road, London, S E 1 And at Liverpool and Bristol

Samples free to Members of the Medical Profession

Modern Iron Therapy

Iron Jelloids are an elegant and reliable means of administering the protocarbonate of iron The preparation has none of the disadvantages of Pil Blaud The iron content remains fresh and unoxidized indefinitely and injury to teeth is avoided

The Jelloids are highly effective in the treatment of achlorhydric anaemia and indeed in all the simple anaemias in which massive iron therapy is indicated

Iron Jelloids

You are cordially invited to apply for samples for clinical test

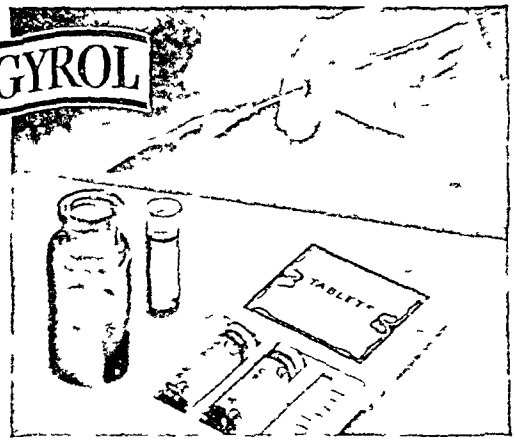
Hedley Jelloid Company Ltd Kings Langley Watford Herts

LACTAGOL (Tdestine Calcium Phosphorus) helps to compensate for the co istant drain by the foetus upon the reserves of the expectant mother
It is a valuable roborant during convales cence following parturition and exerts a definite galactagogue action on the mammary glands of the nursing mother Specimens for clinical trial free on appli cation Lactagol Ltd Mitcham Surrey

Expectant and Nursing Mothers thrive upon Lactagol

Sinusitis in Older Children

ARGYROL
BRAND SILVER VITELLIN



Infections in older children with larger sinuses and relatively smaller ostia require special treat ment in addition to the removal of constitutional disorders

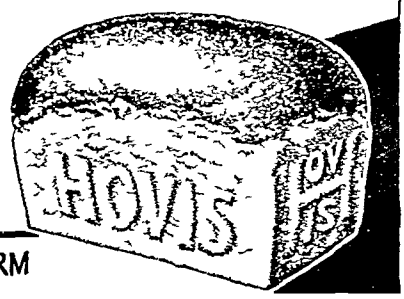
The most approved treatment consists of the use of suction, removal of adenoids, and nasal tam pons of 10 per cent solution of Argyrol—the standard in mucous membrane inflammations for many years

Argyrol has peculiarly sedative, inflammation-allaying qualities, and its clinical successes of 30 years' duration may be easily accounted for by pertinent chemical facts

The very great differences between Argyrol and other silver salts in silver ion and in hydrogen ion concentration (or alkalinity) no doubt have much to do with the irritation noted by doctors when allegedly equivalent mild silver proteins are substituted The pH and p Ag of Argyrol are especially regulated for treatment of delicate mucous membranes Insure the results you expect—specify 'ARGYROL"

Sole Distributors
FASSETT & JOHNSON, LTD.,
86, Clerkenwell Road, London, E.C.1.
THERE IS ONE AND ONLY ONE "ARGYROL," MADE ONLY BY A. C. BARNES COMPANY SOLE MAKERS OF ARGYROL AND OVOFERRIN

★APART from its low starch content, HOVIS is practically free from indigestible cellulose



Best Bakers Bake it
Macclesfield

Contains 25% ADDED WHEAT-GERM
Rich IN VITAMIN 'B'

H 279 A

IT ISN'T JUST "GOOD-FOR-YOU"

DOLE Pineapple Juice as you can see from the analysis below is a valuable addition to anybody's diet It is a good source of Vitamins A B and C and natural fruit sugars It provides mineral salts Calcium Oxide 022% Magnesium Oxide 019% Copper 0002% Manganese 0003% and Iron 0005% Dole Pineapple Juice has an alkaline reaction in the body which tends to offset the effects of acid producing foods It has been accepted by the American Medical Association Committee on foods and is in constant use in many American Hospitals and Nursing Homes

But it is equally important that this valuable fresh fruit drink is more than acceptable to patients especially children with obstinate appetites or fickle tastes Its fresh fine flavour, not like the syrupy liquid you expect to find with tinned pineapple is refreshing thirst quenching and invigorating *It is not often you come across a drink that you can recommend with such sure knowledge that your advice will be followed*





TYPICAL ANALYSIS OF DOLE PINEAPPLE JUICE

Moisture	85 3 %	Titratable acidity as citric acid	0 9 %
Ash	0 4 %	Reducing sugars as invert sugar	12 1 %
Fat (ether extract)	0 3 %	Carbohydrate other than sugars (by difference)	0 38 %
Protein (N 6 25)	0 3 %		
Crude fibre	0 02%		

* * *

Dole Pineapple Juice is unsweetened chemically with no preservative and no added sugar

Nearly 2 000 doctors have received the sample tin of Dole Pineapple Juice If you will write us on your letterhead we shall be pleased to send you one

It comes to you fresh from Hawaii where it is unsweetened by the Dole Fast Seal Vacuum Pack

DOLE PINEAPPLE JUICE *From Hawaii*

J K HUSBAND & CO LTD 10 EASTCHEAP LONDON E C 3

BAUMOL TOILET SOAP

A pure super-fatted soap introduced to the public more than half a century ago Recommended by the medical profession

Duncan

BAUMOL BATH SOAP

A super-fatted hard soap specially milled and perfumed for use in the bath

Particulars on application

BAUMOL MEDICATED SOAPS

A full range of medicated soaps Invaluable in dermatological practice

DUNCAN, FLOCKHART & CO.

EDINBURGH 104-108, HOLYROOD ROAD, 8

and

LONDON 155, FARRINGDON ROAD, E C 1

ACETYLCHOLINE B.D.H.

Substitution therapy is the rational form of treatment in endocrine disorders when immediate results must be obtained This is so also in such conditions as paralytic ileus, Raynaud's disease, embolism of the retinal artery, amblyopias and post-operative abdominal distension In all these conditions Acetylcholine B D H continues to be used with success

Acetylcholine B D H is a stable sterilised solution of acetylcholine bromide issued in solution containing 0 1 grm in each 1 c c in ampoules of ½ c c, 1 c c and 2 c c

Sample on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegram Tetradome Telex London

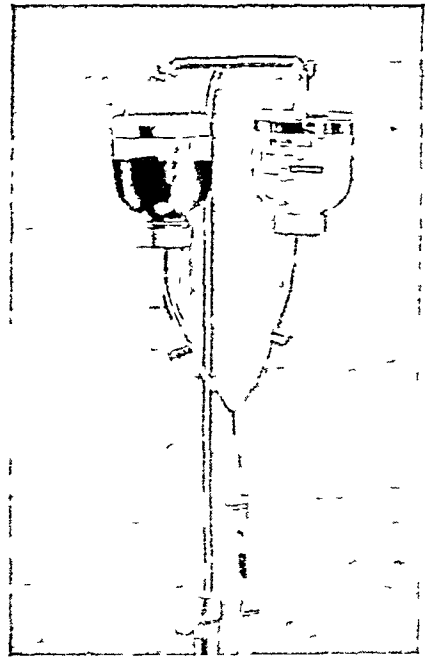
A et S 10

A NEW TECHNIQUE FOR THE INFUSION OF BLOOD AND SALINE

The infusing of citrated blood and saline by means of the new Baxter Indirect Blood Transfusion Apparatus, coupled with a Baxter "Vacoliter" of Saline Solution, is the latest contribution on the part of Baxter to Intravenous Therapy

Over 400 Hospitals in England have standardised on Baxter's Intravenous Solutions in "Vacoliters" and we are glad to present this further evidence of the efforts of the Baxter Laboratories to improve and simplify Hospital methods

We shall be pleased to send on request further details regarding the Baxter Blood and Saline Infusion Technique and welcome the opportunity to show you how simply and effectively it operates



JOHN BELL & CROYDEN
Wigmore Street, London, W 1
DAY AND NIGHT SERVICE

Sole Distributors in Great Britain for Baxter Laboratories Ltd
24 Conway Road N 15

THYMINIC ACID BASE

URALYSOL

TRADE MARK

FORMULA

Thyminic Acid	0 10
Hexamethylenetetramine Anhydromethylenecitrate	0 50
Hexamethylene Tetramine	2 50
Piperazine Tartrate	0 25
Lithium Carbonate	1 00
Sodium Benzoate	1 00
Effervescent Base	ad 100

DIRECTIONS

One teaspoonful to be taken morning and night in a tumblerful of water

Uralysol, in addition to being a solvent and eliminator of pathological Uric Acid, is a powerful urinary antiseptic.

Normally there exists in the body a certain quantity of uric acid which assists general metabolism, and after it has played its part is eliminated together with the normal thyminic acid of the organism When however, uric acid is present in excess, the body needs additional thyminic acid to supplement the resultant deficit of this normal solvent of uric acid

Uralysol, by its thyminic acid content, supplies the agent necessary to dissolve excessive uric acid

The next step is the elimination of this thyminic uric acid which, being in excess of normal, necessitates treatment by an agent capable of enhancing elimination

Uralysol, by its content of hexamethylenetetramine and lysidin, stimulates the organism to eliminate the pathological uric acid already dissolved by its thyminic acid content.

Samples and literature on request

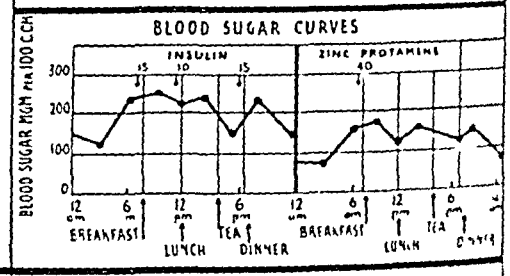
CONTINENTAL LABORATORIES LTD CL **30 MARSHAM STREET, LONDON, S W I**

PROTAMINE INSULIN

(with Zinc) SUSPENSION .. BOOTS

The fall in blood sugar after injection of Protamine Insulin (with Zinc) Suspension is gradual, and the Insulin carbohydrate metabolism reproduces closely the continuous secretion of Insulin as it takes place in the normal person

RELATIVE HYPOGLYCAEMIC EFFECT OF
PROTAMINE INSULIN
(WITH ZINC) SUSPENSION BOOTS and INSULIN



Blood sugar curves from a man aged 65 years; the first while taking Insulin, the second while taking Protamine Insulin (with Zinc) Suspension—Boots. The diet was the same on both occasions. (See Brit. Med. J. 1937, 1, 516).



With small doses (under 30 units) the risk of hypoglycemia is less than with Insulin and Protamine Insulin (with Zinc) Suspension is particularly valuable for use in general practice Supplied in rubber capped vials in the following strengths

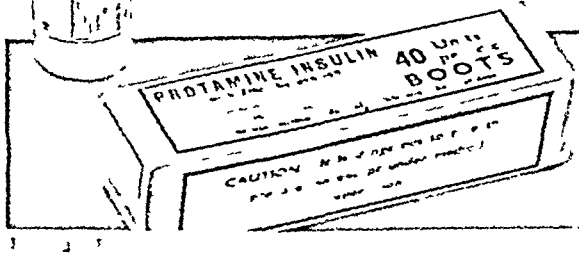
40 units per c.c.

5 c.c. vial (200 units) - - 2/1
10 c.c. vial (400 units) - - 1/6

80 units per c.c.

5 c.c. vial (100 units) - - 1/6

Full details of the treatment of Diabetes Mellitus with Protamine Insulin (with Zinc) Suspension are given in our booklet a copy of which will be sent on request to the



WHOLESALE & EXPORT DEPARTMENT
BOOTS PURE DRUG CO. LTD.
NOTTINGHAM ENGLAND

HEPATEX WITH IRON

A POWERFUL STIMULANT OF THE BLOOD REGENERATING ORGANS

Of distinctive service in —

The anæmia of pregnancy
Stubborn secondary anæmias
Anæmia resultant upon hæmorrhage

In the maintenance treatment of **Pernicious Anæmia** Hepatex with Iron affords helpful support during trying seasons of the year

DOSE One or two teaspoonfuls per day are ample in the majority of cases

Hepatex with Iron a combination of Hepatex Liver Extract with a readily assimilable form of iron is issued in 2-oz bottles 8/6 each

Evans Sons Lescher & Webb Ltd.

Manufacturers of Fine Chemical Pharmaceutical & Biological Products

LIVERPOOL AND LONDON

MERSALYL B.D.H.

Injection of Mersalyl B P

The use of mercurial diuretics has become an established routine in ordinary clinical practice The superiority of the sodium salt of salicyl-(γ-hydroxymercuric-β-methoxypropyl) amide-O-acetic acid over other diuretics is officially recognised, and this substance has been included in the B P Addendum under the name 'Mersalyl' and as 'Injection of Mersalyl'

Mersalyl is indicated in various œdematous conditions, particularly those associated with cardiac dysfunction

It will be found in most cases that premedication with digitalis considerably enhances the effect of mersalyl

Mersalyl B D H is available in a sterile buffered solution in ampoules of 1 c c and 2 c c , it is supplied also in suppositories for adjuvant treatment or for administration (following a single injection) in mild cases

Literature on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome, Telex, London

Mrsl/S/42



In anæmic conditions of indeterminate origin

Livôgen contains an abundance of supplementary principles essential for the control of anæmia Its daily administration is followed by a marked increase in the number of red blood corpuscles, the lassitude, inertia and lack of zest associated with anæmia are overcome, and with renewed appetite and return of normal digestive processes the period of convalescence is shortened and the patient returns to the full enjoyment of robust health

LIVOGEN

Sample on request

THE BRITISH DRUG HOUSES LTD
LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

Lgn/S 60

Streptocide

(p aminobenzenesulphonamide Evans)

Therapeutical Indications

Acute Puerperal Sepsis, Erysipelas, Tonsillitis, Streptococcal and Meningococcal Meningitis, Gonorrhoeal and B Coli infections of the Genito-urinary tract

Tablets
In bottles of 25 0 25 grm 1/3 0 5 grm 1/6
100 3/9 1/6
250 9/3 11/-

Folded Powders
In boxes of 12 0 25 grm 2/6
0 5 3/3

Streptocide Ointment

Therapeutical Indications

Empyematous Sinus
Cytolysis
Post Scarlatinal Rhinitis
Chronic Ulceration
Impetigo
Erysipelas and Scarlatinal rashes
Infected Wounds and Burns
Whitlow
Varicose Ulcers
Cellulitis

For external use

Contains 5% Streptocide in solution in a fat basis

Issued in 2 oz Collapsible Tubes 2 3 and
1 lb Tins 13,-

Streptocide Cream

Recommended in acute inflammatory conditions when rapid absorption of the drug is essential Free from irritant effects and may be applied over extensive areas

Same strength as above but in a water soluble base

Issued in 2 oz Collapsible Tubes 2 6

Made at THE EVANS BIOLOGICAL INSTITUTE by

EVANS SONS LESCHER & WEBB LTD.

Liverpool and London

Ergoapiol-(Smith)

A Menstrual Regulator . . .

When the periods are irregular, due to constitutional causes Ergoapiol (Smith) is a reliable prescription Containing apiol (M H S special) together with ergot aloin and oil of savin of the highest quality this preparation effectively stimulates uterine tone and controls menstrual and postpartum bleeding

In cases of *Amenorrhea, Dysmenorrhea, Menorrhagia* and *Metrorrhagia*, Ergoapiol serves as a good uterine tonic and hemostatic Valuable in obstetrics after delivery of the child and for the menstrual irregularity of the *Menopause*

Prescribe 1 to 2 capsules 3 or 4 times daily Supplied only in packages of 20 capsules Literature on request

As a safeguard against imposition the letters MHS are embossed on the inner surface of each capsule *visible only* when the capsule is cut in half at seam as shown

MHS

MARTIN H. SMITH COMPANY
NEW YORK, N.Y., U.S.A.

THOS. CHRISTY & CO., LTD., 4 & 5 OLD SWAN LANE, LONDON, E.C. 4, ENGLAND
Specialists in Glandular Products

OVALTINE

IN PREGNANCY

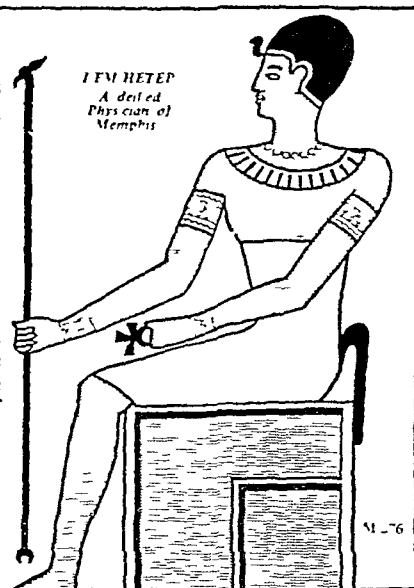
THE physiological drain of calcium phosphorus vitamins and other important food elements calls for replacement during pregnancy Composed of milk eggs and malt 'Ovaltine' supplies these essentials in a delightful form which does not overtax the unstable maternal digestion A cup of 'Ovaltine' on arising during the early months, is often effective in controlling sickness and has a food value greater than three eggs

IN LACTATION

To maintain lactation to the eighth month is an ideal not often realized under modern conditions of life Ample evidence is available to show that 'Ovaltine' has a definite action in increasing the flow and enriching the quality of the milk It has, moreover a beneficial effect on the health of mother and child The flavour is so agreeable that it can be taken for prolonged periods without any distaste arising

A liberal supply for clinical trial send free on request

A WANDER, Ltd, 184, Queen's Gate, S W 7
Laboratories and Works KING'S LANGLEY HERTS



OUTSTANDING Products!

No. 24

KAYLENE
(Kaylene Brand of Colloidal Kaolin)

KAYLENE-OL
(Kaylene Brand of Colloidal Kaolin with highly viscous liquid paraffin)

MAGSORBENT
(The original and standard brand of Synthetic Hydrated Magnesium Trisilicate)

★

Visit our stand at the BRITISH MEDICAL ASSOCIATION EXHIBITION, PLYMOUTH, JULY 18th to 22nd.

Samples and literature obtainable from the sole manufacturers —

KAYLENE, LTD., Sole Distributors ADSORBENTS, LTD, **WATERLOO RD., LONDON, N.W.2**

Telephone GLAdstone 1071/2/3 *Telegrams Kayloidol, Gold Ford*

KOROMEX METHOD

The Koromex Occlusive Diaphragm is made in a range of sizes to fit each individual patient, pure latex rubber pessaries Light and comfortable, practically unfelt Two-year durability guaranteed Practitioners and birth control clinics, for more certain protection, prefer to use the perfect fitting Koromex Diaphragm with

KOROMEX VAGINAL JELLY

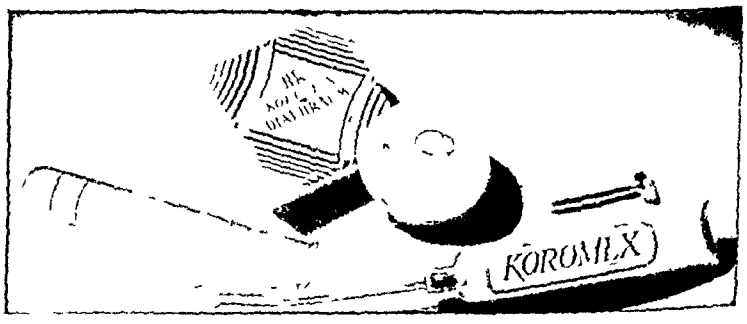
Stainless and prolonged effective spermicide The carefully gauged viscosity of Koromex Jelly affords the all-important mechanical block No toxicity or irritation makes the diaphragms easier to insert

Advise the Koromex Method Your patient will be grateful

A sample of Koromex Jelly will be sent on application to medical practitioners also a booklet the Physician's Guide on the technique of fitting the Occlusive Koromex Diaphragm No charge Write to

The Highest Record of PROVEN SUCCESS in Contraceptives

● **Evidence of the high degree of efficacy of the Koromex Method is based upon the experience of 234 clinics—140 hospitals—over 50,000 physicians.**



THE KOROMEX METHOD

KOROMEX DIAPHRAGM + KOROMEX JELLY

● The Koromex Diaphragm appears on the National Birth Control Association's approved list with seven Premier products, including Condoms, Sheaths, Jellies and Suppositories Price list and samples on request

PRENTIF LIMITED, CONTRACEPTIVE SPECIALISTS, LONG'S COURT, ST. MARTIN'S STREET, LONDON, W.C.2

Sole agents in Great Britain for Holland-Rantos Co., Inc New York

If you are not receiving regularly the Prentif Quarterly Medical Bulletin Contraception Practice Kindly inform us We shall be pleased to supply missing back numbers and arrange that future issues are specially sent

CRUNCHY FOODS AND THE HEALTH OF CHILDREN

The inclusion in every child's diet of a quantity of hard, dry food is regarded as essential by many practitioners Such food compels thorough mastication, the regular exercise this gives to the jaws is believed to assist their correct development, thus preventing many possible troubles to the teeth in later life

The importance of instilling the habit of thorough mastication is further stressed because of its value to digestion, to which the practice of swallowing insufficiently chewed masses of food is considered extremely harmful

Many physicians therefore recommend that growing children should eat crisp Ryvita with their meals Free samples of Ryvita for distribution to patients will gladly be supplied on request

THE RYVITA COMPANY LIMITED
96-98 SOUTHWARK ST LONDON SE1
Bakeries in Birmingham

4238

PROMOTES METABOLISM

To ensure a well balanced metabolism the tissues need more than heat and energy Organic elements and inorganic salts must be furnished in proper proportion in order that the electric magnetic and chemical forces

SALVITAE

locked up in the food molecule and released by digestion may make the metabolic processes effective for health SALVITAE makes available the minerals to restore and sustain metabolic balance in conjunction with a properly prescribed diet



Professional samples and literature gladly sent on request

COATES & COOPER LTD, 94, CLERKENWELL ROAD, LONDON, EC1

NOVOCAIN

Brand Ethocain

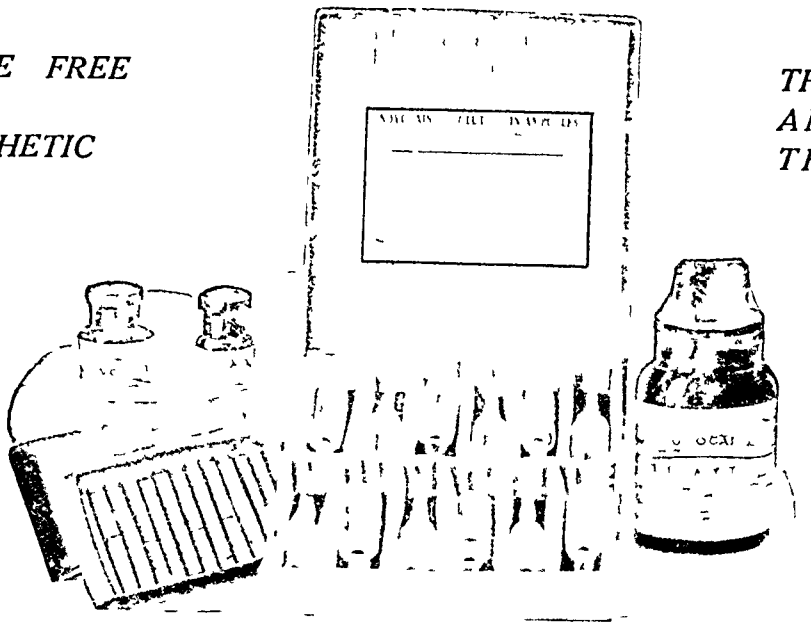
The Original Preparation

English Trade Mark No 276477 (1905)

The Safest and most Reliable Local Anaesthetic for all Surgical Cases.

COCAINE FREE
LOCAL
ANAESTHETIC

THE OLDEST
AND STILL
THE BEST



For use in all cases of Local and Spinal Anaesthesia.

Supplied in

Powder
Tablets of various Sizes
Ampoules of Solution
Ampoules of Sterilized Powder

Does not come under the Restrictions of the Dangerous Drugs Act

WRITE FOR LITERATURE

Sold under agreement

THE SACCHARIN CORPORATION LTD, 72, Oxford Street, London, W 1

Tele... SACCARINO BATH LONDON Telephone MUSEUM 80...

...Agent J. L. EKOW & CO ...ealand Agent THE DE... L & MEDICAL SUPPLY CO LT...

INDICATIONS FOR SANATOGEN No 5

"NERVES"

"Social conditions not a direct determinant"

found Guy's Hospital

The recent investigations conducted by the Department of Psychological Medicine of Guy's Hospital show that poor social conditions are not in themselves a direct determinant of nervousness in young people Yet impaired alimentary absorption combined with increased bodily demand for certain food elements is characteristic of sufferers from neurasthenia and other forms of "nervous debility"

In the treatment of functional nervous disorders, occupational therapy, change of surroundings, suggestion, psycho-analysis, and other methods essentially psychic, play a leading part But the nutritional problems also call for consideration The "nervous" patient, whether adult or child, usually has poor capacity for absorbing and metabolising the food he eats, and he is quickly fatigued

Hence it is that marked improvement in these cases nearly always follows the regular use of 'Sanatogen'—a carbohydrate-free product of 95 per cent pure milk casein, with 5 per cent sodium glycerophosphate 'Sanatogen' is easily digested and quickly absorbed Also it promotes the absorption, and increases the nutritive value, of other foods It helps to restore mental and nervous energy, lessens depression and postpones the onset of fatigue

'SANATOGEN'

A brand of Casein and Sodium Glycerophosphate

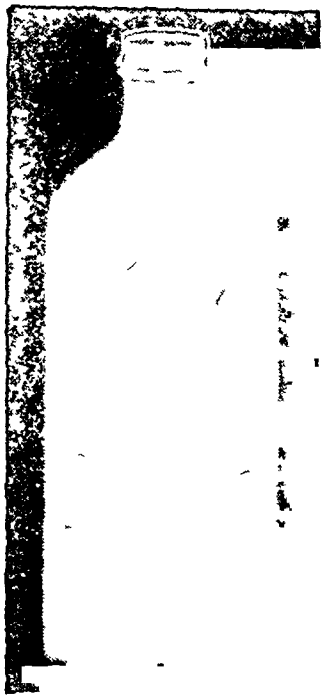
Sold by all chemists price 2/3 to 19/9

DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants teaspoonful added to each bottle feed

GENATOSAN LTD LOUGHBOROUGH

Clinical samples and literature available on request to

GENATOSAN LTD, LOUGHBOROUGH, LEICESTERSHIRE.

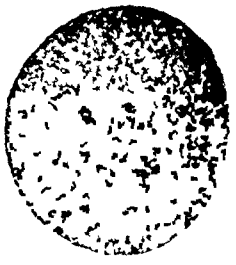


X-ray reveals uniform density of Agarol

. . . Agarol has had a physical examination

THE x-ray says "Look for uniform density throughout as evidence of soundness" Agarol brand Compound *is* a thoroughly uniform emulsion that acts the same way with every dose

The microscope says "Look for the small uniform oil globules" as a sign of thorough *emulsification of Agarol* It means stability, freedom from oiliness, ready miscibility with water, milk, fruit juices or any other liquid



The microscope shows extremely fine division of oil in Agarol

The pharmacist says "If it pours freely, it is the sign of a good emulsion" Agarol is a good mineral oil emulsion that has thoroughly proved its value in the relief of acute constipation and in the treatment of habitual constipation



Descriptive literature and a liberal supply of Agarol supplied gratis to Members of the Medical Profession on request

Agarol is not advertised to the public

WILLIAM R WARNER & Co, Ltd, Power Road, Chiswick London, W 4

ELI LILLY AND COMPANY LIMITED

Pharmaceutical and Biological Products



'LEXTRON'

Liver Stomach Concentrate with Iron and Vitamin B Complex

RAPID convalescence from many debilitating diseases can be brought about with 'Lextron' when secondary anaemia has assumed a conspicuous place in the clinical picture. On 'Lextron' the patient receives all the materials essential for blood regeneration

'Lextron' brand liver-stomach concentrate with iron and Vitamin B complex is supplied in bottles of 42, 84, and 500 'Pulvules' brand filled capsules

Prompt Attention Given to Professional Inquiries

2 3 AND 4 DEAN STREET LONDON W 1

Distributing Agent in Britain for

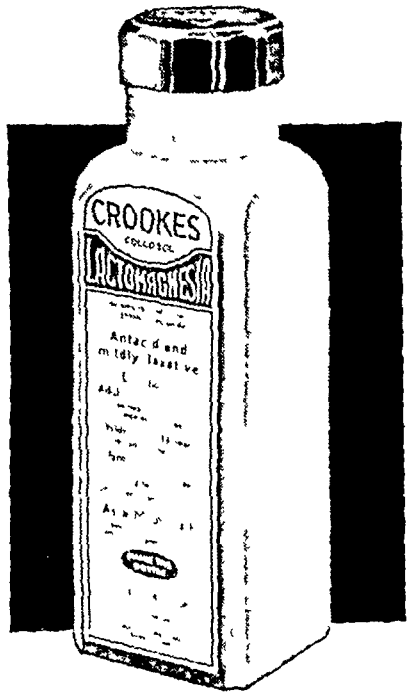
ELI LILLY AND COMPANY INDIANAPOLIS, U S A

Crookes'

LACTOMAGNESIA

SPECIMENS WILL GLADLY BE SENT TO MEMBERS OF THE MEDICAL PROFESSION UPON REQUEST

4 ozs	1/
8 ozs	1/9
For dispensing 80 ozs	15/



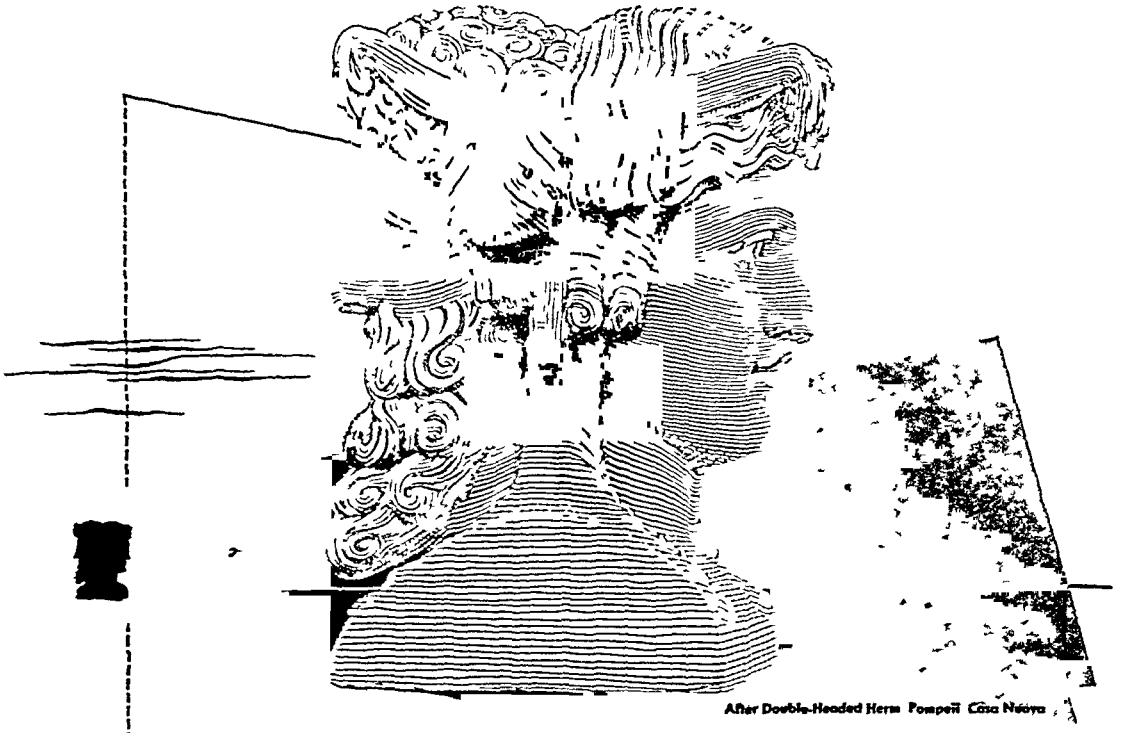
CROOKES Lacto Magnesia contains 43 grains (10 per cent) magnesium hydroxide in each fluid ounce

It presents the hydroxide in an extremely fine state of sub division – colloidal form – ensuring an even and rapid effect This is of great value when the product is used as a mouth wash and penetration to the innermost folds of mucous surfaces and to the interstices of the teeth is desired

In dental practice and when an alkaline mouth wash is called for two teaspoonfuls stirred up in a half to one wineglassful of water is effective and refreshing

CROOKES Lacto Magnesia has a pleasant natural flavour and is most economical both in price and in usage

THE CROOKES LABORATORIES
(BRITISH COLLOIDS LTD)
PARK ROYAL, LONDON, N W 10
TELEGRAMS COLLOIDS HARLES LONDON TELEPHONE WILLESDEN 4313



After Double-Headed Herm Pompeii Casa Nuova

DOUBLY EFFECTIVE ★ ★ ★

Relieves Nasal Congestion — Combats Infection

Metaphedrin Inhalant No 99 (Abbott) contains the powerful antiseptic Metaphen 1 part in 2 500 and Ephedrine alkaloid 0 95% in a light bland mineral oil ● Metaphen has been found to be 250 to 1,500 times more germicidal than phenol depending upon the organism tested In 1 2 500 dilution it is non toxic non irritating to mucous surfaces and does not coagulate serum or tissue albumins The chief value of Ephedrine lies in its power to decongest and shrink the nasal mucous membrane This is accomplished with little or no irritation ● This combination of antiseptic and shrinking actions makes Metaphedrin Inhalant No 99 an especially useful agent for the treatment of hypertrophic rhinitis coryza nasal and sinus infections and the nasal congestion of hay fever The product is of great value as a preventive of infection and is frequently used at the onset of certain colds to cut short the course of the disease itself It is also valuable for instillation into infected sinuses and for use in all rhinological operative procedures ● Metaphedrin Inhalant No 99 may be applied topically or it may be prescribed as a spray It is obtainable through pharmacies and is issued in ½-ounce 1-ounce 4-ounce and 16-ounce bottles Enquiries for a free trial sample of Metaphedrin Inhalant No 99 (Abbott) and for professional literature are welcomed The coupon below is for your convenience

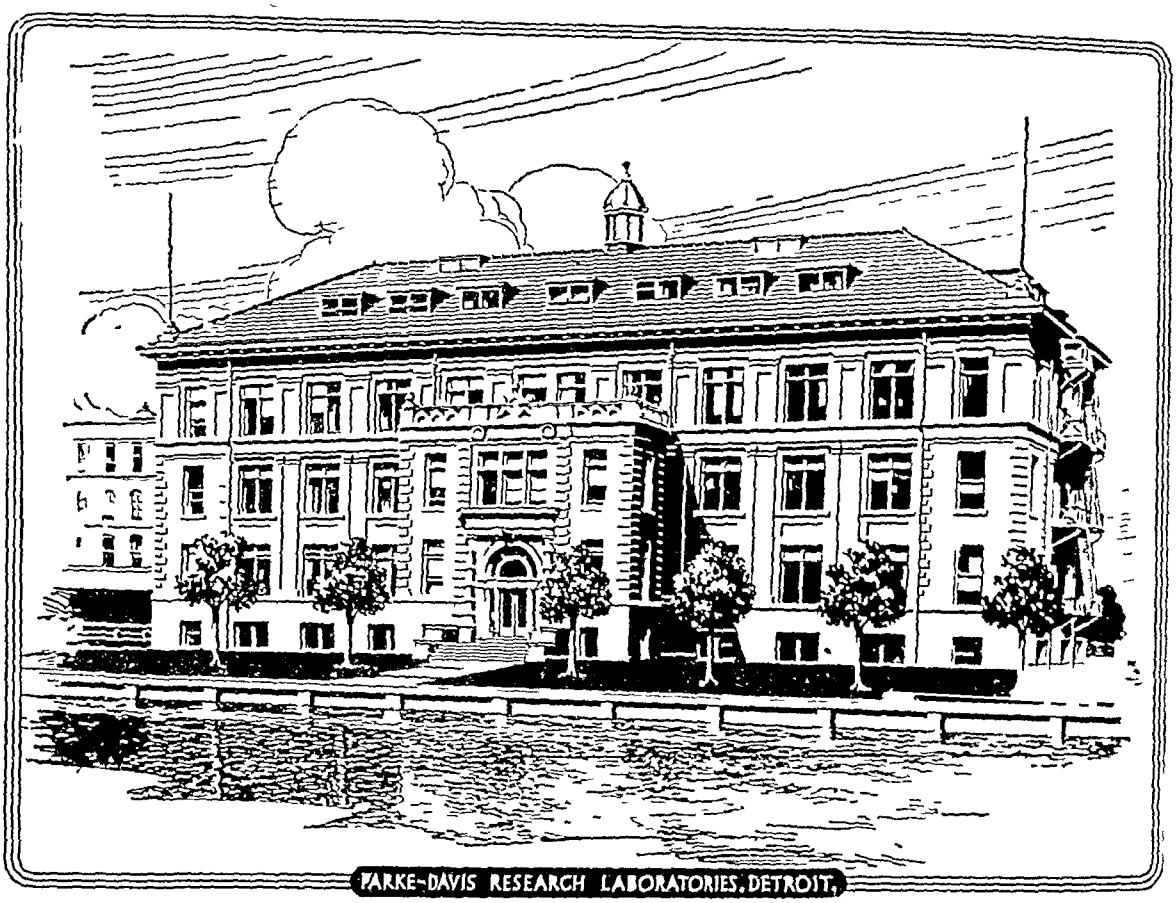
ABBOTT LABORATORIES
(*ENGLAND*) LIMITED
WADSWORTH ROAD PERIVALE MIDDLESEX
Montreal Sydney Johannesburg Bombay
Shanghai New York Chicago Mexico City
Havana Rio de Janeiro Buenos Aires Manila

METAPHEDRIN INHALANT NO. 99

Send free sample of Metaphedrin No 99 to

NAME_____

ADDRESS_____ B.J.H.


PARKE-DAVIS RESEARCH LABORATORIES, DETROIT.

RESEARCH LABORATORIES

In a building which stands apart from the main manufacturing plant the Parke-Davis Research Laboratories house a staff of scientific workers engaged in the search for new medical knowledge and in the elucidation of problems connected with the treatment of disease.

Each of the separate phases of research work, such as bacteriology, botany, chemistry, pharmacology, physiology, pharmacy, etc., is supervised by a scientist of specialised training and frequently of national or international reputation. Under him is a staff of skilled technicians working with up-to-date equipment in an endeavour to bring to light new knowledge and to explore new avenues in the conquest of disease.

This work of research which has been in progress in the Parke Davis Laboratories for more than half a century, is not controlled by time schedule or calendar—often many months and even years are spent in the solution of a problem and the only stipulation is that the work shall be done conscientiously and well.

PARKE, DAVIS & CO., 50, BEAK STREET, LONDON, W.1

Laboratories: Hounslow, Middlesex. Inc. U.S.A. Liability Ltd.

'CYSTAZOL'

A POWERFUL URINARY ANTISEPTIC



'Cystazol' is a combination of Hexamine with Sodium Benzoate its action depends on the liberation of formaldehyde from the decomposition of the hexamine that takes place in the urine which has been rendered acid by the sodium benzoate moiety

'Cystazol' is employed with advantage in cystitis bacilluria of all types pelvi agra gonorrhœa and septic conditions of the urinary tract generally

COMPRESSED TABLETS of 'Cystazol'

Supplied in bottles of 20 40 80 160 and 500 10 grain tablets 1/6 2/6 4/6 8/6 and 20/-

EFFERVESCENT GRANULES of 'Cystazol'

Supplied in bottles at 2/6 and 4/6

Descriptive literature and clinical trial sample will be sent post free on application

Allen & Hanburys Ltd, London, E 2

ST. BARTHOLOMEW'S HOSPITAL OPERATION TABLE

with the

Latest Improvements

including

Easy to operate Release Lever for lowering the table Trendelenburg position increased to 55° tilt, Foot operated rubber covered Floor Brake

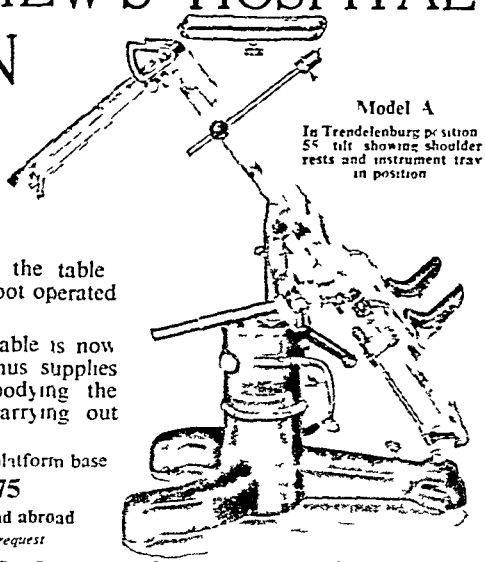
The St Bartholomew's Hospital Operation Table is now manufactured in five different models and thus supplies a range of modern operation tables embodying the latest ideas of well-known surgeons for carrying out surgical operations

All models can be supplied with either tripod or platform base

Price Model A with chromium plated lithotomy crutches only **£75**

Over 1075 of these tables are in use at home and abroad

A descriptive booklet full illustrated will be sent on request



Model A

In Trendelenburg position 55° tilt showing shoulder rests and instrument tray in position

ALLEN & HANBURYS LTD, LONDON, E 2

Manufacturers of Surgical Instruments and Appliances Sterilized Surgical Sutures Hospital Furniture and Electro-Medical Apparatus,

Showrooms 48 Wigmore Street, W 1

LACTIC ACID MILKS in INFANT FEEDING

LACIDAC REGD

In spite of advancing knowledge of Infant Dietary, there is still a high mortality rate amongst Infants from affections of the alimentary tract—particularly during the warmer summer months

Lactic Acid milks are acknowledged to be of great value in these cases and Lacidac presents a standardised and easy form which can be prescribed with confidence

Clinical samples and literature will be gladly sent on to any member of the Medical Profession

Indications

Gastro intestinal disturbances Whooping cough Pneumonia Measles Diarrhœa Marasmus Vomiting

Composition

	FULL CREAM		HALF CREAM		SEPARATED	
	Powder	Reconstituted Milk (1 in 8)	Powder	Reconstituted Milk (1 in 9)	Powder	Reconstituted Milk (1 in 10)
	%	%	%	%	%	%
Moisture	2 4	87 8	2 4	89 2	3 1	90 4
Fat	25 5	3 2	15 5	1 7	0 7	0 1
Protein	25 0	3 1	28 3	3 2	33 0	3 3
Lactose	35 2	4 4	41 0	4 5	49 5	4 9
Mineral salts	5 6	0 7	6 5	0 7	7 4	0 7
Lactic acid	6 3	0 8	6 3	0 7	6 3	0 6
	100 0	100 0	100 0	100 0	100 0	100 0
Calorific value per oz	145	18 1	129	14 3	104	10 4
pH value		4 6		4 6		4 6



A COW & GATE PRODUCT

COUPON

To COW & GATE LTD
Guildford, Surrey

Please send me Post Free Literature and Clinical Samples of Lacidac

NAME

ADDRESS

BMJ 16/7/38 ©504



BRITISH MEDICAL JOURNAL

LONDON SATURDAY JULY 16 1938

THE CEREBRAL INTEGRATION OF THE OCULAR MOVEMENTS*

BY

GORDON HOLMES, M.D., I.R.C.P., F.R.S.

Physician to Charing Cross Hospital and to the National Hospital for Nervous Diseases, Queen Square

It is customary among us to commemorate great men from time to time by a lecture or discourse relating to their work or to some subject in which they were interested. To-day we meet to pay a tribute to the memory of Victor Horsley almost on the twenty-second anniversary of his death in the service of his country while striving for those ideals which characterized his life—the relief of suffering and the defence of liberty.

Horsley's name is indelibly inscribed on the records of human achievement. His work as a physiologist is incorporated in the heritage of our knowledge and he will ever be remembered as a pioneer in the surgery of the nervous system which since his day has grown as only his faith could have foreseen. But great though his achievements were in the realm of science it is his personality which keeps his memory most vividly alive to those of us who had the privilege and good fortune to work with him. We recall his amazing energy, his enthusiasm for knowledge, the help he gave so liberally to younger colleagues, his kindness and generosity, and his unswerving devotion to the welfare of his fellows. I accept gratefully this opportunity to add my contribution to his memory.

The subject of this lecture is one to which Horsley's investigations contributed materially; some of his earliest work defined accurately an area of the cortex by stimulation of which ocular movements could be obtained; later he described the anatomical paths connecting the visual cortex with the oculomotor apparatus in the midbrain, and his latest experiments on the cerebellum, which unfortunately have never been published in full, dealt with the movements and postures of the eyes which can be elicited on electrical stimulation of this organ or result from lesions of it.

There are several categories of ocular movements. In the first place we can move our eyes by an act of volition, but few of their ordinary movements are in this sense voluntary or the result of a conscious effort. Any peripheral stimulus as movement a flash of light or a sound may deviate our eyes involuntarily towards its source, while accurate vision demands accommodation and fusion which is effected by so arranging the visual axes that the images of the object at which we look fall on corresponding parts of the two retinae. Finally there are the compensatory or adjusting movements by which the eyes are kept directed on an object when either it or our heads move. The upper part of the brain stem contains a complicated mechanism by which all these types of movement are effected and co-ordinated; here we are not concerned with this mechanism but with the more highly evolved nervous centres at the behest of which it acts.

All our movements, those of our eyes as well as of our limbs and trunk, are directly or indirectly initiated, guided, and controlled by afferent impulses, and in the case of the eyes the most important impulses are those of retinal and labyrinthine origin. The work of Magnus in particular has shown how the labyrinths either alone or in conjunction with proprioceptive impulses from the muscles of the neck ensure the correct postural adjustments of the eyes to changes of the head in space, but in the higher animals retinal impulses suffice for the normal control of the movements and postures of the eyes even where the labyrinths or the fibres conducting from them are destroyed.

Differences in Organization of Vision between Man and Animals

Experiments on animals have contributed much of what we know of the physiology of ocular movements, but all conclusions from such experiments are not applicable to man owing to essential differences in the organization of vision. In the first place each human retina contains an area of highly developed sensitivity at the fovea which is employed exclusively for distinct vision and many of our ocular movements are directed to allow a distinct image of the object which interests us to fall on this part or keep it there. In lower animals which do not possess differentiated foveae such movements are naturally not fully represented. Binocular vision is also more accurately organized in man. Further, though in the phylogenetic scale vision is the first function to acquire cortical representation, the visual cortex is more highly elaborated in the primates and in man complex associational areas which play a part in the movements of the eyes develop around it. The differences in the organization of cortical vision in various animals are obvious from the effects of destruction of the occipital lobes. All observers agree that in man no perception of light or reaction to retinal impulses except contraction of the pupils can be obtained when the occipital lobes are destroyed. In monkeys closure of the lids occurs on sudden illumination (Kluver); dogs can in addition react to differences in intensity of illumination (Marquis); rodents may recognize the position and distance of objects and even avoid obstacles (Lashley); while birds from which the forebrain has been removed may react even more normally to retinal

*The Victor Horsley Memorial Lecture delivered at University College Hospital Medical School on July 12, 1938.

stimuli During ascent in the animal scale there has been, therefore, a gradual transference of vision from lower to higher levels of the nervous system, till in man it is exclusively a function of the cortex

Parallel with this movement of vision corticalwards there is a similar 'encephalization,' or transference towards the forebrain, of the seat of reactions which may be excited by retinal stimuli till in man no movements in response to light are obtainable without participation of the visual cortex It is therefore on the study of clinical material that we must mainly rely in any attempt to understand the physiology of the ocular movements in man But the methods should be the same as those of the experimental physiologist—to study the simpler components of a complicated function by isolating each of them and then attempting to integrate the separate parts into a normally functioning whole We must, however remember that symptoms of dissociation of the ocular movements cannot be simply interpreted as loss of function of the injured part they are usually the response of the organism to the abnormal situation produced by the lesion and include, as Hughlings Jackson repeatedly insisted manifestations of disordered activity of undamaged structures

Cortical Areas Concerned in Eye Movements

In both man and lower animals movements of the eyes can be obtained by stimulation of certain parts of the cerebral cortex One of these which was originally described by Hitzig and Ferrier but was more accurately localized by Beevor and Horsley in the ape lies in the frontal lobe separated by inexcitable cortex from the motor centres of the precentral gyrus Cushing Foerster, Penfield and Boldrey and others have demonstrated it in man The function of this oculogyric centre has naturally been compared to that of the precentral motor area, but Sherrington has shown that in the chimpanzee there are such marked differences in the nature of its responses that it is necessary to put it into a separate physiological category It is interesting that Beevor and Horsley in contrasting the responses from this frontal area in the orang-outang with those they observed in the bonnet monkey, recognized these same features—slowness in development and in execution of the movements of the eyes The projection fibres from this frontal centre pass through the anterior portion of the internal capsule then probably enter the cerebral peduncle and turn dorsalwards into the tegmentum

The fact that destruction of this frontal centre does not produce a persisting palsy of any of the ocular movements has raised doubt on its significance It may be that, as Wernicke suggested all ocular movements are represented in both frontal lobes and consequently as in other bilaterally innervated movements the effects of a one-sided lesion may be compensated by the unaffected side Permanent voluntary palsy in man has however been described by Tilling Lutz and others as a result of bilateral frontal lesions but Ferrier and Turner observed no paralysis after removal of both frontal lobes in the monkey

Ocular movement can be also obtained by electrical stimulation of the visual cortex on the inner aspects of the occipital lobes This oculomotor area was first described by Schäfer and later studied by Munk and others including Foerster in man According to some it is the cortex immediately around the visual area rather than the area striata which is excitable but from our point of view this matters little It was naturally suggested that movements elicited from it are due to subjective visual impressions excited by the stimulus and that these reach the frontal oculomotor centres but Munk showed that they could be still evoked after he had isolated the occipital lobe from the rest of the cortex by a deep incision That there is an apparatus in the occipital lobe from which ocular movements can be excited directly was made more probable by the demonstration by Beevor and Horsley of fibres passing from here to the anterior quadrigeminal bodies in the neighbourhood of the oculomotor nuclei About the same time Probst described these cortico tectal fibres in the cat According to later authors as Minkowski, Bremond, and Poljack they take origin in the cortex around not within, the area striata They descend through the occipital lobe medial to the optic radiations, and pass through the pulvinar and the anterior brachium to reach the tectum of the midbrain

There are therefore two widely separated cortical areas concerned in movements of the eyes and each has its own projection tract to the oculomotor mechanism in the brain stem A study of the effects of their injury or destruction throws light on their functions and on the part each takes in the normal organization of the ocular movements

Effect of Disturbances of Frontal Centres

Disturbances of the functions of the frontal centres produce the more obvious symptoms These usually result from involvement of the frontal projection fibres in the internal capsule or in the neighbourhood of the anterior part of the midbrain rather than of the cortex and in this respect they are comparable to the loss of voluntary power in the muscles of the lips, tongue, palate, and larynx which characterizes pseudo bulbar palsy

The most striking features of a typical case is the inability of the patient to move his eyes to command or when ordered to look at an object in one or possibly in any direction For instance on command to turn his eyes to the right or to look at an object in the right half of the field of vision no deviation of the eyes occurs though the effort at movement is obviously great If the attempt is often accompanied by expressions of distress One patient on being asked to look to the right first turned his head in that direction then jerked it about and raised it from the pillow flexed his body forward and rotated it to the right advanced and flexed his arms clenched his fingers and groaned and protested he could not do it An example of the apparent trophic reaction which Goldstein has described in connexion with failure to carry out a task owing to a cerebral lesion Even when the head is actively turned in the desired direction the eyes often fail to move with it

This condition at first sight shows all the appearance of loss or paralysis of the movement but that this is not present becomes obvious when the subject is asked to follow with his eyes a slowly moving object then if provided the rate of movement is uniform and not too fast a full range of deviation may be obtained If however the displacement of the object he attempts to follow is rapid or irregular the eyes move through only a small angle and quickly slide back to their position of rest When the patient looks at a slowly rotating drum on which lines or figures are displayed the eyes after a time in the direction in which the figures move but the nystagmus seen in normal persons does not appear He may also fail to converge on a near object but can do so when a distant object is slowly approached to him We therefore find that though voluntary effort fails to produce movement the eyes follow a moving object if images of which fall on the fovea

The influence of foveal impulses on the execution of these movements is obvious but impulses from

diate neighbourhood of the macula may be effective too If there are two marks on a sheet of paper the patient may be unable to turn his eyes from one to the other but he can often do so when the marks are joined by a line his eyes then as it were creep along the line from one point to the next the movement being excited by a series of impulses coming from the confines of the foveae Similarly the eyes can travel along a series of closely arranged dots the retinal image of each succeeding dot being an adequate stimulus Attempts to read reveal the same facts the eyes travel slowly from letter to letter but if there is too wide a space between the words the attempt may fail At the end of the line he is unable to bring his eyes leftwards to the beginning of the next line but frequently patients surmount this difficulty by moving a finger slowly along the line as they read and by it lead the eyes back to the start of the next line

Movement of the eyes can be elicited even more easily by either active or passive movement of the head if for instance the subject is unable to look up or to the right his eyes may deviate upwards when his head is bent forwards and to the right when his head is rotated to the left his eyes move simultaneously with his head and through an equal angle but in the opposite direction This compensatory deviation has been by several authors attributed to adjusting reflexes of labyrinthine origin but though this may be their nature in animals under certain experimental conditions we shall later see reasons why it is not the explanation Bielschowsky who originally regarded it as a labyrinthine reaction later stated that this holds only if the movement of the head is quick and abrupt Labyrinthine reflexes may however play a part for in some of these pathological cases a compensatory deviation of the eyes occurs even when the lids are closed and all retinal stimuli thus excluded and in a patient with complete cortical blindness whom I examined the eyes moved to the left when the head was passively rotated to the right and vice versa On the other hand in two patients who were deaf and in whom no vestibular reactions could be excited I found that the eyes moved with the head when the lids were closed as both retinal and vestibular impulses could be excluded the probable explanation is that the tone of the ocular muscles dependent on their own proprioceptive impulses kept the eyes in their normal relations to the orbits

When the eyes are deviated from their normal central position either by following a slowly moving object or by rotation of the head the patient may be unable to move them back or he may experience much difficulty in doing so particularly if the eyes remain fixed on the original point this is one of the arguments against compensatory deviation being essentially of labyrinthine origin for the stimulus which excites the labyrinths is movement and reflexes dependent on them cease rapidly at the end of the movement

Further investigation of these symptoms helps us to understand their nature All observers have been struck by the fact that the paresis is variable under certain conditions no voluntary movement can be observed under others the eyes can move through a modified range at least Though in a typical case deviation of the eyes to either side on command or towards an object is impossible the eyes move simultaneously with his head but in the opposite direction when his head is rotated If however the lids were closed or if the experiment is carried out in a dark room or if a screen is held immediately in front of the eyes so near to them that no point can be accurately fixed this compensatory deviation does not occur There must therefore be a visual factor concerned in the phenomenon and this factor seems to be fixation—that is the tendency to keep the images of the object at which the subject looks on the foveae either by maintaining the postures of the eyes or by moving them

The Fixation Factor

Another series of tests emphasizes even more strongly how important this factor is It in a normal person one ear is irrigated by cold water nystagmus is evoked the slow phase being towards the ear which is irrigated the same effect is obtained by passing a galvanic current through the two ears or by rotating the person In many of these pathological cases however no nystagmus develops but the eyes become strongly and persistently deviated in the direction towards which the slow phase of the nystagmus should occur—that is towards the irrigated ear or towards the anode of the galvanic current This deviation is frequently so strong that it is uncomfortable or distressing to the patient It varies however under different conditions of examination In one patient who lacked almost all voluntary movements of the eyes it was generally very pronounced but on other occasions it could not be elicited Further examination showed that its appearance was influenced mainly by the patient's visual interest in his surroundings for when his eyes were not fixed on an object or when his lids were closed or his eyes screened a strong deviation could always be obtained but when his eyes were fixed on any point as on the eyes of the observer who sat in front of him even the strongest vestibular stimulation often failed to produce any deviation Fixation which was the only variable factor in these experiments is therefore capable of inhibiting the powerful reflex deviations which in its absence can be obtained by stimulation of the labyrinth

Fixation may influence even volitional movements for patients in whom the degree of palsy is not great can often move their eyes on command or look towards an object when accurate fixation is made impossible by placing convex lenses or a screen in front of the eyes In severely affected cases the range of movement possible under these conditions is usually small and the movements which obviously need great effort are jerky and discontinuous but in milder cases an approximately normal degree of deviation may be observed

In attempting to follow a moving object the accuracy of fixation also plays a large part success is possible only when the subject's eyes are accurately directed on the object before it moves and if its movement is so rapid or so irregular that fixation is for a moment broken—that is if its images no longer fall on or in the immediate proximity of the foveae—the eyes cease to follow it and recede towards their position of rest

These observations explain a curious paradox which has often been observed in these patients Though they fail to move their eyes in one or in all directions on command and to turn them towards an object the eyes may at times move about in a more or less normal manner Tiling in the first recorded case of this type found that though there was apparent paralysis of vertical deviations and of movement to the right the eyes sometimes moved involuntarily in these directions in Bristow's case recorded a few years later the eyes moved independently of her will though there was no power of voluntary movement in a similar case Roux reported that nothing in the hospital ward escaped the patient and one of my own cases was regarded by the nursing

attendants as "hysterical," as they observed that his eyes frequently moved about as he lay in bed but failed to do so while being tested. Such spontaneous movements are most often seen when the patient is drowsy or half awake, or when he is in a state of emotional excitement; for instance, one man who was unable to move his eyes voluntarily became excited while being prepared for vestibular tests, and his eyes rolled about in all directions.

It was also repeatedly found that when these patients tried to look towards an object they employed various devices by which to interrupt the fixation of the point on which their eyes were directed: some blinked or closed their eyes momentarily, or jerked their heads abruptly; one man occasionally brought his hands before his eyes. It is therefore obvious that fixation of the eyes on an object tends to impede voluntary ocular movements and can even inhibit the powerful reflex reactions excited by labyrinthine stimuli. It is now necessary to consider the nature of normal fixation.

The Nature of Normal Fixation

Fixation means the maintenance of postures of the eyes by tonic contraction of the ocular muscles so that the retinal images of the object which is fixed fall on the two foveae. These postures can be kept up with remarkable accuracy for long periods. It is true that fixation in this sense is only relative, for the lines of vision constantly oscillate through small angles about the point fixed and consequently the images move over the foveae: this avoids sensory adaptation and the appearance of after-images which would interfere with the acuity of vision. But fixation does not imply only immobility of the globes in relation to the orbits, for we can fix moving objects and keep our eyes on a point when our heads are in motion: this requires constant adjustment of the eyes by contractions and relaxations of their muscles, for the slightest displacement of the head necessitates a compensatory deviation of the eyes in the opposite direction, so accurate and immediate that the foveal images remain relatively stationary. By voluntary effort alone this accurate adjustment of the eyes would certainly not be possible, and the observations referred to above show that fixation may persist when volitional movement is defective. Fixation must therefore be regarded as in part at least a reflex act. But fixation, as all the other visual reflexes, requires perception—that is, the intervention of consciousness—and in this respect the fixation reflex differs from those reactions in which only the lower levels of the nervous system are concerned, to which the term 'reflex' is usually applied.

Normally, fixation is under the control of volition, for we can move our eyes from object to object as we will, but when voluntary movement is defective the fixation reflex becomes so dominant that the eyes may remain anchored to an object and can move from it only when the reflex is broken by interruption of the retinal impulses. It is for this purpose that persons affected with this condition blink, jerk their head, or place a hand between their eyes and the object which fixes gaze. We can speak of the pathological condition as spasmodic fixation. It was first observed and carefully described by Gowers in 1879.

Spasmodic and Reflex Fixation

Spasmodic fixation is comparable to the spastic paresis which results from lesions of the cortico-spinal tracts: in this condition there is, as in the eyes, a defect of voluntary power, but movement is also interfered with by increased tone of the muscles due to uninhibited reflexes initiated by proprioceptive impulses from the muscles themselves; and it disappears when the muscles are deafferented. The exaggerated tone of the ocular muscles on the other hand is dependent on retinal impulses acting on a cortical mechanism no longer under control, when these impulses are interrupted tone decreases, the power of voluntary movement improves, and the responses to other stimuli, either voluntary or labyrinthine, are no longer impeded.

It is impulses of foveal origin which determine reflex fixation. On the other hand, the chief function of the peripheral parts of the retinae is, when an image excites them, to bring about such movements of the eyes that the images fall on the foveae. James has aptly said that the periphery of the retina acts as a sentinel which cries out "Who goes there?" and if necessary calls up the more accurate vision of the foveae. Owing to the increasing sensitivity of the retina as the fovea is approached the tendency of peripheral retinal stimuli to determine fixation is greater the more closely to it the images fall. Even in adult life these fixating movements are largely reflex: a flash of light or a sudden movement in the periphery of our fields of vision attracts our gaze whether we wish it or not. This reflex which determines the fixation of extra-foveal images is the means by which patients suffering from paralysis of voluntary movement can read, follow a line with their eyes, or count a row of dots: each succeeding letter, dot or segment of a line tends to excite a movement, and if the impulse which initiates it comes from near the fovea it may be intense enough to interrupt the strong fixation reflex which tends to impede all the other visual oculomotor reflexes as it does voluntary movement of the eyes.

A special feature of these reflexes is that they imply, in addition to conscious perception, interest and attention. It is only the object which occupies attention that excites the fixation reflex, only the succeeding word or dot which interests the patient that draws his eyes towards it, only the gesture in which he recognizes a threat or danger which makes him blink and turn his eyes away.

Other symptoms which some of these patients present throw further light on the nature of this condition. For instance, one man who also suffered from severe pseudo-bulbar palsy was unable to separate his lips, open his mouth, or perform the movements of chewing on command; but when bread was placed in his mouth he masticated it, he could not protrude his tongue, but when sugar was placed on his lips he licked it. In these respects he was simply a reflex machine. If shown appetising food he merely smiled, but if the food was brought close towards his lips his mouth opened at once and he began to champ his jaws as if chewing; but this occurred only when food in which he was interested was approached to his lips. He therefore possessed another visual reflex, that is, a complicated purposive action independent of volition—which was excited by retinal impression and which entailed not merely perception of an object but also recognition of its nature and of its spatial relations to himself.

The anatomical lesions responsible for the cases characterized by loss or diminution of the power of voluntary movement associated with exaggeration of the fixation reflex may be situated in various parts of the brain. In a few of the recorded cases there were bilateral injuries of the frontal oculomotor centres (Fig. 1), but more commonly the projection fibres from these centres were involved in the internal capsule (Case 1).

it It is an interesting fact that as in the case of the supranuclear palsies of the facial and bulbar muscles these paralyses of the voluntary ocular movements are more commonly due to affections of the projection tracts from the cortex than of the cortex itself In some cases the disease was familial and progressive probably a primary degeneration of these fibres (von Pallathy Ballet Cantonnet and Taguet)

Effects of Interference with the Visual Reflexes

On turning from this condition characterized by loss of voluntary movement and exaggeration of the fixation reflex to a study of the effects of direct interference with the visual reflexes we encounter considerable difficulties for all these reflexes use the same afferent paths as vision and probably are mediated through the same cortex as that by which visual impressions are perceived Consequently lesions of their afferent fibres or of the cortical reflex centres cause at the same time loss of vision and in absence of vision these reflexes cannot be studied Since however the cortico tectal fibres which constitute the efferent limb of the reflex arc run a dorsal course through the pulvinar they may be involved by lesions which spare the optic radiations as well as the descending fibres from the frontal oculomotor centre Bilateral injury of these cortico tectal fibres is very rare and as part of each fovea from which the more important visual reflexes are excited is represented in both hemispheres of the brain unilateral lesions do not produce striking effects

When we wish to see an object distinctly we usually adjust or move our heads so that our eyes in their position of rest are directed on it this posture of the eyes demands little if any effort and voluntary action alone may suffice to keep it up It is often by rotating our heads too that we follow a moving point or a series of closely spaced objects as in reading The fixation reflex is therefore not essential and its absence causes no pronounced disturbance But when the eyes are turned widely from the middle line the maintenance of the new position demands considerable effort and it tires rapidly even when supplemented by a normal fixation reflex but as long as the deviation is kept up fixation is accurate If however the reflex is defective fixation cannot be maintained accurately by voluntary effort alone though the ocular movements are unimpaired This disturbance is most commonly seen on deviation of the eyes to one side When the patient is asked to look at an object to this side he moves his eyes promptly towards it but he fails to keep them directed steadily on it they quickly recede towards their position of rest and are brought back by a series of jerks which are obviously voluntary In following a moving object, especially if the rate of movement is not uniform or if his head moves while he attempts to fix a stationary point, the difficulty in keeping up fixation is even more pronounced the necessary ocular movements are possible but the reflex maintenance of the position obtained is deficient This failure to fix accurately is generally more pronounced the further the object to be fixed is from the middle line, in other words it is roughly proportional to the muscular effort which the deviation requires

When this disturbance is bilateral the symptoms are more striking The patient complains of inability to see distinctly or to focus properly When his head is not steady as when he walks or rides in a carriage the difficulty in obtaining clear vision of any object is even greater That it is not merely due to diplopia or failure of fusion of the retinal images is evident as it persists when one eye is closed Orzechowski has given an excellent description of this condition in two patients their eyes oscillated about the object they tried to fix they were unable to seize or hold objects with their eyes especially on deviation to one side in reading they failed to follow accurately letters or lines moving objects could not be accurately followed by the eyes and when walking or in motion they were unable to recognize or distinguish objects by vision Erb and others have observed similar cases

Here there is no question of ocular palsy or of nystagmus from which the condition differs in its manifestations and in the disturbances it produces vision is normal or at least adequate scotomata are not present and there is no defect in visual orientation—to any of which inability to fix accurately may be due There is consequently a state characterized by a failure of fixation though the muscular apparatus of the eyes and its central innervation is intact it is essentially an inability to keep the eyes steadily in a position to which they have been brought by voluntary contraction of their muscles

It is well known that when hemianopia is present the patient often fails to keep his eyes accurately on a point to the hemianopic side even when they are directed towards it This had been usually attributed to the loss of vision but as his gaze may remain fixed on a point directly in front of him—that is when his eyes are in their position of rest—it is obvious that this cannot be the only cause Further this failure to fix may be present even when there is some degree of macular sparing The more probable explanation is that the voluntary movement is not supported by the fixation reflex which is normally mediated by the damaged or isolated visual cortex

Inadequate fusion or defective accommodation may be partly responsible for the disturbances of vision of which these patients complain One of my patients said he could not fix his eyes steadily and that they tended to roll about another that she could not focus and that on attempting to read the letters ran into one another In neither of these cases could diplopia be demonstrated yet both read more easily with one eye closed the fusion reflex by which the coalescence of the two images is effected in binocular vision was evidently at fault Bielschowsky has also described loss of fusion in a case with lesions in each occipital lobe

We have seen that when the fixation reflex is not under the control of other cerebral mechanisms there is a tendency to exaggeration of its function with the result that the eyes cannot easily be diverted from the object on which they are directed In these cases on the other hand the fixation reflex is defective and post mortem evidence goes to show that this defect is due to interruption of the cortico tectal fibres which form the efferent limb of the reflex arc In my own cases which were verified the disease involved the dorsal portion of the thalamus including the pulvinar

These two series of observations are complementary The most striking feature in the one series was loss of deficiency of voluntary movement associated with a tendency to persisting fixation of the eyes on a point in central vision from which they could not be easily diverted by will or even by the intervention of other reflexes unless central retinal impulses were suppressed In the other series the subject was unable to keep up fixation accurately particularly when he or the object to be fixed was in motion, and in some cases fusion and accommodation were probably disturbed too

These observations have emphasized the reflex nature of fixation, but there can be no doubt that under normal

conditions fixation is partly voluntary The fixation reflex, however, supplements and steadies the voluntary effort, but it is, on the other hand, under the control of volition On the normal co ordination of these two functions the accurate and purposeful use of central vision depends

The Brain and Oculomotor Activities

We can now consider what parts of the brain are concerned in these oculomotor activities and then discuss how in normal life they work together

All evidence at our disposal indicates that the frontal oculomotor centre is concerned in those movements and reactions of the eyes which we may call voluntary Through it we can by an effort of will look or turn our eyes in any direction and converge them on a near object By it, too, we can keep our eyes directed on any object that interests us, though this is largely a function of the occipital cortex

The functions of the occipital centre are more numerous Fusion—that is the reactions necessary to unify the separate impression from the two retinae—and accommodation depend on it The movements of the eyes to an object outside central vision, in so far as it is involuntary, is also excited through the occipital cortex by extrafoveal impulses And finally the maintenance of fixation on a point, whether it is at rest or in movement, is determined by a cortical reflex mechanism in the occipital lobes

The abrupt turning of our eyes to an unexpected sound or towards a peripheral stimulus is a more complicated reaction which implies spatial localization, the evidence as to the oculomotor centre through which these movements are effected is incomplete, but the frontal cortex is probably concerned in them, for what we know of its organization indicates that no part of the cortex is devoted exclusively to so called voluntary activity In other reactions, as blinking and aversion of the eyes from threatening gestures and in ocular movements which imply judgment of the nature of the stimulus and of its position in space, more extensive areas of the cortex are involved The reaction to threats can be, for instance, abolished by small lesions of the parietal lobe, and the experiments of Rademaker and Gelderblom show that in the cat the associated closure of the lids depends on the integrity of the sensorimotor cortex The movements of our eyes in response to labyrinthine and other proprioceptive impulses is effected by subcortical mechanisms the forebrain is not concerned in them

The integration or harmonious working of the different parts concerned in ocular movements and postures is to some extent revealed by the disintegrations of these functions which we have studied and these serve also to illustrate other activities of the cortex

In the evolution of the brain vision is the first sense organ to obtain a presentation in the cortex of the forebrain Even in birds fibres carrying retinal impulses reach what is regarded as the original neopallium it is only later in evolution that other sense organs attain cortical connexions and it is still later that so called motor centres appear With vision too, localization in the cortex reached its acme for every point of the retina is represented rigidly in it then the brain it seems may speak teleologically decided that such a rigid relation was unsuitable to its further development and developed more plastic organization for its later evolved powers It is consequently not surprising that cortical visual reactions are more highly organized and possibly function on simpler plan than other cerebral activities

Even in birds the original visual cortex is connected with the roof of the midbrain by efferent fibres—the tractus occipito mesencephalicus of Kappers—which are probably the homologue of the cortico tectal fibres of mammals and by means of these the cortex may be able to influence reactions, including ocular movements and postures in response to retinal stimuli As the cortex became the main, and finally the exclusive organ for visual perception the primary visual reactions—as reflex direction of the eyes to light, accommodation, fusion when binocular vision was acquired, and fixation—were transferred to it till in man they can be evoked through it only The next step in development was the appearance of associational areas around the visual cortex which enable it to co operate with other sense impressions and to elaborate further the faculties of spatial perception discrimination and recognition At this stage in evolution control of visual reactions by higher cerebral functions—as consciousness, attention, and discrimination—became necessary, and the newer cortex of the frontal lobe was given this task Now that the exploration of space by the eyes and the direction of gaze towards any object of interest no longer depended wholly on visual impression, reactions to vision were no longer confined by the fatality of a reflex there was now a mechanism by which behaviour and reactions to environment could be greatly extended This is the primary significance of the development of a frontal oculomotor centre

But in order that a highly evolved function can adequately serve its purpose it is essential that it can control subordinate mechanisms, so the frontal cortex became not merely an organ from which ocular movements could be evoked, it acquired also the power of inhibiting inappropriate and undesirable activities of the occipital lobes The importance in ordinary life of this faculty of inhibition is demonstrated by the existence of the fixation reflex when the voluntary motor centres of the frontal lobes are out of action, the eyes then become fixed on an object to the exclusion of the rest of the environment

Conclusion

We can therefore conclude that in normal conditions there is an accurately adjusted co operation between parts of the cortex concerned in ocular movements Through the occipital centres some visual reflexes evoke *movements* which turn our eyes towards objects in the field of vision other reflexes determine by fusion and accommodation the accurate perception and the continuation of binocular images others keep the eyes fixed on any point which claims attention or excites interest The frontal centres make possible the turning of gaze in a desired *direction* and the exploration of space but they also keep under control or inhibit reflexes that are inappropriate to our conduct or our reactions to the world around us

---

The College of Physicians of Philadelphia has awarded the Mütter Prize to Dr Richard J Shope of the Rockefeller Institute for Medical Research Princeton N J for his recent researches on the aetiology and epidemiology of influenza The prize was established by the late Dr Francesco de Costa Matteucci a native of Lisbon Portugal and a Fellow of the College of Physicians and is awarded annually by the College of Physicians of Philadelphia on the death of the testator *July 1st 1938* to the author of the best memorial or unpublished essay upon any subject in medicine or surgery which may be deemed worthy of the prize

CHRONIC MASTITIS AND BREAST CANCER

A FAMILY HISTORY OF FIVE SISTERS

BY

W. SAMPSON HANDLEY, M.S., F.R.C.S.

Consulting Surgeon to the Middlesex Hospital

(WITH SPECIAL PLATE)

This history of a family of five sisters pursued by breast cancer covers a period of about nineteen years during which with regrettable gaps hesitations and refusals of advice I have been jointly responsible with their own doctors for their defence against the family foe. It is known that their mother died at the age of 69 of cancer of the liver and her mother at the age of 37 of abdominal cancer probably gastric since it was attended by persistent vomiting.

In advising this family I have been guided by the following convictions:

(*a*) Chronic mastitis is a precancerous condition.

(*b*) Chronic mastitis is often amenable to deep x-ray treatment without operation and consequently deep x-ray or radium treatment may be an effective prophylactic against cancer.

(*c*) *The protection afforded by x-rays is neither absolute nor* permanent, and cases so treated should come every three or six months for re-examination.

(*d*) Cases of chronic mastitis in immediate danger of cancer present recognizable clinical peculiarities and should generally be treated by mastectomy.

(*e*) Breast cancer should be treated by radical operation with simultaneous radium to the internal mammary glands and subsequent moderate prophylactic x-radiation. Exceptionally Keynes's radium method may be preferable.

Five separate breast cancers in the family have been treated by radical operation—four by myself and one by Mr. Turner Warwick—and in addition two simple mastectomies have been done—one for incipient cancer the other for precancerous mastitis. In the result two of the sisters have died of breast cancer and three are well at the time of writing. The two sisters who died survived operation eleven and nine years respectively. These results in the face of intense predisposition to the disease in a bilateral form offer encouragement to my belief that routine mastectomy for chronic mastitis—a policy equally distasteful to patient and surgeon—can be safely rejected in favour of x-ray treatment followed by periodic examination with mastectomy in reserve if danger signals show themselves.

If I have described these cases at length it is partly because close personal observation of such a group over such a long period is perhaps unique but mainly because in these histories the whole important question of the prevention of breast cancer is involved. To avoid a running commentary upon the case histories I here submit some general remarks upon the nature and treatment of chronic mastitis.

Clinical Characters of Chronic Mastitis

It is rare for the induration of chronic mastitis to affect the whole breast. The upper and outer quadrant of the breast is the seat of election as for carcinoma and the fact emphasizes the genetic link between the two conditions. The indurations of chronic mastitis affect the breast by lobes and consequently like the lobes themselves they are sector-shaped broader or narrower according to the number of adjacent lobes affected, often multiple in the same breast and sometimes symmetrical in the two breasts.

For their appreciation a special technique of examination is necessary, resembling that of a cat treading its bed preparatory to lying down. A displacement of the swelling upon the pectoral produced by alternate pressure of the two hands lightly laid upon the skin enables its outline and character to be accurately determined as it slips to and fro under the fingers. Except in the cystic form of mastitis it is not a defined lump but a finely granular induration. None of the signs of contraction or adhesion is present. The glands if enlarged are soft and often tender.

Chronic Mastitis—a Precancerous Condition

It is impossible within the scope of this paper to marshal the evidence that chronic mastitis tends to end in carcinoma. In my book (Handley 1931) I believe I have proved that chronic mastitis and eventually carcinoma arise within local areas of lymph block in particular lobes of the breast. The lymphatic block results from lymphangitic surface infections often unnoticed of the main ducts near the nipple. A state of papillomatous hypertrophy within the smaller ducts is seen in the later stages of chronic mastitis as Lenthal Cheatle showed and this is the immediate precursor of carcinoma. All the stages of the process from simple lymph stasis through chronic mastitis to early carcinoma can often be demonstrated in the same breast.

Hormones and Chronic Mastitis

Normal physiology—the rapid development of the breasts at puberty and the recurrent monthly congestion and tenderness of the breasts just before each menstrual period—demonstrates the important influence upon the breast of the ovarian hormones. Lewis and Geschickter (1934) showed that the injection of oestrin into the breasts of male monkeys produced a feminine type of breast, a condition of gynaecomastia. Lacassagne (Cheatle 1935) experimenting on young male mice found that a course of oestrin injections produced in some weeks a cystic mastitis terminating in carcinoma. Cramer and Horning (1936) showed that heavy doses of oestrin produce degeneration of the adrenals together with an initial stimulation followed by subsequent destruction of the anterior pituitary. Quite recently they have found that these changes in the anterior pituitary produced by oestrin can be kept in check if the thyrotropic hormone of the anterior pituitary is injected in suitable doses. They further find that the administration of this thyrotropic hormone to females of a strain of mice in which half the females die of spontaneous mammary carcinoma affords apparently complete protection against the disease (Cramer and Horning 1938). The therapeutic hint of this striking piece of work is obvious but it will take some years to test the suggestion it contains. The lymph stasis theory of chronic mastitis and cancer to which I have referred is perfectly consistent with the view that hormones play an essential part in the causation of these diseases. It is obvious that local areas of lymph obstruction must necessarily be areas where the hormone supply is defective for the regular flow of the tissue fluid through these areas is more or less arrested. Hormones may fail to reach such areas or may accumulate in them to excess. Lymph stasis supplies the localizing factor which determines the site where the cancer arises.

Treatment of Chronic Mastitis

It has been fashionable of late years to treat chronic mastitis empirically by oestrin. The experimental evidence just detailed would seem to show that the treatment is irrational and possibly dangerous. I have recently seen a case of cystic mastitis in which the patient herself was convinced that her breast trouble dated from a course

of oestrin injections Whether treatment with interior pituitary thyrotropic hormone will succeed in preventing human cancer is a question yet to be decided It may prove difficult as in the case of tuberculin to get the remedy to the actual seat of the disease Meantime we have at our disposal a method of proved value

X RAY TREATMENT

In 1910 I advocated the x ray treatment of chronic mastitis and ever since in hundreds of cases I have advised its use instead of mastectomy, with good results Pain promptly disappears and in a few weeks obstinate mastitic indurations often completely vanish The proof that by this treatment many breast cancers have been prevented is naturally very difficult but the evidence which I reserve for another paper, raises a presumption that such is the truth

Danger Signals in Chronic Mastitis

The characters of chronic mastitis in young women have just been described As the cancer age approaches the disease may show one or more of the following danger signals all of them dependent upon the formation of adventitious fibrous tissue in the affected lobe or lobes These signs cannot here be described in detail They are

NIPPLE CHANGES

1 Retraction of one or more of the duct orifices upon the nipple without retraction of the nipple itself
2 Serous or blood stained discharge from the nipple
3 Deviation of the axis of the nipple
4 Elevation of the nipple
5 Appearance upon the nipple of white or black dots from which plugs of degenerate epithelium can sometimes be squeezed
6 Flattening of the nipple
7 Retraction of the nipple

BREAST CHANGES

1 Appearance of multiple hard elastic or fluctuant lumps in the mastitic area (cystic mastitis)
2 The presence near the nipple in the mastitic area of radiating tortuous cords which are thickened main ducts
3 Adhesion of the breast to the skin or the pectoral fascia is rarely seen except in fully developed carcinoma

Case Histories

The case histories, subsequently to be given in detail, are summarized in the following table

	Date of Birth	Right Breast	Left Breast	Result
Sister A	1871	Mass appeared in 1930 just before death (Second primary carcinoma)	Primary carcinoma 1919 (Radical mastectomy)	Died 1930 with signs of pyloric obstruction due to a primary gastric growth or to secondary abdominal masses
Sister B	1875	Primary carcinoma 1925 (Radical mastectomy)	Primary carcinoma 1937 (Radical mastectomy)	Alive and well 1938
Sister C	1879	Proliferative mastitis and incipient carcinoma 1933 (Simple mastectomy)	Proliferative mastitis 1930 (Simple mastectomy)	Alive and well 1938
D	1885	Mastitic induration 1930 (Surface radium treatment)	Mastitic induration 1929 (X ray treatment)	Alive and well with normal breasts 1938
Sister E	1886	Second primary carcinoma 1927 (Radical mastectomy)	Primary carcinoma 1923 (Radical mastectomy)	Died in 1932 of recurrence in supraclavicular glands sternum and spine

SISTER A BORN 1871 UNMARRIED

In 1919 I operated upon this patient for a carcinoma in the lower outer quadrant of the left breast The growth had been present since 1918 was 2½ inches in diameter, and was adherent to skin and muscle though clinically the axillary glands were not enlarged Microscopical section showed a regular spheroidal cell carcinoma with considerable tubule formation but the axillary glands were free from growth

She remained in good health until 1929 when she began to suffer from arthritis of the spine and hip Radiographs showed no evidence of secondary bone deposits In November of the same year I again saw her she was then suffering from a neoplasm of the stomach with pyloric obstruction Her condition was hopeless and did not admit of radiography of the stomach It was impossible to say whether the neoplasm was primary or secondary She died in January, 1930 her doctor Dr A M Barlow reported that a few weeks before death a lump (? a second primary carcinoma) appeared in the right breast

On the whole it appears likely since her mother possibly and her grandmother probably died of gastric carcinoma that death was due to a primary neoplasm of the stomach

SISTER B, BORN 1875, MARRIED

The patient was first seen in 1920 She had had an abscess in the left breast after a miscarriage and a narrow sector shaped mastitic induration containing two small nodules thought to be cysts was found above and internal to the nipple The left nipple was elevated but in view of the history of abscess the importance of this sign was minimized The right breast was normal I asked to see her in six weeks time but it was not until 1925 that she again appeared with a typical carcinoma of the right breast Vague induration could be felt in the left breast at the site of the cysts but it was otherwise normal A right radical mastectomy was done and microscopical examination of the specimen showed a carcinoma with no involvement of the axillary glands

In 1927 she was well but a thickened duct could be felt a short distance above the left nipple Deep x ray and surface radium treatment was given during 1927 and 1928 In 1930 a precautionary left mastectomy was advised but the patient declined operation and another course of deep x ray treatment was given In 1934 thickened ducts had again appeared, and operation was urged but without success

In 1937, five years after the last x ray treatment, a hard lump adherent to the skin appeared in the upper and outer quadrant of the left breast just outside an area of x ray telangiectasis present above the nipple since 1931 Mr Turner Warwick performed a radical mastectomy and pathological examination showed a cellular spheroidal cell carcinoma without axillary gland invasion The patient made a good recovery from the operation and is at present well It is interesting that the carcinoma appeared outside the area of telangiectasis I have never seen a carcinoma develop beneath such an area but I can recollect at least one other case in which a carcinoma appeared just beyond the margin

The history of this case shows that the protection against carcinoma afforded by x rays is not absolute and *permanent* It also emphasizes the need for three monthly or six-monthly re examinations of the abnormal breast and for repeating the x-ray course at least every two or three years It is to be noted that the breast was watched and treated for fourteen years before its removal was urged, and that frank carcinoma did not supervene until three years later This is prima facie evidence that it is possible to distinguish the onset of the dangerous stage of chronic mastitis

SISTER C, BORN 1879, MARRIED

In 1927 this patient was sent to me by Dr Barlow for pain in and under the left breast She had cardiac weakness and irregularity following influenza, with a bruit over the lower sternum, and was subject to indigestion All remaining teeth had been extracted a year before

On examination a sector-shaped mastitic induration was found in the upper quadrant of the left breast In it near the nipple could be felt tortuous thickened ducts The left nipple was higher than the right and pointed forwards and outwards while the right pointed normally—that is forwards outwards and downwards Owing to these signs I regarded the breast as a dangerous one but in view of the cardiac condition x-ray treatment was advised in preference to mastectomy A month later the left breast appeared almost normal except that some thickened ducts persisted above the left nipple On this occasion some thickened ducts were felt above the nipple of the other (right) breast In June 1928 both breasts were much improved In May 1930 there was a slight duct thickening above the left nipple and further x ray treatment was given to both breasts by Dr Russell Reynolds The left nipple was still raised and deviated

In September 1930 following a blow on the left breast a small lump a quarter of an inch in diameter and adherent to the skin was found in the left upper and outer quadrant I diagnosed carcinoma The pathologist reported that the lump was a cyst and that the breast only showed chronic mastitis A simple mastectomy was done Re-examination of the slide has convinced me that the duct epithelium was in a precancerous condition

In March 1933 a mastitic swelling containing thickened tortuous ducts appeared above the right nipple and I urged a simple mastectomy with removal of the glands This was done The breast showed advanced fibrosis with microcystic distension of the smaller ducts and proliferation of their epithelium At certain points the breast showed diffuse papillomatosis of the ducts still innocent (Plate Fig 1) At one point there was seen a duct distended by epithelium with definite infiltration of the surrounding tissues—an incipient carcinoma (Fig. 2) Glands were not infected Subsequently a course of *x* rays was given

This case confirms the evidence of the preceding one as to (1) the controlling power of irradiation in chronic mastitis (2) the need for periodic examinations in such cases (3) the value of the danger signals which herald approaching malignancy

SISTER D BORN 1885 MARRIED WITH TWO CHILDREN

The patient first presented herself in 1929 because of discomfort and pain in the left breast of twelve months duration Examination showed a slight mastitic thickening in the upper inner quadrant of the left breast which was tender There were no other signs in either breast The induration disappeared after a short course of x ray therapy

In 1930 an indurated area was noted in the region of the axillary tail of the right breast but this also subsided under surface radium treatment The breasts were normal when the patient was last seen in October 1937

SISTER E BORN 1886 MARRIED

This patient was operated upon by me at the Middlesex Hospital in December 1923 for an advanced carcinoma of the left breast when aged 37 Radium tubes were introduced in the upper intercostal spaces and a patch of radio dermatitis developed a month later over the inner end of the third space

She does not appear to have been seen again until September 1927 At this time two patches of radio dermatitis were present at the inner ends of the third and fifth left spaces In the right breast in the upper and outer quadrant was a defined granular sector shaped thickening an area of chronic mastitis The right nipple seemed less prominent than normal and was flame-shaped in contour in the plane of the skin with the point directed towards the mastitic thickening There was no definite adhesion to the skin but a very faint depression appeared over the induration when the breast was displaced I advised removal of the right breast but as an alternative owing to the reluctance of her relatives offered x ray treatment with re-examination in two months The axillary glands were not enlarged There was no recurrence on the left side I wrote to her medical adviser Dr Barlow There seems to be some danger that this patch will develop into a carcinoma and removal of the right breast would be a wise precaution since the second breast in a patient who has had carcinoma is four times as likely to develop carcinoma as the breast of a normal woman

By October 1927 after one dose of deep x rays which gave her acute pain in the breast and made her ill for some days the patient had made up her mind to undergo operation A faint but unmistakable skin dimple could now be elicited over a small lump beneath the edge of the right great pectoral at the periphery of the breast The mastitic swelling had become less definite probably as the result of the x ray dose The flame shape of the nipple was still evident A diagnosis of second primary carcinoma was made and immediate radical operation was urged and performed Histological examination showed a spheroidal cell carcinoma without invasion of lymph glands considered to be a second primary carcinoma

In June 1928 she was free from recurrence though suffering from inginal attacks but she then escaped from observation In May 1930 I was informed that she was having radium treatment for enlarged glands in the neck A sternal recurrence was subsequently treated by buried radium In 1932 spinal secondary deposits appeared and she died in 1934 after being bedridden for two years

In the history of this case the regrettably long intervals between examinations are to be specially noted

Commentary

The history of this unfortunate family recalls the high incidence of breast cancer found in certain inbred laboratory strains of mice Dr W E Gye (1936–7) makes some interesting observations on these strains He says

Inbred strains of mice are very useful in some branches of experimental cancer research The discovery of the carcinogenic property of oestrone was made with such a strain and the analysis of the chain of events which ends in malignancy of the breast is simplified by the use of pure strains of high and lower cancer incidence But as Dr Cramer has pointed out inbred mice are not normal animals and in high cancer lines the clinical picture of cancer is distorted by the predominating influence of one aetiological factor—inherited susceptibility in a particular organ—to such an extent as to minimize the importance of other factors. Conclusions drawn from observations on such strains cannot therefore be applied without reserve to cancer of normal mixed stocks In high cancer strains for example multiple tumours of the breast are of frequent occurrence whereas in mixed stocks single tumours are the rule If a cancer in a high strain is excised surgically the animal though cured of this particular tumour is liable to develop a second or a third independent growth in another part of the same breast or in the breast of the opposite side The inherited predisposition to cancer of the breast is not affected by the removal of the first tumour and surgical treatment in these exaggerated artificial circumstances is ineffectual and appears to be irrational In mice of mixed strains surgical removal of a tumour is not followed by the appearance of fresh independent new growths if local recurrence takes place it is due to incomplete removal of the primary tumour The differences between cancer in pure line strains and in mixed stocks may have their counterpart exhibited less strikingly in human surgery

How far are these conclusions supported for human carcinoma by the facts I have related? The fact that three of the five sisters are still living free from pain and from signs of recurrence partly as the result of radical mastectomies for developed cancer partly as the result of simple mastectomies for threatening precancerous conditions shows that in the human race (which fortunately has only two breasts) surgical treatment may be worth

while however strong the constitutional predisposition to breast cancer Though I believe radiation to be a valuable prophylactic, it cannot in all cases be an efficient substitute for surgery Indeed the impermanence of the protection it affords is manifest in the case records

Dr Gye's statement that 'in mice of mixed strains surgical removal of a tumour is not followed by the appearance of fresh independent new growths' is far from being applicable in the ordinary case of human breast cancer with no specially strong family history My experience is that I see an increasing number of cases of second primary carcinoma of the opposite breast I hope to diminish that number in future by advising routine post operative irradiation of the remaining breast and by even more careful following up of cases

Summary

This paper records the history of five sisters descendants of a cancerous mother and grandmother who have been under my observation for nineteen years There is evidence that three of them have suffered from double primary carcinoma of the breast One sister was treated by irradiation for bilateral chronic mastitis, which has not recurred The remaining sister was treated for chronic mastitis by irradiation, at first with success but after three years a left simple mastectomy seemed necessary and three years later a right simple mastectomy The right breast showed an incipient carcinoma The danger signals which herald the onset of carcinoma in such cases are described and it is held to be possible to distinguish between cases of chronic mastitis which may safely be treated by irradiation and cases in the precancerous stage needing mastectomy Two of the sisters have died of breast cancer surviving operation eleven and nine years respectively and three remain well Five radical mastectomies and two simple ones have been done

REFERENCES

Cheatle, Sir G Lenthal (1935) *Brit J Surg* 22 710
Cramer, W and Horning E S (1936) *Lancet* 1 247
—— —— (1937) *J Path Bact* 44 633
—— —— (1938) *Lancet* 1 72
Gye, W L (1936–7) Imperial Cancer Research Fund Report p 18
Handley W Sampson (1910) *Practitioner* 84 463
—— (1931) *Genesis of Cancer* H K Lewis London
Lewis D and Geschickter, C F (1934) *Ann Surg* 100 779

Dr Henry Herd, school medical officer for Manchester, in his annual report for 1937 records the transfer to his department of a child guidance clinic which was formerly run on voluntary lines The present tendency to make use of the school clinics for early consultation, in preference to awaiting the next routine visit of the medical officers is shown by the rising ratio of 'special' to "routine" inspections During the year under review some 33 000 routine inspections were undertaken, as compared with nearly 49 000 special inspections The nutritional grading required by the Board of Education was continued during the year An analysis of the very different findings of a group of officers confronted with the same batch of children, the grading being based on general observation only bears out Dr Herd's view that the economic test which reveals that a child can, or cannot be receiving an adequate diet on the income available for feeding him, is still the only reliable and practicable method capable of application on a large scale to the assessment of nutrition The scope of this report is as wide as ever, and it includes a paper on the physical fitness of schoolboys, with special reference to nutrition and the mechanism of heredity

DYSFUNCTIONAL UTERINE BLEEDING TREATED WITH PROGESTERONE*

BY

J. N. MACGREGOR, M.D., F.R.C.S.Ed., M.C.O.G.

Gynaecologist Deaconess Hospital Edinburgh Late Tutor in Clinical Gynaecology Royal Infirmary Edinburgh Crichton Research Scholar

(WITH SPECIAL PLATE)

Although towards the end of last century it was suggested that irregular uterine bleeding was associated with abnormal ovarian function it is only within comparatively recent times that this has been confirmed by scientific data The dysfunctional nature of irregular uterine bleeding was disclosed when the endometrial structure and hormone findings in such cases were correlated with the endometrial changes and hormone concentrations occurring cyclically during the normal menstrual process It is known that menstrual rhythm is founded on the harmonious interaction of the gonadotropic hormone of the anterior pituitary and the oestrogenic and luteal hormones of the ovaries Several factors however particularly dysfunction of one or more of the other glands in the endocrine chain and abnormal nervous stimuli, may affect this intimate relationship

The present communication records a study of *thirteen* cases of irregular uterine bleeding that was essentially associated with a disturbance of the pituitary ovarian mechanism

Types of Bleeding

Two types of bleeding only are considered—namely, ovular and 'anovular

Ovular Bleeding—By this term is implied bleeding which may occur at or near the time of ovulation about the middle of the cycle This phenomenon, which has been noted by many observers (Hartman 1932 Hain 1934) is probably due to a disturbance of the hormonal equilibrium at the time of ovulation In such cases it is presumed that between the time of rupture of the Graafian follicle and the formation of the corpus luteum there is a transient lowering of the blood concentration of oestrin Consequent on the fall of blood oestrin there is diminished endometrial stimulation, which is sufficient to induce partial disintegration of the endometrium with bleeding When the corpus luteum is mobilized, however, the endometrial stimulation is restored and the haemorrhage subsides

Anovular Bleeding—As distinct from anovular *menstruation* this term is synonymous with that of metropathia haemorrhagica The pathological findings in this condition are cystic degeneration of the Graafian follicles with no recent or forming corpus luteum in the ovary myohyperplasia of the uterus and marked proliferation of the endometrium with cystic dilatation of the glands (Plate Figs 1 and 5) The cells lining the glands are cubical, with centrally placed nuclei, no glycogen is found in the cells (Figs 2 and 6) This characteristic pathological picture may result from (*a*) an upset in the pituitary-ovarian mechanism or (*b*) a local pelvic lesion interfering with the normal process of ovulation

Mechanism of Bleeding

Ovular bleeding, it has been suggested, is associated with a lowering of the blood concentration of oestrin

* A Report to the Therapeutic Trials Committee of the Medical Research Council From Dr Douglas Miller's Gynaecological Clinic, Royal Infirmary Edinburgh, the Deaconess Hospital Edinburgh and the Institute of Animal Genetics, Edinburgh University

the time of ovulation and it is probable that a similar factor operates in metropathia haemorrhagica Clinically and experimentally it has been demonstrated that endometrial stimulation can be maintained for long periods provided an adequate amount of oestrogenic hormone is administered The withdrawal of the hormone however is followed by endometrial disintegration In metropathia haemorrhagica therefore there must be some factor which initiates a lowering of blood oestrin

I have several times confirmed the observation made by many investigators that the large follicular cysts found in the ovaries in cases of metropathia haemorrhagica contain a fluid which has oestrogenic properties There are therefore in these cases depots of oestrin in the ovaries which supply a continuous amount to the general circulation and thus endometrial stimulation is sustained Gradual intracystic tension however may cause either atrophic changes in the secreting cells or compression of the blood vessels Whatever the cause the direct result is a reduction of the hormone passing into the general circulation Although it was shown by Corner (1927) and Hartman (1932) and subsequently confirmed by others that oestrin withdrawal causes uterine bleeding it was not until Markee's (1936) experiments on monkeys were carried out that the mechanism of this phenomenon was demonstrated He showed that diminution in the blood concentration of oestrin causes vasoconstriction of the endometrial capillaries Consequent on this vascular spasm the nutrition of the highly proliferated glandular structure is impaired Partial necrosis results with consequent shedding of the endometrium

Diagnosis

The history obtained in cases of anovular bleeding is characteristic There is usually a period of six to ten weeks amenorrhoea followed by prolonged bleeding of from four to eight weeks duration In cases of ovular bleeding there is a history of frequent loss which in some cases occurs regularly every fourteen days It is sometimes necessary to remove endometrium on several occasions in order to distinguish between the ovular and true menstrual bleeding Although a diagnosis of these conditions may be made on clinical evidence this should be confirmed by histological examination of the endometrium In the early years of reproductive life a thorough examination of the genital tract including measurement of the length of the utero-cervical canal and microscopical examination of the endometrium furnishes information which is of value in determining the form of therapy most likely to be beneficial This examination including in particular biopsy, is essential near the menopause as the possibility of carcinoma being the cause of the bleeding must always be excluded

Treatment

Progesterone was the form of therapy used in the present investigation Initially 1 to 2 mg were given daily or every second day, but when more abundant supplies became available 5 mg were given daily In ovular bleeding the treatment was given two or three days before the expected anomalous bleeding the aim being to maintain endometrial stimulation during the time of ovulation and thus tide over the period when the blood oestrin was lowered The administration of oestrin at this time by preventing a diminution of blood oestrin, produces the same effect As is known however oestrin at a certain concentration inhibits the anterior pituitary and accordingly it is possible that this form of therapy may by influencing the pituitary stimulus, delay or inhibit ovulation Theoretically therefore the former method of treatment is preferable

In metropathia haemorrhagica progesterone may be given at any phase During the bleeding stage 5 mg were administered daily until the bleeding was controlled During the amenorrhoeic phase 5 mg were given daily the total dosage amounting to 25 to 30 mg Though oestrin therapy may by sustaining endometrial stimulation control the haemorrhage in these cases the effect is only a temporary one Indeed oestrin would only aggravate the condition and its withdrawal would be followed by still more haemorrhage Accordingly this form of therapy is definitely contraindicated

Data and Results

Thirteen patients were treated with progesterone five were cases of ovular bleeding and seven of anovular bleeding whilst one case, though treated with progesterone was found to come under another category

Ovular Bleeding—As the result of treatment three patients have had regular menstruation for the last eighteen to twenty two months One patient studied over a period of eighteen months had three regular periods after cessation of therapy She then became pregnant but aborted at the end of the second month of gestation (Chart I) The other patient though not completely well

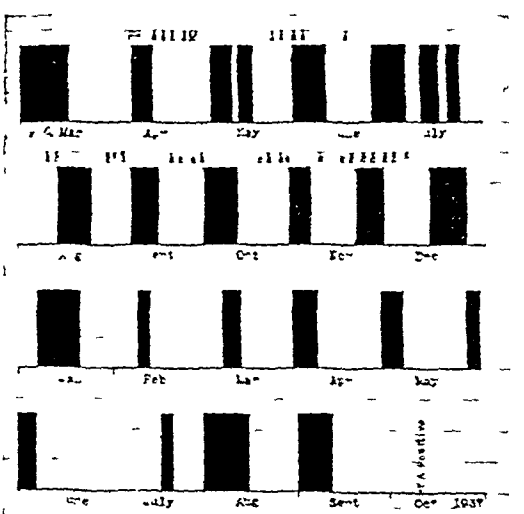


CHART I—Case 4 aged 30 Menarche at 12 Menstruation regular 7-8/28 until the age of 25 Since then menstruation has been irregular 7 21/17 21 Biopsy curettage carried out on two occasions indicated that ovulation was occurring but was associated with bleeding The chart indicates the effect of treatment Doses of progesterone were given on the following days 1936 April 7 8 9 10 15 18 21 and 25 1 mg April 27 and 28 2 mg May 24 27 and 31 and June 3 14 17 and 21 and August 10 and 13 1 mg August 30 and September 1 and 4 5 mg September 20 23 27 and 30 and October 19 22 26 and 28 and November 8 1 mg November 15 18 22 25 and 29 and December 2 and 6 2 mg

has now only a brownish discharge whereas formerly she had frank haemorrhage for a few days between every two periods

Anovular Bleeding—In four cases of anovular bleeding menstruation became normal in duration and periodicity In two cases however there has recently been a recurrence of the irregularity This has been attributed by one patient to a nervous turn following the sudden death

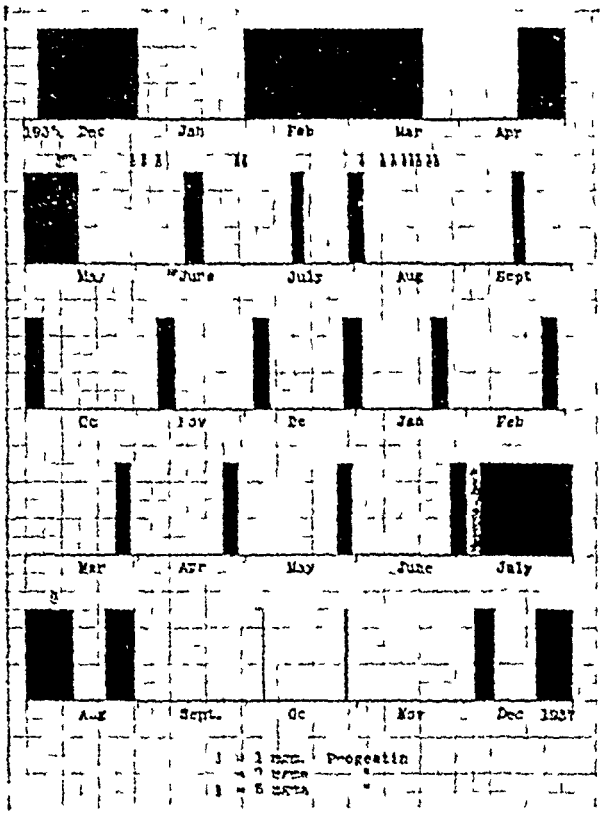


CHART II—Case 6 aged 31 2 para Menstruation 4 7/21-28 day type since the menarche at the age of 13 till December, 1935, when period lasted from December 5 1935 to January 1 1936 After an interval of four weeks, bleeding began again in the beginning of February and lasted until March 23, 1936 when a diagnostic curettage was carried out Basal metabolic rate + 7 per cent Blood sugar tolerance 88 mg per 100 c cm after 50 gm glucose, 100 119, 99 90 and 90 mg per 100 c cm The diagnosis of metropathia haemorrhagica was confirmed by histological examination of the endometrium Doses of progesterone were given on the following days 1936, May 10 11, 12, 13, and 14 2 mg, May 31 1 mg, June 3 7 and 29 and July 1, 2 mg August 3, 9, 12 15 17, 19, 22 and 24 1 mg, 1937, August 8, 2 mg, August 9 1 mg

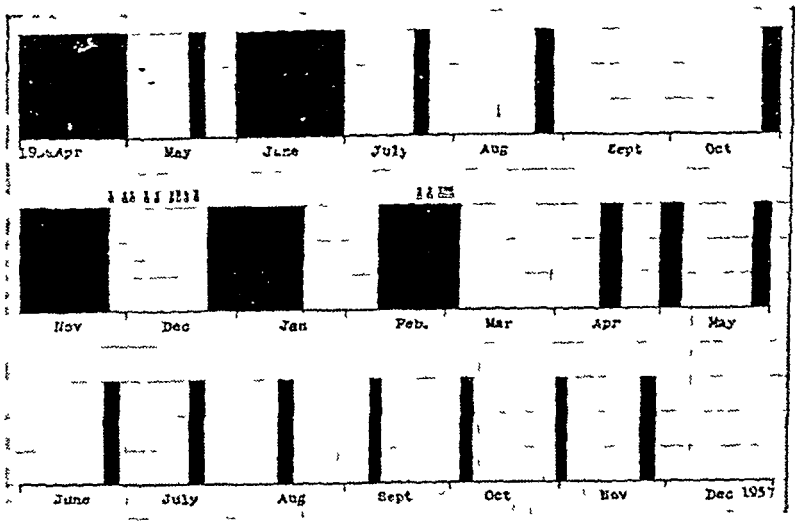


CHART III—Case 7 aged 31, 1 para Menarche at age of 12 Periods were regular 4/28 until birth of child two years ago Menstruation recommenced three months after the birth and was regular 4/28 until April, 1936 The diagnosis of metropathia haemorrhagica was confirmed by histological examination of the endometrium removed on April 30 1936 Doses of progesterone were given on the following days 1936 November 26 and 30 and December 2 6, and 9, 1 mg, December 13, 15, 17, and 20, 2 mg, 1937, February 21, 24, and 27, 2 mg February 28 and March 1 and 2 5 mg

of a near relative while in the other case the patient sustained a shock on falling off a bus (Charts II and III) In the remaining three cases the uterine endometrium was examined histologically before and after treatment, and it is of interest to note that as a result of the treatment the hyperplastic endometrium has been changed into a pseudo secretory phase in two of the cases (Figs 3, 4, 7, and 8) These cases have only recently been under treatment and two have had two normal periods, whilst the third has had one normal period

On the other hand, the following case illustrates the wasteful aspect of the indiscriminate use of endocrine therapy for irregular uterine bleeding

Case 13—This patient aged 13 was first seen on August 17, 1936 Menstruation started in February 1936 and her periods were as follows the first period lasted five days, the second period five weeks later lasted seven days the next period, one month later lasted a similar time the period in May lasted seven days two periods in June lasted seven days, a period started on July 4 1936 and continued until the patient was seen on August 12 Thyroid therapy had no effect on the bleeding Between August 12 and 17 the patient had 10 mg of progestin Bleeding stopped on August 28, but restarted on September 3 and lasted nine days, it was again present from September 24 to October 3 and came on once more on October 12 Between October 19 and 26 the patient had 35 mg of progestin which did not control the bleeding Examination under anaesthesia on October 31 showed that the uterus was small the utero cervical canal measuring only two inches Thereafter she was put on progynon B oleosum forte (oestradiol benzoate) and after a total dosage of 45 mg. menstruation came at regular intervals for five days and has continued to do so

I have indicated that the progesterone treatment in this case was indiscriminate If the patient had been examined initially under anaesthesia and the hypoplasia of the uterus detected progesterone would not have been given, as it would have had no effect on an endometrium which had not been sufficiently primed with oestrogenic hormone

Discussion

The histological appearances of the endometrium before and after the administration of progesterone are significant, in that they demonstrate clearly the effect of this hormone on the endometrium If this were the only action produced, however, this therapy would be of little value as its effect would be merely a local and temporary one I have shown that progesterone therapy, in some cases of metropathia haemorrhagica, was followed by a normal menstrual rhythm This result, it is presumed, has been due to a re establishment of a normal hormonal balance The rationale of this form of therapy is possibly as follows the progesterone brings about an increased elimination of oestrin by urinary excretion or converts it into less physiologically active fractions (Smith, Smith, and Pincus, 1938) This results in a lowering of the blood concentration of oestrin to within normal limits following upon this, that inhibition of the pituitary which has been associated with a high concentration of oestrin is removed The pituitary can now act at a normal level A full

reactivation of ovarian function restores the normal hormonal balance a continuation of which effects the regular menstrual rhythm

Comparatively few favourable results will follow the indiscriminate use of progesterone therapy but in cases where its employment appears to be indicated by the histological structure of the endometrium encouraging results can be obtained Although radium therapy is successful in the treatment of metropathia haemorrhagica occurring at or near the menopause a wider use of progesterone seems to be indicated as a more rational form of treatment

Summary

1 Two types of irregular uterine bleeding are described

2 The mechanism of bleeding in metropathia haemorrhagica is discussed

3 The results of treatment with progesterone are given and the effect of this form of therapy on the uterine endometrium is illustrated by photomicrographs

4 The rationale of progesterone therapy in irregular uterine bleeding is discussed

I wish to express my indebtedness and thanks to Dr Douglas Miller for the privilege of investigating and treating cases under his care and to Professor F A E Crew for the facilities afforded me in his department

The preparation of progesterone used in this investigation was progestin organon and I am grateful to the manufacturers (Messrs Organon Laboratories) who supplied it to me through the Therapeutic Trials Committee

References

Corner G W (1927) *J Amer med Ass* 89 1838
Hain A M (1934) *Quart J exp Physiol* 24 101
Hartman C G (1932) Carnegie Inst Wash Publ No 433 Contr to Embryol No 134
Marker J E *et al* (1936) *Amer Rec* 64 231
Smith G van S Smith O W and Pincus G (1938) *Amer J Physiol* 121 98

BRODIE'S ABSCESS AND ITS DIFFERENTIAL DIAGNOSIS*

BY

JAMES F BRAILSFORD, M D, Ph D M R C P

Consulting Radiologist City of Birmingham Hospitals

(WITH SPECIAL PLATE)

In the collected works of Sir Benjamin Collins Brodie published in 1865 will be found a paper on Chronic Abscess of the Tibia which was presented to the students of St George's Hospital In this paper he pointed out that an abscess may occur in the interior of any bone in the body but according to his experience we meet with it more frequently in the tibia than in any other bone He gives a brief account of eight cases All the patients except one were males between the ages of 13 and 34 years The abscess was in the upper third of the tibia in four and in the lower third in four The clinical histories indicated that the lesion had existed for periods ranging from five to eighteen years The account of his first case is as follows

Some Early Cases

It was as long since as the year 1824 that I was consulted by a young man 24 years of age under the following circumstances There was a considerable enlargement of the lower end of the tibia but the ankle joint permitted of very motion and was apparently normal The skin was thin tense and closely adherent to the periosteum There was constant pain in the part generally of a moderate character but every now and then it became excruciating keeping the patient awake at night and confining him to the house for many successive days It made his life miserable and his nervous system irritable one effect of which was that it spoiled his temper and thus produced another set of symptoms in addition to those which were the direct consequence of the local malady The disease had been going on for twelve years He had consulted many surgeons respecting it and had used a great variety of remedies but had never derived benefit from anything that was done Instead of getting better he every year became so much worse I tried some remedies without any advantage and at last recommended that he should lose the limb Mr Travers saw the patient with me and agreed with this opinion An amputation was performed and the amputated tibia is now on the table You will see how much the lower end of it is enlarged and that the surface of it presents marks of great vascularity The bone in the preparation is divided longitudinally and just above the articulating surface there is a cavity as large as a chestnut This cavity was filled with dark-coloured pus The inner surface of it is smooth The bone surrounding it is harder than natural On observing these appearances I could not help saying that if we had known the real nature of the disease the limb might have been saved

In another paper he tells us that the patient died a few days after the operation The other seven patients he treated by trephining the bone at the site of the point of maximum tenderness and the release of pus relieved the symptoms and led to rapid cure

In addition to the signs and symptoms recorded in the account of the first case the following are recorded in the other histories

The pain may be of moderate character with periodic exacerbations of excruciating almost intolerable pain and periods of perhaps several months of freedom from all symptoms The adjacent joint may exhibit periodic effusions after exercise which are absorbed with rest One patient had tubercles in the lungs and vomicæ dead bone in the ribs and other complications In one case a sinus communicated with the knee joint The new periosteal bone is softer than normal

Such is the account that Brodie gave to a condition which he recognized as a distinct entity The accuracy of his observations and the value of the method of treatment which he devised were such that though thousands of such cases have been treated by hundreds of different surgeons since his time little if any addition has been contributed to the clinical picture

What Constitutes a Chronic Abscess?

Brodie's clinical work was unaided or as some would express it unhampered by bacteriology or radiology It is therefore impossible to define accurately in the present terms of bacteriology or radiology the nature of the lesion which he described Though in the light of our present knowledge most of his eight cases appear to be of a staphylococcal nature the history of at least one of them suggests the possibility of a tuberculous infection Consequently though we may reasonably refer to any chronic abscess of bone as a Brodie's abscess it would be preferable from the point of treatment to confine the term to abscesses that are due to the staphylococcus These constitute all but a relatively small minority that are attributable to the tubercle bacillus, typhoid bacillus pneumococcus streptococcus etc We are also faced with the question of what constitutes a chronic abscess? Brodie stated that the duration of symptoms in his eight patients varied from five to eighteen years To day, with the ready accessibility of the harmless and painless radio-

* Paper read at the Annual Meeting of the British Association of Radiologists at Belfast May 13 1938

graphic examination such lesions may be detected very early in the course of the disease, and what might in Brodie's day have been allowed to progress for some years before surgical intervention was made is now capable of detection and treatment within a month or so of its onset. For the purpose of this paper I have examined the old radiographs and case histories, and made recent clinical and radiographic examination, of as many as were available of the sixty-two cases of chronic bone abscess which have been submitted to me from time to time during the past fifteen years. The results are shown in the following table.

Table summarizing the Main Features of 62 Cases of Chronic Abscess of Bone (42 males, 20 females)

	Age Period at which Abscess was found						
Years	1-5	6-10	11-15	16-20	21-30	31-40	40+
Number of cases	6	5	19	15	10	5	2
Duration of signs and symptoms at time radiographic evidence was obtained	1 wk. to 6 mths.	3 mths. to 6 mths.	3 mths. to 5 yrs.	3 yrs. to 11 yrs.	1 yr. to 20 yrs.	1 mth. to 10 yrs.	

Site of Primary Bone Focus

Tibia			Femur	Humerus	Ulna	Radius	Fibula
Lower end	Upper end	Mid third					
29	9	2	8	7	4	2	1

Single focus in bone 45 cases. Multiple bone foci, 17 cases.

Analysis of the Cases

Analysing this table, we see that the lesion occurred twice as often in the male as in the female. The majority—that is, forty-four—occurred in the age period of 11 to 30 years. The younger the patient the shorter was the duration of symptoms, though in a few isolated cases, even in adult life, a brief history only was obtainable. In those cases with a long history, starting in some instances in the early years of life, the symptoms had been intermittent, attacks of pain and swelling were followed by long periods during which there was almost complete freedom from symptoms, and it is probably due to this that the lesion was not submitted to radiographic examination. Of the six children under the age of 5 who developed signs and symptoms severe and protracted enough to cause the doctor to seek radiographic examination the lesion in five of them appeared to be due to secondary tuberculous infection.

In some cases radiographic evidence of a septic focus in bone was obtained within a month of the patient complaining of symptoms, but since we are unable to fix the date of invasion of the site by infective organisms from the patient's story we obviously cannot, in the majority of cases, say how long such a lesion has been present. The intelligence of patients, their reaction to pain and discomfort, and their resistance to infection vary considerably, and so does the virulence of the invading organisms. The physical signs also do not materially aid us in our estimation, for even in acute osteomyelitis swelling of the affected limb and redness of its skin are relatively late signs. In the case of the chronic lesion these signs appear intermittently, and though there may be long intervals during which little can be detected, these intervals tend to diminish as the signs become more prominent and intensive.

Upwards of a third of the total number of abscesses were found in the lower end of the tibia. This is in opposition to the findings recorded by other workers in acute osteomyelitis of childhood, when the upper end of the tibia was more often involved. Except in a few instances the primary lesion was seen to be in the metaphyseal extremity of the diaphysis, and by the aid of serial radiographs it was observed that the lesion extended from this site towards the medulla and rarely perforated the epiphyseal joint cartilage. In those instances in which the latter occurred the tubercle bacillus was found to be the infecting organism.

In the majority of cases the periosteum did not show any evidence of reaction, but when the abscess was large and involved the whole extent of the diaphyseal extremity periosteal new bone was evident. This distribution and suggestion of spread of infection is in opposition to the views put forward by Starr with regard to acute osteomyelitis. He produced evidence to show that the infection passes from the metaphysis to the periosteum, stripping the latter from the bone by the formation of a subperiosteal abscess and subsequently infecting the medulla via the Haversian canals. In these cases of chronic bone abscess I am unable to obtain any radiographic evidence of infection of the bone via this route. In nearly one-third of the cases the patients either exhibited evidence of previous septic bone foci or subsequently developed such lesions while others gave a history of tonsillitis, pneumonia, empyema, etc. The duration of the lesion in most cases was so long that the early events in its history were not well remembered, but in no fewer than eight instances there was definite evidence of severe injury to the part preceding the development of symptoms. In some cases the symptoms and signs produced by the trauma passed imperceptibly into the symptoms and signs which have become associated with the bone abscess.

Many of the patients gave a history of having had scarlet fever, measles, and other exanthemata, and in some cases the lesion in the bone developed during or shortly after the infectious illness. In two cases a history of typhoid fever was obtained, and the organism was recovered from the abscess. As in acute osteomyelitis the infecting organism found in the majority of the cases was the *Staphylococcus aureus*.

Physical Signs and Symptoms

The chronic abscess has an insidious onset, quite distinct from acute osteomyelitis, in which the striking clinical features are the sudden onset of severe or even excruciating pain and the development of a point of exquisite tenderness over the primary focus—which the patient guards with fear—associated with rigors, high fever, and rapid pulse, followed by the signs of a severe toxæmia, delirium, and coma. The patient may complain of recurrent attacks of pain which have gradually increased in severity. The pain is often of a boring or burning character, giving the impression of a gradual expansion of the bone from some internal compression and at times it may be almost intolerable. Some patients complained that it was worse during the day when they were walking about, but that it became less on resting and at night. In these cases the affected limb usually became somewhat swollen, the skin reddened, and there was evidence of oedema of the soft tissues over the affected bone during the day, which subsided during the night. In others the pain appeared to be worse at night, none being experienced during the day until resuming in the evening. Attacks of pain of a more severe nature lasting three or four days were followed in some instances by months of freedom. In most cases there was tenderness on pressure over the abscess. In the most acute phases the patient may show a hot, red, tense, fluctuating

swelling with some oedema of the affected limb The adjacent joint at such phases sometimes became swollen and showed signs of effusion into the joint In a few cases superficial abscesses developed and discharged and sometimes definite thickening of the affected segment of bone could be observed

Radiographic Signs

ACUTE OSTEOMYELITIS

Radiographic evidence of acute osteomyelitis for the purpose of diagnosis does not exist By the time the bone shows changes detectable by radiography the shaft will have been denuded of periosteum and sequestra have formed From radiographic examination of septic fingers in which the date of onset can be more accurately fixed I have determined that changes may be found in the affected bones within ten days The earliest sign is localized osteoporosis When the focus is situated in the medulla absorption of the cancellous structure may be evident In less acute lesions no apparent change may be seen for one or two months though there may be highly suggestive clinical signs and symptoms In a patient aged 32 who had complained of pain in his leg for one month radiographs revealed a well-defined area of cancellous destruction in the medulla of the tibia at the junction of the middle and upper thirds with some increased density of the surrounding cortex

SUBACUTE OSTEOMYELITIS

In subacute osteomyelitis physical signs and symptoms precede the development of radiographic signs by a week or more Thus in a girl (D V) aged 10 years radiographs taken one week after the onset of pronounced physical signs and symptoms showed a small ill defined area of osteoporosis at the lower metaphyseal extremity of the tibial diaphysis but a month later radiographs revealed irregular osteolysis of the whole of the lower end of the tibial diaphysis including its compact cortex and an accretion of new periosteal bone which in places also exhibited calcium deficiency It was impossible to define the boundaries of the infected bone Further radiographs after another month showed that calcium had been deposited and there was now increased definition in the affected zone evidence of consolidation and localization of the process and more regular ossification of the new periosteal bone No evidence of sequestra formation could be found

CHRONIC BONE ABSCESS

The chronic bone abscess at the diaphyseal extremity in the patient whose epiphysis has not yet fused is revealed on the radiograph by an area of cancellous destruction extending from the epiphyseal growth cartilage towards the medulla Its boundaries are not sharply defined but they are perhaps rendered more apparent because the adjacent bone has an increased density Frequently the lesion is spatulate in form and even with five years history may be less than a quarter of an inch in thickness but extending an inch or more from the epiphyseal line towards the medulla The more acute the abscess the larger the cavity formed and the less defined are its boundaries and the greater the probability of new periosteal bone accretions As the lesion increases with age its boundary will tends to become more sharply defined and sclerosed In one patient aged 21 who gave a history of a lesion of seventeen years duration the radiograph showed an abscess with a sharply defined regular wall which was little more than a quarter of an inch in diameter extending from the subarticular surface of the tibia for one and a half inches towards the medulla (See Fig 3 Special Plate) In patients above 20 years of age who give a history suggesting the beginning of an abscess about the age of 14 the radiographs may show the abscess to be about an inch above the ossified epiphyseal growth cartilage

It is rare for the growth cartilage to be penetrated by staphylococcal infection and the epiphysis eroded consequently though the joint may exhibit periodic effusion it is rare for it to be infected by extension but after the epiphysis has fused the lesion may be extended into the epiphyseal area and even infect the joint No evidence of accretion of new periosteal bone may be found even after the abscess has existed many years thus in one of seventeen years duration no thickening was apparent and consequently no swelling was detectable on clinical examination However in those cases in which the abscess has involved most of the diaphyseal extremity an accretion of new periosteal bone will be shown No sequestrum is to be observed within the abscess cavity except in those cases that have been subjected to surgical intervention as the abscess extends by the gradual absorption of the adjacent bone

Much less common than the abscess in the metaphyseal region is the abscess in the middle third of the shaft of a long bone and beneath the periosteum

MEDULLARY ABSCESSES

An abscess in the medulla of the middle third of the shaft of a long bone is recognized from its radiographic appearances The shaft in the area shows a spindle-shaped expansion or thickening In the middle of the

LEGENDS FOR RADIOGRAPHS IN SPECIAL PLATE

FIG 1—Radiograph of G J a youth aged 15 showing subacute abscess in lower end of diaphysis of tibia Duration of symptoms five months Note ill-defined area of central cancellous destruction with increased density of the adjacent bone and accretions of new periosteal bone A radiograph taken six years after evacuation of abscess showed linear outline of cavity in lower third of diaphysis but no evidence of reaction in the adjacent bone or periosteum Clinically cured

FIG 2—Radiograph of Mr D E aged 21 showing chronic abscess in lower third of tibia three-quarters of an inch above line of epiphyseal growth cartilage Note marked increase in density of surrounding bone Duration of symptoms five years

FIG 3—Radiograph of Mr S B aged 21 showing chronic abscess in lower end of tibia which has extended to subarticular bone the epiphyseal growth cartilage having disappeared Duration of intermittent symptoms seventeen years Note well-defined outline of sclerosed wall of abscess and absence of periosteal reaction

FIGS 4 and 5—Antero-posterior and lateral radiographs of Miss E M aged 14 showing chronic abscess in lower end of tibial diaphysis Duration of symptoms five years Note well-defined wall of abscess

FIG 6—Radiograph of Miss E M ten years after biopsy which failed to reveal abscess Compare with Figs 4 and 5 Note drill hole in bone (made ten years previous to this radiograph being taken) is away from site of abscess but resolution of the infected area has largely occurred

FIG 7—Radiograph of D C aged showing abscess involving the epiphysis Duration of symptoms one month Tuberculous

FIG 8—Radiograph of P P aged 6 showing tuberculous abscess which has involved the epiphysis Duration of symptoms several months Tuberculous

FIG 9—Radiograph of Miss E H aged 2- showing chronic abscess in femoral shaft Duration of symptoms fourteen months History of typhoid fever Typhoid bacillus removed from pus

expanded segment a well defined rounded or ovoid area of cancellous destruction—the abscess cavity—is seen. This area is surrounded by a thick wall of dense compact bone, which appears to obliterate the medullary cavity above and below the abscess cavity. Surrounding the thickened abscess wall evidence of activity is indicated by the thin regular layer of new bone that is being added beneath the periosteum. Following successful surgical evacuation of the abscess cavity the bone assumes its normal compact and cancellous proportions, the reactive periosteal bone being absorbed.

PERIOSTEAL ABSCESSES

When the lesion develops as a localized abscess there is present beneath the periosteum a localized fusiform thickening of the bone which is due to the laying down of additional subperiosteal compact bone in the thickest part of which a well defined rounded abscess cavity will be seen.

Radiographic Localization of the Abscess

In these days when lesions of bone can be accurately localized by radiography this should be done before any surgical intervention takes place, for, as already indicated, the abscess is usually but a narrow track that may easily escape the surgeon's weapons and thus permit the recording of one more radiographic fallacy. Two radiographs (Figs. 4 and 5, Special Plate) reveal such an abscess which eluded the surgeon's search. It is interesting, for it shows that while the abscess was not discovered by the trephine, the lesion resolved, though the scar of the trephine hole has persisted for over ten years (Fig. 6, Special Plate). Localization of the lesion followed by the marking of the skin indicating its site, would enable the surgeon infallibly to expose the lesion in the minimum of time.

Results of Surgery on Radiographic Appearances

Serial radiographs of the bone from which an abscess has been evacuated show that the cavity may persist for many years. One, two, or three years afterwards the walls of the cavity are not sharply defined and present a radiographic picture which has been mistaken for that of an active abscess. And as it is not uncommon for a patient to have occasional bouts of pain or discomfort, with undue redness of the area over the site of the old abscess, particularly if he has an injury to the part, it is imperative that this possibility be realized, otherwise an active abscess may be diagnosed and a useless operation be performed. At this operation no abscess will be found, and histological examination of material removed will indicate the reaction of trauma. A few days' rest results in disappearance of these clinical signs though the radiographic appearance remains. While little radiographic evidence of the abscess site may be found after two or three years, in some cases even after twenty years the walls of the cavity made by the surgeon may be observed. Such old scars in bone are clearly defined with linear contours, and present *no evidence of reaction* in the surrounding bone. After the effective evacuation of an abscess which was associated with definite accretions of new periosteal bone the latter is soon absorbed, and in a few months no trace of it can be found. This is an additional feature useful in the recognition of the evacuated abscess.

Differential Diagnosis

There is perhaps no lesion in which the clinical history of the patient is more helpful in diagnosis than the Brodie abscess, and in introducing the question of differential diagnosis I cannot do better than quote Brodie's own words. He asks:

> 'What are the circumstances that would lead you to suspect the existence of abscess in the tibia? The answer is: When the tibia is enlarged from a deposit of bone externally; when there is excessive pain, such as may be supposed to depend on extreme tension, the pain being aggravated at intervals and these symptoms continue and become still further aggravated, not yielding to medicines or other treatment that may be had recourse to, then you may reasonably suspect the existence of abscess in the centre of the bone.'

The clinical history will indicate the age of the lesion and the existence of any previous septic focus or infection likely to be associated with bone abscess. Such information is invaluable in view of the fact that lesions of a widely different significance produce radiographic appearances which are rather alike. Such lesions are tuberculous abscess, gumma, simple bone cyst, sarcoma, and endothelioma.

TUBERCULOUS ABSCESS

In this series of cases five of the six children under the age of 5 years who presented a lesion of the bone so intractable that radiographic investigation was sought had a tuberculous abscess which was associated with some typical lesion in another part of the body. The tuberculous abscess does present certain features which assist in identification. Mention has been made of the fact that the tuberculous process does not appear to be checked by the growth cartilage at the metaphysis and prevented from invading the epiphysis, as is the usual feature of the staphylococcal abscess (Plate, Figs. 7 and 8). The early tuberculous bone abscess is a regular rounded excavation with clearly defined walls, for the effect of the organism is the solution of the bone against which it comes into contact without any apparent reaction, such as osteoporosis or osteosclerosis in the adjacent healthy bony wall. After an interval of some months general decalcification of the involved bone occurs, and then an ill defined sequestrum of somewhat greater density than the neighbouring bone may be recognized.

GUMMA

Gumma of the bone is usually identified by the massive reaction it produces in the adjacent bone. This finding should indicate the need for obtaining the Wassermann reaction. Evidence of other syphilitic lesions may be forthcoming.

SIMPLE BONE CYSTS

The commonest sites for such lesions are in the neighbourhood of the great trochanter of the femur and the middle third of the shaft of the humerus and the lower third of the radial diaphysis. In these sites the bone is expanded. The expanded area is ovoid, cyst like, and devoid of cancellous trabeculae. Its boundary is but a thin wall of bone, which appears to be yielding to the pressure of its contents. There is usually no evidence of new periosteal bone, in fact, the thin bony wall may even appear to have been completely absorbed in one area. Spontaneous fracture through such a cyst is often the event which leads to radiography and to the discovery of the lesion.

OSTEOCLASTOMA

In the early stages of its development this tumour may present a radiographic appearance which rather resembles the chronic abscess. The discovery of such a tumour at this stage would be accidental for the signs and symptoms are negligible, radiography of a bone following trauma being the usual means of recognition. The clinical history will therefore be a most essential factor in identification.

SARCOMA

There is a type of sarcoma which starts in the medulla by destroying adjacent bone and producing an abscess like cavity that may or may not have reactive changes in the adjacent bony wall Its boundaries are not clearly defined as in the case of the simple bone cyst It may lead to spontaneous fracture and subsequent radiographic appearances may give the suspicion of a sequestrum within the abscess like cavity The short history and the paucity of clinical signs and symptoms associated with the radiographic features should arouse suspicions of the gravity of the lesion further radiographs after a week or so may reveal conclusive evidence of its nature Often the bone in the region of the fracture will now show periosteal spicular formation

ENDOTHELIAL MYELOMA

Endothelial myeloma of the bone occurs at about the same age periods as we find with chronic bone abscess Like bone abscess it may be associated with lesions in other parts of the skeleton It often shows intermittency of symptoms The clinical features however do not reveal the chronicity of the bone abscess the progress of the lesion is more rapid The radiographic features which bear some resemblance to those of chronic bone sepsis I have dealt with elsewhere Often a marked response to x radiation therapy is seen in endothelioma and this is of diagnostic significance Serial radiographic study of the lesion will usually suffice for identification

BIBLIOGRAPHY

Bradford James F (1935) *The Radiology of Bones and Joints* 2nd ed J and A Churchill London
—— (1937) *Brit J Radiol* N S 10 171
—— (1937) *Proc roy Soc Med* 30 751

PARASITIC FOETUS SUCCESSFULLY REMOVED BY OPERATION *

BY

MAX GREENBERG F R C S Ed

Senior Surgeon Johannesburg Hospital

(WITH SPECIAL PLATE)

A male child born on April 6 1937 was admitted to the Transvaal Memorial Hospital for Children under my care on April 26 He was born normally in a right occipito anterior position there being no difficulty with the labour in spite of the child being the mother's first The period of gestation was normal

On examination an incompletely symmetrical conjoined twin was found attached to the epigastric area of the host by a fleshy pedicle and consisted of a right arm an abdomen lower limbs penis and scrotum The lower limbs were kept in a frog position astride the abdomen of the host the penis and scrotum being opposite the host's umbilicus (Figs A and B) On palpation a bony pelvis and sacrum could be made out but no vertebral column or ribs A rounded firm mass could be felt in the abdomen of the parasite and there was an imperforate anal dimple a heart beat could not be felt or heard and no movements were observed the parasite appearing devoid of sensation Both the host and the parasite passed urine at different times The host except for the attachment of the parasite was normal

Barium was given to the child by mouth and was observed under an x ray screen It was found to pass through the stomach and small and large bowels of the host but not in the parasite suggesting that even if there were bowel in the parasite there was no communication between the two

Four cubic centimetres of uroselectan B were later injected into a vein and radiographs were taken at frequent intervals for an hour The dye was easily visible in the parasite revealing a normally functioning kidney but it

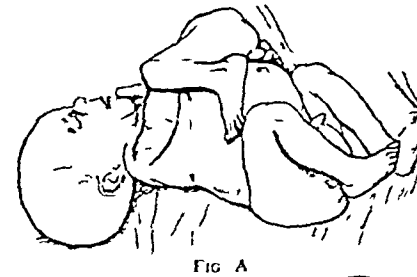


FIG A

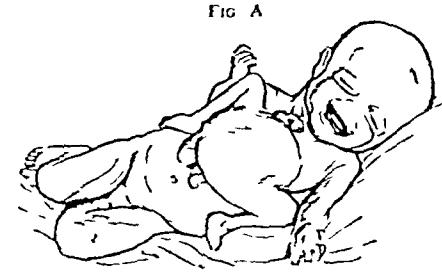


FIG B

Illustrations showing the relative positions of host and parasite (Redrawn from photographs by Audrey J Arnott)

was poorly shown in the host owing to there being a large quantity of intestinal gas but the secretory systems were present and the dye collected in the bladders of host and parasite

The host during the following two months was growing normally while the parasite remained stationary the ratio of host to parasite having risen from approximately 2½ to 1 at birth to 4 to 1 on June 15 The child continued making this progress till August 23 when surgical removal of the parasite was decided upon

The Operation

Under general anaesthesia an incision was made round the parasite through skin and subcutaneous tissue and it was then noticed that the peritoneal cavities of the host and parasite were continuous A loop of blind ending bowel from the parasite lay free in the host's part of the peritoneal cavity and a fibrous cord apparently a urachus joined both bladders The host's abdominal cavity contained its normal viscera but in the parasite's peritoneal cavity there was only a horse shoe kidney with two ureters entering a bladder

The peritoneum was cut close to the parasite leaving enough for the host's abdominal cavity the blind loop of bowel was returned to the parasite and the fibrous cord joining the two bladders was ligatured and cut near to the host's bladder The host's abdomen was then closed in layers The wound healed by first intention and the child was discharged from hospital on October 2 1937 The parasite is shown in Fig 1 of the Plate

On February 2 1938 the child was again seen being then in perfect health He had put on weight and there was no sign of ventral hernia having developed at the site of operation (Plate Fig 2)

* Shown at the March meeting of the Southern Transvaal Branch of the Medical Association of South Africa (B M A)

Clinical Memoranda

Recurrent Cerebral Thrombosis with Recovery

The case of cerebral thrombosis of which I give some details strikes me as being rather unusual, if only because the patient has made such a complete recovery after each attack, and this in spite of her age and the alarming character at the time of some of her symptoms

CASE RECORD

A lady aged 69 became very depressed in February 1936 and strange in her manner following an accident to her daughter whereby the latter lost an eye Her relatives stated that she had become very confused and no longer took any interest in either her personal cleanliness or her clothes whereas before she had always been most particular in this respect At the same time her speech became indistinct and there was considerable muscular weakness so that she could hardly walk Her pulse was slow (60) and soft and her blood pressure 120/60 The heart sounds were muffled The pupils were small and contracted and barely reacted to light the knee jerks could not be elicited There were no other physical signs and the Wassermann reaction was negative Complete recovery followed within a month

After a period of perfect health a similar attack occurred in May of 1937 but was marked by periods of coma alternating with spells of motor activity when the arms were slowly and mechanically raised and dropped, to give rise later to considerable general restlessness Insomnia was a feature of this attack Complete recovery followed within a month

On December 23, 1937, she again became strange in her manner her expression was vacant and she had difficulty in recognizing those around her By December 27 she had lapsed into a deep coma A catheter specimen of urine showed albumin + and sugar *nil* There was incontinence of urine and faeces The arms were flaccid but not completely paralysed By the evening of December 28 as her condition showed no improvement I gave a hypodermic injection of *digitaline grain 1/100* with strychnine grain 1/60, this was followed by a marked improvement within half an hour so that she opened her eyes and responded to questions with a considerable degree of intelligence These injections were continued thrice daily for the next two days by the end of which time the patient was talking and answering questions almost normally

Unfortunately a profuse and foul diarrhoea now set in and rapidly dehydrated the patient, the eyes became sunken the face thin, and what was more alarming she rapidly became stuporous and sank in a heap off her pillows, and presented all the signs of rapidly approaching death Added to this a gangrenous patch 2 in long by 1 in wide had developed at the upper end of the natal cleft Kaylene in one drachm doses in a little water or milk was tried and retained This was increased to a dessertspoonful every three or four hours on the following day, and met with a quick response The stools lost their frequency and their abnormal character and the patient started to take her food once again and show every sign of a return to health

The sloughing tissue on the buttock was irrigated with eusol three times daily and soon separated leaving a deep but healthy looking wound, which gradually but completely granulated up with the aid of lotio rubra

The patient has now made a complete recovery

SUMMARY

An elderly lady with a somewhat low blood pressure and slow pulse develops cerebral thrombosis as the result of severe mental trauma Symptoms suggest a lesion of the frontal lobes in the first attack as evidenced by a change in character and behaviour This postulates a thrombosis of the anterior cerebral artery The second attack was marked mainly by motor activity the up and down movements of the arms and the general restlessness suggest lesions at sites different from the first attack, and in the area supplied by the middle cerebral artery The third attack, more serious than the first two, suggests a more complete thrombosis of the middle cerebral artery, as shown by the flaccidity of the arms and the loss of control of the sphincters

The use of the old and well tried drugs digitaline and strychnine based on the pathology of the condition, was amply justified by the astonishing response The value of kaylene in acute infective conditions of the bowel is also well worthy of mention

London S W 6 G LLEWELLYN DAVIES, M R C S L R C P

Orthoptic Cure of an External Squint of 35 Degrees in a Woman of Thirty

I think that an account of the cure of this case should convince sceptics that there must be something in orthoptics and perhaps also raise hope in the hearts of adult squinters who would give much to have a pair of straight eyes, like the majority of their fellow beings

This woman had had a bad squint in her left eye from early childhood but there were points in her favour (1) it was an external squint, (2) she was a woman and had therefore a stronger desire to be cured than most men have—her mirror was her constant ally The vision in the right eye, with

$$\frac{-0\,5}{-3\,0 \quad \text{ax } 145}$$

correction was 6/9, and in the left eye, with

$$\frac{-0\,5}{-2\,5 \quad \text{ax } 30}$$

correction was 6/6, but of course only the right eye was being used

The angle of the squint was 35 degrees and when using a separator with a coin in front of the good eye she could just see a bright light held in front of the other but not a non luminous object such as a piece of white paper—that is vision was entirely uniocular

She came to see me twice a week and practised at home about three quarters of an hour daily with great regularity Within ten weeks the eyes were straight but *only while* she remembered ! In four months the acquirement of stereoscopic vision and the great increase in *brightness* consequent on the use of both eyes had made temporary relapses into uniocular vision so distasteful that no further exercises were needed to keep her eyes straight

The stages of her training were as follows (1) The acquirement of vision with both eyes simultaneously This was done with Remy's separator and Cantonnet's mirror stereoscope

(2) The transition from simultaneous vision to *binocular* vision—when for the first time in her life while using *both* eyes, she saw an object in space as one *This* was achieved by means of exercises with Cantonnet's stereoscope the large diploscope, and the small diploscope, together with Javal's grid for reading

(3) Lastly, stereoscopic vision had to be acquired For this purpose she went through a course of Swan Cole orthograms, using the ordinary Holmes stereoscope The whole training was completed by a study of anaglyphs by Dr Margaret Dobson

The enormous superiority of this orthoptic cure over a surgical cure, if indeed such had been possible, is obvious when one remembers that a surgical cure would have been merely cosmetic The originally deviated eye would have remained a non-seeing eye, and the great incentive to retaining a pair of straight eyes—namely, stereoscopic vision—would have been absent

Tisbury, Wilts W H DU PRI, M B, B S Lond

Reviews

DIETETIC MALNUTRITION IN THE TROPICS

Tropical Nutrition and Dietetics By Lucius Nicholls M D (Pp 165 49 tables 2 plates 7s 6d net) London Bailliere Tindall and Cox 1938

In his preface to *A Treatise of Foods* published in 1704 Louis Lemert remarks that Several Authors have treated of this Subject but some of them have been so large and prolix that there is no Reader though never so much bent upon it but must be dashed in considering only the length of the Work Others have handled it with so much brevity and briefness that you can scarce meet with half the Things there which ought to be in The same might be said of a number of authors who have treated of this subject within recent years but not of Dr Lucius Nicholls whose recently published book *Tropical Nutrition and Dietetics* gives a clear concise and practical account of the relation of foods to health and disease in the Tropics It is meant primarily for medical practitioners who work among the masses in these regions but those working elsewhere will find it worth their while to study it for experience gained in the Tropics of disease due to dietary deficiencies provides much that is instructive for doctors elsewhere Of the eleven chapters in the book six are devoted to an up to date account of the essential constituents of food —carbohydrates fats proteins minerals vitamins roughage —and the energy value of foods In regard to protein requirements it is pointed out that while there is a general acceptance among the nutritionists of Europe and America that the daily protein allowance should be 100 grammes this allowance is too high for tropical conditions The author is in agreement with Aykroyd that 65 grammes is sufficient for men and 55 for women additional allowances being made for growing children and lactating women The weight of fat in the diet should be about the same as the weight of proteins Three chapters on dietary surveys analyses of foodstuffs and the prescribing of diets will be found most useful

The chief interest of the book lies in the account it gives of the symptoms and signs of dietary deficiencies In addition to the extreme conditions such as beriberi scurvy pellagra and keratomalacia which arise from various food deficiencies the study of the less cogent results of dietary deficiencies has brought to light the prevalence of many signs symptoms stunted growth and other effects These are dry and staring hair phrynoderma pellagra like eruptions scrotal dermatitis petechial haemorrhages oedema stomatitis sore tongue marginal stomatitis oesophagitis spongy gums Bitot's spots night blindness xerophthalmia dental decay malocclusion and irregularities of the teeth signs of rickets neuritis pareses anaemias lowered resistance to infection particularly of the lungs and intestines, and poor growth and condition of the body No doubt future study will reveal others For if Foods contribute so necessarily to the preservation of Life and Health they also produce the greatest part of the Distempers to which we are subject and so the knowledge we ought to be most desirous of should be that of Foods (Lemert 1704) Dr Nicholls's book provides this knowledge showing why it is that foods contribute so necessarily to health and how it is that improperly constituted food produces many distempers His object—to give as shortly as possible the general principles of nutrition and dietetics and to collect under one cover the salient points of this information —has been well achieved If there be a fault to find in the book it is in its title Tropical Nutrition Can nutrition a function of the body be spoken of as tropical per taining to characteristic of or peculiar to the Tropics?

TUMOURS IN THE NECK

Surgical Pathology of the Diseases of the Neck By Arthur E Hertzler M D (Pp 237 206 figures 21s net) Philadelphia London New York Montreal J B Lippincott Company 1938

The tumours which appear in the neck form a group of considerable surgical interest covering a very wide range of pathology There is indeed no region in which the appearance of a tumour is more common or in which its diagnosis may be more difficult The present volume dealing as it does with both the surgical and pathological characters of this group of tumours will be of interest to medical practitioners in many fields

The first chapters are devoted to Hodgkin's disease and the lymphosarcomas and an account is given from the surgical standpoint of the various views which pathologists have taken of these conditions This is followed by a discussion on the rare primary tumours of the neck and of thyroglossal and branchiogenetic cysts A description of the benign tumours of the neck follows Diseases of the salivary glands are treated in some detail and the volume concludes with a description of the secondary tumours and infectious conditions arising in the neck

The whole volume is beautifully illustrated both by photographs of typical cases and by microscopical sections The descriptions given are brief and to the point and while no attempt is made to go into elaborate pathological details the accounts given are sufficient for practical purposes The volume is indeed essentially practical and will well repay the study both of the student and of the surgeon who has to deal with these conditions

NUTRITION AND DIETETICS IN BRIEF

Food and Physical Fitness By Professor E W H Cruickshank M D D Sc M R C P (Pp 148 15 tables 2 figures 5 net postage 5d) Edinburgh E and S Livingstone 1938

Under the title of *Food and Physical Fitness* the Regius Professor of Physiology at Aberdeen has made available in the form of a short monograph a series of public lectures which he had delivered under the John Farquhar Thomson Bequest The book is a very good attempt to make available to the general public the results of research in nutrition and the elements of sane dietetics In his introduction Sir John Orr says that information of practical importance has been collected and presented in lucid and interesting language which can be understood by the general public and this is a very fair commentary The interest of the public is growing steadily in the subject of nutrition in relation to health and disease and to economic policy This book will be of great service to those engaged in social services and to householders who wish to make the best outlay of their budget on diet The general principles of the energy needs of the body and the value of the different foodstuffs for energy production and the sources of minerals and vitamins are very carefully dealt with

In the last few chapters Professor Cruickshank deals with subjects which are a good deal in the public eye at present—namely the relation of dental caries to defective diet and the effect of adequate nutrition on physique and muscular development In a somewhat trenchant chapter on vegetarianism he exposes the fallacies

of various modern diet fads These distortions of truth have undoubtedly arisen to fill the vacuum created by the fact that the public are increasingly aware of the importance of diet in relation to health, and yet the average doctor is either unable or unwilling to translate physiological principles into simple language which the lay public can understand Professor Cruickshank's book will go a long way to filling this vacuum by reasoned facts and it would be a great advantage if the book were read not only by the lay public but also by the medical profession

THERAPEUTICS OF ANTIMONY

Advances in the Therapeutics of Antimony By Professor Dr Phil Nat Hans Schmidt and Dr Med F M Peter With a preface by Philip Manson Bahr C M G D S O, M D F R C P (Pp 257 10 diagrams R M 18 bound M 19 50) Leipzig Georg Thieme 1938

This is an English version of *Ergebnisse und Fortschritte der Antimontherapie* by Professor Hans Schmidt and Dr F M Peter which was published early last year In our review of the German volume (*British Medical Journal* 1937 2 66) we mentioned the remarkable rapidity of the advance in the importance of the antimony compounds in the treatment of tropical diseases An English edition is therefore very welcome moreover, the authors have revised and expanded the original material and have incorporated the literature up to the end of 1937 They have also added an author index which is a very valuable addition Dr Philip Manson Bahr has contributed a preface, in which he reviews the extraordinary career of antimony as a therapeutic agent Jezebel used it to darken her eyebrows Paracelsus boomed it as a panacea and the University of Paris solemnly banned it and all its users In the first half of the nineteenth century it was the chief basis of the orthodox method of "heroic" treatment, while by the end of the nineteenth century it had almost ceased to be used Finally in the twentieth century it has made a sensational come-back, and organic antimonials are steadily increasing in importance in chemotherapy

GRINKER'S NEUROLOGY

Neurology By Roy R Grinker M D Second edition (Pp 999 406 figures 38s) London Baillière, Tindall and Cox 1937

The second edition of this work appears within four years and without any outstanding change in its scope, except that the descriptions of new developments, such as the increased knowledge of the physiology and pharmacology of the autonomic nervous system and advances in diagnostic methods such as the electro encephalogram and improved encephalography soon necessitated the shortening or omission of certain sections in the first edition if the aim of the author to keep the work within the covers of one volume was to be maintained In spite of this laudable aim the work is large and heavy, extending to nearly 1,000 pages, which only goes to show what a complicated subject neurology has become

The scope of the book is along the lines of the modern systematic textbook, the arrangement being largely on pathological lines and covering the field of organic neurology reasonably completely It is well illustrated, with a useful bibliography at the end of each section A good many textbooks of this kind are being published nowadays which cover much the same ground in much the same way, and it is a little doubtful how far their multiplication is worth while Probably each is patronized less on its individual merits than on the extent to which the author is known personally or by repute to those who happen to want a comprehensive manual of neurology at the moment The present volume will therefore appeal to the Chicago medical schools and those other schools which are under the influence of that important centre of learning but we see no particular reason to commend it to British readers to any greater extent than several other works of a similar nature

PRACTICAL ANATOMY

Manual of Practical Anatomy Volume I Upper Limb Lower Limb and Abdomen Volume II Thorax Head and Neck Central Nervous System Eye and Ear By J Ernest Frazer D Sc F R C S and Reginald H Robbins M A M D (Pp 536 and pp 456 281 figures and 290 figures 10s 6d each volume) London Baillière Tindall and Cox 1937

The *Manual of Practical Anatomy* by Frazer and Robbins of St Mary's Hospital, London, is something more than a guide to dissection and regional anatomy since the detailed description of the structure of the adult subject is explained and supplemented by references to developmental anatomy These not only add interest to the anatomical facts but throw a clear light on many details of anatomy which would otherwise be obscure Due attention has also been paid to the medical and surgical aspects of anatomy and we may specially mention in this respect the descriptions of the thoracic and abdominal regions

The book is in two volumes, but it is not burdened with too much detail, the full description of special structures such as the eye or ear being left for study in the larger systematic treatises on anatomy The nomenclature employed is the 'Birmingham Revision,' and each volume has a separate index and glossary The manual is on the whole well illustrated, many of the figures having been reproduced from standard works such as Hirschfield and Leveillé, others are new or have already appeared in Frazer's *Manual of Embryology* or in Buchanan's *Anatomy*, all of these have the unmistakable stamp of originality, and though some are schematic others are drawn from actual specimens and serve to illustrate particular points, such as the relation of articular cartilages pads of fat or synovial pouches to the ligaments of a joint The book, which is the work of two experienced anatomists, is admirably adapted to meet the requirement of both junior and advanced medical students, not only with regard to the anatomical information which it contains but also is a training of the faculties of observation and dissection and as an aid to the passing of examinations

Notes on Books

The first group of articles on the Management of Some Major Medical Disorders contributed to these columns were republished in March, 1936, as Volume I of *Treatment in General Practice* This collection dealt with diseases of the respiratory system, acute specific fevers and cardiovascular diseases In reviewing it Dr Robert Hutchison said that "the articles are so uniform in their mode of presentment that they might all have been the work of one author, whilst the therapeutic instructions given in them are clear and definite, and the reader is not confused, as he so often is in books on treatment, by the mention of lists of remedies which are 'sometimes successful'" The book was reprinted in March, 1937 and now a second edition, revised by the several authors, is published by Messrs H K Lewis and Co at 8s 6d

For a generation and more Hawk's *Practical Physiological Chemistry* has been an outstanding work and successive editions reaching now to the eleventh (J and A Churchill 30s) have kept well abreast of the very rapid developments of the subject In his great undertaking Professor PHILIP HAWK has of recent years enlisted the help of more collaborators and three other well known names now appear on the title page and various contributors have lent their expert knowledge and advice in different parts The book is and always has been the complete laboratory guide stocked with methods so carefully selected that they may be relied upon with absolute confidence In places a point of detail may be lacking but only where the original literature is quoted for fuller reference

The monograph by Dr ERICH A HEIDE on *Die Bornholmer Krankheit* (Berlin R Schoetz, RM 3) otherwise known as myalgia acute epidemica of Sylvest consists of a critical review of the literature including the articles which have appeared in the *British Medical Journal* by Pickles (1933 2 817) Carter (1933 2 56) Jay (1934 1 79) Buchanan (1934 1 120) and Scott (1936 2 698) The clinical aspects aetiology epidemiology and distribution of the Bornholm disease in Germany and other countries are discussed at length and the author comes to the following conclusions This disease represents one of the mysterious short lived febrile maladies of temperate zones on which new light may be shed by further epidemiological and parasitological investigations as has recently been exemplified by tularaemia Japanese river fever Weil's disease and tropical and subtropical typhus It is probable that the Bornholm disease is caused by some kind of living virus which is kept in an animal reservoir and transmitted by blood sucking insects at definite seasons of the year The question further arises as to the existence of endemic epidemic or pandemic diseases which are transmitted not by a specific agent but by telluric and cosmic influences which so affect man animals or plants that they develop a disease just as if they had been attacked by a living virus The author suggests that the Bornholm disease may be an example of this kind

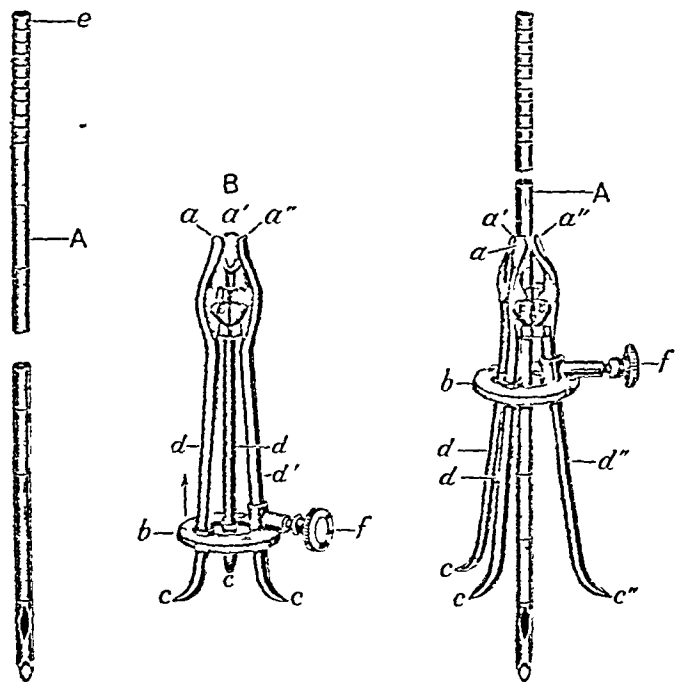
The *Internationale Zeitschrift fur Psychoanalyse* and the journal *Imago* the official organ of the International Psychoanalytic Society both edited by Professor Freud have ceased publication The *International Journal of Individual Psychology* will also cease publication

Preparations and Appliances

TRIPOD FOR VENTRICULOGRAPHIC NEEDLES

Dr V OPIE (London W 1) writes

It is often difficult to keep steady the ventriculographic needle during the repeated aspirations of cerebrospinal fluid and injections of air in ventriculography Even a slight shifting of the point of the needle may stop the flow of the fluid The device depicted above helps to steady the needle and to keep it in the correct position after it has penetrated into the ventricular cavity It consists of a tripod which is slipped over the needle as soon as the cerebrospinal fluid begins to flow The pointed ends of the slightly curved legs of the tripod bury themselves in the diploe of the trephine opening while the blades at the opposite end of the legs grip the needle firmly and thus prevent it from being pushed in or out during the subsequent manipulation The tripod is manufactured by Messrs Lewis Bros 68 High Street Marylebone W 1



A ventriculographic needle 17 cm long once in the correct position in the brain it is fixed by means of the tripod (B) which is made to slip over the needle *a a a"* Short blades for gripping the needle *b* Movable ring When it moves upwards in the direction of the arrow the legs (*d d d"*) of the tripod spread out and the points (*c c c"*) bury themselves in the diploe of the trephine opening Simultaneously the blades (*a a a"*) are brought closer together and grip the needle which is thus immobilized The set screw (*f*) prevents the ring from sliding after it has been brought into the correct position The needle (A) is then connected to a syringe by means of a short rubber tube which is slipped over the free end of the needle (Actual size)

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY JULY 16 1938

CLINICAL SCIENCE

To all who were privileged to enjoy Victor Horsley's friendship, and especially those who were so fortunate as to work with him as collaborators or disciples and were thus able to savour the scientific genius as well as the courageous and lovable personality of this great Englishman, the very title "Victor Horsley Memorial Lecture" will bring a flood of happy recollections—perhaps most of all to those who were with him in that last and noblest chapter of his life written in Egypt and Mesopotamia and concerned with greater things than science We do well to commemorate such men primarily that we may not cease to learn from them those lessons of moral courage intellectual integrity, and scientific imagination that their lives show forth but also and particularly in this instance and at this time because Horsley exemplified that successful combination of clinician and scientific investigator the very possibility of which has recently been challenged by a distinguished laboratory scientist So wide was the range of Horsley's scientific interests that in a single lecture but one aspect of it can be adequately considered and Dr Gordon Holmes has chosen his contributions to the physiology of ocular movements as the theme of the present lecture He has developed this in a manner reminiscent of Horsley's own method, for he has presented a body of precise observations and has proceeded to provide an analysis of them on physiological principles

The cerebral integration of the ocular movements is a peculiarly complex problem in the physiology of movement, and this perhaps because of the abundance of facts of observation rather than from any lack of them In some ways it may at first sight seem that these movements are a law unto themselves Their cortical representation in the frontal lobe is anatomically separated from that of other movements, and the ocular responses to electrical stimulation of this representation differ qualitatively in some respects from the more familiar motor responses to stimulation of the so called "excitable motor cortex" Again, in many widespread disorders of movement and of posture from brain lesions eye movements alone escape disturbance, as, for example, in chorea double athetosis, and paralysis agitans, to cite but the most familiar To Hughlings Jackson we owe certain illuminating generalizations as to the modes of dissolution of function in disease of the central nervous system, and in the light of his conception of loss and release of function the phenomena of cerebral paralysis have been analysed on lines that are familiar to students of neurology

Jackson himself made many studies of disorders of ocular movement, but these disorders have never been brought fully within the scope of the principles which he showed to govern the evolution and form of disorders of movements other than those of the eyes It is the merit of Dr Gordon Holmes's lecture that he has so brought them, and has demonstrated that a careful study of disorders of ocular movements from cerebral lesions reveals those same phenomena of loss and of release of function with which we are familiar in respect of other movements Thus the exaggeration of the fixation reflex which may be found in association with certain forms of loss of voluntary deviation of the eyes is seen to be a release phenomenon comparable with the hyper tonus and other increased postural reflex reactions that are so prominent a feature of what we call spastic paralysis Conversely, there are described the disorders of voluntary movement and posture of the eyes that result from a defect of the fixation reflex, and this reflex itself is also subjected to close physiological analysis In a word Dr Holmes's studies have brought one more group of clinically observed disorders of function within the scope of those generalizations that have already proved so fruitful in neurology and while thus making these additions to our knowledge, he has also integrated them with the general body of neurological theory This is the true scientific method, and that it can still be pursued by simple clinical observation must be a cheering sign to those who believe that this method has yet a rich harvest to give to medical science and that it has not yet yielded pride of place to the experimental method These studies also teach us that whatever help we may receive in the advancement of medical science from the labours of the experimental physiologist it must always be the clinician who places the coping-stones upon these labours by determining their application as only he can to the human subject

The English school of neurology has a great tradition and we may learn from the studies which form the subject of this lecture that this tradition is still alive and honoured

A PIONEER HOSPITALS CENTRE

At page 138 we publish an account of the Birmingham Hospitals Centre and the Medical School Buildings of the University of Birmingham opened on Thursday by the Duke of Gloucester acting in place of the King who was prevented by indisposition from fulfilling the engagement This ceremony is an outstanding event not only in the annals of a city famous for its progressive spirit and local pride but also in the history of voluntary hospital planning in this country The Hospitals Centre —which means a hospital or group of hospitals linked structurally and in a working arrangement with the Medical Faculty of the University—is well understood in the United States but the Birmingham achievement is a pioneer one in Great Britain The new buildings are a first instalment providing some 500 beds the completed hospital is planned to accommodate 740 It embodies the latest ideas and experience in design planning and administration The beds are to be organized in units of sixty each unit being complete in itself The first instalment of patients is deferred until the autumn To provide a complete organization working at full capacity will take some time especially in a hospital of modern design including all the many departments supplying the needs of a medical school

Fully to understand the idea behind the scheme for the Hospitals Centre it is necessary to go back a little Soon after the war it became apparent that there was an increasing deficiency of hospital beds in Birmingham having in view its growing population and perhaps its increasing 'hospital consciousness The two large general voluntary hospitals—the General founded in 1766 and Queen's in 1840 both of them teaching hospitals—began to consider the question of extension on their existing in town sites The General with its Jaffay branch has 536 beds and Queen's 324 The Hospitals Centre scheme was made possible by the amalgamation of these two hospitals for working purposes, under the name of the Birmingham United Hospital of which Lord Austin is chairman A joint committee was formed including representatives of both institutions and the ambitious plan of a Hospitals Centre right outside the city was determined As soon as the full complement of the 740 bed hospital is complete Queen's will close down Another ruling consideration which has led to the establishment of the Hospitals Centre is the need for closer co ordination with the Medical Faculty of the University Hitherto the Medical Faculty (with those of Arts and Law) has been housed in the buildings of Mason's College in the centre of the city It has been unable to follow the other faculties out to Edgbaston so long as the two teaching hospitals remained on their present sites As the Prince of Wales said when he laid the foundation stone of the hospital and cut the first sod of the medical school buildings in 1934 A working partnership between the hospital and the Medical Faculty of the University is now universally recognized as the most effective service that can be rendered to those in need of care and treatment

The most urgent need was for general medical and surgical beds but it is expected that in due course the various special hospitals—of which there are nine in Birmingham—now located in the centre of the city will migrate to the new site This must be in each case a rather complicated business in view of the disposal of properties but the special hospitals are already associated with the scheme and they will have the opportunity of working out with the Executive Board plans for their own development on the site while still preserving their identity In years to come there may be in the city only casualty clearing stations and with an adequate ambulance service all in patient and out patient provision will be concentrated at Edgbaston The site which the Birmingham Hospitals Centre owes to the munificence of the Cadburys is of 150 acres of which 100 acres are scheduled for hospital purposes and 50 for open space This is considered adequate for all hospital developments for at least half a century to come

PLANS FOR PLYMOUTH

Publication of this number of the *British Medical Journal* coincides with the opening of the business and political part of the 106th Annual Meeting of the British Medical Association, and in our next *Supplement* we expect to give a full report of the first two days proceedings in the Representative Body The Association has met only once before at Plymouth sixty seven years ago The meeting of 1871 in the Three Towns" (Devonport Stonehouse Plymouth) was regarded as one of the most enjoyable ever held and if the elaborate plans sketched in last week's *Supplement* are carried through in the traditional Plymouth way the same will be said of the meeting of 1938 No member of the British Medical Association has to be reminded that at Plymouth he treads historic soil It is moreover a locality which combines the charm of seascape and landscape with the varied animation of a great port and arsenal Indeed the programme of entertainments and relaxations in a beautiful setting is so full that there may be risk of pleasure standing in the way of duty

The seventeen Scientific Sections have arranged a good and many-sided programme for Wednesday Thursday, and Friday Three combined sessions will be held one to discuss sciatica another the prevention of puerperal sepsis and another rheumatoid arthritis The main subjects taken by the Section of Medicine are toxic infective jaundice anxiety states and organotherapy, and by Surgery, the treatment of acute appendicitis, cancer of the breast and the septic hand The Section of Obstetrics, when meeting alone will discuss occipito posterior positions and their complications, Orthopaedics, fractures involving the knee-joint Neurology and Psychological Medicine, vertigo and the differentiation of states of depression Ophthalmology has what may be called a joint topic—co operation between ophthalmologist and physician in cases of visual loss, and Medical Sociology, not to be outdone, makes co operation in public health administration its chief item The Section of Public Health will discuss the future development of the hospital system Physical Medicine (meeting at Torquay on Friday), the basis of national fitness, and the Services Section the evacuation and treatment of gas casualties while Physiology stoops to conquer the practising doctor with a session devoted to light in relation to climate and health Pharmacology will debate the dosage of anaesthetics, the teaching of anaesthesia and ovarian therapy Pathology has chosen the aetiology of rheumatism and rheumatoid arthritis for discussion, Tuberculosis, the prevention of the disease with which it is concerned, and skiagraphy of the chest, Radiology x rays in the elucidation of haemoptysis, and the treatment of uterine haemorrhage—two matters of interest to other specialties The programme for Diseases of Children includes a debate on the modern failure of breast feeding, and another on empyema in early childhood, and on its second day a lecture in memory of the late Editor of this *Journal*, on Some Nutritional Problems of Childhood will be given before that Section by Professor L G Parsons, to whom the Dawson Williams Prize has lately been awarded Beyond these larger items in the Sectional plans for next week there are many independent papers covering a wide field of practice and research, all of them listed in the programme published on July 9 It is to be hoped that the audiences in the Sections will be worthy of the fare provided

In 1871 it was held to be a matter for serious nsideration by members "whether it will not be sirable to subdue the otherwise naturally growing endency to allow the holiday-making to override the scientific and working objects of these annual meetings" Never before so the argument ran, had the British Medical Association covered so large a ground of public usefulness or influenced so strongly public opinion "The annual meetings offer the finest professional platform which exists for the propagation of opinions in the profession, the publication of researches, and the enunciation of facts The natural course of events would be therefore, that these meetings should continue to attract papers of more and more value, and it was the operation of this opinion, and the great increase in the scientific prestige of the Association, which necessitated recently the formation of a multiplicity of Sections The reaction from the years of sectional activity to those of continuous pleasure making requires to be checked" The visitors to Plymouth in 1871 had earned these prim words of rebuke by their neglect of work for play Some such warning may be needed even in 1938

THE STREPTOCOCCUS CARRIER PROBLEM

The new chemotherapy has so changed the outlook in the problem of puerperal sepsis that its other aspects are apt to be forgotten It is indeed interesting to speculate on the direction which prophylactic efforts might have taken during the past three years had so strikingly successful a treatment not monopolized attention The chief advance preceding this had been to identify the source of puerperal infection as usually the nose or throat of a contact with the case, and measures for detecting such carriers were coming to be regarded as an obligation on those responsible for the conduct of midwifery, at least in institutions Where do we stand now in this matter? It has been emphasized repeatedly that the possession of a powerful therapeutic weapon in sulphanilamide is no excuse for relaxing precautions or for neglecting other forms of treatment It must nevertheless influence a decision when the proper course of action is really in doubt, or when extreme measures in detecting and excluding carriers are impracticable Strictly speaking the whole personnel of a midwifery unit should be swabbed on entry and at intervals thereafter, and carriers of haemolytic streptococci proved to be of Group A should be excluded until free The rigid application of this rule would overwhelm existing bacteriological laboratories with an exceedingly tedious type of work and probably demand the establishment of others, and at the same time it would sometimes disorganize clinical work by requiring the banishment of essential personnel Nor will these extreme measures necessarily succeed for a member of the staff may acquire a streptococcal infection at any time, and an active tonsillitis or sinusitis is a far greater danger than the quiescent carrier Any efficient precautionary system will include prompt attention to any acute [illegible] of the upper air passages whether by way of relief from duty or of bacteriological investigation a great question is whether this form of precaution which also involve the clinical recognition of as tradition infection of the upper air passages and its

investigation is not preferible to a system of universal swabbing This attitude was supported in our correspondence columns some time ago and it is favoured by Lucy M Bruce and Phyllis Tewsley [1] who report in detail an extensive study of the carrier condition in connexion with a small outbreak of puerperal sepsis in Australia This investigation was somewhat hampered by the lack of facilities for the serological typing of streptococci and in attempt to classify them by determining their susceptibility to different strains of bacteriophage did not provide a satisfactory substitute for this method Nevertheless the results indicate clearly that whereas in the presence of spreading streptococcal infection persons with a normal upper respiratory tract may become carriers for a short period only those with clinically detectable abnormalities in this region tend to remain carriers irrespective of their environment The conclusion drawn is that a clinical examination of the nose and throat should precede the study of midwifery this is a common sense attitude which has much to commend it

THE PECKHAM HEALTH EXPERIMENT

An interesting meeting was held at Clothworkers Hall in the City of London on July 6 for the purpose of discussing the recently issued interim report of the work of the Peckham Health Centre This report entitled *Biologists in Search of Material* was reviewed in these pages on June 18 (p 1312) Sir Wyndham Deedes who opened the discussion said that five or six years ago the starting of such an enterprise as the Peckham Health Centre might well have been thought impossible but despite difficulties and prejudices Alpine if not Himalayan Dr Scott Williamson and Dr Innes Pearse the seeking biologists had surmounted them all *Too many experiments were undertaken by people who* had a perfectly clear idea of what they wanted but did not allow the data—the material—to have enough to say in the matter On the other hand the Peckham experimenters had no preconceived ideas they were content to await whatever results the interaction of the material and the environment was capable of bringing about The policy of wait and see in this connexion at least was not without its advantages A great deal of money was sometimes spent in social work but the people for whom the social services were designed were forgotten or at least not studied Great changes in social environment had taken place within the experience of the present generation Man had been taken largely from the village or small town into a vast society in which the individual was lost and few people had given scientific consideration to the sociological consequences of such change *One sentence in the interim* report had struck him People tell us that there is no real neighbourliness We have discovered that the conditions suitable for neighbourliness are not there How [illegible] e suitability or otherwise of the environment of the ordinary [illegible]ple made all the difference between happy and [illegible]trated lives Dr Scott Williamson said that the [illegible] e significance of the interim report lay in the word of Anthropological' Sir Wyndham Deedes had extolled the courage of the experimenters but courage and faith and biology all went together The most appalling fact to be deduced from the report was what could only be described as the devitalization of the people The Centre was dealing with a representative cross-section of the community not poverty stricken relatively well housed many of the people in safe employment and yet in spite of the fact that various diagnosable maladies had been dealt with and maladjustments corrected there had been no great rebound to health The devitalization was present in various degrees many of the people enjoyed a sense of well being (what our reviewer called well seeming) but the population was rather a surviving than a living one This was due to the heritage of environmental conditions in the lives of the young people Later work at the Centre subsequent to the period covered by the report had brought out the helpful fact that notwithstanding a people relatively devitalized the children by the application of appropriate scientific measures could attain normal physiological standards *This was a great encouragement to go* further and discover a scientific approach to the various problems by watching how men and women under conditions of relative freedom behaved and reacted to the facts presented to them in the simplest possible way The experiment therefore had much further ground to cover One lesson for our profession was well put by Dr Scott Williamson Medical practice of the future he said will have to take into account the fact that patients are not only sick persons but units in some form of social machinery and the approach to the people is not best made through the contacts rendered necessary by sickness but through community centres or some such form of organization In reply to a question he promised to offer some guidance to social workers and local authorities on the method of organizing *in their respective localities such centres* free from officialdom as Peckham

TAR-VIRUS CANCER

Reference has been made several times recently in this *Journal* to the hypothesis that all malignant tumours are initiated and maintained in activity by a living virus In order to explain the undoubted carcinogenic action of many chemical irritants in accordance with this hypothesis it is necessary to suppose that chemical action of this kind only serves to render cells susceptible to the virus One of the leading advocates of this view Peyton Rous briefly announced two years ago the startling results of an experiment which at first sight appear strongly to support it The Shope papilloma is an innocent tumour infectious and unquestionably due to a virus *which occurs naturally in the skin of* wild rabbits in some parts of America It is transmissible to domestic rabbits and in them sometimes undergoes malignant change especially in response to trauma the virus however becomes irrecoverable after malignancy is established Rous injected a suspension of this papilloma virus intravenously in rabbits whose ears had been tarred The tar used very rarely caused malignant change even after prolonged application the only result being the formation of indolent papillomas

[1] *Med J Austral* 1938 25 1 639

On the other hand, about three weeks after the intravenous injection of papilloma virus the tarred ears suddenly assumed great proliferative activity and multiple cancers appeared on them and grew rapidly Apparently two stimuli, each incapable in itself of causing malignant change, had co-operated to achieve this result with astonishing rapidity Peyton Rous and J G Kidd[1] have now at long last published a full description of this phenomenon Although this does not detract from its significance it is now made clear that the effect is by no means a constant one an exceptionally active virus suspension preferably obtained from a natural growth in a wild rabbit, appears to be necessary to secure it This paper also records in minute detail the effects of varying the technique in a number of ways and in so far as these other results can be interpreted they point to the conclusion that malignant change occurs only when active virus injected intravenously becomes "localized" in a previously tarred area C H Andrewes and his colleagues[2] have to some extent confirmed Rous's observation, using not papilloma virus but that of the Shope fibroma a similar but different innocent tumour of rabbits It will be interesting to see where this method of experiment ultimately leads It should not be difficult so to adapt it as possibly to gain evidence of the presence of a virus in purely malignant mammalian tumours Any such results would be of enormously greater significance than those hitherto obtained

SYMPTOMS OF CARDIAC STANDSTILL

Some patients with heart-block have spectacular attacks in which there is loss of consciousness and convulsions, associated with extreme bradycardia or cessation of the heart beat This syndrome the Stokes-Adams attack, is also associated, though more rarely with other disturbances of the cardiac mechanism that slow the circulation almost to a standstill In the attack as usually described convulsions and apnoea take place while the heart beat is very slow or arrested but P Formijne[3] describes five patients with apnoea or convulsions which occurred after more or less normal cardiac activity had been resumed Three had heart-block, one a syncopal attack of emotional origin, and one attacks of ventricular fibrillation or flutter In two of these cases graphic records of the heart beat and of respiration during the attacks show that apnoea began at an interval of a few seconds after the return of the heart beat, convulsions or localized clonic movements were observed after about the same interval in three of the patients Cerebral anoxaemia, which is held responsible for the convulsions and apnoea accompanying cardiac standstill, will not account for these events as observed by Formijne, and he suggests that they are to the action on the brain of hyperventilated blood the latter contains a high concentration of oxygen and a low concentration of carbon dioxide, and results from the continuation of respiration while the circulation is arrested In experiments on narcotized dogs it was also demonstrated that apnoea and clonic contractions followed asystole when this was of 15 to 35 seconds' duration, analysis of blood taken from the carotid artery immediately after the return of the heart beat showed a reduced CO_2 content, and the blood was redder than normal arterial blood The apnoea could be prevented by the inhalation of 5 per cent CO in oxygen during the period of asystole The respiratory effects are believed to be due largely to chemical action on the respiratory centre, but some of the results indicated that the carotid sinus may also play a part Immediate treatment is rarely possible for a patient in a Stokes-Adams attack, but in the light of Formijne's work oxygen and CO_2 might be given with a view to preventing convulsions

[1] *J exp Med* 1938 67, 399
[2] *Lancet* 1937, 2, 893
[3] *Amer Heart J* 1938 15, 129

MEASURING EMOTION

In this country and in the USA a wide interest is taken in the measurement of mental attitudes and emotional traits, not only on account of the importance of these assessments in social, educational, and medical questions but also on account of their uses in industry In spite of this there has existed hitherto no collected account of the literature on this wide subject To help to fill this gap Dr P E Vernon has undertaken a descriptive survey of experimental work which has been carried out on the measurement of emotional characteristics His survey which has been issued by the Industrial Health Research Board of the Medical Research Council,[1] is restricted to an account of types of verbal behaviour which are susceptible to quantitative treatment The techniques which have been invented for collecting groups of opinions are fully described and adroitly criticized by Dr Vernon In discussing the procedure of rating he points out that in relation to the marking of examination questions both the average mark and the dispersion of marks given by each examiner are liable to scandalous variations which could be and should be adjusted When due care is exercised in technique of experiments striking results are sometimes obtained It is possible to measure the relative effects of various types of propaganda by examining people before and after they have been subjected to the influence of a cinematograph film Of the specific tests quoted, one of the most ingenious is Watson's test of fair-mindedness The person under examination is presented with a statement, such as "all most, many, few, no Roman Catholics are superstitious" The subject who encircles either "all" or "no" is deemed to show prejudice in his response There are also ways of detecting prejudice in the examiner If, for instance a rater regards a subject as highly artistic he will tend to attribute all the other traits commonly associated with the artistic temperament to this subject if the rater thinks the subject melancholy he will fail to notice such of his characteristics as do not fit in with the preconceived

[1] *The Assessment of Psychological Qualities by Verbal Methods* By P E Vernon, Ph D Med Res Counc Industr Hlth Res Bd Rep No 83 London H M Stationery Office 1938

over simplified notion This phenomenon known as the halo effect usually due to the raters general liking or disliking for the subject is almost unavoidable It gives rise to suspiciously high correlations between pairs of traits in the estimation of character Following the lines originally laid down by Spearman in the analysis of special mental abilities many investigators have attempted to analyse the results of questionaries self ratings and vocational tests in terms of specific factors For example the degree of extroversion and introversion in a given subject has been thought to be separable into five component factors—namely sociability emotional maturity masculinity freedom from care and intellectual interest Dr Vernon points out that it is now generally admitted that an infinite number of factorizations of the same set of variables is possible but he expresses the hope that factorization may yet help us to make predictions with a maximum degree of efficiency Not all who read the survey may be as sanguine as this Dr Vernon however is to be congratulated upon a painstaking and extremely lucid summary of existing knowledge in this very obscure but fascinating field

IMMUNIZATION AGAINST POLIOMYELITIS

Constant attempts are being made in the United States to devise a means of protecting against poliomyelitis It will be remembered that one of these—the injection of a living and supposedly attenuated virus vaccine—led to disastrous results the active virus having undoubtedly caused attacks of the disease some of which were fatal More recently attention has been concentrated on rendering the nasal mucosa impermeable to the virus by repeated spraying with astringents a laborious proceeding which if carried out with persistence can scarcely be supposed to leave the nose quite as it found it A new possibility which will not however be translated to the clinical field without much courage and care is foreshadowed in experimental results reported by S D Kramer L H Grossman and G C Parker[1] These indicate for the first time that it is possible to immunize monkeys by the nasal route Natural infection by this route in man is usually overcome without involvement of the nervous system and it is thus that the majority of adults have acquired immunity The monkey reacts differently to the intranasal instillation of virus which either produces poliomyelitis or leaves the animal as susceptible as before What the present experiments show is that if the virus is introduced into the nose of monkeys after the repeated instillation of pituitrin and adrephine (a mixture of adrenaline and ephedrine sulphate) the disease fails to develop and a resistance to infection is usually produced indicated both by negative results from instilling virus alone at a later stage and by the demonstration of protective antibody in the animal's serum some animals also became resistant to intracerebral inoculation It is not clear why these drugs were chosen or how they act their antiseptic power is slight and the fact that the action is local is indicated by failure of protection when they are injected elsewhere They elicit a cellular response in the mucosa in which eosinophils are prominent The practical outcome of these observations remains for the present quite uncertain but they at least suggest that there is no need for a defeatist attitude in this difficult field

[1] *J exp Med* 1938 67 529

A SETBACK TO MEDICO LEGAL SCIENCE

In April 1935 the then Home Secretary Sir John Gilmour appointed an Advisory Committee on the Scientific Investigation of Crime Its members were Lord Trenchard (chairman) Lord Atkin (vice chairman) Lord Dawson of Penn Sir Russell Scott the late Sir Edwin Deller Sir Bernard Spilsbury Sir Frank Smith Sir Robert Robertson Mr Hugh Lett Sir Frederick Menzies and Sir Arthur MacNalty This expert committee unanimously reported in July 1936 in favour of the establishment in the near future of a Medico legal Institute[1] It declared that the scheme set out in the report was long overdue and should be pressed forward as a matter of public importance Reinforcing this view the Senate of the University of London gave unqualified approval to the general principle of creating a central institute for forensic medicine in the metropolis and associating it with a university chair The scheme provided for three separate but interrelated branches of activity—teaching routine work and research Such a national institute organically linked with the Faculty of Medicine of the University on the academic side and associated with the Metropolitan Police College laboratory at Hendon in its day to day work would as a matter of course become a centre for research in the medico legal sphere to which problems would be referred by outside bodies Two years have passed but nothing has been done Worse than that the Government pressed for a sign of its intentions now announces that it cannot at the moment consider a scheme which however admirable it may be would involve a not in considerable capital outlay The polite correspondence between Lord Trenchard pleading on behalf of the non official members of his committee and Sir Samuel Hoare the Home Secretary is reproduced at page 142 There is hardly a capital in Europe that does not possess a medico legal institute but England is still too poor and must await better times or persuade a "public-spirited benefactor" to put up the money

[1] *British Medical Journal* August 1 1936 p 229

THE HALF-YEARLY INDEXES

The usual half-yearly indexes to the *Journal* and to the *Supplement* and *Epitome* have been prepared and will be ready shortly they will however not be issued with all copies of the *Journal* but only to those readers who ask for them Any member or subscriber who wishes to have one or all of the indexes can obtain what he wants post free by sending a postcard notifying his desire to the Finance Department British Medical Association House Tavistock Square W C 1 Those wishing to receive the indexes regularly as published should intimate this

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

FRACTURES OF THE SHAFT AND SUBCAPITAL REGION OF THE HUMERUS

BY

T. P. McMURRAY, M.B., M.Ch., F.R.C.S.Ed.

Any of the three types of violence—direct, indirect or muscular—may cause a fracture of the humerus at any level. Thus a direct blow on the arm may be followed by a fracture at the site of injury, or a fracture at any level may follow a fall upon the outstretched hand. Or, again, a fracture may result from excessive muscular strain, as in the tear fracture of the great tuberosity, in which this portion of the bone is pulled away from the head of the humerus. As a rule fractures towards either end of the shaft are caused by indirect violence, whereas those occurring towards the middle of the bone may be either of the direct or indirect type.

Fractures of the upper part of the shaft are classified into two main groups: (1) fractures of the anatomical neck, in which the lesion lies external to the articular surface of the head, usually passing through the substance of the tuberosities; (2) fractures of the surgical neck, in which the fracture line is placed below the level of the tuberosities.

FRACTURE OF ANATOMICAL NECK

This type of fracture is seen usually in the elderly patient as a result of indirect violence following a fall on the hand. The fragments are generally impacted, although non-impacted fractures are also seen.

Signs of the Impacted Fracture

In this, the more common type of fracture of the anatomical neck, the presence of impaction between the fragments may lead to great difficulty in diagnosis without the help of a good x-ray photograph. Following a fall on the outstretched hand the patient complains of some pain and tenderness in the region of the shoulder, with slight swelling in the injured area and a restricted range of voluntary movements. On passive rotation of the arm the shaft and head of the humerus move in one unbroken mass. On such clinical evidence a mistaken diagnosis of bruising of the shoulder may be given, and the patient be advised to massage the shoulder and to use the arm freely in order to prevent the formation of adhesions. Such a course of treatment, although based on a wrong diagnosis, is often successful, and the presence of the fracture may not be appreciated unless an x-ray examination is carried out at a later date. This fortunate result can only occur if the impaction remains firm, but if during the massage and active movements disimpaction occurs, then all the usual signs of fracture become apparent.

Treatment of the Impacted Type

As the patients are elderly disimpaction of the fracture correction of any deformity should be avoided, unless re is such severe malunion that the subsequent movements of the joint would be gravely restricted. As a rule the extent of the impaction is not equal over the whole line of the fracture, being deeper on the inner than on the outer aspect. It follows that some degree of deformity is present in almost every instance, but not to such a degree as to cause any serious limitation of the range of movement in the joint.

Treatment therefore should consist in the protection of the impaction until union is complete, when any restriction can be diminished by active use of the joint, assisted by gentle passive stretching. A firm triangular sling is applied to the limb, supporting the elbow and preventing the constant strain of gravity, which might cause disimpaction, the hand and wrist being left free for active movements. As an additional safeguard, when the patient is nervous the arm may be bandaged to the chest by a binder, after a firm pad of wool or felt is placed in the axilla. Fixation is maintained for two weeks, after which the patient is advised to use the arm and is encouraged by gentle massage of the whole of the shoulder girdle.

Signs of the Unimpacted Fracture

The signs present in a case of this type of fracture of the neck of the humerus are very similar to those of displacement of the upper epiphysis. In each the shaft of the humerus is displaced forwards and upwards in front of the small fragment, which can be felt under the tip of the acromion process. In each the arm is slightly shorter than the normal when measured from the acromion process to the external condyle, while the elbow on the affected side is carried behind the mid plane of the body.

Treatment

The treatment is based on the impossibility of controlling the small upper fragment, which, because of its muscle attachments, is rotated outwards and upwards. As a result of this rotation the rough upper end of the lower

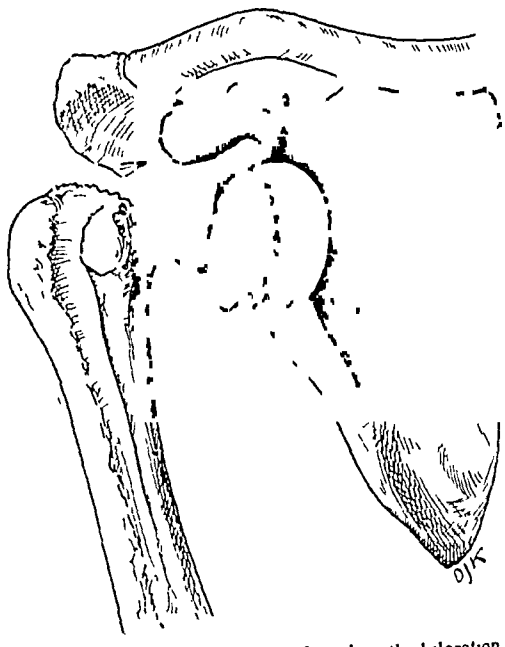


FIG. 1.—Fracture of the anatomical neck with dislocation of the head.

fragment lies against the articular surface of the head of the humerus which is separated from it by the capsule of the shoulder-joint. Approximation of the two broken surfaces is only possible by abduction and external rota

tion of the lower fragment Under anaesthesia the arm is pulled outward from the side into a position of abduction and external rotation when locking of the fragments can be felt The arm is then maintained in this corrected position for two weeks until consolidation of the fracture has begun when gentle movements may be started and the position of adduction gradually assumed Some little difficulty is met with in after treatment which may be prolonged

FRACTURE OF ANATOMICAL NECK WITH DISLOCATION OF HEAD

A rare but exceedingly troublesome complication of fracture of the anatomical neck of the humerus occurs when the upper capital fragment is dislocated from its position in the glenoid cavity (Fig 1)

Clinical Signs

With such an extensive injury there is great swelling pain ecchymosis, and tenderness round the region of the joint while the patient supports the injured limb with the other hand X ray photographs will demonstrate the lesion and indicate the new site of the head of the humerus

Treatment

Owing to the presence of a fracture through the neck of the humerus it is evident that reduction of the dislocated head into the glenoid cavity cannot be accomplished by any of the ordinary methods of rotation or by extension of the limb Its replacement however is possible by open operation—an extremely difficult procedure —or more simply by extension of the limb in the vertical direction

Reduction by Manipulation—Under full anaesthesia extension is applied to the limb in an almost vertical direction above the head Slow steady traction in this direction is continued until the dislocated upper fragment slips back into the glenoid cavity Occasionally during the extension of the arm assistance to the replacement can be given by the fingers which press the head gently into position through the skin of the axilla For success of the manœuvre reduction must be attempted within one week of the injury If a greater interval has elapsed reduction by this method is difficult or impossible After reduction the fracture is treated as already described The two raw surfaces are interlocked so that the limb may be brought down to a position of 50 degrees abduction at which redisplacement is improbable Later the range of movements is restored by active use

OLD FRACTURE DISLOCATION

When the displacement has been present for months or years the head of the humerus is usually united firmly to the side of the shaft The arm is held away from the side and movements between the humerus and the scapula are lost Reduction of the displacement is then impossible and the only indications for active treatment are the presence of signs of pressure on the nerves or vessels of the axilla or limitation of movement of the joint

Treatment

When the signs of pressure on the axillary contents are slight considerable improvement often follows a gentle manipulation of the shoulder under anaesthesia If however the signs of pressure are outstanding features such treatment is useless or even dangerous and relief is only possible by removal of the head of the humerus

The operation is a very extensive and difficult one with the possibility of injury to adherent vessels or nerves but if carried out slowly and carefully the result is satisfactory After removal of the head of the humerus the stability of the shoulder is definitely diminished Passive movements are free but stable active movements are negligible The operation does however succeed in its object of relieving the pain or swelling of which the patient complained and to that extent it is advisable

FRACTURE OF SURGICAL NECK

A fracture of the shaft of the bone occurring in the upper sixth and below the epiphyseal line is described as a fracture of the surgical neck It may follow on direct or indirect violence and unlike fracture of the anatomical neck usually occurs in vigorous adult life and is not as a rule impacted

Clinical Signs

In addition to the usual signs of fracture such as pain swelling ecchymosis and spasm of muscle the upper end of the shaft can be felt lying in front of the head forming a mass on the anterior aspect of the joint which rotates at the line of fracture without movement of the head

Treatment

If displacement of the fragments is not present treatment should consist in fixation For this purpose the wrist is slung from the neck by a halter the elbow being flexed to right angles the weight of the forearm acting as a steady extending force on the arm Lateral movements of the fractured surfaces are prevented by the use of three moulded metal splints which enclose the shoulder and arm down to but not including the elbow joint This protection is maintained for six weeks when the splints may be removed movements being restored by voluntary effort the range increasing with the diminution of tenderness in the fracture

When displacement is present reduction under full anaesthesia is simple by the application of steady traction to the limb in slight abduction Locking of the fragments can be appreciated and redisplacement is unlikely as the fractured surfaces are usually more or less transverse at this level When the reduction is satisfactory the arm can generally be adducted without risk of redisplacement fixation with three metal splints forming an adequate protection and preventing any recurrence of deformity

FRACTURE OF GREAT TUBEROSITY

Owing to its protected position under the muscular mass of the shoulder joint fracture of the great tuberosity is not as a rule caused by direct injuries to this region but follows overaction of the abductor and rotator muscles which are inserted here The fracture is usually present as a single lesion but it may be accompanied by dislocation of the head of the humerus

Signs

The diagnosis rests on the radiographic appearance and in the absence of a dislocation little can be elicited clinically beyond the presence of swelling and tenderness under the acromion with pain on passive movements of the arm When dislocation is also present this lesion may overshadow the comparatively small fracture and considerable disability results from the treatment of the injury as a simple dislocation without recognizing the existence of the bony lesion

Treatment

As it is impossible to control the detached fragment and bring it into apposition with the body of the humerus, it is necessary that the rough surface of the humerus should be brought into contact with the broken tuberosity This is easily done by abduction and external rotation of the arm to an angle of 80 degrees In this position replacement is complete and if it is maintained for three weeks voluntary movements can be instituted and the normal range of movement restored

FRACTURE WITH DISLOCATION

Here the head of the humerus lies in the subcoracoid region from which it can be replaced in the glenoid cavity by rotation or by slow steady traction If the dislocation were the sole lesion after-treatment would consist in the fixation of the arm to the side until the torn capsule had healed

Rest in adduction which would be ideal in the treatment of a simple dislocation of the shoulder, produces a wide separation of the detached tuberosity It is therefore necessary to rest the arm on a frame in a position of 50 degrees abduction for at least two weeks, when the angle of abduction can be increased to 75 degrees, at which the arm is maintained for a further period of two weeks before the resumption of voluntary movements

FRACTURES OF SHAFT OF HUMERUS

In considering the treatment of fractures of the shaft of the humerus, whether transverse, oblique, or spiral, one is apt to think of fractures of the femur In each there is a single bone, a fracture of which leads to shortening of the limb with overlapping of the two fragments Although the conditions are similar up to this point, the analogy cannot be followed any further In fractures of the femur the shortening is maintained by the protective spasm of muscles which are powerful enough to support body weight, whereas in the case of a fractured humerus the resistance to reduction is much less

In fractures of the humerus extension with weights, pulleys, or elastic is never necessary Full length of the arm and correct alignment can be obtained by using the weight of the forearm as an extending force The use of greater weight than this is not only inadvisable but in some cases positively dangerous Non union is reported as a common sequel of fracture of the shaft of the humerus by the same surgeons who advocate strong extension as the means of reducing the displacement

Treatment

The weight of the forearm is used by slinging the wrist from the neck by means of a halter, the elbow being kept at a right angle By this simple means the full length of the arm is obtained, but only if the lateral movements of the rough bony ends are prevented In most fractures of the humerus the line of fracture is not transverse, so that locking of the fragments is not usually possible There must therefore be a continuation of the action of the weight of the forearm if full length is to be maintained

The diagram (Fig 2) shows the simplest and most efficient method of producing both of these actions on the fractured bone The wrist is slung by a halter from the neck, while the broken humerus is protected by three

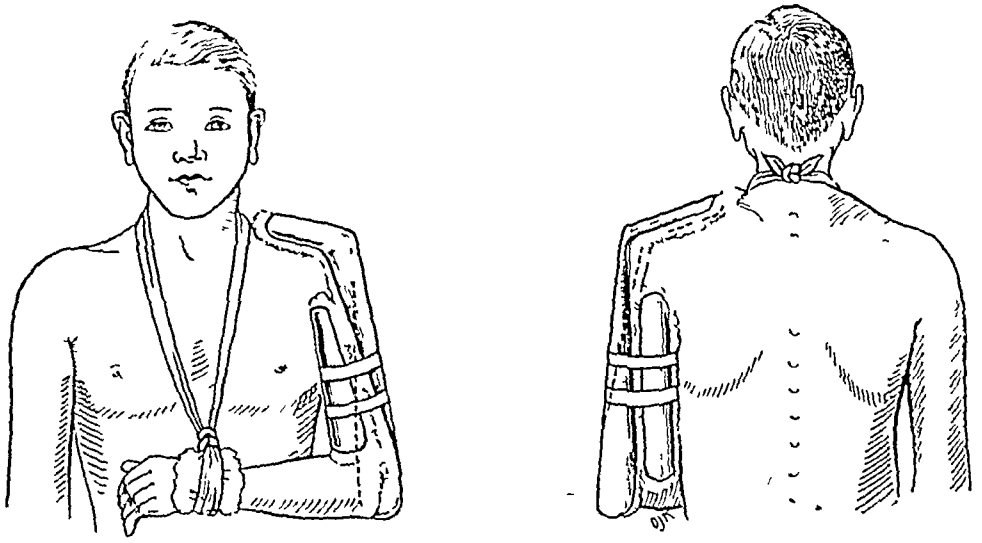


FIG 2—Front and back views of splinting for fractured shaft of the humerus

metal splints, surrounding the limb from the top of the shoulder to the level of the epicondyles In following such a method no triangular sling is used, as this would support and lift up the elbow-joint, thus destroying the extending force of gravity In the case of a man the shirt must not be tucked into the top of the pants, an arrangement which is similar in action to the use of the triangular sling The patient is encouraged to stand up or sit upright without any support under the elbow, and at night correction is continued by propping him up in the semi-erect position

If straight splints are used for the lateral protection of the bone, union with deformity will almost certainly result The reason for this is clear a straight splint applied on the outer aspect of the arm touches the bulk of the shoulder-joint and the external condyle of the humerus, leaving the middle of the bone unsupported unless this be pulled towards the splint into a position of deformity If, however, mouldable metal splints are used these can be twisted on their long axis so that they lie on top of the acromion, on the outer aspect of the shoulder joint, and towards the back of the bone at its lower end The small splints used on the inner and anterior aspect

are given a similar twist so that the bone is supported in its whole course and its normal alignment retained

Treatment is continued in this way for six weeks when as a rule the splints may be removed and the patient encouraged to use the arm for small active movements the sling usually being retained as a support for another three or four weeks Complete consolidation of the humerus is to be expected in nine or ten weeks and a full range of movement very soon after this Occasionally there is some restriction of movement in the shoulder a condition which may require a course of physiotherapy

COMPLICATIONS OF FRACTURED HUMERUS

Non Union

The occurrence of non union following a fracture of the humerus can be attributed to any of the usual causes such as want of fixation of the fractured bone want of apposition or the presence of pathological changes in the bone but in many instances non union is directly due to an error in treatment

There are two common causes of non union which are not sufficiently recognized (1) the widespread removal of partially detached fragments of bone in a compound fracture (2) *the application of excessive traction to the fractured* bone producing wide separation between the fractured surfaces

Treatment—The treatment of non union depends largely on the length of time that has elapsed since the occurrence of the fracture When this period does not exceed five months union frequently follows the use of efficient treatment as for a recent fracture reinforced by the stimulation of passive venous congestion at the site of fracture The method is simple a thin rubber band is placed round the arm next the skin above the site of fracture before the splints are applied and each day this band is tightened for three periods of half an hour without interfering with the fixation of the splints The congestion must be of such a degree that the hand become swollen and bluish but not painful This method is continued for at least three months before deciding whether union will occur or not If however more than six months have elapsed bone grafting holds out the only hope of union and should be carried out without delay

Nerve Involvement

Any of the nerves in the arm may be involved at the time of the fracture or at a later date either through injury by the rough bone ends or through compression in callus or scar tissue The musculo spiral nerve on account of its position close to the bone is involved more often than either the median or the ulnar nerve

Signs—When the function of the musculo spiral nerve is lost all the muscles on the extensor aspect of the forearm lose their power of voluntary contraction with or without paralysis of all or part of the triceps according to the site of the lesion

Treatment—When the clinical examination indicates that such an injury is present the paralysed muscles must be protected from overstretching by placing the hand and fingers on a long curved splint the wrist being held in dorsiflexion with the metacarpophalangeal and interphalangeal joints in slight flexion Gentle massage is given to these protected muscles the progress of the nerve injury being gauged by repeated electrical examination of the paralysed muscles If from such examination it is evident that the nerve is torn an operation for nerve suture or nerve freeing should be carried out without delay Very occasionally when there has been wide preliminary destruction of nerve tissue as in a severe compound fracture it may be impossible to perform a satisfactory suture of the divided nerve and improvement in the function of the hand may only be possible by transplanting the tendons of some of the flexor muscles of the forearm to the dorsum so that they act as extensors rather than flexors of the wrist and fingers

Nova et Vetera

SURGICAL FORCEPS DOWN THE AGES

The History of the Forceps An Investigation upon the Origin Evolution and Use of the Forceps from Ancient Times to the Present Day (With a Chronology in Dates) By Vilhelm Moller Christensen (Pp 39 111 figures A Chronological Table 20 net) London Humphrey Milford Copenhagen Levin and Munksgaard 1937

Dr Vilhelm Moller Christensen says that he invented a pair of forceps when he was an assistant physician in Denmark in 1931 Curiosity led him to inquire into the history of forceps and like most people he thought there were only a few varieties Investigation soon showed him his mistake and he has since travelled far and read much to produce this book on their history and evolution

The result of his inquiries has been to show that forceps were in use long before the invention of scissors, and that they are found in Egypt and Mesopotamia about 3300 BC The different types evolved were employed for epilation for the removal of foreign bodies, and for dealing with the smoky wicks of the oil lamps then in common use The epilation forceps were used alike by men and women forming a part of their toilet sets Everyone seems to have carried such a set for there must have been many who preferred to pluck out their hairs with a pair of forceps rather than be shaved with a flint or bronze razor Two different types were developed the Cypriot and the Mycenaean about a thousand years later Dr Christensen thinks they were not known to the Egyptians but year later the Mycenaean type found its way to Italy and Scandinavia Thanks to the work of Dr J S Milne the surgical instrument of Greece and Rome are fairly well known Dr Christensen has consulted his book and is able to show from personal examination that a pair of bronze forceps in the Copenhagen Museum is more likely to have been used for drawing the stump of teeth than a epilation forceps as was stated by Dr Milne

Surgical forceps have not undergone any great change during the last 5000 years though it was a long time before the blade were ridged to improvement of which materially increased their gripping power It was longer still before they were provided with a ring or slot to keep them closed and make them self adherent When Dr Christensen was in England he visited the Guy's Museum and the Wellcome Medical Institute Of the twenty four pairs of forceps in the Guy's Museum (still there he thinks that seventeen are incorrectly described as to their use For one reason he did not see the example in the Internal collection of Instruments at the Royal College of Surgeons in Lincoln's Field where he would gladly have consulted Neither has he read the late Mr Allbutt's on the development of the eye me for Koberle Klein and Sydney Wells in the *British Medical Journal* in 1917 (I no mention at all of Spencer Wells

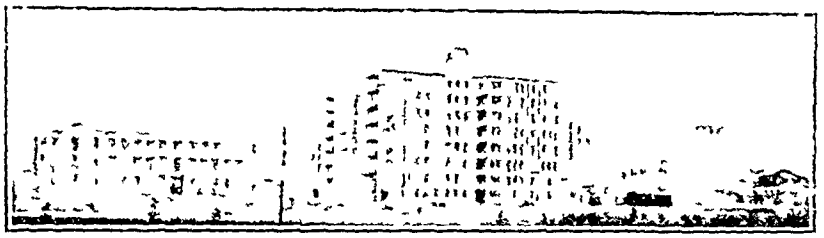
The book is very useful as a collection of medical history there a chronological table how many different types from prehistoric bibliography, and index of

THE BIRMINGHAM HOSPITALS CENTRE

ROYAL OPENING CEREMONY

The opening of the Birmingham Hospitals Centre and the Medical School Buildings of the University by the Duke of Gloucester on July 14 sets the seal upon a great enterprise which was first mooted eighteen years ago

The new buildings at Edgbaston two miles from the centre of the city on open ground 500 feet above sea level and just to the north-west of the University, make an inspiring group even now, although the scheme is far from complete Nothing has been spent in useless adornment but the very simplicity of the treatment and the harmonious massing of the several buildings give it all the needful dignity The three main structures—the hospital itself the nurses home to the north and the medical school buildings to the south—fit in perfectly with one another so that the eye is satisfied from every aspect All the buildings are in a yellowish-grey stone, disappointing at first glance when compared with the warm red of the University a few hundred yards away, and yet not unpleasing On three sides of the hospital stone balconies have been constructed on every floor of the medical and surgical wings for the outdoor treatment of as many patients as possible, and these give a decorative relief to the plain wall surfaces



Side View of Hospital and Nurses Home

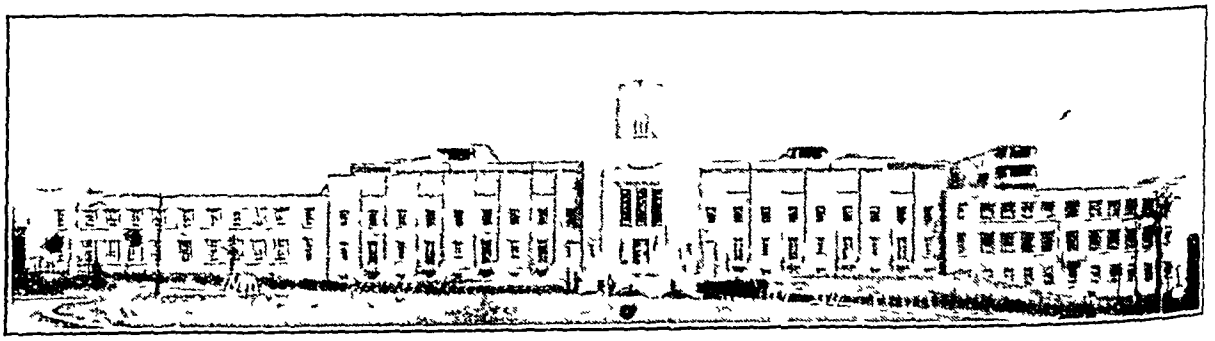
Evidently the scheme owes something in its architectural conception to the Medical Centre of New York City in which many hospitals and schools are associated, but there the emphasis is on the perpendicular line, whereas at Birmingham it is on the horizontal The hospital building is of seven and eight stories, as compared with the twenty-two stories of the Presbyterian Hospital, the original unit of the New York Centre The architects, who submitted the winning design in open competition, are Messrs Lanchester and Lodge of Bedford Square, London Mr H V Lanchester is the designer of the University of Leeds, the Cardiff municipal buildings, and the reconstruction of St Bartholomew's

The First Instalment

The buildings which have been opened this week are a first instalment Much remains to be added before the Centre corresponds fully with the architects' original plan The new hospital at present will provide just over 500 beds, whereas the completed hospital is planned to accommodate 740 The buildings so far finished and opened include the central administrative block, with offices, stores, and large central kitchens, dominated by the clock tower, which serves the utilitarian purpose of water storage The medical wing to the east of this block is also complete, as is the surgical block to the west with the exception of one of the forward projections There remain to be added, on the west side, a casualty department and ward and the large out patients' department, and, on the east, a paying patients' block of 100 beds, also to project from the centre of the building southwards the chapel Opposite the principal entrance to the hospital (north), on the other side of the fine roadway, is the nurses' home a large seven storied structure which when complete will have on the one side of it a smaller night wing and on the other a home for the hospital maids A dispensary is at present being built as a link between the surgical wing and the out patient department

The New Medical School

To the south of the hospital, at a lower elevation separated by a wide and pleasant court and garden space which will be used for convalescent patients, are the Medical School Buildings These are only two, or in some parts three, stories in height, so that they do not rob the hospital of any sunshine But the main frontage extends for a full 600 feet On either side of the entrance block is a square of buildings surrounding an open central court If these school buildings stood by themselves they would be regarded as a triumph of architecture, they are dwarfed however, by the great mass of the hospital behind them On one side are located the anatomy and physiology departments and on the other those of bacteriology and pathology, and the museum and library overlook the road leading to the University Three well equipped lecture theatres have been provided, and there are laboratories for each of the four principal sections The building was still in the workmen's hands on the occasion of our visit, but it was evident that teachers and students will enjoy every accommodation and facility Covered ways and corridors connect the medical school with the hospital



Medical School South Frontage with Hospital Clock Tower beyond

Internal Hospital Arrangements

The 500-bed hospital now opened although ultimately the bed accommodation will be increased to half as much again, is nevertheless complete with all auxiliary and ancillary services It embodies the latest ideas and experience in design, planning, and administration The beds are to be organized in units of sixty, each unit being complete in itself Of the sixty beds, thirty will be for men and thirty for women each thirty will be made up of one ward of sixteen beds two of four beds and three of two beds The largest ward in the hospital will be

JAMES F. BRAILSFORD BRODIE'S ABSCESS AND ITS DIFFERENTIAL DIAGNOSIS

(For legends see Text)



FIG. 1



FIG. 2



FIG. 3



FIG. 4



FIG. 5



FIG. 6



FIG. 7



FIG. 8



FIG. 9

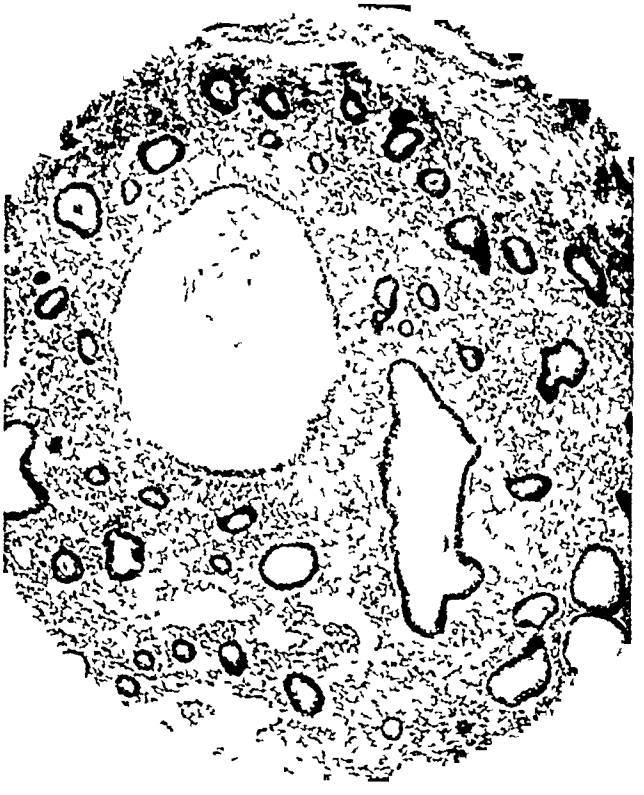


FIG. 1.—Case 9. aged 21. Menarche at 16. Menstruation 3/28 regular for four years. Since then periods have been irregular. Endometrium before progesterone therapy. (Magnification × 50.)

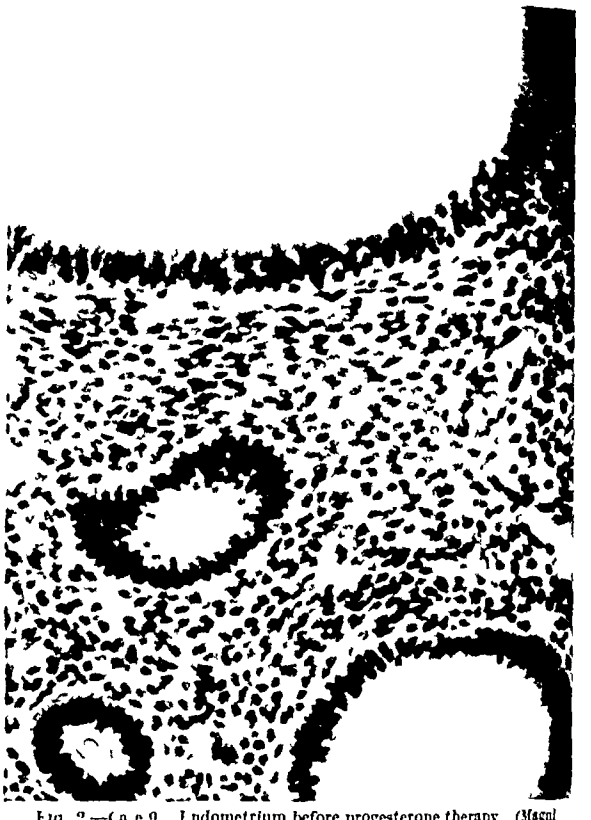


FIG. 2.—Case 9. Endometrium before progesterone therapy. (Magnification × 260.)

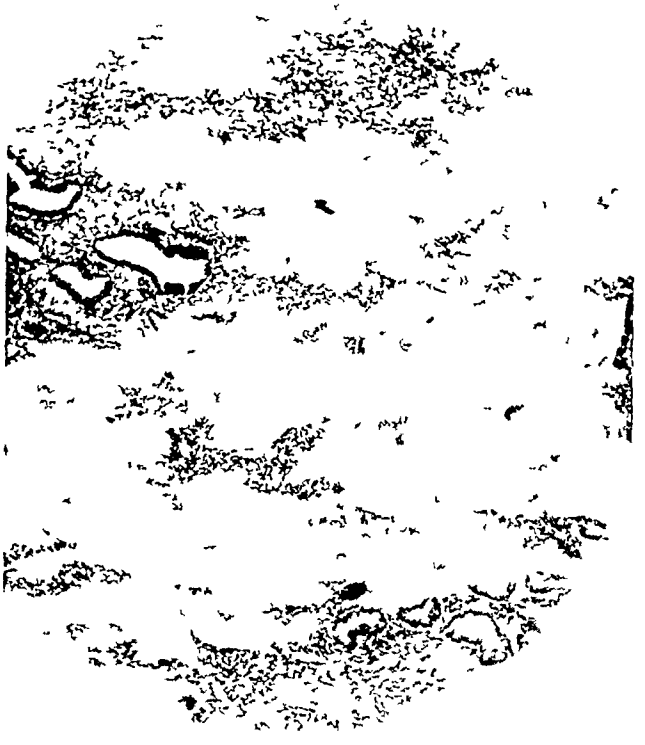


FIG. 3.—Case 9. Endometrium after 25 mg. progesterone. (Magnification × 50.)



FIG. 4.—Case 9. Endometrium after 25 mg. progesterone. (Magnification × 260.)

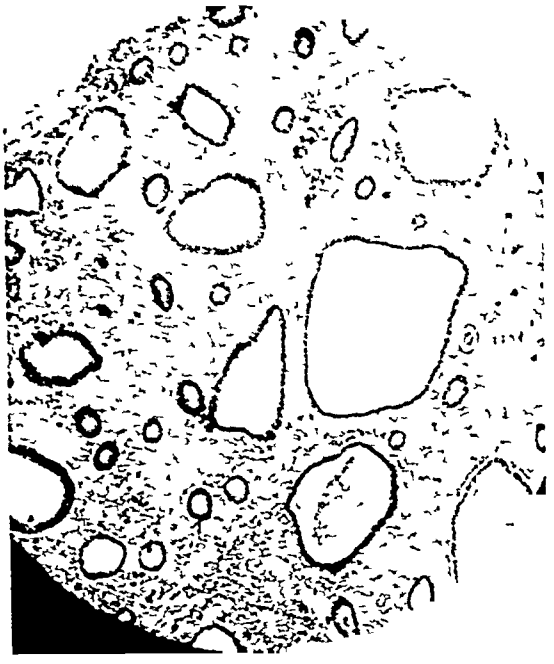


FIG. 5.—Case 10, aged 20. Menarche at 13. Menses 3-4/28 for three years, 2 to 3 months' amenorrhœa followed by profuse loss. Endometrium before progesterone therapy. (Magnification × 50.)

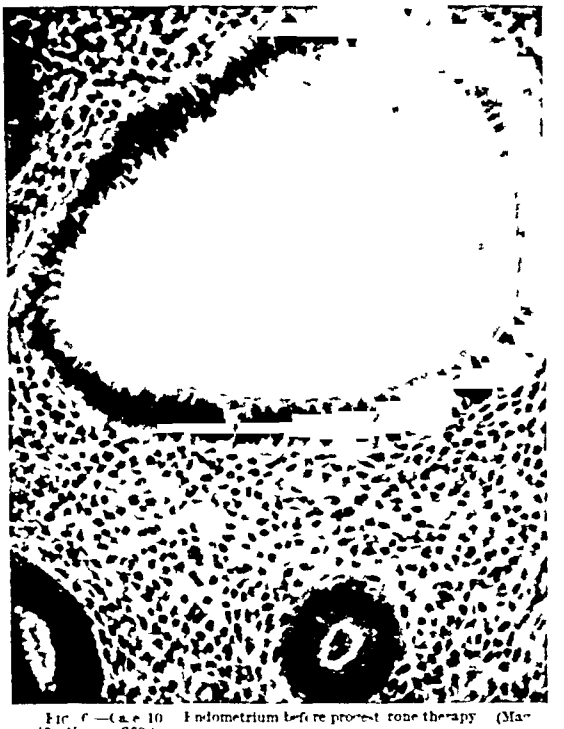


FIG. 6.—Case 10. Endometrium before progesterone therapy. (Magnification × 260.)



FIG. 7.—Case 10. Endometrium after 25 mg. progesterone. (Magnification × 50.)



FIG. 8.—Case 10. Endometrium after 25 mg. progesterone. (Magnification × 260.)

W SAMPSON HANDLEY CHRONIC MASTITIS AND BREAST CANCER A FAMILY HISTORY



FIG 1—Sister C Right breast Diffuse innocent papillomatosis of the ducts Magnification × 120 (Photo by Bland Sutton Institute)



FIG 2—Sister C Right breast Incipient carcinoma Duct distended by epithelium infiltration beginning Magnification × 200 (Photo by Bland Sutton Institute)

MAX GREENBERG PARASITIC FOETUS SUCCESSFULLY REMOVED BY OPERATION

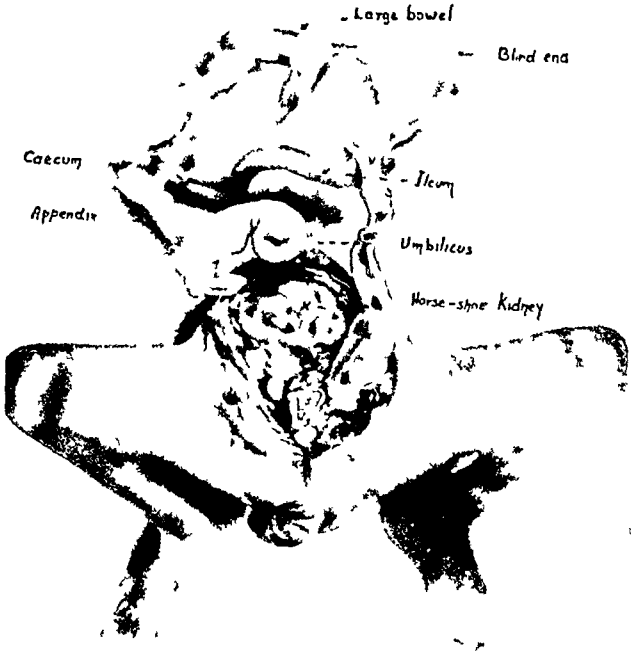


FIG 1—Parasite after removal



FIG 2—Child at age of 10 months

have more than sixteen beds There will be six general operating theatres—one on the floor of each of the surgical units—as well as departments for massage and remedial exercises x rays and radium electrotherapy hydrotherapy and other special purposes The beds as far as possible are being arranged parallel to the windows instead of in the usual right angle position and the heads of the beds are against partition screens projecting into the ward some eight feet from the wall It is intended that each member of the senior staff shall be assigned one of the units of sixty beds with accessory services clinical laboratory record room and so forth When the completed hospital is functioning of the 740 beds 240 will be medical, 200 surgical 60 children's 60 gynæcological and obstetric 60 special (ear nose and throat ophthalmic dermatological) and 20 casualty In addition there will be the 100 beds in the paying patients block still to be constructed Fifty of these beds will be in single rooms This block will be so related to the hospital that all essential services may be obtained with the least inconvenience to the patients

The nurses home when the night wing is added will accommodate 460 nurses giving each of them a separate bedroom There will be separate bedrooms also in the maids home for 100 maids Part of the nurses home will be a training school with lecture theatre and demonstration rooms

It should be added that it is expected that it will be October or November before the Centre opens for the first instalment of patients The Birmingham United Hospital (the General Hospital and Queen's) is undertaking without avoidable delay the responsibility for the new buildings and service but the speed is necessarily regulated by rate of recruitment of nursing and domestic staff To provide an entirely new and complete organization to full capacity will take some time especially in a hospital of such modern design and containing all the numerous departments connected with the special needs of a medical school

The Finance of the Scheme

On the financial side the Centre, being a unified institution not one hospital appealing against others with competing claims has been fortunate in enlisting the enthusiastic support of the whole community The civic authorities headed by successive Lord Mayors since the appeal began in 1930 have been particularly co operative The cost of the scheme with the 740 bed hospital is one and a quarter millions one million of which represents the cost of the present first instalment That million to within the last £30 000 has been secured A few days before the opening the Lord Mayor received a letter from an anonymous well wisher promising £10 000 to cover certain additional items of expenditure if the outstanding £30 000 were forthcoming Thanks largely to the efforts of the secretary of the Centre Captain J E Stone whose writings on hospital administration are well known in the hospital world the appeal expenses represent just under 1 per cent One sixth of the amount of the appeal fund is credited to the University for the building of the school the maintenance of which is the University's responsibility no part of the expenditure falling upon the hospital authorities When the University, a few days before the opening marked the occasion by conferring certain honorary degrees, it was mentioned that Lord Nuffield who received the degree of Doctor of Law had been the chief contributor and next to him the largest single subscriber had been Mr Harry Vincent a Birmingham business man for eight years the honorary treasurer of the appeal and one of the hardest workers on its behalf

The words of Dr Robert Hutchison President of the Royal College of Physicians of London (who with Sir Cuthbert Wallace President of the Royal College of Surgeons of England and Sir Edward Mellanby Secretary of the Medical Research Council, also received honorary degrees), on the same occasion may be quoted

It [the idea of forming the Hospitals Centre] was an idea of great imagination carried out with all the practicality one expects in Birmingham and I am sure it will not fail not only to facilitate the treatment of the sick but also to improve the teaching of the student and extend the facilities for research It cannot fail to enhance still further the already high reputation of Birmingham as a teaching centre Those who practise in the metropolis with its woefully scattered medical resources view not only with satisfaction but with a considerable degree of envy Birmingham's Hospitals Centre I believe that the example you have set here to medicine in the concentration of medical resources in one quarter cannot fail to be widely followed in other cities

Opening by the Duke of Gloucester

The arrangements for the royal opening on Thursday of this week had to be revised owing to the illness of the King in whose place the Duke of Gloucester accompanied by the Duchess performed the ceremony The spaciousness of the setting permitted 8 000 people to be present It was arranged that the Duke and Duchess driving from New Street station should spend exactly one hour at the Centre first entering the Nurses Home where certain presentations were to be made by Sir Charles Grant Robertson chairman of the Executive Board of the Centre and Vice Chancellor of the University The list of presentations here included members and officials of the Board representatives of the architects engineers contractors and works staff the house governor and matron and members of the honorary medical staff of Birmingham United Hospital After the presentation of an address by the Lord Mayor Their Royal Highnesses proceeded to the main door of the administrative block opened with a key presented to the Duke by the architect and then passing through the vestibule visited one of the large general wards of sixteen beds and an operating theatre The further programme included an inspection of the buildings of the Medical School where the Chancellor of the University Viscount Cecil of Chelwood presented the Dean of the Faculty (Dr Stanley Barnes), the professors and other officers

[The photographs reproduced are by H J Whitlock and Sons Ltd Birmingham]

NATIONAL FOOD POLICY

Within recent weeks two documents have been published which bring into prominence the imperative need for a national food policy planned not only to safeguard the *health of every citizen in times of peace but his existence* in times of war The first is a *Report on Nutrition*[1] issued by the British Association for Labour Legislation

It is an effort to carry out the instructions of the Assembly of the League of Nations and the International Labour Organization to the various nations of the world to study the problem in their own country It sets out clearly and concisely the relevant facts in regard to this problem as it exists in Great Britain An outstanding feature of the report and one that lends to it a high value is the emphasis laid on the relation of British agriculture to national health a relationship which is we consider fundamental to the whole health question

The second document is a special report entitled Towards a National Food Policy issued by the Committee against Malnutrition and recommended to public attention by a number of authorities on the subject of nutrition It emphasizes the need for adjustment of national economy towards the provision of an adequate guaranteed

[1] Obtainable from the Hon Secretary 55 St Mary's Mansions Paddington W 2 (Pp 118 price 1s 6d)
Bulletin No 27 July 1938 19c Eagle Street Holborn London W C 1

diet to all sections of the community It touches upon the range of possible measures that might be taken to this end, measures which the public—medical scientific and lay alike—is invited to examine and discuss The problem is a national one upon which the public as a whole must make up its mind

The relevant facts and suggestions, as set out in these documents, may be summarized under the following headings in order, as we think of importance food production food distribution cheapening of basic foodstuffs, the raising of incomes in certain classes of the community and palliatives

National Food Production*

The work of the scientific investigators of nutrition on the one hand and of public health officers on the other, has demonstrated that there exists among our population a large amount of indifferent health or actual disease and of predisposition to infection due to dietetic malnutrition, defects that can be obviated by the general adoption of a more balanced dietary which will include an increased consumption of materials—particularly fresh vegetables and dairy produce—which are normally products of our own agriculture Of these materials our own agriculture does not produce nearly enough for national needs although our conditions of soil and climate are particularly suited to their production This of itself suggests that some selection can be exercised in the national interest as to the crops that should be grown and the stock to be kept, provided always that the farmers are assured of an adequate return for their products

Secondly, agriculture has become an assisted industry, the aid from the State in the way of duties subsidies or other relief has been reckoned to be in the order of £40,000,000 It is then not unreasonable that the State should direct the incidence of this assistance so as to ensure the production of the materials essential to national welfare At present it does not do so Owing to the operation of subsidies much of the best land in England is being cropped with wheat and sugar beet, though it is so eminently suited to the growth of vegetables Wheat and sugar are among the cheapest products in the world's market, the easiest to transport and store Neither the everyday need for them nor the threat of war justifies the expenditure of such vast sums in subsidizing their home production As it is the nation consumes vastly more sugar than it needs If war emergency arises we are still under the necessity of importing the bulk of our food, and economy of shipping tonnage becomes the determining factor in what we can afford to import Wheat and sugar are of all foodstuffs the most concentrated and come from the Americas across the one sea that is likely to be open War emergency should be met in another fashion that of bringing into cultivation a great deal of the now neglected and unimproved grassland of England It would therefore be sound national policy to transfer the subsidies now being accorded to the growth of wheat and sugar to other branches of our agriculture, such as milk vegetables, and meat

Thirdly, the agriculture of this country is not flexible ugh Flexibility of farming demands the ability not y to produce a particular commodity of a particular ality at a given time, but also the ability at all times o utilize to the maximum of advantage, and with the minimum of waste, the urine and faeces of the grazing animal for the maintenance of soil fertility with the least possible risk of disease to the stock concerned Our arable area—and that is our only flexible area—contributes but 21 6 per cent to our land surface, rough and hill grazing thin which nothing could be less flexible contributes 32 1 per cent, and permanent grass, but little more flexible than hill grazing, contributes as much as 31 per cent The black patch—and it is the largest patch—is our huge area in permanent grass, and in easily improvable rough and hill grazing *no less than sixteen million acres in England and Wales* The cultivation of fruit, vegetables, and cereals is denied to a huge acreage of the country Permanent grass and rough grazings flow like a sea right up to the very doors of our highly populated industrial centres These great centres of population of necessity obtain their vegetables from considerable distances and hence the populace never, or hardly ever, eat vegetables that are fresh in the true meaning of the word Further, the fertility of this huge acreage cannot be properly maintained, nor can the health of the grazing animals Permanent grass has a short growing season and therefore, a short carotene-giving season The health of animals is probably, to a very real extent, a function of the length of the effective outdoor grazing season

In an emergency the prime need is calories and the greatest possible production of energy-providing food stuffs This necessity makes peremptory demands for a system of farming which is flexible It is only by a mass attack on our permanent pastures that we can adequately safeguard our supplies of health-giving foods and hope to meet an emergency in respect of calories If the country is so minded it can without further ado enormously increase the gross output of its food supplies add almost immeasurably to the health units contained in such output and permanently benefit British agriculture Moreover, this greater production meets another national requirement in that it involves a high rate of employment on the land The first essential, then, in any prudent national food policy is to adapt our agriculture to national needs These needs are clear their satisfaction is imperative, the neglect to satisfy them is the extremity of folly

Food Distribution

The protective foods the population needs are such as can be produced here to the permanent advantage of British agriculture But for large sections of the population their cost is prohibitive It is not the cost of their production but that of their distribution that stands in the way of cheapness to the consumer "The whole of our system of trading in these perishable goods—commission agents, salesmen, wholesale merchants, and retail traders—is out of date and is paying extravagantly for services rendered Much of it has grown up to accommodate the laziness, lack of forethought and real economy in the people themselves, there are no 'robbers of the poor to be denounced for the expensiveness from which the 'poor suffer'' A complete census of distribution is an essential preliminary to a thorough rationalization of the distributive trade The Committee against Malnutrition suggests that basic food should be taken deliberately out of the normal field of supply and demand, since food is a primary necessity and must be guaranteed inalienably to all Basic food should be marketed through public concerns boards should be established to handle the whole distribution of food from the point of production or import to the home of the consumer, the boards to be under the control of a Food Minister or of some existing Ministry such as the Board of Trade The system of

* Much of the subject matter under this heading is in the language of the Report on Nutrition by the British Association for Labour Legislation

centralized wholesale distribution presents great opportunities of economic organization but if any preference is to be granted to such a system in legislation adequate assurances should be obtained that these opportunities will be taken Space does not permit further reference to this matter, the urgency of which is self evident

Cheapening of Protective Foods

Measures to this end are concerned mainly with lowering the cost of distribution of protective foodstuffs and with increasing the demand for them Demand is largely a question of education and of income The problem of nutrition is fundamentally one of poverty though ignorance indifference and thriftlessness are not unconnected with it To solve it we must banish poverty and ignorance Large numbers of our people have not the means wherewith to purchase food that will satisfy their physiological needs For these the raising of incomes becomes a question demanding close consideration

The Raising of Incomes

A rise in the level of working-class incomes is almost invariably accompanied by a wider expenditure on the necessary protective foods But it does not of course, follow that the whole of the margin is expended on foodstuffs The Report on Nutrition (British Association for Labour Legislation) affirms that the standard of national nutrition could be raised by raising incomes lowering the prices of foodstuffs or reducing the fixed and prior charges on the family purse such as rent rates, and insurance premiums The possibility of introducing a system of family allowances and of securing wider adoption of one or other of the various rent rebate schemes should in the opinion of the authors of this report be investigated The Committee against Malnutrition on the other hand comes to the conclusions that an attempt to ensure adequate nutrition through raising incomes can at best only have partial and indirect results A scheme of family endowments only affects one section of the population A rise in other working-class incomes affects or is held to affect, the course of employment it is also considered frequently to influence the prices of food and other necessities by leading to a price rise that effectively swallows up the benefits from higher incomes Thus in any case it would be necessary for the price system to be manipulated by Government intervention if any advances in average working-class incomes are to be of benefit to the consumer

Palliatives

The present method in this and other countries of dealing directly with the problem of nutrition is that of providing free or cheap milk and other foodstuffs to the necessitous in certain sections of the community The method is a negative one it serves to treat or forestall in some measure the worst degrees of malnutrition as we experience them it does not envisage a situation wherein malnutrition is practically impossible In the second place and associated with the first consideration the schemes have been and still are administered in the spirit of the old Poor Law with the accompaniment of inspectors income tests and so forth Thirdly only certain sections of the community—for example school children and expectant and nursing mothers—are contemplated by the schemes and of necessity there must be numerous gaps and omissions Even at the best the schemes frequently work in a sporadic manner usually ceasing during the school holidays and at periods when the mother is unable to visit a clinic Meanwhile no consideration is taken of the fact that the organism requires an adequate diet all through its life and not merely at certain periods and during certain critical phases There is reason to doubt too whether the provision of milk however desirable solves the whole complex problem of individual malnourishment in some circumstances of dietary deficiency the consumption of extra milk may be of little use Finally it has been demonstrated that the provision of milk and other foodstuffs to the necessitous is a burden to local authorities in special areas of the country and may tempt them to provide meals of no great physiological value in the effort to conserve funds the responsibility should evidently be assumed by the nation as a whole and not left to the whim or the resources of local authorities —as it now in fact is Such are the views of the Committee against Malnutrition and we agree with them The committee suggests that there should be provided at the cost of the State to all elementary school children without discrimination a well balanced ample and sociable midday meal served in comfortably equipped centres open to supervision by the parents But valuable as this scheme would be for the school children it still leaves us with a selected group of the total population Probably any idea of a wider extension of communal feeding would be quite alien to conditions in Britain to-day and it seems doubtful whether the country would at present consider the large annual outlay needed to maintain even the scheme for elementary school children

A Many sided Problem

In concluding this necessarily brief summary of the facts and suggestions set out in the two documents we are reminded of a recommendation made in the final report of the Mixed Committee of the League of Nations on the Relation of Nutrition to Health Agriculture and Economic Policy (Geneva August 14 1937) which appears to have an important bearing on the subject under review

A national nutrition policy requires the guidance of some central authority with special responsibility in order to utilize to the best advantage the teachings of science interpret them in the light of national conditions and suggest means for their practical application In making this suggestion we were especially influenced by the many sidedness of the problems of nutrition and by the necessity for co ordinating economic and social action with new physiological teachings We are now more than ever convinced of the necessity for bringing together scientists economists agricultural experts consumers representatives teachers and administrators in National Nutrition Committees It is our firm conviction that through National Committees adequately representative of the various elements that go to constitute this complex problem the most useful progress can be made

MEDICAL RESEARCH COUNCIL TRAVELLING FELLOWSHIPS IN TUBERCULOSIS

The Medical Research Council announces that it has awarded Dorothy Temple Cross Research Fellowships to the following candidates who intend to study problems of tuberculosis at centres in the United States during the academic year 1938-9

NEVILLE CHRISTOPHER OSWALD M B B Chir M R C P
JOHN FREDERIC PATERSON M B M R C P
KENNETH MURRAY ALLAN PERRY M D B Chir M R C P
JOHN OVENSTONE WESTWATER M D M R C P

A MEDICO-LEGAL INSTITUTE

GOVERNMENT AID WITHHELD

The following correspondence has passed between Lord Trenchard chairman of the Advisory Committee on the Scientific Investigation of Crime, and Sir Samuel Hoare the Home Secretary regarding the question of the establishment of a medico-legal institute in accordance with the recommendations made by the Committee in its report of June 1936[1]

Letter from Lord Trenchard to Home Secretary

'I am writing as chairman, on behalf of the non official members of the Advisory Committee on the Scientific Investigation of Crime—namely Lord Atkin Lord Dawson Sir Bernard Spilsbury Sir Robert Robertson Mr Hugh Lett Sir Frederick Menzies and myself—with regard to our future course of action You will recollect that the Committee was set up by Sir John Gilmour as Home Secretary on April 9 1935, and that we submitted an interim report on June 24 1936, which was published on July 25 This report therefore is nearly two years old and we have been seriously exercised as to what our future action should be

"We understand from you that though you welcome the principle of the establishment of an institution for medico legal research you find that owing to present day world conditions it is impossible for the Government to give any financial assistance at this time towards its establishment We feel that there would be no difficulty in the maintenance of such an institution but that there would be great difficulty in financing the necessary capital expenditure for the purchase of a site the erection of a building and the equipment of such an institution without adequate Government support We fully accept your opinion however that owing to the financial situation at the present time it is impossible for the Government to give that support which we consider necessary

We cannot conceal our disappointment at this decision for as we pointed out in our report the projected institute is a matter of pressing public importance There is hardly a capital in Europe that does not possess such an institution and we had hoped that the time had come when this country might cease to deserve the reproach of lagging behind the greater part of the civilized world in organizing research and instruction in a subject of such great public importance

But faced with the impossibility of carrying this great and important work to a satisfactory conclusion without Government support for the initial expenditure and sensible of the importance of seeing that all the work and research into this question which is embodied in our interim report should not be lost we feel that the Committee should be adjourned *sine die* It would then be possible for you to reconstitute it at any time that you consider suitable We believe that this would be the best course to pursue as it would be most unfortunate if the work that has been done so far were to be completely wasted

Of course if any public spirited benefactor came forward and offered to finance the capital expenditure or to give a large sum towards it it would then be possible for you to reconstitute the Committee and carry on the work which we hope we have been of some use in furthering

'We would remind you that when the report was published it aroused much public interest in the Press and inquiries have since been made as to the progress of this work Therefore we ask you to agree to the publication of this letter in the Press

The Home Secretary's Reply

I have received your letter of June 24, conveying the suggestion of the non official members of the Advisory Committee on the Scientific Investigation of Crime that the Committee should be adjourned *sine die* in view of the decision of the Government that they are unable in the existing financial situation to provide the necessary funds for the establishment of the medico legal institute which the Committee recommended in their report of two years ago I have discussed this project with the members of the committee and yourself on more than one occasion and I do not need to reiterate my personal sympathy with the object you have in view You will appreciate however that the demands made upon the Exchequer in the present abnormal situation are such that the Government cannot at the moment consider a scheme which however admirable it may be would involve a not inconsiderable capital outlay Unless therefore the necessary funds can be provided from some other source there is clearly no immediate prospect of the scheme maturing and I can only express the gratitude of the Government to the members of the Committee for the valuable work they have done in preparing the way for the further consideration of this project when financial circumstances permit I am in entire agreement with your view that the Committee should remain in being and I welcome therefore your suggestion that it should be adjourned *sine die* in order that it may be reconstituted when circumstances permit

I have of course no objection to the publication of this correspondence'

[1] *British Medical Journal* August 1, 1936, p 229

MATERNITY AND CHILD WELFARE CONFERENCE

A national conference on maternity and child welfare was held at Bristol from July 5 to 7 under the presidency of Mr R H BERNAYS Parliamentary Secretary to the Ministry of Health It had been organized on behalf of the National Council of Child Welfare and various of its constituent bodies by the National Association of Maternity and Child Welfare Centres and for the Prevention of Infant Mortality in co operation with the maternity and child welfare group of the Society of Medical Officers of Health and was associated with a clinical course for medical practitioners which was conducted on July 3rd and 4 After the opening speech by the Lord Mayor of Bristol Mr Bernays delivered his presidential address on the psychology of pregnancy in conjunction with the falling birth rate, in which he said that the maternal mortality rate last year had been 3·11 the lowest for the century but there had been no appreciable decline in the death rate of infants under four weeks old A discussion followed in which Dr ELEANOR JOYCE PARTRIDGE dealt with the tendency of advancing civilization to diminish procreation partly for economic reasons but also because of the existence of what she termed 'sex-starved spinsters Professor DREW SMYTHE had previously stressed the importance of the economic factor but Dr Partridge insisted on the part played by an attitude of fear of sex imbied in young girls by mistaken behaviour of their parents In the milder cases of this predisposition education could effect much good but in the more severe cases psychological treatment was essential In the evening of the first day there was a reception by the chairman and members of the Bristol Health Committee at the Clifton Zoological Gardens

Physical Fitness in Children

Mr R C ELMSLIE F R C S, opened a discussion on physical fitness in young children by reading a paper on postural defects in this class of the community He first defined a "defective posture' as one which was not necessitated by or adapted to what was being done at the moment and gave illustrative examples A defective posture further interfered with normal function, but to be considered a defect it must be habitual Temporarily relaxed attitudes were not always harmful Clothing must not be too tight, particularly across the chest and round the shoulder-joints Shoes for children must not be too stiff to bend under their weight Postural defects should

be treated by ensuring full mobility and by simple exercises for this and for control of balance and position and by other simple mechanical methods recommended by the medical practitioner Mr Elmslie added that during his lifetime he had seen a great diminution in the number and severity of postural defects resulting from improvement in hygiene in clothing and in physical education In young children minor orthopaedic defects were most likely to be encountered immediately after birth when the child began to sit and stand and with the starting of school attendance Mr JOHN BASTOW F R C S dealt in some detail with the treatment of minor orthopaedic defects

Co-operation between Organized Bodies

This session of the conference was opened by Dr F J POYNTON who spoke on the need for closer co operation between the school medical and maternity and child welfare services and the need for increased provision of convalescent residential accommodation for children under school age He was followed by Dr A S M MACGREGOR medical officer of health for Glasgow who insisted that the child welfare service and the school medical service could and should function most harmoniously under public health administration, the two services having now been amalgamated in most parts of Scotland and there being from the point of view of the Department of Health for Scotland no real break in the child's development medically between the ages of 1 and 14 The two services further came into close practical contact in the joint use of remedial clinics medical inspection of the pre school child and the nursery school Dr Macgregor gave details of what was being done in Glasgow mentioning the training course for teachers and explaining why he thought that on practical grounds it would be better to associate the nursery school with the child welfare service rather than with the school medical service He was followed by Professor R H PARRY medical officer of health for Bristol who said that co ordination of the two services was far from being general in the country generally at present Details were given of the methods of obtaining closer co-operation in Bristol and the creation of the first health centre in the Shirehampton (Portway) district of the city in 1935

Dr WILFRED PEARSON sponsored the claim of the pre school child to further consideration by the public and the provision of better convalescence facilities for children of that age in conjunction with better supervision in the home and adequate medical attention when required Periodic home visiting should be systematic while day nurseries and nursery schools should be multiplied Dr R COVE SMITH asked for the provision of emergency homes for infants and toddlers in cases of parental illness or domestic crisis He paid a warm tribute to the supplying of such day nurseries by the National Society and he enumerated the types of children which might be expected to benefit from an extension of such facilities Care must be taken to avoid institutionalization and it was necessary to provide a background which would give a sense of security and develop self reliance and initiative rather than dependence If temporary shelters were going to be provided by the Government as part of the Air Raids Precaution scheme some might be used from the start as emergency holiday homes until the more urgent need arose Under careful supervision the supply of adequate ventilation balancing of diet and the supply of suitable clothing there would be an improved environment with a minimal risk of cross infection The most satisfactory size for such homes would appear to be a nursery school of about fifty children presided over by a matron with nursing and nursery school qualifications, and assisted by a nursery school teacher, four staff nurses, and about fifteen probationers

Parental Considerations

Opening a discussion on the parents of the future Miss MARY MACAULAY considered a wide range of possible questions which were posed by children and adolescents and discussed how they should be dealt with She thought that far too little was being done to use the different ages of children to prepare them for their own eventual maturity and possible parenthood This paper led up naturally to the subject of sex teaching in girls clubs and Miss VIOLET SWAISLAND indicated various practical points which arose while Dr G DE M RUDOLF in a paper on sex teaching in boys clubs said that parents should be made to realize that knowledge of sex did not imply licence but rather that the sexual and acquisitive instincts could be turned to other than the direct uses of them Children should be taught that pre marital intimacy caused psychological harm and tended to lead to unhappy marriages while restraint before marriage led to more respect and happiness after the wedding day Dr EDWARD GRIFFITH read a paper on individual preparation for marriage

Reports of Societies

ROYAL MEDICO PSYCHOLOGICAL ASSOCIATION

Annual Meeting in Yorkshire

The ninety seventh annual meeting of the Royal Medico-Psychological Association was held at Ilkley from July 6 to 8 under the presidency of Dr JOHN R GILMOUR medical superintendent of Scalebor Park institution (West Riding County Council) The meeting was attended by several psychiatrists from abroad who brought greetings from their respective associations Dr R Gjessing of Oslo Dr Noel Peron of Paris Dr M Sakel formerly of Vienna and now of New York, and Dr J H Pameijer of The Hague

The Private Patient and Some Changes

In his presidential address Dr GILMOUR discussed some of the changes which had taken place especially with regard to private patients during his more than thirty years experience of Scalebor Park—the only local authority hospital solely for private patients he believed in the country The most noteworthy change he said had been in the incidence of general paralysis For many years this incidence was high now it was very low Alcoholism had been almost negligible among his patients Formerly it was accepted as inevitable that tuberculosis would break out in any mental hospital but it was now many years since a case had arisen in a patient at Scalebor or a member of the staff Influenza was still a potent cause of mental trouble Many of the cases were of what he called the August holiday type the initial attack of influenza took place in the winter or early spring followed by listlessness inability to concentrate headaches and increasing depression and after the August holiday had failed a number of patients sought the refuge of the institution A social change which lowered the numbers who could be discharged as relieved was the diminishing family which meant that often there was no disengaged relative to look after the patient

The greatest social change Dr Gilmour continued was the vastly increased public interest in psychological matters since the war accompanied by a decline in the observance of all forms of religion Thirty years ago the reply to the question as to a patient's religion was given unhesitatingly and without apology now the question had to be directed to his reactions to the cinema or recreation centre

'The younger generation are no longer looking outwards for their salvation but are driven deep into their inmost consciousness for a solution of their problems and finding there what does not give them peace they fly to the psychologist Man has turned to his own subjective processes and any maladaptation of these leads to a feeling of illness and that illness being psychic, must be treated psychologically'

Physio-pathology of Schizophrenia

Two of the three scientific sessions were devoted to schizophrenia, its pathology and treatment, and seven papers were contributed on convulsive shock therapy A cinematograph film illustrating insulin and cardiazol treatments was shown by Dr G W B JAMES It showed a normal morning of insulin treatment in one patient from injection to interruption the various manifestations of hypoglycaemia, and (a colour film partly in slow motion) the epileptiform convulsions induced by cardiazol Dr J H QUASTEL and Dr W T WALES read a paper on faulty detoxication in schizophrenia They had used the hippuric acid excretion test in sixty-seven cases of mental disorder, eighteen of which were classed as catatonics All the catatonic patients studied, without exception, showed a diminished ability to excrete hippuric acid at a normal rate The authors inferred that a metabolic disturbance of the liver affecting benzoic acid detoxication may be a characteristic feature of catatonic patients Dr R GJESSING of Oslo gave the results of a study of thirty-three patients including twenty-four periodic catatonics The investigation consisted of kinetic registration of a number of representative physiological functions daily or several times a week over a period of four to six months During the stupor-free and non-excited phases there was a gradual accumulation of nitrogen in the body which reached the threshold characteristic for each case When this level had been reached there was a sudden change in the vegetative tone the excess nitrogen was excreted and the patient entered the active phase of stupor or excitement as the case might be

Professor F L GOLLA, speaking on this last work said that his feeling was that here was offered a definite treatment based on somatic pathology for a certain—possibly very limited—class of patient At the same time he thought it would be the most unhappy thing if it were supposed that in order to improve the mental state of the patient it was only necessary to use the proper hormone for an endocrine gland which was functioning improperly Dr P K MCCOWAN also uttered some cautions suggesting that Dr Gjessing's work might not have the pathological significance he was inclined to attach to it and that there was a physiological explanation of some at least of the results he had been able to obtain

Convulsion Therapy

The first of several papers on shock therapy was by Dr MANFRED SAKEL, who described what he called his "pharmacological shock treatment' The overdosage of insulin manifested itself in two main groups first, in the form of the so called "wet shock" with coma and profuse perspiration, and, secondly, in the form of an epileptic seizure, frequently without perspiration—the so called "dry shock" As these two main groups could not be directed by insulin alone, he initiated the dry shock—if it did not occur spontaneously—by injecting cardiazol in the second or third hour after insulin, and thus provoking convulsions Dr Sakel presented a statistical record of 1,500 treated cases from New York State Medical Service The number of recoveries was given as 192 280 were said to be much improved, and 357 improved The ratio of improvement was definitely less with the duration of the disease, nevertheless, in cases of six years' or greater duration there had been recoveries and improvements Dr Sakel's statistics were criticized by some members because they had been compiled by a professional statistician, not a medical man One speaker, Dr H GILLIES declared that professionally compiled statistics were a little worse than useless From his own small series of insulin treated cases it required very little juggling to prove (1) that insulin was a complete cure for schizophrenia and (2) that it was of no use at all An honest impression was worth more than reams of statistics, and his impression was that insulin and cardiazol did in some way aid in the production of remissions

Dr L C COOK discussed the range of mental reaction states influenced by cardiazol convulsions Convulsion treatment, he said, did not pick out particular mental diseases or individual symptoms Its effects depended less upon the type of morbid reaction than upon its duration and depth and upon the degree of dissociation of personality Dr L W RUSSELL pointed out that the combined insulin cardiazol therapy enabled the fits to be controlled "The too placid patient gets his fit and the patient who is prone to fits has luminal to stop them, and has the fits as they are indicated by the use of cardiazol' In the "raw' cardiazol treatment the failure of the injection to produce a fit was often followed by agitation and nervous upset, but with the combined therapy the failed fit was less common because the patient was more prone to the fit, and also less upsetting because it was produced in a state which was so near to unconsciousness that it was completely forgotten Lately he had thought that subconvulsive doses of cardiazol were of great benefit They seemed to have a better effect in the stuporous cases than the full fit dose Patients often had a pathetic terror of the cardiazol injection, but insulin predisposed to the fit and also gave a complete amnesia besides having its own therapeutic effect

Psychological Aspects of Shock Treatment

A study of the behaviour of patients under insulin was presented by Dr EDWARD LARKIN Patients who recovered with insight he said, were able to describe their feelings whilst they had been in the schizophrenic state They agreed that the predominant feature was lack of interest in persons and things He gave a description of a method of quickening external interest during treatment With the treatment properly carried out the patient himself began to make efforts to reach out to reality and gradually to get away from the childish plane Dr Larkin added that observation of the behaviour of the nurses administering this technique indicated a possible neuropathology of schizophrenia which, if true, established part of the rationale of insulin and cardiazol treatments

Dr A DICK and Dr W MCADAM presented observations on four cases of cardiac complication in cardiazol treatment—auricular fibrillation in three, and the onset of heart-block immediately following a convulsion in another Dr L A FINIEFS discussed the dangers and emergencies of insulin therapy, these included premature incidence of coma, circulatory and respiratory complications, convulsions, delayed return to consciousness, and toxic reactions and after-effects

The use of a new convulsant drug, triazol 156, in the treatment of schizophrenic and other mental states was described by Dr A WALK and Dr W MAYER GROSS Its advantages were given as smaller dosage, lessened cost less unpleasantness to the patient, and the possibility of intramuscular administration Certain variations of the treatment were now being tried out, including the induction of prolonged "twilight" states without convulsions the induction of multiple convulsions, and the administration of convulsant doses with inhibition of the fit by amyl nitrite

Precautions and Qualifications

Dr ISABEL WILSON of the Board of Control said that a point which had emerged from the discussion was the value of standardization of technique It was important that those who were going to work with insulin or

cardiazol or any of these drugs should know the orthodox methods before they began Another point of great importance to bear in mind was that there was hardly a worker in this field who did not also rely on psychological methods of some kind It was out of the question to treat these patients with a mechanical substance and expect that to work the whole miracle As for the dangers of the treatment everyone was agreed that the more experienced the worker the less was the danger Sir LAURENCE BROCK chairman of the Board of Control mentioned that the Board was shortly publishing a report by Dr Isabel Wilson and Dr Rees Thomas on treatment with cardiazol as observed by them during a recent visit made at the request of the Board to Budapest, Vienna and Frankfort

Dr H PULLAR STRECKER said that it would be unfortunate if the idea became prevalent that mental disease could be cured by a few convulsions or comas This occasionally did occur but certainly not as a general rule The very advantages of cardiazol treatment constituted a danger—namely that the public or even the profession might come to believe that any case whatever its type or duration could be cured While admiring Dr James's cinematograph film he thought those who had seen the actual treatment with insulin and cardiazol would agree that it was not quite so drastic as the film made it appear Dr J H PAMEIJER Inspector of Mental Hospitals Holland said that in the mental clinics of the four universities in his country about 700 patients had been treated by insulin and 1 200 by cardiazol Individual cases did completely recover and in others there was surprising improvement But among the 700 cases subjected to insulin treatment there had been six deaths and four deaths among the 1 200 subjected to cardiazol He had also known fifteen cases of fractures occurring during cardiazol treatment Dr A A W PETRIE described the apprehensions of the patients subjected to cardiazol—a real point against the method Some of the patients had described it to him as worse than death

Genetical Problems in Mental Deficiency

The final session of the meeting was devoted to the subject of mental deficiency and two papers were contributed from the Royal Eastern Counties Institution Colchester Dr L S PENROSE in a paper on genetic problems said that rare dominant Mendelian characters might be the chief causes of mental defect in cases of Huntington's chorea epiloia neurofibromatosis and some types of oxycephaly Dominance in man was very often incomplete however, and the expression of dominant genetic factors was variable The genetic factors responsible for some relatively mild types of mental defect appeared to be incompletely dominant In some families the mating of two cases of mild defect produced offspring with severe defect Again in a number of types of congenital defect though there might be a genetic background environment was much more significant than heredity Congenital syphilis encephalitis and cerebral trauma from the medical point of view were simple environmental causes of mental impairment When the origin had to be sought for in the prenatal period the effects of environment and heredity were less easy to separate The maternal age at the birth of the child was aetiologically important in mongolism and also but to a lesser degree in anencephaly, hydrocephaly and spina bifida

Dr T A MUNRO presented a paper on consanguinity and mental disorder A survey of a large group of mental hospital patients showed that the incidence of consanguineous parentage was higher among psychotic patients than among persons suffering from general bodily diseases A comparison of 152 psychotic patients of consanguineous parentage with a similar group of unrelated parentage showed a higher incidence of schizophrenia in the consanguineous group Differences also appeared amongst the relatives of the patients in the two groups, those in the consanguineous group showing a higher incidence of neurosis and psychopathic personality Dr Munro exhibited the following table showing the parental consanguinity rate among patients in the Cardiff Mental Hospital and in the Cardiff Royal Infirmary respectively

	No. of Patients	Percentage Parents Consanguineous	Percentage Parents First Cousins
Mental Hospital			
Present patients	466	1·58	1·2
Former patients	1,146	1·04	—
Royal Infirmary	1 763	0·81	0·46

The nearer in blood to the patient the greater the chance of mental disorder Among patients who had blood-related parents he had found several instances of strange and rather atypical psychoses

Dr J A FRAZER ROBERTS drew attention to the people who exceeded the intelligence quotient average by the same amount as idiots and imbeciles foreshortened it—persons with intelligence quotients of 150 or thereabouts on the Binet scale as compared with the 50 of the feeble minded He was not sure whether the child with an extremely high intelligence quotient—a colleague had come upon a ten year boy whose quotient was just over 170—was not as abnormal socially as the imbecile Dr E O LEWIS said that it was a matter of pride that in this country there were two centres at which this kind of research was organized and carried on in a systematic way—namely, the Royal Eastern Counties Institution and Stoke Park Colony The younger generation of investigators like Dr Penrose worked on meagre data as compared with the long genetical tables of Karl Pearson and Goddard but the meagreness of the data was a merit because it showed that they were far more critical of their data than the older workers

At the annual dinner of the Association Sir JAMES BAILLIE Vice Chancellor of Leeds University in proposing the principal toast urged the need for more training in psychology for medical students He believed that 90 per cent of the students passing into the profession had had no proper or systematic training in general psychology at all It was not enough to study the abnormal A training in normal psychology was as necessary as in normal physiology He looked forward to the time—not distant he hoped in the case of Leeds—when every hospital attached to a medical school would have among its posts one dealing with mental aberration in its earliest stages

---

R Laporte and R Grimal (*C R Soc Biol* Paris 1938 128 42) have found difficulty in cultivating tubercle bacilli from material which has taken some days to reach the laboratory and which has arrived in a state of putrefaction With such material the ordinary sulphuric acid technique cannot be relied upon for the destruction of contaminating organisms Experiments have shown that a satisfactory way of preventing bacterial growth in post mortem and other material is to place the tissue in 5 to 10 times its volume of a 10 per cent. solution of sodium carbonate This solution has some destructive action on the tubercle bacillus but not very much more than Ringer Locke solution Material that has been soaked in it for some time becomes soft and can be ground up very readily with sand in a mortar Once a homogeneous suspension has been obtained the carbonate is neutralized with hydrochloric acid using litmus as an indicator The suspension can then be diluted with distilled water and inoculated directly on to tubes of egg medium Only if the tissue is badly contaminated before being placed in the carbonate solution is it necessary to treat it with sulphuric acid before cultivation

Local News

ENGLAND AND WALES

An Association of Special Hospitals

A conference of delegates from sixty-three London special hospitals was held at the Royal Westminster Ophthalmic Hospital on July 5 for the purpose of founding an Association of Special Hospitals. Lord Mersey, chairman of the Royal Westminster Ophthalmic Hospital, presided. Mr J. P. Wetenhall, house governor of the West End Hospital for Nervous Diseases, proposed that the Association of Special Hospitals be founded. He said that he had discussed with the vice-chairman of his own hospital fourteen years ago the possibility of forming such an association but the matter was not then carried further. The publication of the Sankey Report last year had brought the matter to the front again. After a preliminary conference held at Moorfields Eye Hospital last October an *ad hoc committee was formed, and as a result of its* deliberations the present meeting was being held. Sir Kenneth Wigram, chairman of the Cancer Hospital, seconded the resolution, which was carried unanimously. A constitution proposed by Mr Wentworth Stanley and seconded by Sir Mortimer Margesson was carried, and the association elected the following officers: president, Sir Kenneth Wigram; honorary treasurer, the Earl of Dudley (chairman of the Brompton Hospital); honorary chairman, Mr Wentworth Stanley (*vice-chairman* of the City of London Maternity Hospital); and honorary secretary, Mr J. P. Wetenhall. A council was elected consisting of two representatives of each of eight classified groups of *special hospitals—women's, children's*, ophthalmic, nervous diseases, ear, nose, and throat, chest and heart—with representatives from unclassified special hospitals including genito-urinary, cancer, and "long-stay" hospitals.

West London Medico-chirurgical Society

The president, Mr D. G. Rice Oxley, took the chair at this society's annual dinner held on July 6 at the Trocadero Restaurant. Viscount Dawson of Penn presented the society's Triennial Medal to Professor E. C. Dodds, who, he said, brought to his searchings after knowledge a Promethean fire and an untiring energy. His work on the purification of insulin had reduced its price considerably and brought about a great benefit to the community. His greatest work, however, was on the sex hormones. That very year he had produced a synthetic male hormone which outstripped anything Nature could produce. Professor Dodds, in thanking Lord Dawson and the Society, pleaded with his clinical colleagues to give research workers the greatest possible freedom. The generosity of the staff of the Middlesex Hospital in allowing him to wander into any branch of chemistry he chose had made possible the breaking of one of the strongest Continental patent rings in this particular group of substances. Proposing the health of the society, Lord Macmillan said that, like all good things it had grown up spontaneously and was the ideal club for a profession like that of medicine. They were entering on a romantic age of medicine, full of the stirring of adventure. The president, in reply, sketched the activities of the society, and Mr Alex Roche proposed the health of the guests, who included Dr Robert Hutchison, Sir Farquhar Buzzard, Sir William Willcox, and the presidents of many medical societies. Replies were made by Dr Robert Hutchison, Sir Henry Gauvain, and Mr J. E. H. Roberts. Dr Hutchison claimed the West London medal for heroism in the discharge of medical duties, on the ground of the large number of banquets he had to face as President of the Royal College of Physicians. He relied on the support of Lord Macmillan, that veteran of a thousand stricken banqueting halls.

Treloar Cripples' Hospital, Alton

On July 6 over 150 members of the medical profession of Hampshire accepted the invitation of the trustees of the Lord Mayor Treloar Cripples Hospital, Alton, to meet Lord Horder and to witness a number of special demonstrations by the resident and honorary medical staff. Lord Horder, in his address, contrasted the treatment of the crippled child thirty years ago when the hospital was founded with the treatment now given at the Treloar Hospital. The advance made, he said had been largely due to the work of Sir Henry Gauvain and his staff. They had done a great deal of the field work in that sphere of medicine and had settled the principles on which the treatment of the crippled child was founded. The scope of the work had been widened until it embraced any and every crippling condition. He had watched it grow, and he warmly congratulated Sir Henry Gauvain on the success he had achieved and the substantial contribution he had made to medical science. During the afternoon interesting cases were demonstrated by Mr H. A. T. Fairbank, Sir Henry Gauvain, Professor Hey Groves, Dr C. E. M. Jones, Mr T. Pomfret Kilner, Mr H. H. Langston, Dr R. L. Vollum, and Sir William Willcox. The hospital, the rebuilding of which has just been completed, and the New Treatment Centre which embodies all the most up-to-date modern appliances and improvements, provided a very interesting afternoon for the visitors.

IRELAND

Medical Research Council of Ireland

The Medical Research Council of Ireland has made the following awards. Dr Patrick J. H. Clarke. Whole-time grant for six months' training in juvenile rheumatism to be taken at various centres in London to be followed by a six-months' survey of the disease as it occurs in Dublin and district. Dr E. S. Duthie. Grant-in-aid for one year to enable him to employ technical assistance in connexion with an investigation of (*a*) chemotaxis in leucocytes and (*b*) enzyme content of lymphocytes, the work to be carried out in the Sir William Dunn School of Pathology, University of Oxford. Dr D. M. Mitchell. Grant in aid for expenses in connexion with an investigation of the effect of deficient diets upon the central nervous system and peripheral nerves, the work to be carried out in the School of Pathology, Trinity College, Dublin. Professor H. F. Moore. Grant-in-aid for anatomical and pathological technical assistance in connexion with an investigation of bundle branch block, the work to be carried out in the Anatomy Department, University College, Dublin, by Dr E. Keenan and in the Mater Misericordiae Hospital, Dublin, by Dr W. R. O'Farrell.

Royal Maternity Hospital, Belfast

The new wing to the Royal Maternity Hospital, Belfast, which has been named Johnstone House after Sir Robert Johnstone, was opened on June 28 by Lady Craigavon. It contains twelve beds in single rooms and one ward with three single-bed cubicles, two theatres, with a sterilizing room, a separate nursery with an annexe for incubators and a milk room besides other service rooms. The private wards are intended for patients who are able to meet the full cost of maintenance and medical treatment, and the cubicles for patients of limited means, the charge for the single room being higher than that for a cubicle. Sir Robert Johnstone who attended the ceremony spoke of the importance of safe maternity. It was the duty of the

public and of the Government he said to see that mothers were safe while giving birth to their children and that they were restored safe to their families afterwards It was not expected that Johnstone House although a paying block would bring in any enormous income Subscribers would have to continue their loyal support of the institution

SCOTLAND

St Andrews Ambulance Association

At the recent annual meeting in Glasgow of St Andrews Ambulance Association it was stated that during the past year 48 943 calls had been made for the service of ambulance wagons and that the total number of patients conveyed since the formation of the association was 818 372 In Glasgow alone during the year the ambulance wagons had turned out on an average fifty seven times daily The aeroplane ambulance service instituted in 1933 continued to grow and seventy four patients had been carried by this means during the past year The association had now eighty nine motor ambulance wagons of which seventeen were in Glasgow and the remainder throughout Scotland

Cremation in Scotland

At a conference on June 29 of the National Association of Cemetery and Crematorium Superintendents and the Federation of Cremation Authorities in Edinburgh Dr W G Clark medical officer of health for Edinburgh speaking on cremation from the standpoint of the public health official said that legislation threw upon the medical profession the responsibility of ensuring that in the disposal of the dead there should not be danger to other persons A badly situated cemetery might be a danger to the health of the nation although a modern cemetery properly constituted was not so As a public health official however, he believed that cremation was the hygienic method for disposal of the dead Dr Douglas J A Kerr medical referee to the Edinburgh Corporation read a paper on the Cremation Act and Regulations and said that at the present time control of cremation in Scotland was exercised by the Secretary of State through the Department of Health The ultimate aim should be to make cremation as convenient and economical as earth burial this could only be done if crematoria were at hand in every district With regard to the medical certificate he thought that a change was necessary The first medical certificate was of course essential but the wording required to be adjusted The certificate began Having attended the deceased before death and this was construed by some medical men to mean weeks, months or even years Further the provision for cremation during epidemics should be extended to cover deaths in air raids

Royal Blind Asylum

At the annual meeting of the Edinburgh Royal Blind Asylum and School on July 6 the question was raised of unemployed persons who received training at community centres in the city in work usually done by blind persons and, by undercutting restricted the markets for the goods produced by blind workers It was considered by one member of the board that the problem of blind workers could only be solved if institutions providing for them were taken over by the State The Royal Blind Asylum could not even afford to train all those who applied, some persons had been waiting six years to begin training Professor James Drever of the chair of psychology in Edinburgh University, said that the compulsory education of blind children dated in Scotland from 1890 but until the Act of 1936 came into force the education provided was elementary and the period of compulsory education extended from 5 to 16 years Many children how ever who to day would be recognized as educationally blind had been denied a satisfactory education because school boards did not send them to a blind school unless they were obviously blind in the popular meaning of the term The 1936 Act now required the provision of educational facilities from 3 to 18 years During the past twenty years blindness had been greatly reduced because the public health authorities had successfully tackled blindness of the newly born to day only one child was blinded from this cause as compared with ten twenty years ago About two thirds of all blind children at the present time were blind from causes outside medical aid and as a result they must make provision in their school for between 120 and 130 blind children

Princess Margaret Rose Hospital

A new Nuffield Ward at the Princess Margaret Rose Hospital for Crippled Children Edinburgh named in acknowledgment of a donation of £8 000 from Lord Nuffield towards the cost of the extension of the hospital was opened on July 4 by Mr John Colville Secretary of State for Scotland Mr Colville said that since Sir Robert Jones became a pioneer of modern orthopaedic surgery in England many thousands of children had been made whole and straight while many others had had their handicap in life reduced Orthopaedic surgery was not a simple process and treatment was prolonged sometimes to years it required therefore many kinds of skill and infinite patience There were no reliable figures as yet on which to estimate the number of persons in the country children and adults who were crippled in one way or another but these would be available when the survey of cripples in Scotland which was being carried out by the Central Council for the Care of Cripples was completed The Earl of Home president of the hospital, presided at the annual general meeting of subscribers and Harriet Lady Findlay in submitting the annual report said that the work of this hospital was growing every week Co-operation between the hospital and the local authorities in the south eastern area of Scotland was increasing and it was hoped soon to have the full number of clinics required for after care of patients treated in the hospital The finances of the institution were satisfactory but further funds were needed to provide an adequate endowment and for additional buildings Mr W A Cochrane said that during the past year there had been 232 admissions and the hospital through outside clinics was now caring for the large total of nearly 1 000 cases Patients were now being admitted in the early stages so that treatment could often be carried out in clinics for one child who needed to be admitted to hospital ten could be dealt with outside as out patients with great saving in cost and in suffering

Decreased Mortality in Fife

Dr G Pratt Yule who is retiring after twenty six years as medical officer of health in Fife in a valedictory address recently to the County Council Public Health Committee said that one of the most important features in the county was the fall in the infantile mortality rate In the period 1892–1906 the rate was 108 per 1 000 births but during the following fifteen years the rate fell to 97 and after 1922 there was a further fall to 79 Health visitors had had much to do with this result by teaching mothers how children should be fed and clothed Fife had been one of the first counties in Scotland to introduce health visitors When he qualified scarlet fever was a virulent disease and during the period 1912–21 the yearly scarlet fever death rate was 79 per 1 000, but between 1927 and 1936 it dropped to 65 In the former period there were twenty three deaths from typhoid fever, but during the last six years there had been only six deaths from this disease Similarly the deaths from measles had fallen from 161 to 64 while those from whooping cough had fallen from 260 to 113

Correspondence

Medical Relief in China

SIR,—In a recent issue of the *British Medical Journal* you very kindly inserted an appeal for help to keep the British hospitals in China supplied with necessary drugs and instruments during this time of stress and strain due to the Sino-Japanese conflict. The appeal, which is a special section of the Lord Mayor's Fund for the Relief of Distress in China, bore the signatures of a number of those whose names are well known in the medical world, and a copy was sent by post to members of the profession in England, Wales, Scotland, and Ireland—approximately 40,000 in number. I am glad to say that the list is too long for me to ask you to publish the names and amounts of those who have so far sent in their contributions.

Up to to-day's date 871 subscriptions have been received amounting to £1,540 7s. 10d., and although each one has been acknowledged with an official receipt, I wish through your columns to thank those who have responded, and at the same time to remind others who have not yet sent in their donations that for this special purpose £6,000 is needed, and we do hope that this amount may be forthcoming.

If there is one thing more than another which stands out in this welter of human suffering in China it is the way in which complete co-operation has been achieved in the matter of medical relief. No barrier of race or religion has been allowed to stand in the way, and the business man, the consular official, and the missionaries of all denominations have co-operated in trying to bring relief to those in distress. Cheques and postal orders should be sent to me at 121, Westbourne Terrace, London, W.2.—I am, etc.,

H. GORDON THOMPSON
Executive Secretary and Treasurer, Lord Mayor's Fund

July 11

Anti-venereal Measures

SIR,—Dr. Robert Forgan (*Journal*, June 25, p. 1389) seems to think he can easily make hay of the Ministry of Health Report on Anti-venereal Measures in Scandinavia by quoting a few ill-digested figures. He speaks of the decline of syphilis in England and Wales from 1922 to 1936 as being only from 25,000 to 18,000 as compared with that in Denmark from 2,400 to a third of that number. This latter he calls a drop of 300 per cent.—a new method of reckoning! I prefer the ordinary method, by which a reduction of 100 per cent. means a drop to zero. Thus a drop from 2,400 to 800 is a reduction of 66 per cent. But the figures of the two countries are not comparable, since the English numbers (25,000 and 18,000) are cases of syphilis *at all stages*. (See pp. 237 and 238 of the Ministry of Health Report for 1936.) What we need for comparison is the number of *fresh* cases of syphilis for each year, and this we have (in the same report) for the years 1931 to 1936. Now these figures show a decline in fresh cases of syphilis from 9,104 in 1931 to 5,675 in 1936—a reduction of no less than 38 per cent. in six years. From the earlier figures given in the 1936 report it is certain that a further considerable reduction of fresh cases had gone on during the decade 1922 to 1931, so that the total reduction of fresh cases between 1922 and 1936 cannot be less than 50 per cent. This reduction indeed is not so great as that claimed for Denmark and Sweden (about 68 and 72 per cent. respectively), but the difference is not startling. Incidentally, Dr. Lomholt questions the reliability of the Danish figures. If my contention is right, Dr. Forgan is not a little wrong.

In any case at the present time, Holland, which has not adopted compulsory measures, had according to this report a syphilitic incidence of 1.06 per 10,000 population in the year 1935, which is midway between the corresponding figures for Denmark and for Sweden. But the Ministry of Health's Report is not concerned only with statistics, the pitfalls of which are known to every statistician. The conditions of each country, external and internal, the character of the peoples, the density of their population, the nature of their industries, form a background which must be taken into consideration before applying to one country a system which may be suitable for another. The Commissioners have candidly stated that in Denmark and Sweden the compulsory system works without much hardship on or concealment by patients, this being due to the social outlook of the people and the influence of the medical profession. In Holland, where the population density is 667 to the square mile (as compared with Denmark, 224, and Sweden 39.5), we should expect the incidence of syphilis to be higher than in either Denmark or Sweden, and in Great Britain at least as high as in Holland. The figures given per 10,000 population are: Denmark, 2.1 (minimum 1.6); Sweden, 0.67; Norway, 1.5; Holland, 1.06; England and Wales, 1.7; and Scotland, 1.8.

I know that in this country there are many laymen and clinicians too, who in justifiable anxiety to get rid of venereal diseases wish to fly to compulsory methods. The wisdom of such a course must be determined not by statistics alone but by reflection on the character and outlook of the populace. I for one am convinced that here the effect of compulsory notification would, on the whole, be detrimental. From the report it is clear that the Scandinavian administrators say that legal compulsion is seldom employed though they think it is useful to hold in reserve. In spite of it, however, gonorrhoea, which is equally under compulsory laws, is not markedly decreasing in Scandinavian countries any more than in Great Britain.—I am, etc.,

DOUGLAS WHITE, M.D.

Dumbarton, July 6

Ischio-pubic Osteochondritis

SIR,—Being convinced that enlargement of the ischio-pubic junction, with or without some definite irregularity in density of the bone, was not nearly as rare as Mr. G. D. F. McFadden in his report of a case published in the *Journal* of June 18 (p. 1309) suggests, a limited search has been made in my personal records with results that seem to be of some interest.

Batches of consecutive films showing the pelvis in childhood were examined for this lesion. In 200 cases suffering from various affections of the hip twenty-five showed enlargement of the junction in one or more of their films. To give a few details: The first 130 cases of congenital dislocation of the hip provided eleven with the lesion on one or both sides of the pelvis. Both uni- and bi-lateral lesions occurred with either uni- or bi-lateral dislocations. There seemed to be no connexion between the appearance of the lesion and the manipulative reduction of the dislocation, since in most the ossification of the rami at the time of the reduction was but little advanced and the lesion was only found from two to eight years later. In one case the lesion was present before the reduction.

Of thirty six consecutive cases of pseudo coxalgia ten showed the ischio pubic lesion on one or both sides In three of these the lesion was unilateral and on the opposite side to the changes in the femoral head In the remaining seven cases the lesion was bilateral in only one of these were the changes in the femoral head also bilateral In thirty odd cases of various types including tuberculous and other infections of the hip four were found showing the lesion in two it was unilateral and in two bilateral Two of these four cases suffered from tuberculous disease of the hip joint In none of these twenty five cases were symptoms noted directing attention to the ischio pubic junction Were such symptoms present at any time they were either overlooked or misinterpreted In most of the cases the abnormality as seen in the films consisted only of enlargement of the junction in a few there was irregularity in density of the bone in addition In the majority of the cases films taken at a later date were available for examination in each such case the ramus had fused and presented a normal appearance

These cases it seems to me suggest that enlargement of the ischio pubic junction with or without some irregularity in density may occur as a developmental peculiarity devoid of any clinical significance Any inference which might be drawn from the higher percentage of lesions found in the pseudo-coxalgia group—a small group from which to draw conclusions—seems to be negatived by the fact that the numbers found in the other groups were far from being negligible

As to the cases with symptoms which appear to be due to the changes at the ischio pubic junction it was suggested many years ago by my colleague Mr George Waugh when showing me films of a case with definite symptoms that the pathology was nothing more than neglected trauma My small experience of similar cases—the notes of three such are before me as I write—strongly supports this suggestion Complete rest for no more than a few weeks permanently relieves the patient of all symptoms films taken later show complete disappearance of the lesion

There remains the question whether pathological changes worthy of the title osteochondritis ever occur at the ischio pubic junction Personally I doubt it if we take as our type pseudo-coxalgia in which be it remembered the changes progress markedly for several months before healing sets in and ultimately restores a normal density if not a normal shape to the femoral head Though I cannot agree with all the opinions expressed in his letter, I strongly support Mr G Edgar Church in his protest against the indiscriminate use of the term osteochondritis for every case in which irregularity in density and shape of an epiphysis or other fragment of bone forming in cartilage is not readily attributable to a definite cause In my opinion a large proportion of the reported cases have little or nothing in common with that interesting condition of the hip which I have suggested should be taken as the type and which passes under so many names among which pseudo coxalgia has the advantage of committing one to no pathology —I am etc

London W 1 June 11 H A T FAIRBANK

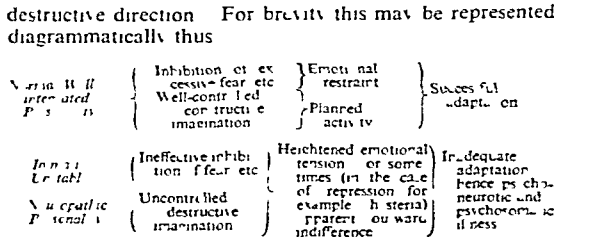
Rising Incidence of Psychosomatic Illness

SIR —Dr James L Halliday in his interesting article (*Journal* July 2 p 11) appears puzzled by the rising incidence of disorders of psychological origin I submit that much of this increase is apparent rather than real When I was physician to the Birmingham Nerve Hospital before the war I could not help being impressed by the large number of out patients attending there who had been turned away from other hospitals because no organic basis for their complaints could be discovered In those days which seem so long ago the psychological factor in disease was pooh poohed and such patients drifted about until they found a doctor who realized that dyspepsia and other disabilities could be caused by ideas as readily as by physical or chemical irritants Disturbances arising from the physical concomitants of emotions were but little understood and a sufferer from them was disdained as a *malade imaginaire* and a nuisance This had a deterring effect Now such disorders are beginning to be generally appreciated even classified and tabulated and to this extent their increase is only apparent

There is however another important factor—what the Germans call the *Krankheitsgewinn* Since psychogenic illnesses have become not only recognized but rewarded a person who suffers from the physical changes associated with anxiety and other emotions instead of being turned away is now given elaborate treatments certificates of unfitness for work and perhaps a holiday at a convalescent home Thus he lacks incentive to adjust himself to or overcome a trouble from which he indirectly profits Physical treatment alone tends but to fix the symptoms During the war in the special neurological hospitals (I speak especially for Maghull) while hostilities continued psychoneurotic soldiers were difficult to cure Being in hospital and out of danger satisfied their unconscious longings After the armistice however most of them got well with surprising rapidity thanks not to them nor to their physicians but to the fact that the cause of their fears had ceased to operate and early discharge offered advantages Then followed the Ministry of Pensions clinics on which I also served and there again I met with the *Krankheitsgewinn* factor—the larger the pension the more difficult the treatment I do not refer to conscious malingering though this also existed but to the unconscious clinging to a symptom for its secondary value Now that in many forms a comparable reward is easily obtained we must expect a real increase in the number and duration of psychosomatic illnesses —I am etc

Caldecote July 5 A E CARVER

SIR —The present widening interest in the psychogenic aspect of illness will be reinforced by the opportune survey contributed by Dr J L Halliday to the *Journal* of July 2 (p 11) It is becoming increasingly evident that in a large number of cases of functional nervous disorder there is an initial failure on the part of the individual concerned to adapt and adjust himself to his environment The underlying psychological conflict tends to resolve itself along the familiar lines of either mental or physical disability the particular variety of which appears to be conditioned by the personality make up of the patient in each case In this connexion two (among several) important factors appear worthy of attention—namely (*a*) the individual's power of inhibiting his own instinctive fears etc and (*b*) the trend of his imaginative activities—that is whether in a constructive or destructive direction For brevity this may be represented diagrammatically thus



Power of adaptation is the keynote Where the normal stable individual would skilfully tack or take in sail to meet life's sudden squalls, the "neuropath" imbued as he often is from the start with a spirit of congenital defeatism tends to heel over and capsize The remedy lies to hand and involves (1) systematic inculcation of sound psychological principles during every student's hospital training and (2) earlier detection of and psychotherapeutic assistance for, the unstable type of individual who would otherwise drift into psychoneurotic or psychosomatic illness—I am etc,

Boscombe, July 4 W V HARKE

The Unconscious Mind and Medical Practice

SIR—The art of psychotherapy, like the art of other branches of medical practice can only be learned through its exercise The textbooks which Dr G Waugh Scott (*Journal* July 2 p 39) has read should have given him an insight into the general principles of analytical psychology Every case however, is a separate problem, and in the nature of things it is impossible to provide him with a *vade mecum* in which he has only to refer to the index to find a specified treatment for each symptom Take the two cases which he brings forward as illustrations both the man and the woman are punishing themselves by inflicting on themselves the thing they fear most, the thing most damaging to their respective egos To clear up the condition one would have to discover the source of the childish unintegrated guilt which they are thus expiating and investigate the current mental conflicts which have revived the latent ones

My advice to Dr Waugh Scott is to begin the investigation boldly on the general lines which he has learned, leaving the particular symptoms to take care of themselves He will soon find that he is accumulating a wealth of material which will point the way to a cure *Solvitur ambulando*'—I am etc

Birmingham, July 4 R MACDONALD LADELL

Mental After-care

SIR—May I be permitted to lay before readers of the *Journal* a brief account of the aims and activities of the Mental After-Care Association the nature of whose work is inclined, unfortunately, to be known only to a limited public specially interested in mental or nervous illness We feel that if a greater knowledge and insight were given as to the valuable assistance rendered through this association to patients leaving mental hospitals the sympathy of a very much larger public would be obtained

The stormy progress of the mental hospital towards honourable recognition is becoming increasingly well known, and it was in 1879 that this association was founded with a view to helping patients leaving mental hospitals to readjust themselves to a great extent before they were expected to face the difficulties of normal life, from which many may be cut off for a period of years Our convalescent homes enable those patients to spend a few weeks in an atmosphere less disciplined than that of hospital routine, and at the same time not so completely lacking in supervision as is expected when they leave to take up work in the ordinary way

Unfortunately, it is still true that the layman is inclined to distrust the man or woman who has been in a mental hospital no matter what the cause may have been, and in this respect we have through our employment bureau been able to assist patient and employer alike by placing the patient in suitable work and by interviewing the prospective employer who then feels that he can apply to us if he is dissatisfied, while each patient who passes through our hands knows he or she can look to us for a sympathetic reception should occasion arise Our most recent addition has been the inauguration of a summer holiday to suitable patients still under treatment in hospital and the experiment has been well justified This summer we hope to give two weeks' holiday to over one thousand patients from various mental hospitals

As your readers will readily understand, all this entails a great deal of expense, and if our high standard of efficiency is to be maintained we must look to our very many good friends to assist us Even the smallest amount will be most gratefully received—I am, etc,

REGINALD WORTH
Chairman Mental After-care Association
Room 354, Grand Buildings,
Trafalgar Square, W C 2

Treatment of Pneumonia

SIR—To quote from your leading article of June 25 (p 1371) "If chemotherapy can equal or even approach serum therapy in efficacy serum will stand little chance of more extended trial Certainly the results obtained recently by Dr Telling and Dr Oliver (*Lancet* 1938, 1, 1391) and in a hundred consecutive cases by Dr Evans and Dr Gaisford (ibid, 1938, 2, 14) indicate a definite superiority over serum treatment The difficulties of treatment by specific sera are obvious Sera have been used with success in America against many different types of pneumococci but only Types I and II antisera have been much used in this country If serum treatment is adopted typing is essential, but in many cases sputum is not obtainable early enough Surely it should be possible to obtain the specific organisms directly from the pneumonic lung by aspiration with an exploring syringe Serum treatment has other disadvantages—for example the possibility of anaphylactic reactions occurring The effects upon the pneumococci of the chemotherapeutic agent and of a type-specific serum are essentially similar The specific serum combines with the capsule, upon which the virulence and type specificity depend, detoxicating the organism and making it vulnerable to phagocytosis T693 also has a definite action on the capsule In either case the pneumococci lose their virulence and are readily destroyed by leucocytes

Professor Fleming (*Journal* July 2, p 37) recommends that specific immune serum should be used together with the chemical agent, because he found that human blood with the addition of T693 and immune serum could deal with a much larger infection than the same blood containing either T693 or immune serum only Cannot the same effect as that achieved by a combination of serum and T693 be obtained by giving a larger dosage of the chemical agent? T693 according to Whitby, has a great advantage over sulphanilamide in being relatively non toxic, although active, in small doses

Evans and Gaisford in a few cases gave as much as 9 grammes in the first twenty four hours with beneficial effect There were no toxic symptoms with the exception of cyanosis—in about a quarter of the intensively treated cases—which disappeared when the drug was withdrawn If it is possible to increase the amount of the drug when the infection is especially severe without detriment to the patient, surely there can be no necessity to supplement its action with serum

It is upon the efficiency of the polymorphonuclear leucocytes that recovery from pneumonia ultimately

depends if they fail neither serum nor chemotherapy can save the patient's life. The onset of granulocytopenia during the course of acute pneumonia is of fatal significance and even leucopenia is of serious import. J. B. G. Muir (*Journal*, April 30, p. 942) records a case of pneumococcal peritonitis in a child aged 10 in which the leucocyte count fell rapidly to 2,700 per c.mm. but treatment with pentose nucleotide raised the count to 27,000 per c.mm. in a few days and the patient eventually recovered in spite of the complication of double lobar pneumonia. Even when leucocytosis remains at a considerable height the bactericidal power of the blood may be deficient. Leucocytes from different individuals especially those suffering from acute infections may vary considerably in phagocytic activity. In such cases the addition of fresh human blood from a suitable donor especially if of high leucocytic activity may turn the scale in the patient's favour. The leucocytic content of the donor's blood may be increased by a previous injection of sodium nucleinate and the leucocytes' non-specific phagocytic activity may be enhanced by the intravenous injection of a small amount of staphylococcal vaccine a few hours before the blood is withdrawn or it may even be added to the blood after withdrawal. Frequent blood counts with differential leucocyte counts during the course of the illness are a useful guide to treatment.—I am, etc.

Worthing, July 5 HERBERT H. BROWN.

Psittacosis

SIR,—In the *Journal* of April 2 (p. 737) there appeared a leading article on psittacosis in which it was stated that a carrier state is readily set up in budgerigars, and that it is from such apparently healthy carriers that many of the human cases have arisen during the last few years.

In October 1937 I attended a female patient aged 56 who died from an atypical bronchopneumonia on the eighteenth day of her illness. Her temperature fell to subnormal on the seventh day, and for the ensuing eleven days remained subnormal. During this period her respirations varied from 52 to 58 a minute, and her pulse rate remained constantly at 120 a minute. On the day of her death her pulse rate fell to 72.

It is interesting to note that her husband bred budgerigars, and at times the patient had attended to them. The birds were kept in somewhat close proximity to the kitchen. Examination of the birds failed to reveal any sign of psittacosis. Nevertheless I am of the opinion that her death was due to psittacosis. In Australia and New Zealand the budgerigar has become a favourite household pet. Some fond owners kiss their budgerigars goodnight with a regularity calculated to arouse the jealousy of a perhaps somewhat neglected child! Let us hope we shall not hear in the future of what may be termed a budgerigar complex! In all seriousness I believe that unrecognized cases of psittacosis have probably occurred in Australia and New Zealand. Might it not be as well to record all cases of severe pneumonia in which the patient has been in contact with sick or apparently healthy budgerigars?—I am, etc.

Auckland, June 1 J. P. HASTINGS.

Treatment of Placenta Praevia

SIR,—In the case described by Dr. H. Gordon Oliver (May 14, p. 1071) Willett's forceps applied to the scalp with slight traction might have been a suitable form of treatment. Dr. Oliver seems to have been particularly lucky with his case. With a low placental implantation the cervix is like wet blotting paper and attempts at manual dilatation are often likely to cause serious trauma and haemorrhage. The prolonged manipulation is also likely to increase the risk of sepsis. Delivery of a full-term baby (5½ lb. in this case) through an os seven eighths dilated carries the risk of damage to the cervical supports with possibilities of gynaecological complications.

Another point that needs comment is the fact that Dr. Oliver administered prontosil after the case actually showed signs of sepsis; this should have been given as a prophylactic from the start with such extensive manipulation carried out near the site of placental implantation.

If vaginal examination is carried out with due attention to asepsis using gloves and a mask this will not be any serious contraindication to a section. Cases of marginal placentas rarely assume a serious state and can usually wait and all cases of uterine haemorrhage during the last few months of pregnancy unless too far away ought to be transferred to a hospital after an injection of morphine without a vaginal examination unless one is fully equipped and prepared to deal with a case on the spot. The slight loss that the patient may have in transit can be easily made good by a transfusion at an institution.—I am, etc.

District Hospital, Sunget Patani, Kedah, Malaya, June 22 S. K. KELKAR.

SIR,—We would like to thank Professor F. J. Browne for his helpful criticism (*Journal*, July 2, p. 38). We cannot help being surprised however when we read his query. Do the writers really believe that packing the vagina controls haemorrhage from placenta praevia if the membranes are unruptured? We would respectfully urge Professor Browne to re-read our paper and in particular the section headed "Principles and Practical Aspects of the Treatment" in paragraph 3 of which we wrote: "When either marginal or lateral placenta praevia was diagnosed the membranes were artificially ruptured whether the patient was in labour or not and as much liquor as possible was allowed to escape. This usually led to satisfactory descent of the presenting part and packing the vagina was employed only if bleeding was profuse or continuous." Again in paragraph 6 (c) we wrote: "While packing of the vagina in conjunction with artificial rupture of the membranes is a recognized stimulus to uterine contraction we have not found that unduly rapid delivery resulted."

Only in cases of central placenta praevia was plugging ever employed before the membranes had either ruptured spontaneously or been ruptured artificially. We would not attempt to defend plugging *per se* but only as an integral part of the routine to be adopted under the circumstances described and would stress the fact that it should always be performed under strictly aseptic conditions preferably in hospital. We hope that these quotations explain the principle employed which was to effect haemostasis by compressing the placenta between the foetal head above and the plugging below.—We are, etc.

Samaritan Free Hospital for Women, London, N.W.1, July 9 J. E. GIESEN, O. LLOYD.

Small-pox and Compulsory Vaccination

SIR,—A statement is made by Dr. A. L. Craddock in his letter on diphtheria prophylaxis (*Journal*, July 2, p. 42) which really cannot be allowed to pass unchallenged. After referring to the entire freedom of this country from fatal small pox in 1937, he goes on to say: "There can be little reasonable doubt that the remarkable position in

respect of small-pox is due largely to compulsory vaccination If Dr Craddock really believes this I can only suppose that he is entirely out of touch with current views among those most familiar with the questions of the aetiology and prophylaxis of small-pox I wonder if he knows that resolutions in favour of the abolition of compulsory vaccination have been passed by both the Association of County Medical Officers of Health and the Society of Medical Officers of Health, and does he realize that the disappearance of fatal small-pox in this country has largely coincided with a continuous decline in compulsory examination? Also is he aware that localities which have taken the lead in the abandonment of compulsory vaccination have shown just as great a reduction in small pox mortality as the rest of the country? In the city of Leicester where compulsory vaccination was abandoned over fifty years ago and where for many years the proportion of infants vaccinated has been less than 5 per cent there have been only two deaths from small-pox in the last thirty-three years—I am etc,

Leicester July 5 C KILLICK MILLARD

Psoriasis

SIR—I read with interest Dr John T Ingram's excellent article on psoriasis (*Journal* April 23 p 881) I have been using ultra-violet radiation in combination with various unguents in the treatment of psoriasis for the past two years, and in many cases have found it very satisfactory In treating some of my fellow practitioners I have tried out, successively salicylic acid, mercurials, cignolin and tar preparations in ointment or paint form together with the ultra-violet light I found that the tar preparations were the most effective and for cleanliness a paint with an acetone and benzol base was preferred Many patients with psoriasis state that they are free from this condition in the bathing season, and usually give the credit to the sea and water Many are so sensitive about their eruption, however, that they will not appear in a bathing suit

I agree with Dr Ingram that a small ultra-violet lamp in the patient's home would be most valuable to prevent recurrences, but I do not agree with his method of giving a small daily dose I consider that most of the benefit is derived from some degree of erythema, most areas require only a very mild reaction, but resistant areas, like the knees and elbows, need a brisk reaction I have had several patients come to me from the northern Australian sheep stations, where it is very hot and very sunny From constant exposure (working with their sleeves rolled up) their forearms, hands, faces, and necks have been very deeply tanned, but these tanned areas have been just as much affected by the psoriasis as the covered areas In treating these patients moderate exposure to ultra-violet light and the application of an ointment will clear up the covered parts, but on the exposed areas a heavy dosage of ultra-violet rays is necessary Does it not seem rational to suppose that with frequent applications the skin will cease to react to moderate doses and the psoriasis will return, as on the exposed parts of the patients I have mentioned, and is it not also likely to increase the risk of keratosis developing later? I have advised the smallest amount of exposure necessary to clear up the attack, and have found little, if any, increase of dosage necessary for the recurrences—I am, etc,

WM GILFILLAN,
Adelaide, May 31 Clinical Assistant, Skin Department, Adelaide Hospital

Complications of Gold Therapy

SIR—I am glad to see that Dr H Warren Crowe (*Journal* July 2 p 44) has become a convert to gold therapy and I feel he deserves our congratulations on his results in that he has never had a toxic reaction in his series This experience I am sure must be unique He states that 'gold is given in minimum doses at as long an interval as possible depending on the tendency of the symptoms to recur My own experience is that those cases which have done best in the end have had a recurrence of symptoms during treatment Having tried gold in the very small doses prescribed by Dr Crowe I am not surprised that there is no reaction, but on the other hand I have failed also to secure beneficial effect, no complication is likely to arise after the administration of one hundredth of the initial dose

I do not agree that "the kind of gold salt used does not appear to make very much difference This again is contrary to the experience of most workers I have seen marked differences with the various salts used which is not unexpected, considering their different chemical characteristics During the past year however using neo solganol which is a calcium-gold keratin preparation it has been found that reactions have been much less marked and the progress much quicker than with other preparations In only one case so treated has there been any skin reaction

It must be very difficult of course to assess therapeutic effects when two separate treatments based on entirely different conceptions of therapy are being used simultaneously—I am etc,

London, W 1, July 5 GERALD SLOT

SIR—Dr Warren Crowe is to be congratulated upon the satisfactory results he obtains with 'gold injections and particularly upon the absence of "any toxic reaction of any kind whatever

Auro intoxication is nevertheless a problem which confronts most other workers in this particular field A considerable amount of experiment investigation and inquiry has been carried out at the Royal National Hospital for Rheumatic Diseases Bath to find a method of predicting those cases which may suffer from intoxication by 'gold, but so far without result The giving of small doses does not ensure the absence of reaction added to which the reaction may be delayed for some weeks after the last injection A hospital patient of mine developed auro-intoxication with skin lesions after a total of 0 17 gramme divided in five doses at weekly intervals—I am etc

Bath July 4 JOHN B BENNETT

Quinsy-Peritonsillar Abscess

SIR—Having read the correspondence on "Quinsy-Peritonsillar Abscess and noted that it is often found difficult to evacuate the pus effectually may I (although not a surgeon) venture to describe a method which I have frequently found to be very effective

When the abscess is behind the tonsil and cannot be opened properly and the neck is swollen at that side I make a small incision (under local anaesthetic) just behind the sterno mastoid about the level of the chin and cut through fascia then take sinus forceps and insert the closed point passing it behind the sterno mastoid (postero medial) and forward Then draw the handle forward so that the point moves in a curve forward medially, and up and then further up and slightly back

till the point is almost behind the tonsil Then open the forceps and pus pours out insert glove drain

One has to go slowly and gently and feel the way My first patient collapsed momentarily and recovered (probably pressure on a sympathetic ganglion) Have the neck very slightly flexed in the process —I am etc

H M DENHOLM YOUNG
M A M B Ch B

Edinburgh July 8

The Final M B B S Lond

SIR —You were good enough to give hospitality in your columns in the early part of this year to a discussion of certain suggestions for a measure of co operation with the Conjoint Board of the Royal Colleges in the final examination for the M B B S of London University The Senate were informed in a memorandum (dated January 11 1937) presented by the then Vice Chancellor to the Board of the Faculty of Medicine of London University and thereafter communicated to the Senate that of the medical students receiving their education in London only 17 per cent obtained a degree and it was upon this information subsequently proved to be erroneous that the Senate in May 1937 authorized the Board of the Faculty of Medicine to discuss with representatives of the Royal College of Physicians and the Royal College of Surgeons the problem submitted to the Senate by the Court—namely the small number of students in Medical Schools who take a Degree of the University of London

Acting upon this authorization delegates appointed by the Faculty Board from its own membership conferred with delegates from the Royal Colleges The result of *this conference as it affected the Royal Colleges* was submitted to the Comitia of the Royal College of Physicians on May 12 1938 in the following terms After giving long and serious consideration to the matter the Delegates (of the two Royal Colleges) came to the conclusion that the plan of a common examination presents so many difficulties as to be impracticable *nor do they think that it would be in the best interests of medical education in London* [The italics are mine —E G L] They therefore recommend the Royal Colleges not to agree to it The recommendation was then and there adopted without modification and without any dissentient voice by the Physicians and a few days later by the Surgeons This decision of the Royal Colleges was reported to a meeting of the Board of the Faculty of Medicine on July 7 1938, and the Board had obviously no alternative but to acquiesce in it

Thus ends the third effort in forty years to establish a common standard of examination in the final medical examinations of the Conjoint Board and the University The first sustained drive in this direction was made during the sitting of the Gresham Commission in 1894 It was the evidence given to that Commission by that veteran and doughty fighter Sir William Collins that was chiefly responsible for the rejection of the proposal by the Commission and graduates in medicine of London University owe him special gratitude The second effort was made in 1912 during the sitting of the Haldane Commission and was it was thought killed by the masterly statement contained in the report published in 1913 demonstrating very conclusively that the suggested co operation would not be in the true interests of medical education thus anticipating the verdict now recorded by the Royal Colleges themselves which we may hope will finally discourage any further attempt of this nature

At its meeting in May 1937 the Senate upon the motion of the External Council took the step of appointing a second Committee of its own body to consider

(*a*) how far the problem mentioned in the Vice Chancellor's Memorandum of January 11 1937 can be solved within the Statutes and

(*b*) the statistical purport of the difficulty

and that this Committee report to the Senate through the Academic and External Councils

Upon the advice of the Vice Chancellor no meeting of this committee has yet been called as it was considered advisable to await the outcome of the conference between the Board of the Faculty of Medicine and the Royal Colleges Now that this Conference has come to the decision recorded above the way is open to investigate the real position of the problem the seriousness of which was undoubtedly exaggerated in the memorandum of January 11 Professor Greenwood has contributed to the medical press certain statistics which would indicate that 50 to 60 per cent would be an approximation to the per centage of London University students in medical schools who take *the final medical degree of the University* These figures though still unsatisfactory are not nearly so calamitous as the Vice Chancellor's Memorandum suggested and modifications entirely within the power of the University to make such as more frequent examinations new adjustments of the curriculum etc may bring about the further improvement anticipated and hoped for by the Court during the next quinquennium —I am etc

E GRAHAM LITTLE

House of Commons July 10

The Medical Directory 1939

SIR,—To maintain the accuracy of our annual volume we rely upon the return of our schedule which has been posted to each member of the medical profession Should the schedule have been lost or mislaid we will gladly forward a duplicate upon request The full names of the doctor should be sent for identification —We are etc

J AND A CHURCHILL LTD

104 Gloucester Place Portman Square W 1 July 11

Obituary

HARRY CAMPBELL M D F R C P

Consulting Physician West End Hospital for Nervous Diseases London

Dr Harry Campbell who died on July 8 was the sixth son of Hugh Campbell of Eweland Hall Margaretting Essex and was educated at Carshalton House and in Germany at Neuwied am Rhein and then entered St Bartholomew's Hospital where he was prominent in work and play captaining the Rugby XV of 1881 which won the inter hospitals cup In the same year he qualified M R C S and graduated M B B S Lond in 1882 proceeding to the M D in 1885 He was elected soon afterwards to the staff of the North West London Hospital as assistant physician and pathologist and retired as full physician in 1919 In 1896 he was elected a Fellow of the Royal College of Physicians of London and joined the visiting staff of the West End Hospital for Nervous Diseases to which he was physician for many years and finally consulting physician

Lancet July 31 1937

Outside the practice of medicine Dr Campbell had many intellectual interests He was a Fellow of the Anthropological Society and a former President of the Society for the Study of Inebriety He had a clear and agreeable literary style, and his writings covered a wide range of subjects the physiology of eyesight, flushing and morbid blushing, differences in the nervous organization of men and women respiratory exercises in the treatment of disease man's mental evolution past and future, and the principles of dietetics He published in 1889 a philosophical essay on *The Causation of Disease* and in 1924 *Fundamental Principles in Treatment* and a number of other books stand to his credit He also edited the fifth edition of *Aids to Pathology* and was for fifteen years editor of the *Medical Press and Circular* Everything he wrote bore the stamp of a thoughtful, inquiring and critical mind

Dr Harry Campbell joined the British Medical Association forty-five years ago He was vice president of the Section of Neurology and Psychiatry at the Annual Meeting at Newcastle upon Tyne in 1921, and vice-president of the Section of Medical Sociology at the Annual Meeting in Dublin in 1933 From time to time throughout his career he contributed to the columns of the *British Medical Journal*, and a short letter pleading for a precise definition of the term "unconscious," written only a few days before his death appeared in our last issue

Dr C O Hawthorne writes

To not a few of the seniors among us the death of Harry Campbell means the close of a rare friendship and the revival of many memories He had a place of his own and it was a place in the affection as well as in the regard and admiration of his fellows His store of knowledge was vast and varied, the fruit of wide reading and careful observation, and the material supplied by the one as by the other was analysed and arranged by a highly critical and reflective mind His numerous writings carry the mark of these processes and provoke thought as well as supply it Medicine was for Campbell a department of natural history, and he cultivated all the avenues, remembering always that in the care of the patient is the true opportunity of the physician Generally, though he delighted in teaching, he was more effective with the written than with the spoken word, for gentleness and persuasiveness rather than emphasis marked his method, and the unqualified proposition was hardly within his vocabulary With the pen he was a literary artist, insistent on precision both in definition and in argument and not a few of his contributions have left an impress both on medical and on philosophic thought Best of all he was a gentle, unselfish, and sensitive soul, with no thought of envy and no ungenerous word And it is the memory of these things that will abide with those who knew him long and loved him well

We have received the following tribute to the late Dr CHARLTON HALL from Drs Constance D Roberts, W E Rutledge, and Ian D Dickson At this late period we feel it is not out of place to record a note of appreciation of the privilege of having known Charlton Hall It is doubtful if any member of the medical profession in the district was more popular, not only among his colleagues, but in the hospital over which he presided As superintendent of the City of Norwich Mental Hospital it was his constant wish to make the patients feel that they were members of one large family being cared for as sick-minded rather than surrounded by asylum walls and in this he succeeded We have known Dr Hall as a friend, a physician and a sportsman, and in none was he lacking in enthusiasm and thoroughness Perhaps his most striking characteristic was his ability to see the best in his fellow men He was indeed the friend of all the enemy of none Norwich has lost a great character and humanitarian, whose place will be difficult to fill The sympathy of his colleagues staff, and patients goes to his widow who in the past was such a help and inspiration to her husband

Dr HENRY OTTRIDGE REIK who died on June 2 was one of the three delegates to the centenary celebrations of the British Medical Association in 1932 from the American Medical Association Born in Baltimore Maryland in 1868, he graduated from Maryland College of Pharmacy in 1888 and M D in 1891 from the Maryland University School of Medicine He was in general medical practice from 1891 to 1894, and after postgraduate courses in Johns Hopkins University and in Glasgow and London including work at Moorfields Eye Hospital he returned to Baltimore to specialize in diseases of the eye and ear He held the post of professor of ophthalmology and otology in the Johns Hopkins Medical School from 1896 to 1912, and was a founder of the Baltimore Eye Ear and Throat Hospital He was general secretary of the International Otological Congress from 1909 to 1921 During the war he served in the United States army with the ranks of captain, major, and lieutenant colonel from 1917 to 1919 and was promoted colonel in the U S A Reserve Corps in 1923 An injury to his right hand prevented his return to surgical practice, and he was appointed secretary of the New York Academy of Medicine committee on postgraduate medical courses from 1919 to 1920, in the latter year he was appointed editor in chief of international medical and surgical surveys and four years later he became executive secretary of the Medical Society of New Jersey and editor of its *Journal* He was the author of *Surgical Pathology and Treatment of Diseases of the Ear* and *Diseases of the Ear Nose and Throat* and books on the conservation of the special senses and the national parks of America He was a member of the American Ophthalmological Otological and Laryngological Societies

Dr JAMES ANTHONY MCVEA died on June 6 at his residence in Netherton Ayrshire After early education at Ayr Academy he went to Glasgow University, where he graduated M B Ch B in 1903 He was subsequently for a time assistant to Dr James McGill of Colyton and then practised for some years with his sister Dr Janet McVea, in Lydenburg South Africa In 1914 he obtained a commission in the Navy and was surgeon in it until the end of the war, after which, in 1920, he rejoined his sister, who was then in practice in Ayr He became a member of the British Medical Association in the same year Dr McVea was very skilful in the building of model ships, and exhibited one vessel of the Armada period in the Empire Exhibition at Bellahouston, it is now in the Palace of Engineering He was a member of the Ayr Amateur Photographic Society, a keen shot and angler, and had a wide circle of professional and lay friends He is survived by his mother and sister

Dr ALFRED ERNEST WILSON HIRD a former member of Birmingham City Council, died recently at his home in Hagley Road and a memoir appeared in the *Birmingham Post* of June 28 The son of a Coventry practitioner, Dr Hird was born at Edinburgh in 1887 He was educated at Cambridge and Birmingham Universities, and after qualifying M R C S, L R C P in 1908 became house-surgeon at the Birmingham General Hospital under Sir Gilbert Barling From 1909 to 1910 he was house-surgeon to the gynaecological department and was awarded the senior gynaecological prize In 1911 he was appointed a junior medical officer to the Birmingham Education Committee and was visiting surgical casualty officer to the General Hospital from 1912 to 1914

He was mobilized on August 2 1914 and served in naval hospital ships and naval hospitals until February 1919 He was mentioned for valuable services rendered during these years and received the R N V R Officers Decoration Dr Hird was promoted surgeon commander R N V R in 1925 and surgeon captain in 1933 the year in which he retired Immediately after the war he was appointed one of the assistant visiting anæsthetists to Queen's Hospital, Birmingham

Dr GEORGE ANTHONY ZELLER superintendent of the State Asylum at Peoria Illinois (1898–1935) and one of America's leading alienists died of heart disease on June 29 at the age of 79

Known as the Father of French Dermatology Dr JEAN DARIER of the Saint Louis Hospital in Paris has just died at a ripe old age and after retirement from medical practice Though his birthplace was Geneva he spent most of his life in France where he acquired many honours including membership of the French Academy of Medicine His best-known work was his *Précis de Dermatologie* Behind a rather cold exterior he hid a warm heart and a great capacity for enthusiasm and kindly feeling particularly for his juniors As a histologist and dermatologist he made important contributions to the pathology of syphilis cancer and tuberculosis and his name is particularly associated with the condition of keratosis follicularis Dr Darier, who was 82 also had the distinction of being an Honorary Fellow of the Royal Society of Medicine

The death is announced of Dr GABRIEL POUCHET professor of pharmacology and materia medica since 1892 at the Paris Faculty of Medicine Vice president of the *Conseil Supérieur d'Hygiène de France* and member since 1898 of the Academy of Medicine he made important contributions to toxicology and forensic medicine and shortly before his death at the age of 87 he was still physically and mentally alert

Dr SIGURD HAGEN professor of ophthalmology at the University of Oslo, died on May 12 of a hypernephroma discovered by accident last September when he underwent a radiological examination for pain in one shoulder Among his most important works was a study of the post-operative serous detachment of the choroid and an experimental investigation of the secretion and regeneration of the aqueous humour

The following well known foreign medical men have recently died Dr JOHN JACOB ABEL emeritus professor of pharmacology at Johns Hopkins University School of Medicine Baltimore founder and editor from 1909 to 1932 of the *Journal of Pharmacology and Experimental Therapeutics* and president of the American Association for the Advancement of Science in 1932 on May 26 aged 81 Dr ALLEN BUCKNER KANAVEL professor of surgery at the North Western University Medical School Chicago, editor of *Surgery Gynecology and Obstetrics* and author of a well known book on infections of the hand aged 63 Professor WILHELM KNOEBFELMACHER an eminent paediatrist of Vienna, aged 72, and Dr LUIS TAMINI professor of orthopaedic surgery at the Buenos Aires Faculty of Medicine, aged 56

On the site where she worked for eighteen years (1907–25) at Salisbury Street Lisson Grove a memorial has been established to Dr Christine Murrell It consists of a Medical Unit attached to the new Portman Day Nursery of the St Marylebone Health Society opened this week by Viscount Stonehaven The memorial is a tribute to Dr Murrell's pioneer medical work in connexion with infant welfare

Medical Notes in Parliament

Progress of Bills

The Mental Deficiency Bill passed through the committee stage in the House of Lords on July 7 without discussion or amendment

In the House of Lords on July 12 the Green Belt (London and Home Counties) Bill was read a second time The Registration of Stillbirths (Scotland) Bill passed through Committee

The Protection of Animals (No 2) Bill was also read a second time in the House of Commons on July 5 The following day the House agreed to the amendments made by the House of Lords in the Children and Young Persons Bill

The Rating and Valuation (Air Raid Works) Bill which was introduced by Dr Elliot on July 7 exempts from rating structures and structural alterations made by way of precaution against air raid damage The Bill is a complement to the provision in the Finance Bill whereby such works are being exempted from liability to income tax Mr Colville presented a Scottish Bill for the same purpose as Dr Elliot's

The Commons agreed on July 7 to the Lords amendment in the Baking Industry (Hours of Work) Bill

In the House of Commons on July 12 the committee stage of the Finance Bill was concluded The Milk (Extension and Amendment) Bill and the Food and Drugs Bill passed through committee

The Divorce and Nullity of Marriage (Scotland) Bill was taken on Report by the House of Commons on July 12 Debate arose on an amendment by Miss Horsbrugh to delete lunacy for five years from the grounds of divorce The amendment was defeated by 158 to 31 A subsequent proposal was to delete Nullity of Marriage from the title of the Bill

Cardiazol in Treatment of Schizophrenia

On July 5 Mr SORENSEN asked the Minister of Health whether his attention had been drawn to the cure of schizophrenia by cardiazol injections and whether this cure was being applied in all public mental hospitals Mr BERNAYS said this treatment had already been investigated by two medical commissioners of the Board of Control and their report was in preparation The treatment which was still in the developmental stage was being applied in a considerable number of public mental hospitals but information was not available on the number of cases cured thereby

Interdepartmental Committee on Abortion

Dr ELLIOT told Sir Arnold Wilson on July 7 that the interdepartmental committee on abortion under the chairmanship of Mr Norman Birkett K C recently completed the hearing of evidence They were engaged in considering the evidence and hoped to be in a position to present a report before the end of the year It would be premature to decide at present that the evidence should be published with the report

Refugee Doctors and Dentists

Sir SAMUEL HOARE replying on July 7 to Sir Philip Dawson said that as regards doctors dentists and oculists admitted into the United Kingdom from Germany and Austria no separate figures were available for the year 1937 Since 1933 the number of refugee doctors (including oculists) and dentists coming from Germany who had been given permission to practise their profession after admission to the British *Medical* and *Dental Registers* was 185 and ninety three respectively

Expert Advice in Forensic Medicine

Sir SAMUEL HOARE in an answer to Mr Dobbie on July 7 said the services of two analysts appointed by and receiving retaining fees from the Home Office were available to the police and coroners if they had occasion to consult them In

such cases they were remunerated in accordance with a scale of fees approved by the Treasury In addition forensic science laboratories had been established in London and certain other centres with whole time scientific staff remunerated by salary In other cases the police could seek the assistance of other experts, who would be remunerated by fee In every case the function of the expert was to give an opinion as a scientist on the material submitted to him and he did so on his own responsibility The responsibility for the prosecution rested with the Director of Public Prosecutions or with the police

Holidays with Pay

The Holidays with Pay Bill introduced by Mr Ernest Brown was down for second reading on July 14 This Bill empowers Trade Boards Agricultural Wages Committees both in England and Wales and Scotland and the Road Haulage Central Wages Board (to be set up under the Bill at present before Parliament) to direct that any workers whose wages they regulate shall be granted holidays The duration of holidays is to be related to the period of employment with an employer In the case of Trade Boards and Agricultural Wages Committees holidays so granted cannot exceed a maximum of seven days in the year, and in the case of Agricultural Wages Committees there is a restriction that only three of these days can be required to be taken consecutively Otherwise the times periods and circumstances in which holidays shall be allowed are left for settlement by the wage regulating authority

Family Allowances in the House of Lords

The BISHOP OF WINCHESTER moved in the House of Lords on July 7 that a committee be appointed to report on proposals for a national policy of family allowances He said that a number of children were deprived of many necessities of life To the employed labourer with a family there should be extended the policy already in operation for the unemployed man who was given an additional allowance for every child that he had

Lord ASTOR said the last report of the Chief Medical Officer of the Board of Education on the health of the school child emphasized the fact that there was a problem of malnutrition Lord TEMPLEMORE said that in the view of the Government there were at least five lines of approach to this subject These were a general increase of wages, the grant of family allowances by employers to those workpeople who had large families, the formation of pooled funds for the same purpose in the different industries, the creation of a National Family Allowances Fund out of the contributions of employers workpeople, and the Exchequer, and finally the direct provision of family allowances out of the Exchequer Opinion was not yet fully formed and the Government did not think the stage had been reached when it would be useful to set up a formal body to examine the subject

The Bishop of Winchester withdrew his motion

Research into Poultry Diseases

In the House of Commons on July 11 Mr W S MORRISON explained the Government's policy with regard to eggs and poultry He said the Government accepted the view of the Poultry Technical Committee that one of the vital factors affecting the prosperity of the industry in Great Britain was the high incidence of mortality in poultry flocks The Government were impressed by the Committee's views on the urgent nature of the disease problem in the industry They therefore proposed that a Poultry Commission for Great Britain should be set up with the responsibility of conducting a stock-improvement scheme on voluntary lines and with power to control the distribution of breeding stock The Government was also prepared to facilitate the establishment of a research station for the investigation of the major disease problems of the industry and to give sympathetic consideration to a scheme which the Commission would be asked to prepare for the establishment of a progeny-testing station with a view to the production of the highest quality foundation stock The proposal for a poultry research station was already under consideration by the Agricultural Research Council Legislation to give effect to these and other proposals would be introduced

Living Conditions in Mercantile Marine Service

The vote for Mercantile Marine services was debated by the House of Commons on July 8 Mr GRENWOOD moved to reduce it He said that despite improvements made during the last few years conditions for life and service in the mercantile marine were unsatisfactory, particularly in the coastal service

Mr OWEN EVANS said it was a common practice of British shipowners to instruct that their ships were not to be heated when in port In some ships there was no hot water and no running water for anybody Sailors quarters and bed linen should be kept clean by someone whose job on board ship that was and not by the sailors themselves Commander FLETCHER said that the medical officer of the port of Hull reported that in the majority of the ships entering Hull the crew accommodation was in the opinion of a sanitarian quite unsuited for human habitation Lady ASTOR stated that this medical officer's survey had extended over 1 800 ships half of them British The new regulations did not affect the old ships in many of which the conditions of the crews quarters was far worse than any conditions in the slums of London Good shipowners said that when conditions were improved the crews responded in a remarkable way Commander MARSDEN said the medical officer of the port of Manchester reported striking advances during 1937 in the hygiene and amenities of crew spaces

Mr OLIVER STANLEY said no attempt had been made during the debate to criticize the instructions issued with regard to new ships His inspectors were instructed last autumn to make every effort when they noticed the need and possibility of alteration in an old ship to get it made by co operation with the shipowner As a result substantial improvements had been made in a number of ships He received monthly reports on this work

The motion to reduce the Vote was deferred

Drug Traffic in China

On July 11 Mr BUTLER told Mr McEntee that he could not say whether there had been an increase in the sale of dangerous drugs in the International Settlement at Shanghai Of the opium seized during 1937 consignments came from both North and South China, while the heroin was thought to have come mainly from the North Replying to Mr Banfield Mr BUTLER said that during 1937, 255 persons were arrested by the police force of the International Settlement at Shanghai for being concerned in the sale of opium and narcotic drugs Of these 144 were Chinese 97 Koreans 13 Japanese and 1 Latvian On the same day Sir ERNEST GRAHAM-LITTLE asked whether the British Government would obtain an official report from British representatives in Manchukuo as to the extent to which traffic in narcotics was being stimulated and whether there was any record of the Chinese and Manchukuo ports of the quantity and value of dangerous drugs imported as well as any indication of the source of origin

Mr BUTLER said he would consider the suggestion of a report The quantity and value of opium imported into Manchukuo as well as the countries of origin were published in the annual Customs reports No similar figures were available in the case of China

Silicosis in Lancashire and Cheshire

Sir SAMUEL HOARE replying to Mr Gordon Macdonald on July 11 said the Silicosis Medical Board granted eight certificates in 1937 to workmen last employed in coal mines in Lancashire and Cheshire 4 in 1936 3 in 1935 3 in 1934 and 4 in 1933 The inclusion of mines elsewhere than in South

Wales was not contemplated as part of the investigation into lung conditions among coal miners at present being carried out by the Committee of the Medical Research Council their method in this instance being to make an intensive study in a selected locality rather than a general survey The value of the findings however would not be restricted to the sample area from which the evidence was drawn

Mr MARSHALL asked whether in view of the great difficulty in establishing claims under the Silicosis Regulations especially in the grinding trades the Home Secretary would give an undertaking to bring in early legislation to remedy these grave difficulties. Sir SAMUEL HOARE said that question did not arise

Mr GRENFELL asked the Home Secretary to consider making a submission to the Medical Board for a revision of the diagnosis because there was failure to obtain an award in a large number of cases of persons who died from this disease Sir Samuel Hoare said that that also was a more general question than that on the order paper but he would take into account what Mr Grenfell had said

Maternity and Child Welfare Clinics

On July 12 Mr ACLAND asked how many local authorities established clinics according to the permission given to them under Circular 1622 and whether any steps were taken or contemplated to increase the number Dr ELLIOT said that of the 365 welfare authorities in England to which this circular was addressed, 347 had ante natal clinics and twelve others had arrangements for ante natal supervision by means of a domiciliary general practitioner service Authorities having post natal clinics or special arrangements for post natal cases to attend at ante natal clinics numbered 236 133 authorities had special ante natal consultative clinics and 159 had special gynaecological clinics His Department had followed up the circular by correspondence with the local authorities of areas in which according to his information the existing provision needed to be supplemented

Administration of Analgesics by Midwives—Dr ELLIOT told Dr Summerskill on June 23 that in the information which he would ask from local authorities for this year's Annual Return would be the number of local authorities who had arranged for the midwives in their employ to have special instruction in order that they might unaided give their patients analgesia He would also ask how many local authorities availed themselves of the powers conferred upon them to provide the necessary apparatus for their midwives in order that analgesia may be available for women at their confinements

Premature Death Registration—Colonel BURTON asked what were the circumstances under which a certain Mrs Martha Brabben obtained a certificate of the death of Mr James Alfred Douthitt of Hamilton Street Camden Town registered his death and caused arrangements to be made for his funeral when in fact he was still alive Dr ELLIOT replied on July 1 that Mrs Brabben Mr Douthitt's landlady seeing Mr Douthitt lying motionless came to the mistaken conclusion that he was dead In this belief she informed Mr Douthitt's medical attendant, who being acquainted with Mr Douthitt's medical condition issued a certificate of cause of death Mrs Brabben then took steps for the registration of the death and since she was a fully qualified informant in her capacity as the occupier of the house in which to her knowledge the death took-place the registrar duly registered the death upon her information Mr Douthitt proved to be alive on Mrs Brabben's return home

Women Medical Inspectors for Insured Persons—Mr GRAHAM WHITE asked on July 7 how many women medical officers were available in the north western divisional area when women members of approved societies were obliged to submit themselves under the rules of their societies Dr ELLIOT said there was one woman medical officer available in the north western divisional area for the examination of cases

Mr White asserted that on one recent occasion it was impossible to secure the attendance of a woman medical officer while Mrs TATE and Lady ASTOR suggested that the difficulty arose because medical women had to give up their posts on marriage Dr ELLIOT said that in fact there were only six demands from the north west area to see a woman medical inspector

Nutritional State of School Children—School medical officers' annual reports for all areas in England and Wales include statistics of the assessment of the nutrition of children examined at routine medical inspection during the year 1937 In 260 out of the 315 areas some children are shown to be suffering from bad nutrition but in many cases the number is very small often only one or two out of several thousand children examined and the total number of such children represents 0·6 per cent of the number examined In addition 10·7 per cent are shown to have slightly subnormal nutrition These figures were given by Mr Kenneth Lindsay on July 7

Supply of Gas Respirators—Mr LLOYD replying to Mr Perkins on July 12 said he was aware that gas respirators were being offered for sale but no such respirator had been approved by the Home Office unless it bore the Home Office certification mark It was the Government's policy to supply respirators for the whole of the civilian population free of charge

Notes in Brief

The Minister of Health anticipates that it will be possible to publish his report which relates to the financial year ended March 31 1938 in about four weeks Asked to arrange for earlier publication Dr ELLIOT points out that the report is based to a large extent on statistical information which has to be obtained from local authorities and analysed in the Department

Mr Wedderburn stated on June 20 that in Scotland there were two deaths from the effects of vaccination in 1927 one in 1928 one in 1930 and one in 1931 Two deaths from small pox occurred in 1930 No deaths from either cause occurred in Scotland between 1931 and 1936 the latest year for which figures were available

A member of the staff of the Medical Research Council is giving his whole time to the investigation of infantile paralysis and cognate diseases

Colonel Colville hopes to make a statement before the end of the session on the Government's intentions with regard to the recommendations of the Gilmour Committee on the reorganization of Scottish offices

The number of patients who on April 1 1938 were receiving treatment in residential institutions under the schemes of local authorities in England and Wales for the institutional treatment of tuberculosis was 27,968 The number of persons who had been awaiting such treatment for more than ten days was 1,798

The full cost of the Joint Council of Midwifery nutrition scheme for expectant mothers from January 1937 to March 31 1938 has been met from the amount of £8,500 granted by the Commissioner for the Special Areas Before January 1937, the cost was defrayed out of voluntary contributions

Of 257 cases of tuberculosis notified in single apartment houses in Glasgow during 1937 190 were in overcrowded houses

The average *per capita* consumption of liquid milk in Great Britain during the year ended May 31 1936 the latest period in respect of which adequate information is available is estimated to have been two-fifths of a pint daily

Mr W S MORRISON states that during the period of three months following the date on which Part IV of the Agriculture Act 1937 came into operation—namely, April 1 1938—payments totalling £4,085 were made out of the Diseases of Animals Account to cattle owners in respect of assistance under the tuberculosis (attested herds) schemes towards the cost of tuberculin tests with a view to eradicating tuberculosis from the herds concerned

INFECTIOUS DISEASES AND VITAL STATISTICS

No 26

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended July 2 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths, and of Deaths recorded under each infectious disease are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 13 *principal towns in Eire* (e) *The 10 principal towns (9 in 1937) in Northern Ireland*

A dash — denotes no cases a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929-37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	18	2	10	1	1	15	2	7		—		
Deaths		—	—				—	2				
Diphtheria	943	140	176	44	21	1 094	145	141	35	20	903	164
Deaths	22	2	5	1	1	20	2	2	—	1		
Dysentery	47	11	27		—	35	3	17		—		
Deaths				—	—				—	—		
Encephalitis lethargica, acute	4	—	—	1	—	2	—	—		—		
Deaths		1					1					
Enteric (typhoid and paratyphoid) fever	26	5	3	5	—	21	2	10	11	—	42	—
Deaths	—	—	—	1	—	1	—	1	—	—		
Erysipelas			57	2	5			55	4	1		
Deaths		—					—					
Infective enteritis or diarrhoea under 2 years												
Deaths	39	9	15	1	3	46	9	9	2	2		
Measles			113		6			83		—		
Deaths	8	3	3	1	—	8	1	2	2	—		
Ophthalmia neonatorum	105	10	49		—	104	10	35		2		
Deaths												
Pneumonia, influenzal‡	622	45	12	7	22	589	39	5		3	605	49
Deaths (from influenza)	17	3	—	2	—	4	—	2	—	1		
Pneumonia, primary			178	9				176	6			
Deaths		16		6	13		1		7	3		
Polio-encephalitis, acute	1	—				2	—					
Deaths		—					—					
Poliomyelitis, acute	3	—	8	1	—	8	1	1	1	—		
Deaths		—					2					
Puerperal fever	4*	4	23	2	1	39	3	9	2	—		
Deaths		2†					1†					
Puerperal pyrexia	184	30	17		2	111	14	20		—		
Deaths												
Relapsing fever	—	—			—	1	—	—		—		
Deaths												
Scarlet fever	1,641	152	361	88	78	1,803	196	339	98	41	1,598	210
Deaths	2	1	1	—	—	4	—	—	—	—		
Small-pox	—	—	—		—	—	—	—		—		
Deaths	—	—		—	—	—	—		—	—		
Typhus fever	—	—	—	—	—	—	—	—	—	—		
Deaths				—	—				—	—		
Whooping cough			97		13			72		4		
Deaths	13	3	3	—	1	18	7	5	—	2		
Deaths (0-1 year)	279	51	59	30	14	288	43	71	19	14		
Infant mortality rate (per 1,000 live births)	46	42				49	36					
eaths (excluding stillbirths)	3,926	739	521	167	150	3,986	732	561	144	121		
nnual death rate (per 1,000 persons living)	9 6	9 4	10 6	11 3	13 3	9 9	9 2	11 5	9 8	11 6		
ive births	6,884	1 313	979	338	260	6,665	1,324	893	133	205		
Annual rate per 1 000 persons living	16 9	16 7	19 9	22 9	23 0	16 5	16 7	18 3	22 7	19 6		
Stillbirths	300	46				300	50					
Rate per 1,000 total births (including stillborn)	42	34				43	36					

* After October 1 1937 puerperal fever was made notifiable only in the administrative county of London

† Deaths from puerperal sepsis

‡ Includes primary form in figures for England and Wales, London (administrative county) and Northern Ireland

EPIDEMIOLOGICAL NOTES*

Enteric Fever

During the week under review 26 cases of enteric fever were notified in England and Wales compared with 20 in the previous week of these 5 (0) were in London—2 each in Battersea and St Marylebone and 1 in St Pancras In Scotland 3 cases of typhoid fever were recorded—1 each in Glasgow Greenock and Paisley

Diphtheria and Scarlet Fever

Notifications of diphtheria in England and Wales fell from 989 to 943 in the week under review and in London from 146 to 140 There was also a marked drop in the notifications for Scotland—176 as against 191—and for Northern Ireland a slight decrease—21 as against 22 but in Eire there was a rise from 41 to 44 Deaths from diphtheria in the 126 Great Towns of England and Wales remained at 22 while in London they fell from 4 to 2 Of the 22 deaths recorded in the 126 Great Towns 2 each occurred in Chester (0) Liverpool (2) Manchester (1) Newport (0) There were 5 deaths from diphtheria in the 16 principal towns of Scotland during the week under review—3 (4) in Glasgow and 1 each in Dundee (0) and Aberdeen (0) There was a decrease in the number of notifications of scarlet fever in England and Wales during the week—1 641 as against 1 765—and in London where 152 cases were recorded compared with 171 in the previous week In England and Wales the figures were slightly in excess of the median value for the last nine years but in London they were considerably less There were two deaths from scarlet fever in the 126 Great Towns of England and Wales during the week under review compared with 3 in the previous week of these 1 (1) occurred in London Notifications in Scotland rose from 355 to 361 with 1 death and in Eire from 79 to 98 but in Northern Ireland they remained at 78

Primary and Influenzal Pneumonia

Notifications of primary and influenzal pneumonia in England and Wales fell from 758 to 622 during the week under review and in London from 76 to 45 the figure for England and Wales is well above the median value for the last nine years while that for London is below it There were 17 deaths from influenza in the 126 Great Towns of England and Wales compared with 20 in the previous week in London the number of deaths from influenza rose from 2 to 3 In the West Riding (Yorks) 82 (103) cases were notified of which 20 (53) were in Sheffield 25 (25) in the Administrative County 14 (20) in Leeds In Warwickshire 35 (39) cases were notified of which 25 (24) were in Birmingham and 6 (10) in the Administrative County Of the 118 (136) cases reported in Lancashire 30 (37) occurred in Liverpool 18 (37) in Manchester 21 (25) in the Administrative County Of the 17 deaths from influenza recorded in the 126 Great Towns of England and Wales during the week 3 (2) were in London and 2 each in Portsmouth (0) and Cardiff (0) In Scotland 178 cases of primary pneumonia were notified compared with 192 in the previous week while there were 12 cases of influenzal pneumonia—compared with 5 in the previous week—with no deaths In Eire there were 9 (11) cases of primary pneumonia and 6 (7) deaths 4 (6) of which were in Dublin There were 13 (14) deaths from pneumonia in the ten principal towns of Northern Ireland during the week—9 (11) in Belfast 3 (0) in Londonderry and 1 (1) in Larne

Measles and Whooping-cough

In the 126 Great Towns there were 8 deaths from measles during the week under review compared with 10 in the previous week of these 3 (1) occurred in London 2 (0) in Newcastle upon Tyne and 1 each in Barnsley (1) Sunderland (0) Stoke on Trent (0) During the week 348 cases were reported from the L C C elementary schools compared with 422 in the previous week The average daily admissions to the L C C fever hospitals were 18 the same as last week and the number of cases of measles under treatment in these hospitals on Friday July 1 was 724 compared with 860 on June 24 On the same day there were under treatment in the L C C fever hospitals 918 (940) cases of diphtheria 682 (761) cases of scarlet fever 252 (263) cases of whooping-cough Notifications for the week ended July 2 in the eleven metropolitan boroughs in which measles is notifiable were 164 (241) distributed as follows Battersea 18 (34) Bermondsey 6 (11) Finsbury 8 (16) Fulham 10 (27) Greenwich 63 (47) Hampstead 6 (11) Lambeth 17 (36) St Pancras 15 (33) Shoreditch 6 (5) Southwark 10 (13) Stepney 5 (8) In Scotland 113 cases of measles were notified compared with 173 in the previous week the figures for Kirkcaldy were 35 (19) for Glasgow (7) and Falkirk (28) 17 each for Dundee 13 (22) for Lanark County 9 (21) and for Edinburgh 7 (8) During the week there were 3 deaths from measles in the 16 principal towns of Scotland—1 each in Glasgow Edinburgh and Dundee In Eire there was 1 death from measles occurring in Dublin and none in Northern Ireland Of the 6 cases of measles reported in Northern Ireland 5 were in Warrenpoint and 1 in Lisnaskea

In England and Wales there were 13 (18) deaths from whooping cough during the week of which 3 (2) occurred in London In Scotland 97 cases of whooping cough were notified compared with 123 in the previous week while there were 3 deaths—2 (0) in Kilmarnock and 1 (1) in Glasgow In Northern Ireland 13 (22) cases of whooping-cough were recorded with 1 death

Cholera

During the week ended July 2 301 cases of cholera were reported at Shanghai and 25 cases with 14 deaths in Hong Kong In the same week in Burma 8 cases with 6 deaths were notified in Calcutta 41 cases with 18 deaths in Bombay (Presidency) 63 cases with 27 deaths in Delhi 3 cases with 1 death In the Central Provinces 1 034 cases with 505 deaths were reported during the week under review in the North West Frontier Province 149 cases with 73 deaths in Madras (Presidency) 287 cases with 111 deaths in the Punjab 112 cases with 54 deaths in Sind 16 cases with 11 deaths and in the United Provinces 7 cases with 2 deaths in Allahabad and 3 cases with 2 deaths in Cawnpore In French Indo-China during the same week 117 cases of cholera were notified in Annam 177 in Tonking and 3 in Hanoi

Plague

During the week ended July 2 17 cases of plague with 10 deaths were reported in Burma In British India in the same week 5 cases with 4 deaths were notified in Bombay (Presidency) and 2 cases with 1 death in Madras (Presidency)

Small pox

During the week ended July 2 there was 1 case each of small pox reported in Shanghai and Hong Kong In the same week in Burma 8 cases were notified in British India 22 cases with 9 deaths were reported in Calcutta 172 cases with 29 deaths in Bombay (Presidency) 37 cases with 9 deaths in the Central Provinces 36 cases with 12 deaths in Madras (Presidency) 28 cases with 10 deaths in the North West Frontier Province 62 cases with 9 deaths in Sind In the same week in French Indo China there were 23 cases of small pox in Tonking During the week ended June 25 225 cases were reported in the U S A

Typhus

During the week ended July 2 in Egypt 1 case of typhus was reported in Alexandria 2 cases in Cairo and 65 cases in the Provinces In the previous week 71 cases with 6 deaths were notified in Morocco mainly distributed as follows Chaouia 17 cases 3 deaths Marrakesh 13 cases, Dukkala 8 cases Casablanca 7 cases 1 death 5 each in Fez (1 death) Rabat and Oued Zem In the same week in Tunisia 76 cases of

* Except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

typhus were recorded mainly distributed as follows Suk-el Arba 14 cases Southern Territories and Susa 12 each, and 4 each at Le Kef, Medjez-el Bab and Teboursuk During the week ended June 18 in Algeria 70 cases were notified distributed by departments as follows Constantine 54 Southern Territories 10, Algiers 6 In Poland during the same week 44 cases with 2 deaths were reported, mainly distributed by departments as follows 7 cases each in Lwow and Nowogrodek Wolhynia 6 cases, Wilno 5 cases, and 3 each in Cracow and Polesia In the U S A during the week ended June 11 there were 34 cases of typhus Georgia 16 Alabama 7, Florida 5, Texas 3 and 1 each in Connecticut, Louisiana, and Maryland

Universities and Colleges

UNIVERSITY OF BRISTOL

The Beaverbrook Fellowship has been awarded to Beryl D Corner, M D

UNIVERSITY OF LIVERPOOL

On July 5 the Council of the University reappointed Professor W H Wood M D Dean of the Faculty of Medicine

UNIVERSITY OF MANCHESTER

The following candidates have satisfied the examiners at the examinations indicated

M D—[1] Mary A C Cowell T F Davey, A Harris, R L Holt (gold medal), N F Kirkman B Portnoy, E N Rowlands, [1] B Sindler G G E Smyth

FINAL M B, CH B—N Altham, J N Appleton, T E Barlow, J E Coates A E David, T B S Dick A M Dickson F I Firth, [1] G Garmany, Edith A Greenhalgh Kathleen M Henderson, [2] A G Hoppleston, [2] Barbara M Jessel F A Langley, N Levy, L Linnell D Longbottom, Constance M F Lyth, J C Mellor, [2] A Morgan Jones, S Mottershead T H Norton J F Rickards, J K Rowson, [1] E Saunsbury, W W Wilson Frances T Wright *Part I (Forensic Medicine and Hygiene and Preventive Medicine)* A P Bates, D Bolchover, Irene M Bower J B Brownlie, Frances M Bullough R Cocker, G R Crawshaw Olive I Elkin, Barbara H Fiddian, Mary Fleure, R T Grime John Halstead, P Hasham, J E Horrocks, Hannah Horton W L R Kenyon, J Latham, Joyce Leach, A D Leigh, R A Martin, A P Massie, Asa Mills, M D Milne, M J Parsonage J R Platt T H Redfern J C A Renshaw, E Ridehalgh G G Robertson B Roditi, E S Rogers, M S Rowley, L D Rutter, J E Schofield F W Taylor G K Tutton, G H Whittle A F Williams R M Winston, E J Yates *(Pathology and Bacteriology)* Peggy Anderson, G T Ashley J G Atherton T G Barlow, E F Burndred J H Gifford E Lee, D Livshin A S Ogden Barbara M Statham, W P Sweetnam *(Pharmacology)* Hilary J Crewe A C C Davey, J D Johnson, F T Jones F R L Makin, Catherine E D Nash, J C Seddon, G K Spruell, D H M Titcombe H Walmsley

DIPLOMA IN PSYCHOLOGICAL MEDICINE—*Part II* Muriel Hughes, I Sutton *Part I* I Sutton

DIPLOMA IN PUBLIC HEALTH—*Part II* S K Appleton, J L Armour J C Brundret Edna Circuitt C L Elder R S Hynd, P A Jennings A I Ross G N M Wishart *Part I* S K Appleton R Bennett J C Brundret Edna Circuitt, H D B North G R Walker, R C Webster H C Williamson

[1] With commendation [2] Second class honours [3] Distinction in Medicine [4] Distinction in Surgery [5] Distinction in Hygiene and Preventive Medicine

UNIVERSITY OF SHEFFIELD

At a meeting of the University Council, held on July 8, Dr J R Grimoldby was appointed demonstrator in anatomy

UNIVERSITY OF ABERDEEN

The following medical degrees and diplomas were conferred at a graduation ceremony on July 6

M D—R G A McLaren

M B, CH B—*J Booth *†J S McConnachie, G S Anderson, Mary Anderson, Joyce D Bailey Thomson V A Cran, K S Crawford, Williamina H Cruickshank T Duncan W Y Fettes, J Fiddes D L Fletcher, M Franklin R G Fullerton, J M Geddie, C W Gordon, G F Hamilton E I Harper, A B Harrington Mabel A Henderson, G A Hendry, Jean E W Inglis I McD Kerr, W Lamb, J Leask, R N Lees L C Liddell, H J Lillie C J Livingstone W Lumsden D R Macaulay, A F MacBean, Dorothea F MacBean, J R McBoyle, A W B Macdonald, J Macdonald Rowth McGowan, J McIntosh R E McKenzie, Zina E Moncrieff Dorothy I Mortimer, J G Munro F Murray, P B Nicol, R E M Paterson Phyllis J H Priestley A W Raffan, A G Reid, S McR Reid Hellen L Reith D F Ritchie G T Robertson Edith Scott H G Skinner A S Spence J H Stewart W J Tavendale, J R Tocher J Watson D F Whyte, Ida M Will Elisabeth M Williams

D P H—‡W C Davidson Isabella M O Allan J R Byars, G G Dickie, W J Godden, M H Webster

* With second class honours † Passed Final Medical Professional Examination with distinction ‡ With credit

ROYAL COLLEGE OF SURGEONS OF ENGLAND

Election to the Council

Four Fellows were elected on July 7 into the Council to fill the vacancies caused by the retirement in rotation of Mr Victor Bonney Mr R C Elmslie, and Sir William Girling Ball and by the resignation of Mr C H Fagge The result of the poll was as follows

	Votes
REGINALD CHEYNE ELMSLIE (St Bartholomew's)	667
WILLIAM FRANCIS VICTOR BONNEY (Middlesex)	658
SIR WILLIAM GIRLING BALL (St Bartholomew's)	657
LIONEL EDWARD CLOSE NORBURY (Royal Free)	502
Vincent Zachary Cope (St Mary's)	410
Robert Joseph Willan (Newcastle upon Tyne)	395
Robert Davies Colley (Guy's)	356
Sir Lancelot Edward Barrington Ward (Great Ormond Street)	349
Julian Taylor (University College Hospital)	297
Walter Goldie Howarth (St Thomas's)	217

In all 1358 Fellows voted, in addition ten votes were found to be invalid Mr Bonney Mr Elmslie, and Sir William Girling Ball are all elected for the full period of eight years and Mr Norbury acts as substitute member for Mr Fagge until July, 1945

COMBINED HOSPITALS UNIVERSITY ENTRANCE SCHOLARSHIPS

The following awards have been made

St Bartholomew's Hospital Medical College D S Cadman St John's College, Cambridge (Scholarship), J N Milnes St John's College Cambridge (Exhibition)

Guy's Hospital Medical School N Gillman Downing College Cambridge (Scholarship) H E S Marshall, Downing College Cambridge (Exhibition)

St Thomas's Hospital Medical School J R Tiller Worcester College Oxford (Scholarship) L H H May, Trinity College Cambridge (Exhibition)

The Services

48TH AND 61ST (S M) DIVISIONS R A M C

Colonel RALPH A BRODERICK A D M S, 48th (South Midland) Division R A M C T A writes I am very anxious to promote a reunion of all old comrades of the above R A M C units who served in these Divisions during the great war I would suggest that a reunion dinner be held in Birmingham in the late autumn of this year under the auspices of the Birmingham Branch of the R A M C Association, and I trust that you will publish this letter so that the attention of your readers may be called to the project Will all who are interested and served in the corps during that period communicate with Lieutenant Stanford, R A M C, T A at Stockfield Hall, Acock's Green, Birmingham, 27?

Surgeon Commander S H Facey, R N (ret), has been awarded a Greenwich Hospital pension of £50 a year in the vacancy caused by the death of Surgeon Captain Sir Arthur Nance, K B E, C B, R N (ret)

DEATHS IN THE SERVICES

Major THOMAS HERBERT DICKSON R A M C (ret) died at Tangier, Morocco on June 17, aged 54 He was born on December 7, 1883, the youngest son of the late Reverend T C Dickson of Argyle Place Church, Edinburgh and was educated at Edinburgh University, where he graduated M B, Ch B in 1906 After filling the posts of junior and assistant medical officers at the North Riding Asylum, York, and of senior house surgeon at the Royal Sea Bathing Hospital Margate he entered the Royal Army Medical Corps as lieutenant on July 31 1909 became major in 1921, and retired on July 31, 1929

Medical News

Mr H L Eason Principal of the University of London has been elected an Honorary Master of the Bench of the Inner Temple

On the afternoon of Tuesday July 26 Dr Walter Elliot Minister of Health will open the new County Infirmary at Louth the ceremony being presided over by Lord Heneage chairman of the Lindsey County Council

An International Plastic Surgery Congress will be held at the Sarfatti Institute in Milan on September 25 26 and 27 Surgeons and specialists from England Germany France Scandinavia Holland and North America have announced their intention of attending the meeting. One of the principal subjects to be discussed is the eradication of malignant facial growths

The twenty fifth French Congress of Medicine will be held at Marseilles under the presidency of Professor Olmer from September 26 to 28 when the following subjects will be discussed icterogenic spirochaetosis hypochloraemia and the present treatment of avitaminosis in the adult Further information can be obtained from the general secretary Professor Roger 66 Boulevard Notre Dame Marseilles

The fifth congress of the Latin Medical Press will be held at Lisbon from September 29 to October 2 under the presidency of Professor Reynaldo dos Santos The subjects for discussion will be medical bibliography and the copyright of articles Further information can be obtained from the general secretary Professor Armando Narciso Restauradores 48 Lisbon

The third international congress for microbiology will be held in New York from September 2 to 9 1939

The introductory address before the Middlesex Hospital Medical School will be given on Tuesday July 26, at 3 p m at the Queen's Hall Langham Place by Mr W Warwick James F R C S dental surgeon to the hospital and the prizes gained during the academic year will be distributed by Sir Edward Meyerstein

The Child Guidance Council (Woburn House Upper Woburn Place W C) has awarded Fellowships in Psychiatry to Allan G Crisp M D Kenneth Soddy M B D P M and Rosalind Vacher M B D P M The fellowships are of the value of £300 and are tenable for a year from October for half time work at the London Child Guidance Clinic 1 Canonbury Place Islington N

The Ministry of Health has sanctioned a loan of £253 000 for the first instalment of Southend's municipal hospital extension

The King has appointed Dr Christopher James Wilson to be an unofficial member of the Legislative Council of the Colony of Kenya

A sanitary code regulation prohibiting the importation breeding and sale of birds of the psittacine or parrot family went into effect in New York State on June 1 and a similar regulation for New York City on July 1

An institute for the study of influenza and its causes and treatment has recently been established in Budapest

The foundation stone of an institute for hygiene social medicine and industrial pathology has recently been laid at Brussels

The Minister of Pensions has arranged at the request of the Minister of Health to lend to the Ministry of Health the services of Dr J H Hebb C B C B E K H P Director General of Medical Services in the Ministry of Pensions Dr Hebb while seconded to the Ministry of Health will be the Principal Medical Officer responsible for advising on all medical questions relating to the emergency hospital and medical services for which the Ministry have taken over responsibility from the Air Raid Precautions Department

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary B M A House Tavistock Square W C 1 on receipt of proofs Authors overseas should indicate on MSS if reprints are required as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary B M A House Tavistock Square W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are

EDITOR OF THE *BRITISH MEDICAL JOURNAL* *Articulate Westcent London*

SECRETARY *Medisecra Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Irish Free State Medical Union (I M A and B M A) 18 Kildare Street Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Cockroaches

F P" has asked us for the name of the vendors of a preparation called zonol used for the extermination of cockroaches (blackbeetles) It can be obtained from any branch of Messrs Boots We take this opportunity of referring E P (and others similarly afflicted) to the pamphlet entitled *The Cockroach Its Life History and How to Deal with It* by Frederick Laing M A B Sc published in 1921 in the Economic Series (No 12) by the British Museum (Natural History) Cromwell Road London S W 7 at 6d per copy (postage 1d)

Mosquito Bites

B B L writes from Scotland in answer to B S s inquiry (May 28 p 1192) I have found flygo —a Dubarry preparation—unequalled Its only disadvantage is that it does not keep well as it is liable to shrink when it has been lying a long time in a chemist's shop Oil of lavender, I found *attracted* mosquitos

Income Tax

Professional Use of Cars

TAXPAYER has for many years used two cars in his practice The local inspector of taxes has now objected to an allowance for more than one car and even then claims to deduct 10 per cent of the expense of one car as representing private use

We cannot see the grounds for the inspector's contention The question is one of fact If Taxpayer uses two cars professionally he is entitled to the running costs depreciation obsolescence etc of both less a reasonable percentage to cover the ratio of private use of both cars If he were liable to assessment under Schedule E the position might be different because the inspector could then contend that the use of two cars was not necessary But as regards an assessment under Schedule D that criticism is not appropriate The inspector seems to us to be no more entitled to object to the expense of two cars than he would be entitled to say that a tradesman is employing too many assistants and that he will only allow the wages of half of them

Expenditure on Apparatus and Books

X Y has spent an abnormal amount recently on apparatus is it advisable to claim "depreciation on such equipment? The inspector of taxes has informed him that no allowance

is due for additions to the medical library as distinct from periodicals or renewals Is this so?

*** The depreciation allowance is for "plant and machinery and surgical instruments fall under the category of 'tools' rather than plant Consequently depreciation on comparatively small and portable apparatus cannot legally be claimed but as the various instruments etc, become worn out or are discarded as obsolete and renewed the cost of replacement can be claimed as a professional expense The same principle applies to books Where a textbook becomes out of date and is replaced by a later book on the same subject the cost can be deducted for income tax purposes

LETTERS, NOTES, ETC

Nasal Sinusitis in Childhood

MR J BERNSTEIN (Liverpool) writes May I be allowed to reply to various points in Mr Frank Coke's letter in the *Journal* of June 11 (p 1285) In my opinion there is a definite condition in which there is thickening of the mucosa of the sinuses with the presence of mucoid fluid and this is due to the allergic state The mucosa of the nasal sinuses is continuous with that of the nose and participates in similar infections and conditions Why therefore, should the allergic phenomenon which admittedly takes place in the nose not extend to the sinuses? For my own part, I find that group testing will give me almost as much information as individual testing and without putting the patient to the inconvenience of a number of sittings I have also found, and I think that many others are in agreement that a particular protein may often give a negative skin reaction and yet be allergic to the patient That is the reason why I eliminate, at the beginning the proteins which I have found to be the most common offenders As the patient improves he is gradually restored to a normal diet by the method of trial and error As to vaccines and infection I think that often the organisms found are merely the result of the predisposing allergic condition and not the cause Because of the unhealthy condition of the mucosa the organisms are not destroyed but proliferate Vaccines may help but in my opinion they do not attack the fundamental cause and I think that is the only point of difference between Mr Coke and myself

Appendicitis and Heavy Meat Diet

MR MORTON WHITBY (London) writes Dr A Forbes Brown's experiences described in the *Journal* of June 25 (p 1390) regarding appendicitis in Uganda coincide with my own when I was Assistant Colonial Surgeon in the Falkland Islands and, later, surgeon and radiologist to Mackenzie Hospital British Guiana Falkland Islanders are mostly Scotsmen and Englishmen, and are compelled owing to the lack of fresh vegetables to live on large quantities of meat, mostly mutton Out of every 100 operations among the inhabitants in 1925 80 were performed for appendicitis The British Guiana native population in the Bush seventy-five miles up the Demerara River, are almost entirely free from appendicitis In 1926 out of 1,000 operations there was only one case of this condition, and the patient died from malaria on the day I had prepared to operate on him A post mortem examination revealed an acute gangrenous appendix, apart from his acute malarial cachexia The patient had been a meat-eater while working for Europeans These two experiences in totally different climates and under different dietetic conditions would strongly suggest that appendicitis owes its origin to a heavy meat diet

Medical Tour to Soviet Russia

MESSRS DAVID BAND NORMAN M DOTT W T MUNRO H M TRAQUAIR and NOEL E WATERFIELD write We would draw your readers attention to the medical tour to the USSR recently advertised in your columns by the Society for Cultural Relations (98 Gower Street WC1) Our visit to the USSR last September was arranged by the SCR and we were thus enabled to make contacts with medical men and to visit medical institutes which we would otherwise have missed The travelling arrangements made for us were excellent Everything worked smoothly, and we had no difficulties with regard to trains and hotels The accommodation was comfortable and the meals excellent and the guides were very friendly and obliging We felt that the trip had been very well worth while from the point of view of gaining knowledge concerning the important medical and social activities of the USSR, and we regard the trip also as a very pleasant holiday The 1938 party will leave London by sea on September 7 and return overland on September 28 the cost being from £28

A Doctor's Collection of Old Medical Books

On July 18 Messrs Sotheby of Bond Street are selling the book collection formed by Dr Cuthbert F Selous of Tunbridge Wells which includes a good many old medical books some of them exceedingly rare Alexis of Piedmont's *Secrets containing excellent remedies against divers diseases* black letter, translated by W Warde and published by R Hall 1562 is in three parts bound together in one volume apparently the other known copy which is in the British Museum has two parts only There are also catalogued two other editions of this book 1580 and 1595 both of them also in black letter Barrough's *Method of Physick* 1624 is the sixth edition of that work which evidently was popular Sir R Blackmore's *Treatise of Consumptions* 1724, and J J Berlu's *Treasury of Drugs unlocked* 1690 precede a copy of Sir William Osler's *Incunabula Medica* Then we come to Boerhaave's *Method of Studying Physick* 1715 J Parsons's *Enquiry into the Nature of Hermaphrodites* 1741, Andrew Boorde's *Breviary of Healthe* 1552, and G Baker's *The Newe Jewell of Health* 1576 which are followed by a long string of the works of that prolific author and earnest researcher Robert Boyle Most of these are not medical, but there are a few which are in this category—for example, *Memoirs for the Natural History of Humane Blood* 1684, *The Reconcileableness of Specifick Medicines to the Corpuscular Hypothesis* 1685, *Medicina Hydrostatica* 1690, and *Medicinal Experiments* 1692 and 1693–4 T Bright's *Treatise of Melancholy* 1586 *Vade Mecum or Companion for a Chyrurgion* by T Brues 1652 R Bunworth's *Physical Discourse exhibiting the Cure of Diseases by Signature* 1656 are followed by a textbook on the cure and prevention of the Plague 1636, and by T Cogan's *Haven of Health* 1612 Culpeper is well represented by a series of books, of which need be quoted only his *Directory for Midwives* 1651 Sir Thos Elyot's *Castel of Helth corrected* 1541, unfortunately is not quite perfect, but a later edition, 1576 is hitherto unrecorded and may well be unique Only two other copies are known (British Museum and Cambridge University) of O Gabelkouer's *Boock of Physicke nuelye translated out of Low duche by A M* Dorte, Iarck Caen, 1599 and C Gesner's *Newe Jewell of Health* 1576, if not quite so rare is at any rate uncommon Another quaint title is that of G Gratarolo's *Direction for the Health of Magistrates and Studentes* Englished by T Newton, 1574 Balneology is the subject of several treatises including T Guidott's *Discourse of Bathe and the Hot Waters there* 1676, Jorden's *Discourse of Naturall Bathes and Minerall Waters* 1633 Tonstall's *Scarborough Spaw Spagyrically Anatomized* 1670 Wittie's *Scarborough Spaw* 1667, and T Venner's *Via recta ad vitam Longam wherunto is annexed Baths of Bathe as also Treatise concerning Tobacco* 1638 There are first editions of T Willis's *Cerebri Anatome* 1664 and *De Anima Brutorum* 1672 as well as others by that author also a copy of William Harvey's *De Generatione Animalium* published at Amsterdam in 1651 the same year as the first edition Langham's *Garden of Health* is represented by the first edition of 1579 and by a later one 1633 Another interesting old book is the *New Mystery in Physick discovered by curing of Fevers and Agues by Quinquina or Jesuites Powder* translated by Dr Belon 1681 There are many other medical books in this collection as well as a large amount of general literature and in a further collection for disposal in the same sale are a few more including another edition of Willis's *De Anima Brutorum nempe Cerebrum et Nervosum Genus afficiunt explicat eorumque Therapeias instituit* Amsterdam 1674, and another copy of the 1692 edition of R Boyle's *Medicinal Experiments*

A little book by Miss J Halford entitled *The Diet for Expectant and Nursing Mothers* is published by the Food Education Society 29 Gordon Square, WC1 post free 3½d It opens with a series of cautions calculated to remove false impressions as to the diet under such conditions These are followed by numerous practical hints

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Deutsche Medizinische Wochenschrift

Berlin vol 64 May 6 1938

Air Electricity and Treatment of Patients —C Rupprich
New Treatment for Chronic Dysenteric Encephalitis with Parkinsonian Manifestations —G Peregrossi
Remarks on Specific Bulgarian Cure of Chronic Eczema Encephalitis —H D v Wittelsbeten
Intranasal Anæsthesia —K Junkmann
Clinical Experiences with a New Spasmolytic —A Pasquali
A Filter paper Manometer in Flocculation Reaction in Syphilis —K v D Gucht
Visual Acuity of Nomads in Asia Minor —S Irmak
Practical Significance of Trichomonas Leucorrhœa —G Panthel
Occupational Therapy in Curative Institutions in Berlin —I Paucker
High Court Medico-legal Judgments in 1937 —Pasch and Trembur

New Spasmolytic—The antispasmodic action of jucundal (Schering) has been tested on the rabbit's small intestines It is claimed for this drug that it possesses remarkable antispasmodic properties with very low toxicity Its technical as distinct from its trade name is trimethylacetamide

Flocculation Reaction—This test the technique of which is described in detail was applied to 298 non syphilitic patients and 111 syphilitic patients The reaction was negative in all the non syphilitic cases In 107 of the syphilitic cases the reaction tallied with the Wassermann and Meinicke II reactions In two cases it tallied only with the Meinicke II reaction Thus there were only two cases in which the reaction described by Guo was negative in the presence of syphilis

Indian Medical Gazette

Calcutta vol 73 April 1938

Present Position of Opium smoking Habit in India —R N Chopra and G S Chopra
Incidence of Rheumatic Infection in India —V Mangalik and H Stott
Subcutaneous Nodule of Rheumatism —P Golferkeri
Bacteriophage Treatment of Dysentery in Private Patient —M O C none
Herpes Zoster Therapeutic Experiments with Tissue Lysate —P Mukherjee and L Ghosh
Renal Ectopia —V Kaikini
Treatment of Splenomegaly by Milk Injections —C Pasricha and G Chopra
Modified Technique for Phleric Evulsion —R Viswanathan
Typhoid Fever presenting Unusual Features —P Karamchandani and C Mehr
Pseudo-malignant Tumour of Ileo-cæcal Region —M Kini
Case of Jejunal Diverticulosis —V Nath
Case of Breast Cancer in a Male —A Dey
Gastric Cancer in Girl of 19 —A Chandra Dey
Conditioned Reflexes —S Bhatia

Rheumatic Infection—Acute and flagrantly active phases of the disease are conspicuously rare in India The type usually seen is a mild and chronic form with vague pains in joints and tendons Valvular disease of the heart of rheumatic origin seems fairly common when compared with the rarity of other manifestations of rheumatism pericardial involvement is rare The association of infected tonsils with valvular disease is too common to be ignored as an aetiological factor

Herpes Zoster—Forty cases of this disease have been treated with hypodermic injections of tissue lysate prepared from the herpetic vesicles there has been uniform success in relieving pain and lowering the duration of the disease The preparation of the tissue lysate is simple and it would be possible to prepare it on a commercial scale

Splenomegaly—The results of the treatment of a series of 100 patients suffering from splenomegaly not due to kala azar with injections of skimmed sterilized milk are recorded There was a marked reduction in the size of the spleen in approximately 50 per cent of the patients treated Intramuscular injection gave better results than intracutaneous injection.

Journal of the American Medical Association

Chicago vol 110 May 7 1938

Endocrinology and Understanding and Treatment of the Exceptional Child —L S Kinne
Management of Septic Patient with Otitis Media —J H Maxwell
Sulphanilamide in Treatment of Genitourinary Tuberculosis —I Thompson
Sulphanilamide in Treatment of Gonorrhœal Vulvovaginitis —S Hoffman M Schneider M Batt and R D Herrold
Carbon Dioxide Breathing Six Cases —S T Gorby and M Trumper
Treatment of Undulant Fever with Sulphanilamide —R Stern and K Blake
Nerve Effects in Human Beings —C M Cord E Teal and W Wiberding

Klinische Wochenschrift

Berlin vol 17 May 1938

Paradoxical Neutralization of Natural Vasomotor Stimulants —E Weber
Sex Specific Effects of Male Testicular Hormones —W H Veil and O Lippes
Effect on Suprarenals of Prolonged Oral Administration of Small Doses of Cellular Hormone —M Dirnhofer
New Method for Qualitative and Quantitative Determination of Corpus Luteum Hormone —J J Dusyenova and Wit
Acid Cover of Skin and Antibacterial Protection I —A Marchionini and W Hauschecht
Influence of Alarm Reaction and Histamine Therapy on Water Metabolism in Renal Lesions —H Selye
Influence of Strychnine Stimulation on Acetylcholine Control of Nervous System Neutralization of this Substance by Dial —J Feiger H Kowarzyk and Z Lelow Lachowicz
Blood Pressure and Blood Sugar Studies on Rabbits with Grafted Pituitary Glands —E Klin and A von Domanski
Recovery from Embolism of Abdominal Aorta —F Grant
Reticuloendothelial System and Iron Metabolism —G Barkan
Conditions governing Withdrawal of Right to Practise Medicine —H Muller Schoites

Acid Cover of Skin—Measurements of the *p*H of the skin of different parts of the body revealed that the skin is covered with an acid layer formed by sweat the acid reaction preserves the skin against bacterial infection But in some parts of the body the reaction is neutral or even alkaline This is the case in the axillae genito-crural and anal regions interdigital spaces of the feet and some parts of the sole these parts are liable to bacterial or mycotic infection

Lancet

London vol 234 May 7 1938

Surgical Treatment of Detachment of Retina —J Cole Marshall
Diet and Internal Treatment in Skin Diseases —F F Hellier
Anorexia Nervosa with Special Reference to Carbohydrate Metabolism —C W Ross
Peripheral Neuritis associated with Pyloric Stenosis and Vitamin B Deficiency —L P L Laurent and H M Sinclair
Treatment of Bubo with Sulphanilamide —A Hutchison
Hypertrophic Pyloric Stenosis in One of Univitelline Twins —W Shelton

Detached Retina—After describing the modifications which have followed Gonin's employment of cauterization Cole Marshall states that he prefers diathermy coagulation combined with electrolysis for drainage The technique is given in detail Two typical cases are reported the tears and the post operative scars being illustrated

Anorexia Nervosa—A severe case is described in a girl aged 12 the carbohydrate metabolism was investigated in detail Dietetic treatment was effectively supplemented by liver therapy The view of a pituitary causation is not favoured a psychogenic abstinence is thought to be followed by physiological impairment of glucose tolerance a falling alimentary hypoglycæmia and impaired gastric tonicity

Medical Journal of Australia

Sydney vol 1 April 23 1938

Public Health Legislation's Evolution in South Australia —A R Southwood
Concoction of Spirits from Time of Galen onwards —E F Gartrell
Indications for Blood Transfusion —E I Wood
Observations on Morbidity in Tropical and Subtropical Queensland —A H Baldwin
Indications for Interference during Labour —A M Wilson

Medizinische Klinik

Berlin vol 34 May 6 1938

Otitis Externa—H Loebell
Eye Injuries through Accident—Kriepsmann
Menopausal Genital Affections—W Benthin
Backache in Females—W W Bauer
Treatment of Puerperal Infections with Intravenous Animal Carbon—R Kohler
Practical Hints on Diphtheria—K Srnetz
*Treatment of Polycythaemia with Diet Poor in Albumin—J Losch
Tyrometric Estimation of Sugar in Blood Serum Cerebrospinal Fluid and Urine in General Practice—J W Wirtz and H Krelle
Recognition of Malingerers—P Reckzeh
Causation and Diagnosis of Cardiac Infarction—J A M Kimbers

Polycythaemia—By means of a diet practically devoid of animal albumin it was possible to reduce the red blood corpuscles in the different types of polycythaemia by one to two millions during the first week of treatment After not more than two and a half months the red cell count came down to five millions The haemoglobin decreased to 100 to 110 per cent much more slowly The general condition of the patients remained excellent but the spleen was still enlarged and the blood pressure and leucocytic count were unchanged A return to a normal diet gave rise to polycythaemia again but it was possible to keep the condition within bounds by means of a partially restricted diet

Medizinische Welt

Berlin vol 12 May 7 1938

Differential Diagnosis of Inflammatory Phimosis—A Stuhmer
Diagnosis of Diseases of Heart Valves in Adolescents—L Bolzer and H Vogt
Pathology Physiology and Therapy of Headache—K Weidner
Active Diphtheria Immunization—C Radmann and L Bauer
Malignant Diphtheria—A Sossinka Lachmann
Doctor and Herbalist—W Lenz
Vasomotive Disturbances treated with Uzarin—H Schlothane

Munchener Medizinische Wochenschrift

Munich vol 85 May 6 1938

German or Jewish Psychotherapy—K Himmelman
Healing in Rickets—E Thomas
Infant Feeding—E Maurer
Wasted Human Milk Wasted National Health—L Walther
Pertussis and Bronchitis treated with Volatile Oil Percutaneously—A Erkens
Calcium Treatment of Trichinosis—C Sogemeier
Electrodes in Short wave Therapy—E Schliephake
Organization of Medical Maintenance Bureau—W Miemietz

Nature

London vol 141 May 7 1938

Ethical Declaration for the Times—L L White
More Discoveries of *Australopithecus*—R Broom
Colorimetric Estimation of Nicotinic Acid in Foodstuffs—M Swaminathan
Effect of Succinic Acid on Respiration of Normal Human Muscle and Various Myopathies—F J Stare E S Gordon and M J Musser
Vitamin B_1 and Cocarboxylase—S Ochoa
Absorption of Growth promoting Substances by Cuttings—T H Jackson

New England Journal of Medicine

Boston vol 218 May 5 1938

*Sulphanilamide in Treatment of Acute Gonococcal Urethritis—W W Spink and E A Gaston
Cerebral Asphyxia during Nitrous Oxide and Oxygen Anaesthesia—J D Stewart
Immediate Flap Grafts following Trauma—H F Day
Progress in Study of Cardiovascular Disease in 1936—S McGinn

Sulphanilamide in Gonococcal Urethritis—Of twenty two men with gonorrhoea treated with 4 grammes of sulphanilamide daily for from ten to twenty days eleven were declared cured in from four to seven weeks Studies of the blood indicated that the drug does not affect the gonococcal complement fixation test or serological tests for syphilis Sulphanilamide increased the bactericidal powers of the patients blood against two strains of gonococci this increase was noted only while the drug was being administered

Nordisk Medicinsk Tidskrift

Stockholm vol 15 May 7 1938

Experimental Investigations of Effect of Ultra short Waves on Blood Vessels of Frog with Special Reference to an Eventual Specific-electric Action—K Kalbak
Vitamin Supply of Norwegian Ship Wintering in Greenland—A Hojer and H W Rasmussen
War Ampoule with Silver Salt Solutions for Credé Prophylaxis—H Wolff

Policlinico

Rome vol 45 May 2 1938 (Sez Prat)

Significance of Uckos Reaction and Postprandial Blood Amino-acids in Pulmonary Tuberculosis—A Rubino
*Sulphanilamide Treatment of Acute and Chronic Gonorrhoea in Males—V Tommasi
Glucose Content of Cerebrospinal Fluid in Insulin Shock Therapy of Schizophrenia—M Fischer

Sulphanilamide in Acute and Chronic Gonorrhoea—Tommasi had good results in fifty three acute and thirty chronic cases lavage being sometimes undertaken as well In five of fifty three acute cases streptosil was not tolerated in five others and in four of the thirty chronic cases it was ineffective The importance of abstention from administration of other drugs at the same time is stressed

Presse Medicale

Paris vol 46 May 4 1938

Hypercreatinaemia—L Cornil D Olmer I Dunan and J Vague
Part played by Sympathetic in Trauma of Face and Fractures of Jaw-bones—M Dechaume
Experimental Hyperthermia—M Burstein

Paris vol 46 May 7 1938

*Slow Continuous Intravenous Insulin in Diabetics—A Baudouin J Lewy and E Azérad
Inflammatory Reactions in Pulmonary Tuberculosis—R Bonda and H Mallet
*Vitamin C Exchange between Mother and Foetus—W Neuweiler and J Hubscher

Intravenous Insulin—The authors give an account of their experiences in treating diabetes with continuous intravenous insulin and claim to have obtained satisfactory results especially in severe or complicated cases (coma, operation infection) Their results would also appear to lend support to the view that in some cases at least diabetes is due to a pluriglandular and not merely to a pancreatic deficiency

Foetal Vitamin C—After an elaborate experimental study of the vitamin C exchange between mother and foetus the authors come to the conclusion that the latter behaves as a parasite and draws from the mother the amount of vitamin C necessary for its requirements This of course entails the possibility of vitamin C deficiency in pregnant and nursing women Moreover the milk of cows and goats contains much less vitamin C than human milk (since these animals can build up this vitamin synthetically) so that neither is a satisfactory substitute for human milk as regards the vitamin C content Lemon orange or grapefruit juice or synthetic vitamin C should therefore be given to make up the deficiency

Schweizerische Medizinische Wochenschrift

Basle vol 68 May 7 1938

Spontaneous Fracture in Circumscribed Tuberculosis of Ulna—C H Gra
*Anatomical and Clinical Features of Forked Clavicle and Coraco-clavicular Articulation—C Henschen
Inflammatory Gastric Granuloma—O Mensis and B Gheiew
Physiopathology of Asthenia—L Laruelle

Forked Clavicle and Coraco clavicular Articulation—Henschen describes two cases of true coraco clavicular articulation discovered accidentally and discusses the phylogenetic and ontogenetic origins of such a condition He classifies the pathological changes which are conceivable or have been recorded both in the true articulation and in the ligamentous articulation with bursa formation between the coracoid process and the clavicle

Science

New York vol 8 May 6 1938

Incidence of Human Botulism—Elizabeth L Hazen
Electrophoresis of Immune Serum—A Tiselius and E A Kabat
Agglutinins for Human Erythrocytes in Type XIV Anti-pneumococcal Horse Serums—M Finland and E C Curnen
Preparation of Pure D Arabinose—S W Fox
Failure of Alfalfa to Prevent Hemorrhagic Sweetclover Disease—W K Smith

South African Medical Journal

Capetown vol 12 April 9 1938

State Medical Service—L Wagner
Years Ago—A District Surgeon
Life Insurance and the Medical Examiner—A Medical Referee
Aplastic Anaemia following X Ray Treatment and Pyramidon Combined—C. D Brink

Ugeskrift for Laeger

Copenhagen vol 100 May 5 1938

Weakness of Labour Pains—P Kuhnel
Studies in Pneumonia Neufeld's Capsule Reaction for Pneumococcus Type Determination—N I Nissen and B Vamvinen
Fifty three Cases with Transitory (Non-specific) Marked Wassermann Reactions—P Krag and A Lorberg
Aspiration of Bronchi—V Schmidt
Cystic Ulcerosa treated with Citrin and Ascorbic Acid—S Thomsen and C E. Zatho

Pneumonia—These studies conducted at the State Serum Institute in Copenhagen and the Sundby Hospital concern the sputa of 336 patients suffering from acute diseases of the lungs The direct microscopic type determination of pneumococci with the aid of Neufeld's capsule reaction was found to be very reliable and useful particularly in cases with rusty sputum when the type could usually be determined in five to fifteen minutes This procedure is therefore of importance as simplifying the technique of the serum treatment of croupous pneumonia

Wiener Klinische Wochenschrift

Vienna vol 51 May 6 1938

Hyperglycaemic Shock—W Borchick
Introductory Communication on Malarial Treatment of 100 Paralytics—C Lucerth and C Pal
Follicular Hormone Treatment of Puerperal Endometritis with Hyperthermia—E Engelhart
Freund's Diet as a Necessary Measure in the Treatment of Cancer—R Bayer
Intracutaneous Examination of Alkali Reserve—R v Leszczynski and E F Ilk
Blood Diseases and the Eye—W Kreibig
How do Diathermy and Short wave Therapy differ from other Forms of Heat Therapy?—J Kowarschik

Wiener Medizinische Wochenschrift

Vienna vol 88 May 7 1938

Fight against Diphtheria and Scarlet Fever in Town and Country—J Seel
Nasal Bleeding and Internal Medicine—F Frenkel
Light and Ray Therapy in Skin Diseases in General Practice—J Konrad
Therapy of Gonorrhoea in Females—R Hofstatter

Diphtheria and Scarlet Fever—In diphtheria the isolation of patients and carriers is recommended as well as the increased application of active immunization In scarlet fever isolation for not less than six weeks in cases free from complications residence in decontamination wards for the same period before going home and the isolation of contacts are important Active immunization with a combined vaccine of scarlatinal streptococci and scarlatinal toxoid has not yet been introduced as a routine practice The prophylactic use of passive immunization by means of serum in diphtheria and scarlet fever should be reserved for special individual cases or for children's departments and wards

SPECIAL JOURNALS

Acta Pathologica et Microbiologica Scandinavica

Copenhagen vol 15 Fasc 1 1938

Peculiar Type of Hemolysis Produced by *Staphylococcus aureus*—T P Kjeldgaard
Studies on Finer Structure of Uterine Blood Vessels of Macacus Monkey—H Okkels and E T Engel
Further Studies on a Transmissible Myeloid Leukosis in White Mice II—H C Ramussen and R Rask Nielsen
Tuberculosis in Axillary Lymph Glands—S Hertz
Studies in Staphylococci VI What Role do Staphylococcus Lysins play in the Rabbit Blood Corpuscles and its Anti-lysin in Staphylococcus Infection in Human Beings?—J Forssman
Morphology of Normal Thyroid Glands I Thyroid in the Newborn—E Koch

Staphylococci—Throughout recent studies of active immunization with staphylococcus toxoid treatment has been controlled and its effect estimated by the titration of anti haemolysin in the patient's blood the red cells used in such tests being rabbits Forssman protests strongly against the validity of this method the only recommendation for which is the fact that the susceptibility of rabbits cells to lysin is more constant than that found in other species He not only finds that the lytic capacity of staphylococcus cultures for rabbit and human red cells does not correspond but claims to have proved that the lysins acting on them are different substances This assertion is based on experiments showing that large amounts of lysin for rabbits cells may be formed in a culture containing only a minimal amount of lysin for human cells and on the results of fixation tests in which the human lysin was absorbed leaving the rabbit lysin The anti lysin for rabbits cells must therefore be considered an antibody unrelated to immunity in the human being and it is not surprising that as numerous clinical observations have shown it can be developed in large amount without corresponding clinical improvement Forssman concludes by saying in making this anti lysin content the basis of an estimation of the therapeutic value of sera intended for human therapy we have in my opinion gone astray and the sooner we get back to the proper path the better

Acta Tuberculosea Scandinavica

Copenhagen vol 10 Fasc 1 1938

Few Cases of Serosis of Larger Bronchi in Pulmonary Tuberculosis—E Sandvej
Mass Investigations into Tuberculosis in Two Norwegian Forest Districts—C Heimbeck
Pleural Effusions and Pleural Adhesions—H Myhre

Mass Investigations in Norway—In one district the author succeeded in examining about 60 per cent of 6 000 inhabitants In each individual a full medical and personal history was obtained and a tuberculin test carried out In those cases showing a positive tuberculin reaction the blood sedimentation rate was determined and the chest screened Films were taken only of those in whom the last examination indicated something abnormal or in those otherwise suspect In the second district the procedure was different The individuals were first screened If any abnormality was detected or the history was unsatisfactory the sedimentation rate was determined a physical examination carried out and when necessary a film taken Of 7 400 inhabitants about 50 per cent submitted to the screening Using the first procedure the author was able to investigate fully about 400 persons a week In the second district he was able to screen about 1 000 people a week Of the 5 760 persons investigated 1.2 per cent were found to suffer from tuberculosis hitherto undetected, requiring active treatment

Pleural Adhesions—In this investigation the radiological pleural appearances were analysed in relation to the possibility

of inducing a pneumothorax In thirty four patients with a previous pleurisy induction was successful in a few cases only In thirty-one patients with an obliterated costo phrenic sinus (whether or not previous pleurisy was known) and in sixteen showing a distinct pleural line a satisfactory pneumothorax was never obtained In eighty patients with one to three single pleural spikes at the apex induction of a pneumothorax was nearly always possible adhesions corresponding to these spikes being generally divisible but adhesions were often present in other situations in addition The results in this group were far better than in a group of 107 patients showing no signs of pleural involvement but with diseased parts of the lung extending to the chest wall In fifty patients with no signs of pleural involvement and no extension of disease to the chest wall a pneumothorax was obtained in every case

American Journal of Cancer

Lancaster Pennsylvania vol 32 April 1938

Comparative Study of Reducing Substance (so-called Glutathione) of Blood in Normal Malignant and Non malignant Conditions —Arnold E Osterberg Robert J Coffey J Arnold Bargen and Claude F Dixon
Studies on Exchange of Potassium between Tumour Cell and Medium —Arthur Lasnitzki
Epidermoid Carcinoma in Osteomyelitis Case Report —J H Harrison
*Sarcoma Development in Mice Injected with Hormones or Hormone like Substances —E L Burns V Suntzeff and Leo Loeb
Transplantable Uterine Rat Sarcoma of 100 per cent Transmissibility —Joseph A Polin
Sarcoma Formation in Autologous Graft of Mammary Tissue —Albert Fischer
Respiratory Quotients of Normal and Leukaemic Mouse Lymphoid Tissue —Joseph Victor and James S Potter
Ability of Tumour Tissue to Oxidize Fatty Acids *in vitro* —Enrico Granati
*Comparative Effect of 200 kV X Rays and Gamma Rays on Pupae of *Drosophila melanogaster* I Determination of Equivalent Roentgen Value for Gamma Rays II Summation Experiments with X Rays and Gamma Rays —J H Muller

Sarcoma following Hormone Injections—Sarcomata were found in ten out of 247 mice injected repeatedly with various hormone preparations eight of the mice had oestrogenic hormones one had lutein and proluton and one liver extract All the tumours save one were at or near the sites of the injections The authors are uncertain whether mechanical injury or a more specific chemical effect was responsible They contrast the sarcoma-producing action with the specific effects of the oestrogenic hormones on the breast and genital tract and with the action of the carcinogenic hydrocarbons and discuss various degrees of specificity in carcinogenic processes

Effect of X Rays and Gamma Rays on Drosophila Pupae — Drosophila pupae were used as test objects in the determination of an equivalent roentgen value for gamma rays No difference was found between the actions of 200 kV x rays and gamma rays on the pupae and the summation of the effects of the two radiations was complete The incomplete summation of effects on the skin erythema threshold is attributed to a qualitative dependence of the skin erythema upon the wave length of the radiation It seems that there are differences in the therapeutic actions of 200 kV x rays supervoltage x rays and gamma radiations which are not satisfactorily accounted for by physical and geometrical factors of dosage distribution

American Journal of Diseases of Children

Chicago vol 55 April 1938

Acute Laryngo tracheobronchitis —J Brennemann W M Clifton A Frank and P Holinger
Tonic Neck Reflexes in Children in Prognosis —R L Byers
*Hysterical Blindness in Children Two Cases —E Wolfe and G S Lachman
Nutritional Heart Disease in Children —J I Waring
Congenital Heart Disease Clinical and Post mortem Study of 105 Cases —S Gibson and W M Clifton
Prophylaxis against Measles with Globulin Fraction of Immune Human Adult Serum —S Karelitz
Hemoglobin Differences in Healthy White and Negro Infants —B Mundey M L Shepherd L Emerson B M Hamil M W Poole I G Macy and T E Rutford

Hysterical Blindness—Two cases are reported and both had many features in common An emotional upset was the starting point in each and was the death of a beloved close relative in one case and the marriage of a brother in the second In each instance there was a loss of affection and attention and both children also had witnessed the special interest given to a friend who had trouble with her eyes Recovery in each case was rapid One was admitted to hospital where the change from home together with encouragement effected a cure in two weeks The second case was cured almost at once in the course of a visit to the physician

Measles Prophylaxis—The globulins were removed from adult serum and prepared in a volume of one sixth to one tenth of the original volume of the serum The use of the serum in preventing measles in those susceptible has been most successful and has the advantage that the amount injected is small The serum can be prepared in any well equipped hospital laboratory and there is less danger of infecting a child with syphilis or tuberculosis There are few reactions and the results are good The serum keeps well without loss of potency

American Journal of Ophthalmology

St Louis Missouri vol 21 April 1938

*Birth Injuries of Cornea —R I Lloyd
Problem of Ocular Tuberculosis —A C Woods
Leber's Disease —J E Rauf and H L Barr
Flicker Perimetry —L L Mayer and I C Sherman
Essential Cardiovascular Hypertension —F T Tooke and J V V Nicholl
Microsurgery in Simple Glaucoma —O Barkan
Trachoma in American Samoa —F Harbert
Cyst of Posterior Chamber —E F Krug
Gonorrhoeal Ophthalmia —J C Geiger and R W Burlingame
Prophylactic for Ophthalmia Neonatorum —V C Rambo
Transparent Exophthalmometer —W H Luedde

Birth Injuries—These injuries are caused by forceps and also by natural delivery, especially where there is some deformity of the pelvic cavity The resulting lesions include glassy rods of Descemet's membrane, glassy membranes in the anterior chamber, and inflammatory strands on the posterior aspect of the cornea Several cases are described in detail Because left occipito anterior presentations are commonest the left eye is most often injured

American Journal of Roentgenology and Radium Therapy

Springfield Illinois vol 39 April 1938

The Laminograph and its Variations —J Kieffer
Body section Roentgenography with Laminograph —S Moore
Ventricular Changes caused by Proved Tumours of Brain —R S Stone and F J Schulze
Roentgen Study of Skull in Epilepsy —H Chor and E E Barth
Historical Review of Roentgen Studies of Gall bladder and Newer Contrast Media of Diagnostic Criteria —L J Friedman and P S Friedman
Aqueous Preparations to Supplant Oil in Roentgenography —H Lilienthal
Benign Bone Lesions showing Spindle-cell Invasion of Bone —J T Murphy
Roentgen Therapy of Infections of Nasal Accessory Sinuses —F M Hodges
*Roentgen Therapy in Angina Pectoris —M G Wasch and S G Schenck
Dosage Chart for Interstitial Radium Element Needles —L A Pomeroy
Healing of Gastric Ulcer with Persistence of Niche —A S Unger and M H Poppel
Boeck's Sarcoid —F J Eichenlaub and I L Sandler
Qualitative Changes in Formed Elements of Blood following Therapeutic Irradiation —K Kornblum V Boerner and S G Henderson
Differences in Relative Action of Neutrons and Roentgen Rays on Closely Related Tissues —R E Zirkle and I Lampe
Secondary Radiation Intensity as a Function of Certain Geometrical Variables —H E Seemann
Spatial Distribution of Radiation from a Supervoltage Roentgen Tube II —K E Corrigan B Cassen and H S Hayden

Tomography—The laminograph tomograph or planigraph a device for the radiographic presentation of sections of the body is described and its principle explained The effects of the various motions on the resulting radiographs and on the exposure time are discussed Circular and spiral motions are advocated for the elimination of troublesome superimposed shadows and a special type of spiral motion well suited for that purpose is described A method for obtaining transverse radiographic sections and a system of planiradioscopy are also discussed The importance of the method in diagnosis and in therapy is stressed

Angina Pectoris—Sixty five patients with angina pectoris not relieved by ordinary medical treatment had x ray treatment applied to the cervico-dorsal and adjacent paravertebral region 68 per cent were improved as shown by reduction in the number severity and duration of the attacks The theory of the action of the x rays is discussed The results are more favourable in angiospastic cases than in those with advanced arteriosclerosis or coronary thrombosis

American Review of Tuberculosis

Baltimore vol 37 April 1938

Functional Test in Chronic Pulmonary Disease—B H Schlomowitz A F Thompson and L G Glickman
Tuberculosis of Gums and Cheek—G G Martin and S W Koepf
Thrombosis of Pulmonary Artery—J F Pugh and R Charr
Tuberculosis of Cervical Lymph Nodes—R C Thompson
Bilateral Phrenic nerve Interruption in Pulmonary Tuberculosis—R V Cohen and G Weiauer
Sex Differences in Tuberculosis Mortality in United States—C C Dauer
Influence of Sunlight on Experimental Tuberculosis—A C Ukil and S R Guha Thakurtha

Functional Test—This test depends on the fact that in the healthy person the level of oxygen intake returns to a resting level within six minutes of the completion of moderate exercise The excess oxygen used in this period per square metre of the body surface is comparable in different persons The authors describe the use and results of the test in silicosis and in emphysema and in the same conditions complicated by cardiovascular disease

Tuberculous Lymph Nodes—A series of 5000 successive patients attending the tuberculosis dispensary at the Henry Phipps Institute during the years 1923 to 1927 was studied to determine the incidence of tuberculosis of peripheral lymph nodes Results were compared with the records of 1000 successive patients attending the same clinic in the year 1907 The incidence of both active and obsolete tuberculosis was approximately the same in both series The author therefore concludes that a lapse of thirty years has apparently not changed the relationship between glandular and pulmonary tuberculosis

Annales d'Anatomie Pathologique

Paris vol 15 April 1938

Chronic Epithelial Nephritis and Bence Jones Proteinuria—P Vuillemier
Morbid Anatomy of Scarlet Fever associated with Ulcerative Angina in Children with Special Reference to Lesions of Nervous System—V Anghelesco S Fasie and T Pienaru-Cernpanitz
Cranial Internal Meniscus of Knee—L Marchand and H L Guibert
Lymphatics of Pylorus Part of Stomach—C Rohlich
Primary Tuberculosis of Glans Penis (Tuberculous Chancre)—J Brunat
Morphological Studies of Hypercrinia Inflammation in Muscle Atrophic from Inactivity Relation to Participation of Nervous System in Allergic Reactions—J M Lasovsky and D N Wyssokowitsch

Neurology of Allergy—The authors rendered leg muscles in rabbits atrophic by one of two methods—section of the nerve or section of the tendons The animals were then sensitized to horse serum and given an injection of the serum into the atrophic muscle When atrophy had been produced by section of the nerve the usual allergic inflammatory response failed to occur whereas in muscles of which only the tendons had been severed it developed as in normal muscle These observations are said to support the belief that the nervous system takes part in the allergic reaction they are also used in an argument dealing with the nature of muscular atrophy and a supposed misconception of its mode of causation in nerve lesions

Annales de Medecine

Paris vol 43 April 1938

Action of Repeated Insulin Injections on Structure and Function of Langerhans Tissue—E Aubertin A Lacoste and R Sarre
Interdependence of Circulation in Periphery Kidneys and Spleen—M Bürger and D Kohler
Influence of Collateral Circulation in Cases of Cirrhosis on Balance of Glucose Ammonia and Amino-acids in Peripheral Blood after Injection of these Substances—R Martens
Selective Test of Pulmonary Artery Function Estimation of Blood Gases in Lung Diseases—A Oschacki

Repeated Insulin Injections—Repeated insulin injections in five dogs caused an increase in the insulin content of the pancreas and of the dog per kg to a degree higher than that found in a normal dog but lower than that of fasting animals The glucose tolerance curves obtained after injection show that for clinical purposes it is neither possible nor necessary completely and constantly to suppress slight periods of hyperglycæmia at night It is sufficient to regulate the insulin dosage near to a point approximating to that of full regulation

Annals of Tropical Medicine and Parasitology

Liverpool vol 32 April 8 1938

Treatment of Malaria Study of Therapeutics and Prophylaxis of Malaria by Synthetic Drugs as compared with Quinine—League of Nations Health Organisation
Mouth Parts of Female *Simulium damnosum* Theobald with Special Reference to Transformation of *Onchocerca volvulus* Leuckart—E G Gibbins
Notes on Ethiopian Simuliidæ II—E G Gibbins
Latent Stage of Rabies Virus in a Vampire Bat—J L Pawan
Preservation for Records of Blood Films in Tropics—D B Blacklock
Observations on Respiratory Metabolism of Malaria Parasites and Trypanosomes—S Richard Christophers and J D Fulton
Influence Effect of Drugs upon Oxygen Uptake Trypanosomes (*Trypanosoma brucei*) and Malaria Parasites (*Plasmodium knowlesi*)—S Richard Christophers and J D Fulton
Studies in Chemotherapy XVII Action of Undecane Diamidine in Malaria—F Gill Hughes E M Lourie and W Yorke

Respiratory Metabolism of Malaria Parasites and Trypanosomes—Normal or arsenic resistant strains of trypanosomes in the presence of glucose take up large quantities of oxygen Even in the presence of glucose the process becomes gradually inhibited by a reduction in *p*H while deprived of glucose trypanosomes rapidly die Oxygen uptake by malaria parasite substance continues steadily for long periods even in the absence of glucose In a medium containing malaria parasite substance there is considerable consumption of oxygen an approximately equal output of carbon dioxide haemoglobin is altered non protein nitrogen is increased there is no acid formation comparable to that produced by trypanosomes and there is no detectable increase in ammonia the serum appears to play little part in providing the requirements of oxygen uptake and the parasite can readily take oxygen from the oxyhaemoglobin of the cell

Effect of Drugs—Certain drugs cause inhibition of the oxygen uptake in both trypanosomes and malaria parasites The effect is to some degree parallel to therapeutic effect and may be related to it oxygen uptake estimations might constitute a delicate means of studying *in vitro* the lethal action of drugs

Undecane Diamidine—Undecane 1 11 diamidine an experimental trypanocidal substance the formula of which differs entirely from that of any known anti malarial drug was found to have a very definite but temporary action in induced benign tertian and quartan malaria

Archiv für Kinderheilkunde

Stuttgart vol 113 April 14 1938

Adipose nevus Subcutanea Neonatorum—R Zeller
History and Pathogenesis of Adipo-necrosis Subcutanea Neonatorum—O Grutz
Acute Middle ear Disease in Children—J Scheideler
Sugar Content in Cerebrospinal Fluid of Child with Special Reference to Influence of Glycolysis Ferments—B Rimele
New Contributions to Infantile Acrodynia—E Mayerhofer and B Dragisu

Acute Otitis Media—Scheideler's paper underlines three factors (1) the hereditary factor is at least as important as the anatomical in the production of the condition (2) in influenzal otitis it is of importance for prognosis and treatment to distinguish between primary otitis in which the infection

is conveyed by the blood stream and secondary otitis in which infection takes place through the Eustachian tube (3) a rise of temperature is the rule not the exception in otitis media of childhood

Archives of Otolaryngology

Chicago vol 27 April 1938

Facial Palsy of Otitic Origin—A H Persky
Development of Otic Capsule IV Fossula Post Fenestram—T H Bast
Vasomotor Rhinitis and Allied Conditions treated with Sodium Morrhuate Preliminary Report—I E Fishof
*Continuously Open Eustachian Tube—G E Shambaugh
Inflammatory Bronchial Tumours One Case and Review of Literature—B S Pollak S Cohen and A M Gross
Effects of Drugs on Strix Vasculitis—W P Covell
Differential Diagnosis of Bacterial Meningitis of Aural and Nasal Origin—J C Yaskin
Nasal Ionization Histological and Clinical Evaluation—A R Hollender and S D Fabricant
*Direct Implantation of Free Nerve Grafts between Facial Musculature and Facial Trunk First Case reported—L J Cardwell
Closure of Persistent Post-operative Mastoid Fistula by Subcutaneous Pedunculated Flap—I A Copps and G L McCormick
Lateral Pressure Splint for Nose—V H Kazanjian
Tuberculosis of Upper Respiratory Tract Summaries of Literature of Past Two Years—G B Wood

Open Eustachian Tube—The continuously open Eustachian tube although a rare condition is a very definite clinical entity not often described in textbooks It occurs in emaciated patients and is then due to the absorption of a pad of fat normally surrounding the cartilaginous end of the tube (Bezold) Shambaugh has found that other factors may enter into the aetiology of the condition—for example scar contraction in Rosenmuller's fossa after the removal of adenoids or after irradiation of the nasopharynx for carcinoma The treatment consists in the insufflation of a powder composed of 1 part of salicylic acid and 4 parts of boric acid into the Eustachian tube

Free Nerve Grafts—The removal of a parotid tumour necessitated the cutting of the facial nerve trunk and of all the peripheral branches leaving a gap of 6 cm The trunk and branches were marked with black silk Three days later the wound was reopened and free nerve grafts taken from the lateral cutaneous nerve of the thigh and the anterior cutaneous branches of the femoral nerve were transplanted between the freshened edge of the stump of the facial nerve and the peripheral twigs Six months later there was still complete facial paralysis but twelve months after the operation the paralysis had completely recovered except in the forehead area

Archives of Pathology

Chicago vol 25 April 1938

Cardiac Contusion Experimental and Pathological Study—A R Moritz and J P Atkins
Typing of Blood and Seminal Stains by Absorption Test—K E Landé
*Capillary Rupture with Intimal Haemorrhage as Causative Factor in Coronary Thrombosis—J C Paterson
Effect of Certain Arsenates on Liver—W C Von Glahn F B Flinn and W F Keim jun
Effect of 1 2 5 6-Dibenzanthracene on Spindle cell Sarcoma of Rat—F A McJunkin and W Wolnyk
Fate of Erythrocytes and Granulocytes in Spleen following Injection into Blood Stream—H Wehrle
Haemochromatosis with Primary Carcinoma of Liver—C H Binford R L Lawrence and H L Wollenweber
Primary Endothelioma of Spleen—S B Biller
Role of Vitamin B in Resistance—D Perla

Causation of Coronary Thrombosis—The immediate cause thrombosis in atheromatous coronary vessels is unsettled aterson presents evidence that its cause is often the rupture of the intima of capillaries derived from the lumen, owing presumably to softening by atheroma of the supporting stroma and to a high pressure in the capillaries Intimal haemorrhage was demonstrable histologically in thirty two out of thirty-seven thrombosed coronary arteries, and reasons are given for regarding this haemorrhage as the primary event and responsible for the subsequent change in the lumen Intimal haemorrhage was also sometimes found in the absence of thrombosis some other factor must therefore be concerned and it is suggested that this may be stenosis

Australian and New Zealand Journal of Surgery

Sydney vol 7 January 1938

*Hydatid Cysts involving Dome of Liver—L Burnett
Ischæmia—A V Mc Iver
Experimental Observations on Increased Intracranial Pressure—R D Wright
Surgical Treatment of Detachment of Retina—W H Robertson
Hernia and its Operative Treatment—B Quick

Hydatid Cysts—A review of the complications associated with old standing hydatid infection of the liver The methods of surgical treatment are contrasted

British Journal of Anæsthesia

Manchester vol 15 April 1938

Death on the Table Address to Students—G Edwards
Nembutal-chloral Narcosis in Childbirth—F B Mallinson
*Three Disturbing Cases of Spinal Anæsthesia administered according to Etherington Wilson Technique—C W H van der Post
Carbonized Ether for Anæsthesia—K E Madan

Etherington Wilson Technique—The use of percaine, 1 in 1 500 by the Etherington Wilson method was followed in three cases by serious collapse two of the patients died Two operations were Caesarean sections with one death the third was for ectopic gestation The author questions the safety of the method and the accuracy of the figures for the specific gravity of the cerebrospinal fluid and for the diffusion rates of injected fluids on which it is based

British Journal of Ophthalmology

London vol 12 April 1938

*Value of Orthoptic Training—Frank W Law
*Sodium and Mercury Vapour Lamps in Ophthalmology—A J Ballantyne
Histology of Bowman's Membrane in Glaucoma—Graeme Talbot
Exfoliation of Lens Capsule in Glaucoma—Alexander Garrow

Orthoptic Training—The assessment of the value of this treatment depends upon the definition of a cure The author considers that in some cases a good cosmetic result is sufficient some patients only require a moderate degree of fusion and to aim at a good stereopsis is to aim too high Judged on this standard one third of ninety one unselected cases were cured without orthoptic training Further orthoptic training succeeded in curing less than half the cases The greatest disappointment occurred in cases of abnormal retinal correspondence where only three out of fourteen cases were cured by orthoptic training It is suggested that more squints than is generally supposed can be cured by glasses with or without occlusion Only cases in which this treatment has failed should be referred for orthoptic training when a further selection bearing in mind the end result desired is necessary The results of orthoptic training have previously been described too optimistically in the medical press

Sodium and Mercury Vapour Lamps—Lamps suitable for use with a reflecting ophthalmoscope are now available and show up the finest details in the retinal vascular system The mercury vapour light emphasizes the surface reflexes of the retina while these are eliminated by the sodium light which gives a clearer view of changes in the choroid and the deeper layers of the retina

British Journal of Radiology

London vol 11 April 1938

Urography in Pregnancy—E Rohan Williams
Lipiodol in Localization of Spinal Tumours—H M Worth
*Further Observation on Familial Multilocular Cystic Disease of the Jaws—W A Jones
Observations on Cases of Suprarenal Tumour—M H Jupe
Dosage System for Interstitial Radium Therapy I—R Paterson and H M Parker

Effect of X Rays on Trypanosome —Prof L Halberstaedter
Model of Radium Unit for Measuring Dosage and Planning Treatments —L C Grimmett

Familial Multilocular Cystic Disease of the Jaws—The condition described is one of multiple dentigerous cysts occurring throughout both the upper and lower jaws and accompanied by a chronic hyperplasia of the submaxillary lymph glands It usually becomes apparent towards the end of the second year of life The paper is illustrated by radiographs and photographs of several members of one family

British Journal of Surgery

Bristol vol 25 April 1938

Evolution and Development of Surgical Instruments —C J S Thompson
Paralysis of Bladder and Neurological Sequelae of Spinal Anaesthesia —J R Fergusson and K Watkins
Carcinoma of Small Intestine —W J Mac C Wheeler
Exstrophy Associated with Hypertrophy and Cleft Palate —M C Ogden
Chronic Lymphoedema —E D Telford and H T Stimson
Dislocations and Fractured Dislocations of Pelvis —R W Jones
Pathology of Struma Nodulosa Thyroidea —A M Boyd
Fifty-three Cases of Vesical Diverticula —R O Ward
Operation and Obturator for Cleft Palate —R R Fitzgerald
Clinical Course and Pathology of Burns and Scalds under Modern Treatment —W C Wilson A R Mansfield and C P Stewart
Osteochondroma of Ear —E H A Parkinson and S L Baker
Cirsoid Aneurysm of Scalp —F Rundle
Experimental Investigation of Cause of Pain following Spinal Anaesthesia —A D Macdonald and H K Watkins
Nervous Control of Gastric Secretion —T S Hewer
Nervous Factor in Traumatic Shock —D Slesinger and L O'S Austin

Post-spinal Vesical Paralysis—This is an analysis of fourteen cases of this complication The authors are forced to the conclusion that the toxicity of the spinal anaesthetic used—heavy duracaine—is the causative factor Hence they regard this substance as a dangerous anaesthetic

Burns—This article represents a detailed report of the investigation of sixty-five cases Special reference is made to the pathological findings the cause of toxaemia and the optimum method of treatment

British Journal of Venereal Diseases

London vol 14 April 1938

Experimental Contribution to Study of Antisyphilitic Hyperthermia produced by Physical Agencies —J F A Albert-Beckmann
Urethroscopy Study of 600 Cases Patients in a Venereal Disease Hospital —C H Reinhardt W M Brunet and N D Shaw
Cupid and Psyche in English Literature —D Arms Power
Nature and Cause of Phobia with Special Reference to Syphilophobia —J A Hadfield
Syphilitic Epididymitis —A E W McLachlan

Urethroscopy—Reinhardt Brunet and Shaw state that the chief indications for urethroscopy are chronic discharge discomfort in anterior or posterior urethra haemospermia persistent prostatitis premature ejaculation and urethral stricture Essential requirements are careful selection of patients effective anaesthesia gentle instrumentation avoidance of trauma and correct interpretation of what is seen The principal lesions seen in the anterior urethra are soft and hard infiltrations and in the posterior urethra cysts enlarged prostatic ducts congested and enlarged verumontanum and soft and hard infiltrations The technique is described in detail and an account is given of the appearances of the normal urethra and of the most common pathological changes seen It is concluded that the use of the urethroscope is as necessary to physicians who diagnose and treat urological conditions as is the stethoscope to the cardiologist

Syphilitic Epididymitis—McLachlan describes seven cases of syphilitic epididymitis—a comparatively rare lesion three occurred in the secondary and four in the tertiary period In the majority of cases the globus major was involved but the body and globus minor may also be affected The lesions vary in size from that of a pea to that of a large olive and may show tense elasticity or cartilaginous hardness sinus formation may occur Histologically the changes are mainly interstitial and fecundity is not usually affected Diagnosis depends on the exclusion of gonorrhoea tuberculosis cysts and malignant disease concomitant evidence of syphilis—serological or clinical—and possibly demonstration of *Sp pallida* in the epididymal lesion and complete resolution under antispecific treatment Local treatment is symptomatic and consists in support tapping of any hydrocele etc as indicated

Deutsches Archiv für klinische Medizin

Berlin vol 182 April 1938

Renal Chlorosis —A Ruehl and S Thasler
Recurrent Diabetic Coma and Hyperglycaemia Symptoms to be Thought of in Cases of External and Internal Excretion of Pancreas —R Duesberg and H Eichhoff
Pneumococcus Mucosa as Secondary Infection in Bronchopneumonia —M Cukerbeyer
New Investigations in Estimation of Vital Capacity of Lungs in 100 Men and Women —M Resch
Metastases in Bones in Malignant Tumours Results of Sternal Punctures —N Marcoff
Picture in Bone Marrow in Normal and Pathological Conditions —H Keilhack
Myelosis Leukaemia Combined with Tumour like Growth —L Rosenthal
Differential Diagnosis of "Arteriosclerotic Concretion Peri and Circumcorneal by Kymography —F Berger
Chemical and Biological Investigation of Relation between Pituitary and Hypertension —W Berkefeld
Volumetric Estimation of Oxygen in Urine in Renal Disturbances —P Ernst and F V Sachs

Pneumonomycosis Mucorina—A patient developed a prolonged typical rise of temperature after bronchopneumonia fungi were found in the sputum This complication was considered to be possibly due to diabetes Treatment with iodides proved successful as in the only other case previously reported in the literature

Folia Haematologica

Berlin vol 59 1938 Heft 2

Genesis of Red Blood Cells and Platelets in Mammals —J Orkin
Fetal Sternal Punctures in Pulmonary Tuberculosis —F Laberdrix
Hydrogen Ion Concentration Protein in Blood Serum in Myeloma —B v Bonsdorff H Groth and Th Packalen
Occurrence of Erythrocytes Carabae Impregnation with Silver in Experimental Lead Poisoning of Rabbit —M Kawahata and M Nakahara
Influence of Atmospheric Oxygen on Pressure of Carbon with Special Reference to Blood Formation in Embryonic Life —C S Engel
New Treatment of Pernicious Anaemia —J Schereschewsky
Erythropoiesis in Azotaemic Anaemia —S Lewenger
Bibliography of German Haematological Literature (1937) —J Hirschfeld
Bibliography of American Haematological Literature (1937) —O F Hynes

Genesis of Red Cells and Platelets—By the use of a special method of staining and fixation it was shown that the platelets are not derived from the megalokaryocytes It is more likely that they are the nuclei of nucleated red blood cells eliminated at the moment when these cells are leaving the bone marrow By a combination of phenylhydrazine and lead poisoning in mice and rabbits giant platelets are formed which show all the transition stages down to free dislocated nuclei

Blood Serum in Myeloma—Two types of crystals were observed in the serum from cases of myeloma One was found at refrigerator temperature after a few days and was a spontaneous precipitation of boat-shaped rhombic semimorphous protein crystals 2 to 3 mm in length with the richest crystallization in the bottom layer The others occurred at room temperature after ten to fourteen days and were smaller and needle-shaped They were soluble in dilute acids and alkalis at *p*H of from 4·5 to 9 insoluble in water saline alcohol and ether and had a molecular weight of about 200 000 compared with 140 000 to 160 000 for ordinary serum globulins or 40 000 to 70 000 for Bence Jones proteose

Erythropoiesis in Azotaemic Anaemia—The sternal bone marrow usually shows a diminished erythropoiesis and more rarely an increase In azotaemic cases the anaemia is of the toxic form without regeneration The toxic substance either diminishes the erythropoiesis or prevents ripening of the erythroblastic cells

Journal de Chirurgie et Annales de la Societe Belge de Chirurgie

Brussels vol 35 April 1938

Complications of Transfusion—M Seur
*Effects of Surgical Operations on the Heart—A Hustin
Rhizoma of *Spine treated by Unilateral Parathyroidectomy*—L Tixier
Adenoma of Liver—R Goffin

Surgery and the Heart—An account is given of the effects of general and spinal anaesthesia on the pulse rate and also of the effects due to the operation itself The various types of anaesthetic are discussed and graphs illustrating the pulse rate in each case are given The effect of the different surgical procedures on the heart action is also shown by means of diagrams

Journal of Industrial Hygiene and Toxicology

Baltimore vol 20 April 1938

*Formation of Oxalic Acid from Ethylene Glycol and Related Solvents—F H Wiley W C Hueper D S Bergen and F R Blood
*Air Purification in Inhabited Rooms by Spraying or Atomizing Hypochlorites—A T Masterman
Gases from Carbon Arcs—R W Coltman
Biological Effects of Inhalation of Carbon Arc Fumes—E L MacQuiddy J Perry Tollman Leroy W La Towsky and Milward Bayliss
Combustion Products of Carbon Arcs—E L MacQuiddy J Perry Tollman Leroy W La Towsky and Milward Bayliss
Ventilation of Motion Picture Booths—Philip Drinker and J Raymond Snell

Formation of Oxalic Acid—Ethylene glycol and its derivatives are being increasingly used in medicine as solvents Animal experiment showed that their administration produced oxaluria casts calculi and degenerative changes in the kidney

Air Purification by Hypochlorites—This method offers a cheap and effective means of purifying air in inhabited rooms A design for an efficient spray is shown and the technique explained

Journal of Laryngology and Otology

London vol 53 April 1938

*Lympho epithelioma—J I Munro Black
Operative Treatment of Chronic Mastoid Disease—Somerville Hastings
Streptococcal Mastoiditis and Meningitis following Simple Tonsillectomy with Recovery—A B Smith and C E Scott
Repair for Partial Loss of Auricle—C Hamblen Thomas

Lympho epithelioma—Lympho epithelioma are tumours which arise as a rule in the tonsillar region or nasopharynx Clinically these tumours are characterized by an extreme degree of radio-sensitivity, but pathologically there is a good deal of confusion in their classification formerly they were described as sarcomata Surgical extirpation should never be attempted and the treatment of choice is by x ray therapy which usually produces a very rapid local regression If a good immediate result is obtained local recurrence is unlikely If the patient passes the three-year limit without developing distant metastases he may be considered cured Treatment of skeletal deposits is probably useless Of six patients treated by the author, two are alive after five years and one after two years Each of the remaining three survived only a little over one year after treatment

Journal de Radiologie et d'Electrologie

Paris vol 22 April 1938

Bicentenary of Luigi Galvani—E Cottenot
Life and Work of Galvani—F Lugnel Lavastine
Animal Electricity and Modern Bio-electricity—J Belot and H Fischgold
Festivities to Commemorate Galvani Bicentenary (Bologna October 17–20 1937)—J Belot
Experimental Sarcoma following X Ray Irradiation—G Gambarow
Peptic Ulcer of Oesophagus—J Terracol P Lamarque and P Bétoulières
*New Radio-diagnostic Method Pneumo-pre peritoneum—G Boriani
Nicolas Tesla—M Kahn

Pneumo pre-peritoneum—The method described by Boriani consists of injecting the air not into the peritoneal cavity but between the fascia transversalis and the parietal peritoneum The injection is made under radiological control The advantages of this method of pneumo peritoneum are discussed

Journal of Tropical Medicine and Hygiene

London vol 41 April 16 1938

*Third Note on Infectivity to Man of a Strain of *Trypanosoma rhodesiense* Two Further Passages through Antelopes and Tests on Volunteers—J F Corson
Multiple Myeloma with Hyperglobulinaemia—G M Dechered and Lant Holland

Experimental T rhodesiense Infections—A strain of *T rhodesiense* transmitted by *G morsitans* from man to a sheep in October, 1934 and maintained for two years in sheep by cyclical transmission by *G morsitans* was passed successively through two reedbuck an impala a dikdik and then by parallel transmission to an eland and a reedbuck Two African volunteers resisted infection from flies which fed on the eland but were afterwards infected by flies from the reedbuck and a European volunteer resisted infection from a fly infected by the reedbuck Owing to the early death of the flies it was impossible to test the third volunteer with the flies that had infected the first two so that a difference between two flies which had fed on the same animal could not be shown

Klinische Monatsblatter fur Augenheilkunde

Stuttgart vol 100 April 1938

Further Ocular Studies in Uniovular Twins in Advanced Life Inheritance of Senescent Changes—A Vogt
*Ocular Blood Pressure with Special Reference to Pathology of Tabetic Optic Atrophy—K Albrich and F Kukan
Oligodendroglioma Contribution to Intradural Optic Nerve Tumours—E Schreck
Glioblasts and Spongioblasts in Origin of Retinal Tumours—F Fasiolo
*Corneal Lesions in Hereditary Palmar and Plantar Keratosis—H Richner
Crystalline Degeneration of Conjunctiva and Cornea—F Blobner

Ocular Blood Pressure in Tabetic Optic Atrophy—In a critical analysis of the recent work on the relationship of the blood pressures in the retinal vessels to tabetic optic atrophy the authors conclude that on Sobanski's own findings the assumption of any such relationship is unwarranted Such therapeutic results as Sobanski obtained must be ascribed to reasons other than those he advances

Corneal Lesions in Hereditary Keratosis—To the growing literature on the association of eye and skin diseases Richner adds a report of the occurrence of epithelial changes in the cornea in a patient with hereditary keratosis of the palmar and plantar areas Four other cases of eye changes in this affection recorded in the literature are noted

Quarterly Journal of Experimental Physiology

London vol 27 February 1938

Effect of Adrenaline on Vasomotor Reflexes—L W Chu and F Y Hsu
Metabolism of the Isolated Mammalian Heart under Partial Anoxia—J Y Bogue I Chang and R A Gregory
Inhibition of Water-diuresis by Emotional Stress and by Muscular Exercise—H Rydin and E B Verney
Studies on the Chemical Nature of the Anti fermenting Principle in Bird Tiger snake Venom—E Chain and L F Goldsworthy
A Comparison of Lysozyme Preparations from Egg white Cat and Human Saliva—E A H Roberts B G Megrath and H W Florey

Tubercle

London vol 19 April 1938

*Silicosis in British Coalfields—W E Cooke
Erythrocyte Sedimentation Rate in *Pulmonary* Tuberculosis—A Post
Desensitization of Tuberculous Guinea pigs—J D Thayer

Silicosis—After indicating the incidence of this disease in different parts of the country the author discusses in detail the mineral matter detected in the lungs and the two distinct types of the disease found among coal miners He explains the disparity in the incidence of silicosis in the southern and the northern groups of the British coalfields and suggests measures of prevention

"Vitamin B_1 deficiency an outstanding fault

in the diet of many millions of people

(*B.M.J.* 16 Oct. 1937, p. 75.)

The reduction in Vitamin B_1 intake due to changes in dietary habits during the last hundred years normally amounts to at least 50 per cent. and may be as much as 70 per cent. It has been demonstrated both experimentally and clinically, that a shortage of Vitamin B acts as a limiting factor in the maintenance of health and nutrition and often results in gastro-intestinal disorders, loss of appetite, indigestion, constipation and if long continued to neuritis and arthritis.

The logical way to rectify such shortage is to restore to the diet the Vitamin B containing substance whose removal is responsible for the deficiency.

This substance is available in the form of Bemax.

For years it has been the policy of the proprietors of Bemax to ensure its Vitamin B activity by biological assay of every day's output. So far as is known Bemax is the only food product to which such a claim is or can be made.

The quantity of Vitamin B_1 supplied by the normal daily dose of Bemax—one tablespoonful—is 200 International Units, an amount sufficient to raise a deficient diet to an optimal level.

The normal daily dose of Bemax supplies in addition to Vitamin B significant quantities of Vitamin B and B Copper Iron and Phosphorus as well as rich quantities of Vitamin E and other essential dietary elements.

Bemax is an entirely natural product consisting only of tabulised wheat germs selected for their Vitamin B_1 activity with no addition whatsoever. Clinical sample and literature on request. The Bemax Laboratories, 23, Upper Mall, Hammersmith, W.6.

Sterility and Habitual Abortion

The increasing use of Vitamin E for habitual abortion and sterility of dietary origin demands a wheat germ oil of proven high activity and of stable Vitamin value. Such an oil is available for the medical profession in Fertilol.

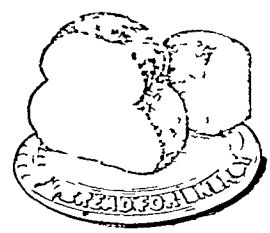
FERTILOL

Wheat Germ Oil Capsules

A highly active source of Vitamin E

A complimentary box of Fertilol Capsules and brochure sent on request

Vitamins Ltd.,
(Dept. B.65) Upper Mall, London, W.6.



Dietary authorities agree that the average diet should be built around bread and milk.

BREAD

. . . for energy

C.F.H.458

IMPORTANT ANNOUNCEMENT

'SUMMIT' Hypodermic Needle

(Regd Trade Mark)

now ALL-BRITISH

The sole manufacturing rights of the 'SUMMIT' hypodermic needle having recently been taken over by S and R J Everett & Company Limited it is now entirely British and is again obtainable through all Surgical Instrument Suppliers

EXCLUSIVE FEATURES OF 'SUMMIT'

(1) FIRM SILKY FIT
Ensured by a soft durable metal seating to a specially reinforced mount (Pat 7359)

(2) EASY TO ATTACH
The shape of the Summit mount enables it to be firmly gripped between the thumb and fore finger

(3) LEGIBLE NUMBERING
Owing to the shape and construction of the mount the needle size is cast on it in very legible characters

(4) APPEARANCE
The special metal with which the mount is made returns a perfect appearance throughout the life of the needle

'SUMMIT' Needles

Manufactured only by

S & R J EVERETT & CO LTD, THORNTON HEATH, SURREY

Telephone Thornton Heath 3253 Telegrams Hypodermic Croydon

For Analgesia in Midwifery

The "AUTOGESIA"

SELF-ADMINISTERED

GAS AND AIR APPARATUS

Patent No 463492



APPROVED BY THE CENTRAL MIDWIVES BOARD for use of MIDWIVES

A simple but efficient portable apparatus which relieves pain without loss of consciousness Automatic in action it delivers a fixed percentage of gas and air and the patient cannot receive pure nitrous oxide or too high a pressure of gas

Size - 16 × 9½ × 9½ ins
Weight complete 28 lbs

PRICE - 12 guineas
(without gas and cylinders)

Send for Booklet to

Sole Distributors

A. L HAWKINS & Co Ltd.,

15, NEW CAVENDISH STREET, LONDON, W 1

Phone Welbeck 1581

CASH

for your old car and a

NEW CAR WITHOUT DEPOSIT

MOTOR BY SUBSCRIPTION

HODGKINSON & CROSSLEY LTD.

Dept B M J 3,

53, SOUTH SIDE, LONDON, S W 4

I am interested in a new car *Please send me without obligation Motoring by Subscription*
My present car is a (make)
(year) *(h p)*
(body) *(mileage)*
Name
Address
Tel No

B M J July 16th

TEL. . MACAULAY 4331-2

A Sound & Profitable Investment

YIELDING

4% TAX FREE

Deposits can be made with The London Investment & Mortgage Company Ltd in absolute confidence the major portion of the Company's funds being well and carefully invested in sound freehold and leasehold properties in and around London Depositors have prior claim to Shareholders on the assets of the Company Easy withdrawals A regular and safe income is ensured by investing with

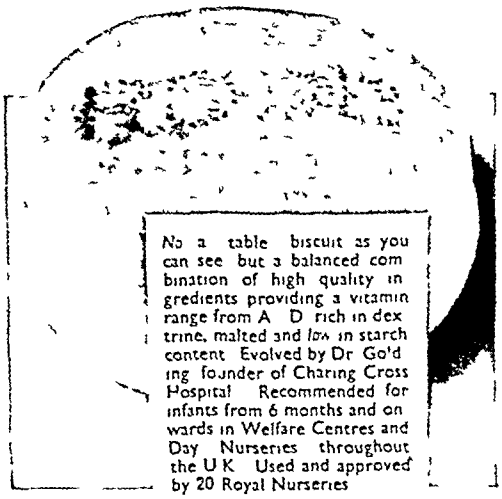
The

LONDON INVESTMENT & MORTGAGE CO. LTD.

39 MOORGATE, EC2. METRO 0503

SECURITY PLUS PROFIT

What is a Robb's Biscuit?



No a table biscuit as you can see but a balanced combination of high quality ingredients providing a vitamin range from A D rich in dextrine, malted and low in starch content Evolved by Dr Goulding founder of Charing Cross Hospital Recommended for infants from 6 months and onwards in Welfare Centres and Day Nurseries throughout the U K Used and approved by 20 Royal Nurseries

Robb's
NURSERY BISCUITS

Testing samples gladly sent on receipt of professional card
Alex Robb & Co Ltd (Dept 6) 145 Atkins Road London S W 12

Heat helps you fight PNEUMONIA!

by relieving *pain* promoting *relaxation* and *rest* and lessening apprehension

These certainly are vitally important considerations tending to make your task *lighter* by making the patient's comfort *greater* and enabling you to carry the case along by routine medication until it has run its course

The Victor Inductotherm offers the *ideal* means of heating human tissues not only because of the proved effectiveness of the basic principle—a short wave circuit utilising *electromagnetic induction*—but because of the extreme simplicity of application and absolute control of dosage The patient's coverings need not be disturbed there need be no weight on or direct contact with the body there are no electrodes to apply to the skin surface There is deep, soothing beneficient heat that comes instantly when the switch is closed

You *should* know the Inductotherm more *intimately* for its use is definitely indicated wherever heat is indicated You *can* learn all about it—without obligation—simply by writing for Publication AU3

VICTOR X-RAY CORPORATION, Ltd
25 29 CAVENDISH PLACE LONDON W 1
BIRMINGHAM BRISTOL CARDIFF
GLASGOW LEEDS LIVERPOOL MANCHESTER NEWCASTLE

Belts by Roussel bring *health* as well as *beauty*



Women will always seek to improve their figure according to the fashionable line of the moment How fortunate then when they can do so with a belt that is beneficial to health!

The special Roussel elastic weave that allows variation in the power different parts of a belt enables J Roussel to make a belt for every individual case Surgeons and doctors can agree to their patients wearing a Belt by J Roussel knowing that with the varied tensions features it can be made to exert pressure and to extend pressure or support only where it is needed

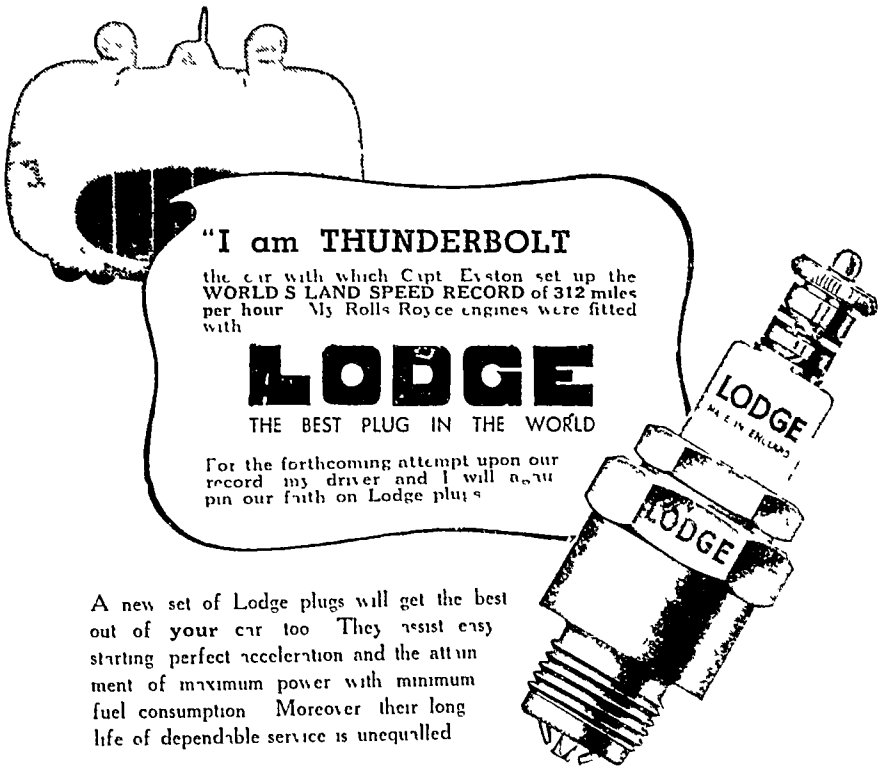
If you would like to know more about the Roussel Belt may we send you a copy of our beautifully illustrated Catalogue?

On Sale Only at

J. Roussel Ltd
(of Paris)

179/181, Regent St, W 1
Telephone Regent 6611
and 74, New Bond Street, W 1
Telephone Mayfair 1650

Also at—Birmingham 18 Arthur St Bournemouth Hampshire House Bristol 3 Park St Edinburgh 1 Frederick St Glasgow 3 Gordon St Leeds 1 Bond St Leicester Cranby Hall Lincoln 11 Lo St Liverpool 1 South John St Manchester 6 King St Nottingham 2a Milton St Southport 11 Lord Street



A new set of Lodge plugs will get the best out of your car too They assist easy starting perfect acceleration and the attainment of maximum power with minimum fuel consumption Moreover their long life of dependable service is unequalled

Lodge plugs are obtainable everywhere, from 5/ each
Made completely in England by Lodge Plugs Ltd, Rugby



A household word

PURITAN Leather Soles

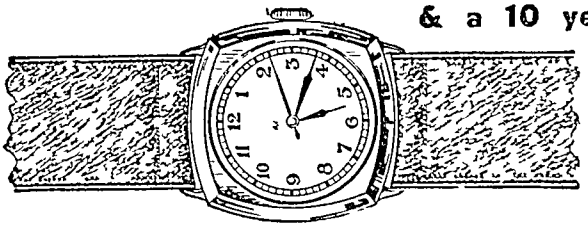
for longer wear and greater comfort

cvs 200

Puritan Tanneries Ltd, Runcorn, Cheshire

OUR 50 YEARS' REPUTATION

& a 10 years' guarantee



stand behind here Offered to Doctors and Nurses for immediate position without displacement of capital they represent the highest possible value and perfection of workmanship and are made especially for your professional needs

FRANKLAND'S VITAL PULSE WATCH (Regd)
(For Doctors) Fully jewelled lever movement
Silver chrome 60 or 13 payments of 5/ Gold £5 17 6 or 16 down and 11 payments of 10 10 YEARS GUARANTEE

Visit our showrooms or Selections sent on Approval

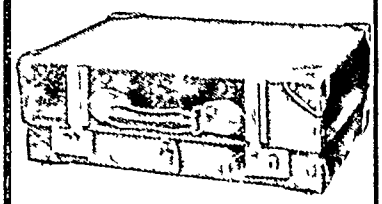
DEPARTMENTS—Furs Fur Coats Jewellery Plate Cutlery Furniture etc
Write for Catalogue

PROTECTIVE MONTHLY PAYMENT TERMS

E J FRANKLAND & Co, Ltd (Dept M) 1-7 Imperial Building
Estab 1885 *Phone Central 2188* Ludgate Circus London E C 4

TRAVEL with LUXURY COMFORT and DIGNITY

At Trifling Cost



A medical man who has once enjoyed the comfort of the Superb Expanding Suitcase would never use any other Always refer everything from a weekend to a month Leather weight made from specially toughened fibre of great strength Lined best dress with continuing straps Tested expanding spring and Superior Lever Lock Super Chromium Plating Eight Leather corners Weighs no more fully packed than the old style leather cases empty! In Levant Leather finish for gentlemen Navy Blue for ladies The first and finest Expanding Suitcases yet produced

24in (7in normal depth expanding to 10½in) 30/ 26in 35 28in 38 6

Supplied to medical men under the Manufacturer Combine Scheme at Trade Prices Terms upon application

Submitted for approval upon receipt of customary reference

Lists of Watches Diamonds Silver Bullard Tables Canteens Cabinets Golf Outfits &c *BMJ applicants mentioning BMJ*

Under the New Trading Scheme Special Trade prices quoted to Medical Men by the

ALLIED MANUFACTURERS

Sole Distributing Agent
H WHITE MANUFACTURING CO LTD
104 Market St Manchester, 1

THE YORKSHIRE INSURANCE COMPANY LIMITED

Established 1824

Links with the Medical Profession

i One of the three Offices which operate and administer the Pension and Insurance Schemes arranged by the B M A for its own Members and for National Health Insurance Practitioners
ii The Office which guarantees the indemnity granted to Members of the Medical Defence Union in respect of Damages and Costs awarded in actions contested by the Council

Needs of the Professional Man

i Life Assurance contracts to meet individual requirements
ii All classes of insurance transacted including non cancellable Sickness Insurance Trusteeships and Executorships also undertaken

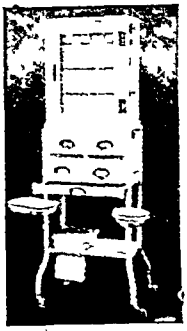
Chief Offices { YORK - - - ST HELEN'S SQUARE
LONDON "YORKSHIRE HOUSE," 66-7 CORNHILL, E C 3

HEALTH BREAD
ROLLS
CRACKNELS
HYGIENIC PACKING
PROTEIN 42 00 CARBOHYDRATES 49 10
POLLEY AND COMPANY LIMITED

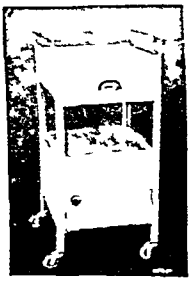
EDGO
REGD TRADE MARK

WIDELY USED IN DIETS FOR
DIABETES,
GASTRIC ULCER
INDIGESTION & OBESITY
Sample Diet Plans & Analysis Free on request
(Dept B) PLYMOUTH RD, LONDON E 16

ASEPTIC
INSTRUMENT AND
DRESSINGS
CABINET ON
STAND



Enamelled white or aluminium bronze
£10 3 6
Carriage extra



SURGERY
TROLLEY
& LOCKER
IN WHITE WITH ESSENTIAL
Size 16 in. 16 in. 3 in. high fitted 2 plate glass shelves Ball Bearing Casters Chromium Plated Fitting Price
£3 10 0
Carriage extra

All Surgery equipment FURNITURE INSTRUMENTS BLOOD PRESSURE APPARATUS ELECTRIC DIAGNOSTIC OUTFITS &c at strictly economical prices
SATISFACTION DEFINITELY GUARANTEED
Current List of Secondhand Instruments and Equipment forwarded on application
A FLEMING & CO (Success)
51 Mortimer St London W1 TEL Mu 6-92

The Picture of the Year



A BICKIEPEG BABY! A picture of health like every Bickiepeg child—no teething troubles to pull him down

To ensure a properly developed jaw with ample room for strong even teeth we suggest that there is nothing better than Bickiepegs tough little biscuit bones There's a hole at one end for a convenient ribbon to be threaded through and they sell at 6d and 1/ per packet

Also BICKIEPEG Veal Bone and Vegetable Broth for babies from birth 2/ per jar

BICKIEPEGS

PROFESSIONAL SAMPLES of each are gladly sent on request BICKIEPEGS LTD Nursery Food Specialists Dept 11 Welwyn Garden City Herts.

GO Motor Boating



Do you know that motor boating costs very little? Surprisingly little And of all pastimes it is the healthiest and most exhilarating
FREE MAGAZINE Sent post free from of our new 1938 catalogue
BRITISH MOTOR BOAT MFG CO LTD
Dept 3 Britannia Works Dalston W C 1

LEADING MOTOR BOAT HOUSE

X-RAY CAR SERVICE

PORTABLE X RAYS
LTD
POWER ROAD CHISWICK
TELEPHONE CHISWICK 4006

ANY HOUR ANY DAY ANY NIGHT
ANYWHERE

In the treatment of Varicose Veins where leg support is prescribed, Compri-Vena give meticulous attention to instructions
They will gladly supply particulars of
RUBBERLESS SURGICAL STOCKINGS
and the service they provide
Compri-Vena (1937) LTD
38 SOUTH MOLTON ST., W 1 MAYfair 0732

NAME PLATES
IN BRONZE ENAMEL OR BRASS
Phone Clerkenwell 2441
Free Sketch and Booklet will be sent on receipt of details
S J & A Herd, 50 Clerkenwell Rd E C 1
PLATES

BROCHURE, SKETCHES & ESTIMATES FREE
CANonbury 3077
NAMEPLATES
BRONZE STAINLESS STEEL BRASS
COOKE'S (FINSBURY) LTD
FINSBURY PAVEMENT HOUSE
MOORGATE, LONDON, E.C.2
Est 1877

FREQUENT MICTURITION
YBWTT ABSORBENT BAGS
Male day pattern 3/9
New Model Female day pattern 4/
DUPLEX BAGS
Male or Female day and night 7/6
SANITUBE
For helpless bedridden patients 7/6
Our bags catch all leakage, easy to wear and body fitting, can be worn under clothing and easily emptied Sent post free to any address in world wide Special patterns for nurses and invalids
Diagrams etc on request from
HILLIARD 123 Douglas Street Glasgow C

Addmeter Honey ADDING MACHINES 77 6 net
TAYLOR'S TYPEWRITERS
SELL, HIRE HIRE PURCHASE EXCHANGE BUY and REPAIR ALL MAKES of Typewriters Duplicators and Calculating Machines
Desks Tables and Chairs

THE QUIET BIJOU
Write for Bargain List 3 Phone—Holborn 7[illegible]
BUY A BIJOU FOR 15 a Month
Complete £14 14s
74 CHANCERY LANE (Holborn End) W C 2

A GENTLEMAN ALWAYS LOOKS WELL DRESSED IN SAVILE ROW CLOTHES

NEW LIGHT OVERCOATS LOUNGE DRESS SPORTS SUITS etc by all eminent tailors viz Schulte Tesley & Robert Kilgour et OUR PRICES 3 to 6 Gns
Alterations on Premises
REGENT DRESS CO
2nd Floor Piccadilly Man[illegible] 17 Shaftesbury Av Piccadilly Circus W 1 (Next Café Monico) GER 7180
LADIES DEPT on 1st FLOOR

NAMEPLATES Brass Bronze Stainless Steel
REDUCED PRICES
Send for List 111 to the Actual Maks
F OSBORNE & Co, Ltd Tel Euston 4874
117 Gower Street London W C 1

NAME PLATES in Bronze and Enamel
Stainless Steel Brass or Chromium
Actual Makers Quick Delivery Low Price
The WHITE BRONZE Co 190 London Rd, CROYDON

NAMEPLATES of character in Brass Bronze
Send for Illustrated Brochure and Price List
F B HALL & CO 445 New Cross Rd S E 14 TIDeway 3818

BOWDEN HOUSE,

HARROW ON-THE HILL,

For the residential treatment of Functional Nervous Disorders

No case under certificate nor under the M T A

This home which was founded in 1911, is designed to provide for psychoneurotics a curative environment associated with modern psychological treatment modified to suit each individual patient The treatment is in the hands of three experienced psychotherapists and most patients receive three hours of analytical treatment per week Occupational therapy of many varieties is available but not obligatory Recreations include tennis badminton billiards etc

On admission patients are examined by the diagnostic physician who advises on all physical treatment As far as possible all necessary pathological examinations are carried out by the pathologist in the laboratory on the premises

STAFF

H CRICHTON-MILLER M A M D M R C P (*Senior Physician*) GRACE H NICOLLE M A, M B (*Resident Physician*)
ALFRED TORRIE M A M B, Ch B D P M (*Medical Superintendent*) MARY HALL, M B, B Ch (*Pathologist*)

CHEADLE ROYAL HOSPITAL

CHEADLE, CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay N Wales is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES

The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary

In addition to the Main Building there are separate villas Extensive grounds Hard and grass tennis courts cricket and croquet grounds and a covered court for badminton There are also wireless installations Golf may be had within easy distance Occupational therapy

VOLUNTARY TEMPORARY AND CERTIFIED PATIENTS received

The Hospital is nine miles from Manchester 50 minutes by rail from Liverpool and 11 hours from London

For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT

Telephone GATLEY 2231 (3 lines)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds Detached Villas Chapel Garden and dairy produce from own farm Terms very moderate

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds with tennis courts etc Voluntary Temporary or Certified Patients may visit by arrangement for long or short periods

Illustrated Brochure on application to the Medical Superintendent The Old Manor, Salisbury 'Phone Salisbury 2241

CALDECOTE HALL

NUNEATON

WARWICKSHIRE

(Phone Nuneaton 241)

Residential treatment of

FUNCTIONAL NERVOUS DISORDERS

Including Alcoholism and other Addictions

(Certifiable Cases are no received)

This beautiful mansion situated in the heart of the country (less than two hours from London by L M S R) and surrounded by charming pleasure grounds in which games and outdoor occupational therapy are available is devoted to the treatment of Functional Nervous Disorders by psychotherapeutic and ancillary methods

Illustrated brochure and particulars obtainable from A E CURIER M D D P M Resident Medical Superintendent

CAMBERWELL HOUSE, 33, Peckham Road, London, S.E.5.

Telegrams PSYCHOLIA LONDON

FOR THE TREATMENT OF MENTAL DISORDERS

Telephone RODNEY 4 4 (1 line)

Also completely detached villas for mild cases, with private suites if desired Voluntary patients received Twenty acres of ground Hard and Grass Tennis Courts Putting Greens Bowls Croquet, Squash Rackets Recreation Hall with Badminton Court and all indoor amusements including Wireless and other Concerts Occupational Therapy Callisthenics, and Dancing Classes X ray and Actino therapy Prolonged Immersion Baths Operating Theatre Pathological Laboratory Dental Surgery and Ophthalmic Dept Chapel Senior Physician Dr HUBERT JAMES NORMAN assisted by three Medical Officers also resident, and visiting Consultants

An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary

The Convalescent Branch is HOVE VILLA, BRIGHTON, and is 200 feet above sea level

PECKHAM HOUSE, 112, Peckham Road, London, S.E. 15.

Telegrams "Alleviated, London" Telephones Rodney 2641-2642

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders Certified voluntary and temporary patients are received Separate houses for treatment and accommodation of special cases adjoining the Institution Occupational therapy, physical drill and other forms of modern treatment There is a seaside branch Kearsney Court, near Dover to which patients may be sent for treatment or on holiday Motor drives are arranged when required Tennis courts Entertainments dances and indoor amusements held throughout the year Terms from £3 3s per week Illustrated prospectus and further particulars can be obtained from the Medical Superintendent

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date Lovely house and grounds (18 acres) Certified and uncertified cases taken Facilities for access to the seaside

ESTABLISHED OVER 200 YEARS

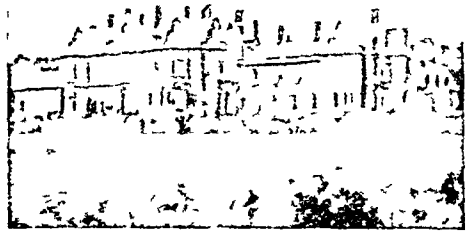
Apply to Med Supt for illustrated brochure Tel SALISBURY 2041

THE RESIDENTIAL TREATMENT OF ALCOHOLIC & DRUG ADDICTION

RENDLESHAM HALL

(Postal Address) — **WOODBRIDGE, SUFFOLK**

Rendlesham Hall, which is open to receive patients is essentially a Sanatorium Its daily life and routine are that of an ordinary comfortable holiday or health resort or of a large country house Each patient has all the privileges of a guest consistent with the prescribed medical treatment



RENDLESHAM HALL—SOUTH VIEW

Rendlesham Hall has 45 bedrooms and about 450 acres of gardens and park It has also a private nine-hole golf course tennis and croquet lawns and bowling green

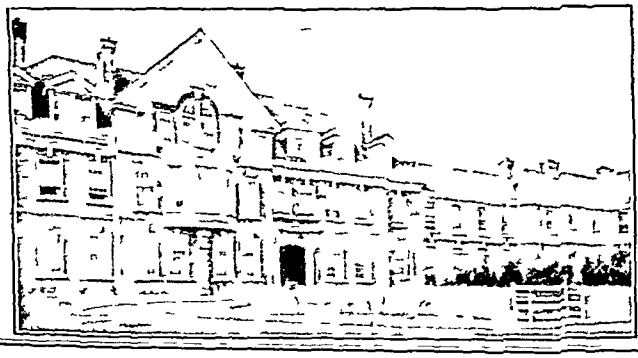
Illustrated booklet giving particulars as to terms etc can be had on application to the

RESIDENT MEDICAL SUPERINTENDENT

Telegrams and Telephone WICKHAM MARKET 216 *(Toll Call from London)*

Proprietors The Norwood Sanatorium Limited

ROOKSDOWN HOUSE, NEAR BASINGSTOKE, HANTS.



FOR THE RECEPTION and TREATMENT OF

NERVOUS AND MENTAL ILLNESS

A Superior Modern and Attractive Building situated in a charming and bracing locality 400 ft above sea level

Extensive pleasure grounds with croquet tennis bowling and putting greens

Occupational Light and Hydro Therapy

ONE HOUR RAIL JOURNEY FROM LONDON

Ladies and gentlemen can be received as private patients on a voluntary basis or with certificates written application alone is required for the former

FEES (including all necessities) from THREE to FIVE GUINEAS A WEEK

Brochure and information may be obtained from the MEDICAL SUPERINTENDENT

Telephone Bramley Basingstoke

RUTHIN CASTLE, NORTH WALES

A Private Hospital or Clinic for the diagnosis and treatment of Internal Diseases (except Mental or Infectious Diseases) The Clinic is provided with a full staff of doctors bacteriologists chemists radiologists dietists nurses masseurs and masseuses

The surroundings are beautiful The climate is mild There is central heating throughout The annual rainfall is 30·5 inches that is less than the average for England

The inclusive weekly fees are from 15 guineas a week according to the room occupied rooms with bathroom are from 21 guineas The charges include all chemical bacteriological X-ray or other examination advised by the doctors and all the usual forms of treatment in addition to board and lodging There are no extra charges except for alcohol (when ordered) and laundry An examination and consultation fee of 15 guineas is charged on the first visit

Address THE SECRETARY Ruthin Castle North Wales *Telegrams* Castle Ruthin *Telephone* Ruthin 66

ST. ANDREW'S HOSPITAL

FOR MENTAL DISORDERS

NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

President THE MOST HON THE MARQUESS OF EXETER C M G A D C

Medical Superintendent THOMAS TENNENT M D M R C P D P H D P M

This Registered Hospital is situated in 120 acres of park and pleasure grounds Voluntary patients who are suffering from incipient mental disorders or wish to prevent recurrent attacks of mental trouble temporary patients and certified patients of both sexes are received for treatment Careful clinical biochemical bacteriological and pathological examinations Private rooms with special nurses male or female in the Hospital or in one of the numerous villas in the grounds of the various branches can be provided

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders It contains special departments for hydrotherapy by various methods including Turkish and Russian baths the prolonged immersion bath Vichy Douche Scotch Douche Electrical bath Plombières treatment etc There is an Operating Theatre a Dental Surgery an X ray room an Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment It also contains Laboratories for biochemical bacteriological and pathological research

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres Milk meat fruit and vegetables are supplied to the Hospital from the farm gardens and orchards of Moulton Park Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves in farming gardening and fruit growing

BRYN-Y-NEUADD HALL

The seaside house of St Andrew's Hospital is beautifully situated in a park of 330 acres Llanfairfechan amidst the finest scenery in North Wales On the North West side of the Estate a mile of sea coast forms the boundary Patients may visit this Branch for a short seaside change or for longer periods The Hospital has its own private bathing house on the seashore There is trout fishing in the park

At all the branches of the Hospital there are cricket grounds football and hockey grounds lawn tennis courts (grass and hard courts) croquet grounds golf courses and bowling greens Ladies and gentlemen have their own gardens and facilities are provided for handicrafts such as carpentry etc

For terms and further particulars apply to the Medical Superintendent (Telephone No 2356 and 2 57 Northampton) who can be seen in London by appointment

HAYDOCK LODGE

NEWTON-LE-WILLOWS LANCASHIRE

Teleg Street Ashton in Makerfield *Phone* Ashton in Makerfield 7311

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntary temporarily, or under Certificate Patients are classified in separate buildings according to their mental condition

Situated in park and grounds of 400 acres Self supported by its own farm and gardens in which patients are encouraged to occupy themselves Every facility for indoor and outdoor recreation For terms prospectus etc apply MEDICAL SUPERINTENDENT

NORTHUMBERLAND HOUSE,

GREEN LANES, FINSBURY PARK, N 4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses Conveniently situated and easy of access from all parts Six acres of ground highly situated, facing Finsbury Park Voluntary and Temporary Patients received without certification Occupational Therapy, Psychotherapy, and other modern forms of treatment

Telephone STAMFORD HILL 2688 *Telegrams* SUBSIDIARY LONDON

Convalescent Home KEARSNEY COURT DOVER For further particulars apply to the Medical Sup

COURT HALL, KENTON, near EXETER,

for the treatment of eight Ladies voluntary, temporary, or certified patients
Large gardens and own dairy

CLIFFDEN, TEIGNMOUTH, for early and convalescent cases A well appointed house with spacious balconies, and extensive views of the South Devon coast Sub tropical gardens own dairy in 25 acres Private road to beach

		Telephones
Resident Physicians	BERTHA M MULES, M D B S	Starcross 59
	ANNE S MULES M R C S L R C P	Teignmouth 289

THE COPPICE, NOTTINGHAM

HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted Occupational Therapy Voluntary and Temporary Patients received

Tel 64117 *For terms etc apply to the Medical Superintendent*

BARNWOOD HOUSE

GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS Within two miles of the G W Railway and L M & S Railway Stations Gloucester the Hospital is easily accessible by rail from London and all parts of the United Kingdom It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres Voluntary Patients of both sexes are also received for treatment Special accommodation for Lady Voluntary Patients is also provided at the MANOR HOUSE which has its own private grounds and is entirely separate from the Main Hospital For particulars as to terms etc apply to G W T H FLEMING M R C S L R C P D P M Medical Supt

Telephone No 6 07 Barnwood

STRETTON HOUSE,

Church Stretton, Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provisions of the Mental Treatment Act 1930 Bracing hill country *See Medical Directory* p 2328—Apply to the Medical Superintendent Phone 10 P O Church Stretton

FENSTANTON,

CHRISTCHURCH ROAD,
Streatham Hill, S W 2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders Certified Voluntary and Temporary Patients received Large Mansion with 12 acre of grounds (*See Medical Directory* p 2312) Apply Resident Physician *Telephone* Tulse Hill 7181

BAILBROOK HOUSE, BATH.

For sufferers from Nervous and Mental Disorders with or without certificates

The house is gloriously situated in wooded grounds of 20 acres with magnificent view of the City and the Avon Valley (*See Medical Directory* page 2322)

For terms apply A CUPPAGE M A D M B Ch D P M *Resident Physician*

Telephone Bathaston 8189

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded grounds For Ladies and Gentlemen suffering from Nervous or Mental Illness Voluntary Patients Temporary Patients and Patients under Certificate are admitted for treatment Fees from 4 guineas a week upwards according to requirements A few vacancies exist for Ladies and Gentlemen at reduced fees on the recommendation of the Patient's own Physician Apply to Dr J A SMALL Telephone 80 Norwich Telegrams Small 80 Norwich

TYKEFORD ABBEY,

NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest standing in 15 acres of garden and park and is situated 14 miles from Northampton and 12 miles from Bedford on the main London to Northampton Road fifty miles from London Both sexes are accommodated Psychoneurotic Treatment is used extensively in suitable cases Radiant Heat X ray and Ultra Violet Light Diathermy and Foam Baths Billiards Tennis etc

Apply Dr D E M DOUGLAS-MORRIS

Telephone Newport Pagnell 11

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDER

(20 miles from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on the lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital Convalescent or mild cases can be received at a delightful country mansion with grounds known as

HIGHFIELD HALL,

situate about a mile away from the Hospital FEES TWO TO THREE GUINEAS PER WEEK

For further particulars apply to the Supt W J T KNIFF L R C P D P

ST ALBANS, HERTS

BARNWOOD HOUSE

GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS Within two miles of the G W Railway and L M & S Railway Stations Gloucester the Hospital is easily accessible by rail from London and all parts of the United Kingdom It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres Voluntary Patients of both sexes are also received for treatment Special accommodation for Lady Voluntary Patients is also provided at the MANOR HOUSE which has its own private grounds and is entirely separate from the Main Hospital For particulars as to terms etc apply to G W T H FLEMING M R C S L R C P D P M Medical Supt

Telephone No 6 07 Barnwood

STRETTON HOUSE,

Church Stretton, Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provisions of the Mental Treatment Act 1930 Bracing hill country *See Medical Directory* p 2328—Apply to the Medical Superintendent Phone 10 P O Church Stretton

FENSTANTON,

CHRISTCHURCH ROAD,
Streatham Hill, S W 2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders Certified Voluntary and Temporary Patients received Large Mansion with 12 acre of grounds (*See Medical Directory* p 2312) Apply Resident Physician *Telephone* Tulse Hill 7181

BAILBROOK HOUSE, BATH.

For sufferers from Nervous and Mental Disorders with or without certificates

The house is gloriously situated in wooded grounds of 20 acres with magnificent view of the City and the Avon Valley (*See Medical Directory* page 2322)

For terms apply A CUPPAGE M A D M B Ch D P M *Resident Physician*

Telephone Bathaston 8189

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded grounds For Ladies and Gentlemen suffering from Nervous or Mental Illness Voluntary Patients Temporary Patients and Patients under Certificate are admitted for treatment Fees from 4 guineas a week upwards according to requirements A few vacancies exist for Ladies and Gentlemen at reduced fees on the recommendation of the Patient's own Physician Apply to Dr J A SMALL Telephone 80 Norwich Telegrams Small 80 Norwich

TYKEFORD ABBEY,

NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest standing in 15 acres of garden and park and is situated 14 miles from Northampton and 12 miles from Bedford on the main London to Northampton Road fifty miles from London Both sexes are accommodated Psychoneurotic Treatment is used extensively in suitable cases Radiant Heat X ray and Ultra Violet Light Diathermy and Foam Baths Billiards Tennis etc

Apply Dr D E M DOUGLAS-MORRIS

Telephone Newport Pagnell 11

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDER

(20 miles from London)

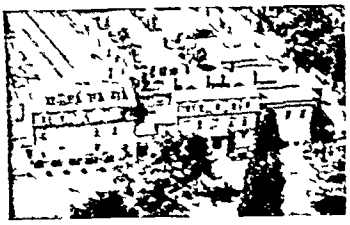
Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on the lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital Convalescent or mild cases can be received at a delightful country mansion with grounds known as

HIGHFIELD HALL,

situate about a mile away from the Hospital FEES TWO TO THREE GUINEAS PER WEEK

For further particulars apply to the Supt W J T KNIFF L R C P D P

ST ALBANS, HERTS



THE STANBOROUGHS HYDRO

Delightfully situated in private wooded park of 60 acres 600 feet above sea level Only 18 miles from London

Recent structural alterations have greatly improved the facilities. Additions to the equipment include the installation of 100 kV X Ray etc.

The well regulated Diet Department for the supervision of individual diets the Physiotherapy Departments including Hydrotherapy Electrotherapy Light Therapy Occupational Therapy in addition to outdoor amusements and the lounge and gardens make The Stanboroughs very desirable for rheumatoid and metabolic disturbances, neuroses and fatigue states

Surgical and Medical Section—
Two Resident Physicians

Medical Superintendent—
J. E. CAIRNCROSS L.R.C.P. & S.

Prospectus and full information on application to the Manager

The Stanboroughs Hydro
Stanborough Park,
Watford Herts

Telephone Garston (Watford) 6 3

Within 10 miles of London yet in lovely and secluded surroundings

Home for the Treatment of
WORRY & NERVE STRAIN
(Under Medical Supervision)

Large airy rooms—Studied dietary—Expert cooking Pleasant garden with tennis court—Friendly and cheery atmosphere—New emphasis on Happiness in the Home

Terms from £5 5 0 per week

Apply to—D. H. C. GIVEN, M.D., D.P.H.
D.T.M. & H. Surgeon Captain R.N. (retd.)
late Resident Medical Superintendent Norwood Sanatorium Beckenham)

"GLENROY,"
6, Sundridge Avenue Bromley Kent
Telephone RAVensbourne 0410

NORMANSFIELD

For Mental Defectives of either sex

Unedr private management.

Apply to Dr Langdon Down,
Normansfield, Teddington

HOME FOR EPILEPTICS

MAGHULL (near LIVERPOOL)
FARMING and OPEN AIR OCCUPATION for PATIENTS

few and in let and 2nd Class House
EES 1st Class (men only) from £3 p.w. upards. 2nd Class (men and women) £2 p.w.

For further particulars apply

C. EDGAR GRISEWOOD A.C.A.,
Secretary 20 Exchange Street East Liverpool 2

CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy Cases of alcoholism and drug addiction are admitted The Physiotherapy Department has separate units fully equipped for X-ray work heliotherapy short wave therapy electro-therapy and hydrotherapy (swimming bath prolonged baths Scotch and Vichy douches Plombières treatment electric and Turkish bath cabinet etc) There is a fully equipped gymnasium under qualified instructors Facilities are provided under special recreational therapists for all indoor and outdoor games including golf course cricket football and hockey grounds lawn tennis and squash court croquet and bowling greens

The Hospital has its own Cinema Library and Hairdressing Saloon Terms include regular motor drives

Private rooms suites or villas are available and special nurses can be provided

The Hospital grounds extending to nearly 1,000 acres are situated in delightful country and include an extensive farm (T.T. herd) gardens and orchards

As the Hospital is well endowed terms are exceptionally moderate e.g. First Department 3 to 10 guineas per week Second Department 2 and 2½ guineas per week Voluntary and certified patients are received Medical Certificates given anywhere in the British Isles are valid for admission Patients Forprospectus necessary forms and further information apply to

Physician Superintendent P. K. McCOWAN J.P. M.D. F.R.C.P. D.P.M. Barrister at Law
July 1st Tel. Dumfries 1119

CHISWICK HOUSE, PINNER, MIDDLESEX

Telephone PINNER 231

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes

A modern country house 12 miles from Marble Arch in beautiful secluded grounds

Fees from 10 guineas per week inclusive Cases under Certificate Voluntary and Temporary patients received for treatment

Douglas Macaulay M.D. D.P.M.

ASHWOOD HOUSE, KINGSWINFORD STAFFORDSHIRE

An old-established PRIVATE HOME for the care and treatment of Ladies and Gentlemen mentally afflicted Probationary cases and non-certified patients are received as well as those certified

The home is beautifully situated in its own grounds of 50 acres

Full particulars as to reception terms etc may be obtained from the Resident Medical Officer

---

HALLIFORD HOUSE UPPER HALLIFORD SHEPPERTON *Established in 1851*

This handsome secluded residence standing in a park of 36 acres situated 16 miles from London is licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections

Voluntary or certified cases received Terms moderate Patients are under the constant personal care of the Resident Medical Superintendent Dr R. A. Stewart from whom full particulars can be obtained Tel. Sunbury-on-Thames 70

THE GRANGE, near ROTHERHAM.

A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental disorders Both certified and voluntary patients received Approved for temporary Patients This is a large country house with beautiful grounds and park five miles from Sheffield Tel No 40030 Ecclesfield Res. Phys. GILBERT E. MOULD L.R.C.P. M.R.C.S. *Station* Grange Lane L. & N.E. Rly.

SPRINGFIELD HOUSE

Near BEDFORD (Phone 3417)

For Mental Disorders with or without Certificate
Resident Physician CEDRIC W. BOWER

Old-fashioned Private Home Five Guineas per week
(Including Separate Bedrooms where suitable)

Interviews in London by Appointment

RUSSELLS

HEMEL HEMPSTEAD RD. WATFORD
Telephone WATFORD 591

A convalescent home for the care and treatment of mild and recoverable nervous conditions in both sexes The house is situated high up in 50 acres of grounds 17 miles from London at the termination of the Watford by-pass One Medical Officer is in residence and two others are in daily attendance Fees from ten guineas a week inclusive

Apply RESIDENT MEDICAL OFFICER

EPILEPSY.

Owing to extensions there are at present a few Vacancies at the

DAVID LEWIS COLONY

for Ladies and Gentlemen who have **Epilepsy,** but are of good intelligence and sound mind

Colony life gives to most people who have epilepsy the best chance of happiness and contentment

Apply to the **Director,**

The David Lewis Colony, Warford, Alderley Edge

THE MAUDSLEY HOSPITAL,

DENMARK HILL, S.E.5
Telephone RODney 3141

A CLINIC situated by the London County Council for treatment of Nervous and Curable Mental Disorders Voluntary patients received

New Out-patients—MEN Mondays and Thursdays 2 p.m. WOMEN Tuesdays and Fridays 2 p.m. CHILDREN Mondays and Fridays 10 a.m. In-patients (a) 36 beds (both sexes) in ward or separate room 1 guinea 38 beds in a ward of King's College Hospital which is in use as a temporary annexe the Maudsley Hospital (b) a special ward (including some private rooms) for the patients of each sex who are paying the full cost and are otherwise suitable TERMS £5 a week but in case of patients with a legal settlement in the County of London a less sum may be barred according to means

Terms include (with rare exceptions) all forms of treatment for which there are experimental facilities as there is a staff of Consultant Specialists and the Central Laboratory of London County Mental Hospitals is attached to the hospital Inquiries of Edwin Mapother M.D. F.R.C.P. Medical Superintendent.

ECCLESFIELD Staplehurst Kent

(Removed from Ashford Middlesex)

PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large mansion beautifully situated in 100 acres of park land Extensive views Home farm. R.C. Chapel Under the management of the Sisters of the Good Shepherd Apply Rev. Mother Tel Staplehurst 61

Tel. and Telegrams Hayres Brentwood 45

LITTLETON HALL, BRENTWOOD ESSEX

Large grounds 400 ft. above sea HOME for ladies Mentally afflicted Voluntary Boarders received Station Brentwood and Shenfield 1 mile Liverpool St. 26 mins Apply Dr. HAYNES

Medical Supt. Dr. J. LANGHAM MACAULAY Tel Bedford 20

WYE HOUSE, BUXTON

For the treatment of Ladies and Gentlemen mentally afflicted Voluntary Boarders received Situated 1,000 ft. above sea level Grounds 15 acres of ground —For terms apply to the Resident Medical Superintendent W. W. HORTON M.D. Nat. Tel. 150

The MUNDESLEY SANATORIUM

The central building makes the Mundesley Sanatorium the best equipped building in England for the cure of Tuberculosis All the bed rooms have hot and cold running water, electric light and wireless headphones The public rooms are spacious and comfortable

Resident Physicians
S VERE PEARSON
M D (Cantab) M R C P (Lond)
E C WYNNE-EDWARDS
M B (Cantab) F R C S (Edin)
GEORGE H DAY
M D (Cantab)

For all information apply
The Secretary
THE SANATORIUM, MUNDESLEY, NORFOLK
Telephone Mundesley 94 and 95
(2 lines)

The buildings face S S W and are sheltered from the sea by a pine clad ridge The sunshine record and dry air complete a perfect site The medical equipment is of the latest kind and there is a day and night nursing staff

TERMS FROM 7½ GUINEAS WEEKLY

HOLLOWAY SANATORIUM VIRGINIA WATER

A Registered Hospital for the Treatment of MENTAL DISORDERS of the EDUCATED CLASSES. Founded by THOMAS HOLLOWAY in 1885.

This Institution is situated in a beautiful and healthy locality within easy reach of London It is fitted with every comfort Patients can have Private Bedrooms and Special Nurses as well as the use of General Sitting Rooms, at moderate rates of payment Voluntary Patients can be admitted

There is a Branch Establishment at CANFORD CLIFFS BOURNEMOUTH where Patients can be sent for a change and be provided with all the comforts of a well appointed home

For Terms apply to

The Resident Medical Superintendent, St. Ann's Heath, Virginia Water, Surrey.

THE CORNISH RIVIERA SANATORIUM

ROSEHILL, PENZANCE

For the treatment of patients suffering from tuberculosis

The Sanatorium stands in its own grounds of 13 acres of garden, lawn, and woodland and is well sheltered from cold winds The climate is mild in winter cool in summer Artificial pneumothorax, and other modern forms of treatment are available Day and night nursing staff Electric light Wireless in all rooms

Medical Supt **Francis Chown**, M B Lond, D P H Consulting Physician (late Med Supt) Cornwall County Sanatorium

Terms 5 to 7 guineas weekly 'Phone Penzance 598

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills, seven miles from Cheltenham, for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S S W, sheltered from North and East elevation 800 feet Pure bracing air **Special Treatment by Artificial Pneumothorax** (X-ray controlled) **Tuberculins and Ultra-violet Rays** are available when necessary, without extra charge **X-ray** plant Fully equipped Dental Department Electric light Radiators, hot and cold basins, and Wireless in all rooms Up to date main drainage

Full day and night Nursing Staff Terms 5 gns to 7½ gns a week Inclusive

Med Supt GEOFFREY A HOLLMAN B A M B T C Dub *Asst Phys* MARGARET A HARRISON M B B S Lond *Latholomt* EDGAR S DAVLY M B B Ch *Consult Laryngologist* CASSIDY DE W GIBB F R C S Edin *Consulting Dental Surg* GEORGE V SAUNDERS L D S R C S Lond Apply Secretary The Cotswold Sanatorium Cranham Gloucester *Tel* 81 and 82 Witcombe *Grams* Hotspur Birdlip

HARROGATE FOR HEALTH

Harrogate specialises in the Treatment of — Disorders of the Liver — congestion, cirrhosis, jaundice cholecystitis cholelithiasis, and tropical liver Also in Diseases of the Skin—eczema, psoriasis the coccal infections of the skin etc The Chronic Rheumatic Diseases—Arthritis Fibrositis Neuritis, Gout Hyperpiesis, Mucous Colitis Functional Disorders of the Heart Pelvic Disorders of Women, Convalescence from acute illness A wide range of Sulphur and Iron waters is available for dealing with the large group of disorders amenable to Spa treatment Prescribed diets for Spa patients can be obtained at hotels and boarding houses without extra charge **Complimentary and reduced price facilities for the Cure, Accommodation and Amusements are available for Members of the Medical Profession**

Full details of Harrogate for Cure and Holiday will be sent free on application to Spa Manager, Information Bureau, Harrogate 1, (*state if a medical enquiry*)

"IT'S QUICKER BY RAIL"
Cheap monthly return tickets to Harrogate from all stations Any train any day

HARROGATE
THE MODERN SPA

Choose a Spa in

Czechoslovakia

The Spas and Health Resorts of Czechoslovakia with their centuries old tradition of healing reinforced by the experience and researches of local specialists invite your serious consideration

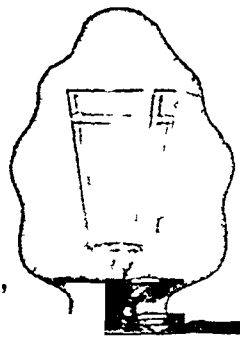
In addition to places of world wide repute such as

PISTANY (Piestany) **CARLSBAD** (Karlovy Vary) **MARIENBAD** (Marianske Lazne) **FRANZENSBAD** (Frantiskovy Lázne)

ST JOACHIMSTHAL (Jáchymov) **TEPLICE-SANOV** (Teplitz Schönau) **LUHACOVICE** **SLIAC** **TRENCIANSKE-TEPLICE**

with their medicinal springs and mud baths there are numerous smaller spas and health resorts admirably equipped for the treatment of many diseases including those in the following groups

Anaemia and Chlorosis Basedow's Disease Bronchial Catarrh Constitutional Diseases Scrofula Rickets Digestive Diseases Diseases of the Bladder and Urinary Organs Diseases of the Kidneys Diseases of the Nose and Throat Diseases of Women Disorders of Bones Muscles and Joints Disorders of the Heart Disorders of Metabolism and Gout Gallstones Leucaemia Nervous Diseases and Post Hemiplegic Conditions Tuberculosis of the Lungs



The arrangements in the bath establishmen are up to date in every way the cleanliness and neatness proverbial the service attentive and courteous

It is accepted that a spa cure to be fully beneficial should provide a complete change of surroundings and a break with the patient's normal everyday life

The Czechoslovak Spas fulfil this purpose admirably comfortable hotels first class orchestras and dance bands every facility for sport—tennis golf swimming riding fishing etc

There are also numerous fully up to date homes for convalescence and rest cures

Further information from any Office of
THOS COOK & SON, LTD,
and other leading Tourist Agencies

and at
CZECHOSLOVAK TOURIST INFORMATION OFFICES
in London 1 Regent Street S W 1

DOCTORS OWN SPA for RHEUMATISM

Mud from Pistany in packs ready for home use Simplest safest and most economical treatment, may be entrusted to any patient cost 20s. for 20 treatments Literature on request

Sunny **Pistany**

VOLCANIC-SULPHURIC MUD SPRINGS
in delightful surroundings
21 DAYS INCLUSIVE CURE
Special facilities for doctors and their wives
Second Class Fare with Sleeper £19 19 0 return

Particulars free

PISTANY AGENCY LTD., 310 Regent Street, London W 1 Tel LANgham 4214 or PISTANY SPA BUREAU 25 Cecil Street S W 1 (Tel Whitehall 7464)

WOODHALL SPA

IS Unique among British Spas

in having a Bromo Iodine Water (for all forms of Rheumatism etc), an INHALARIUM with FOG ROOM for the treatment of Catarrhs of the Respiratory Tract and an entirely RURAL and therefore RESTFUL Quality Sheltered dry and sunny with a gravel sub soil

Information and Literature on application to the Spa Director Woodhall Spa Lincs

THE CLINIC
20 Devonshire Place
London, W 1
Tel Welbeck 4444 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns to 18 gns per week (Average—14 gns)
8 Operating Theatres
150 State Registered Nurses
2 Resident Medical Officers (for emergencies)
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary



DAX
(FRANCE)

THE THERMAL ESTABLISHMENT WHOSE TREATMENT BY THE FAMOUS **MUD BATHS** WITH APPROPRIATE DIET IS UNRIVALLED FOR **RHEUMATISM**

OPEN ALL THE YEAR ROUND
Through trains from Paris On the main line to Biarritz and Pau

For information or literature apply to FEDERATION OF THE HEALTH RESORTS OF FRANCE, BRITISH MEDICAL ASSOCIATION HOUSE TAVISTOCK SQUARE LONDON W C 1 or FRENCH RAILWAYS—NATIONAL TOURIST OFFICE 179 PICCADILLY LONDON W 1 or SOCIETÉ DES EAUX THERMALES DAX (FRANCE)

Smedley's

Great Britain's Greatest Hydro

Matlock

Full range of Hydropathic Treatment In Unrivalled suites of Baths Turkish and Russian Baths Aix and Vichy Douche Massage Hombieres Treatment Studi Chas Electric Installation for Baths and other Medical Purposes Diverse Radiant Heat Infra red Light Artificial Sunlight Diathermy Short Wave High Frequency Diathermy Southern Bath Simple Form Baths of Certified malt from own farm Large Winter Garden Orchestra Special provision for Invalid Night Attendance Over 60 trained Male and Female Nurse Masseur Attendant etc

Terms 13/ to 18/6 per day inclusive board
Illustrated Brochure M J on request
Resident Physicians
G C R HARBINSON M B B Ch B A O
(R U I) R MacLELLAND M D C M
Phone No 17 Grams Smedleys Matlock

MONTANA HALL, Montana, Switzerland

OPEN ALL THE YEAR

THE ONLY SANATORIUM IN SWITZERLAND UNDER BRITISH OWNERSHIP AND CONTROL AND WITH A DAY AND NIGHT STAFF OF BRITISH TRAINED NURSING SISTERS

INCLUSIVE TERMS—from 7 guineas (sterling) per week.

Med Supt HILARY ROCHE M D (Melb) M R C P (Lond) Tuberculous Dis Dip (Wales)

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)
CITY ROAD E C 1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Dental Clinics and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Residential) Nearly 2 000 patients annually

RALPH B CANNINGS Secretary

QUEEN CHARLOTTE'S MATERNITY HOSPITAL

MARYLEBONE ROAD, N W 1

Medical Students and Qualified Practitioners admitted to the Practice of this Hospital Unusual opportunities are afforded of seeing Obstetrical Complications and Operative Midwifery (about one half of the total admission being primiparous cases) Over 2 700 patients are admitted to the Wards annually and in the Antenatal department there are over 20 000 attendances per annum Clinical demonstrations are given by the Staff daily

For rules fees etc apply H B STOKES Secretary Superintendent

LONDON HOSPITAL MEDICAL COLLEGE

F.R.C.S.

A Course of Instruction for the FINAL FELLOWSHIP EXAMINATION will begin on Thursday September 1st 1938 Fees (exclusive of Operative Surgery) 25 guineas Operative Surgery 10 guineas

Further particulars may be obtained from — DR A E CLARK KENNEDY M D F R C P Dean London Hospital Medical College Turner Street London E 1

LONDON HOSPITAL MEDICAL COLLEGE

PRIMARY FELLOWSHIP EXAMINATION

A SPECIAL COURSE OF INSTRUCTION for the above Examination will begin on Thursday September 1st

The fee for the Course is 15 guineas

Further particulars may be obtained from — DR A E CLARK KENNEDY M D F R C P Dean Turner Street Mile End E 1

DIPLOMA IN OPHTHALMOLOGY DIPLOMA IN RADIOLOGY DIPLOMA IN LARYNGOLOGY AND OTOLOGY

Short Intensive Revision Courses Oral and Postal in preparation for these Diplomas
For full details write SECRETARY Medical Correspondence College 19 Welbeck Street W 1

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH

ROYAL COLLEGE OF SURGEONS OF EDINBURGH

ROYAL FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW

COPIES OF REGULATIONS for the TRIPLE QUALIFICATION (L R C P E L R C S E and L R F P & S G) and the DIPLOMA IN PUBLIC HEALTH containing dates of Professional Examinations for the year 1938 1939 Curriculum etc may be had on application to The Registrar Surgeons Hall 18 Nicolson Street Edinburgh 8 or to the Registrar 242 St Vincent Street Glasgow C 2

STAMMERING, SPEECH DEFECTS

BEHNKE METHOD Est 1880 Cases non resident treated at 39 Earls Court Sq S W 5 and in residence in the Summer holidays at MISS BEHNKE'S house on the Chilterns

Pre eminent success in education and treatment of stammering and other speech defects — Times

Thoroughly physiological principles — Lancet

The method is scientifically correct and perfectly effective — Guy's Hospital Gazette

Stammering, Cleft Palate Speech, Lisping, 3 9 of MISS BEHNKE 39 Earls Court Sq S W 5

THE CHILDREN'S CENTRE THE INSTITUTE OF CHILD PSYCHOLOGY

TRAINING and EXPERIENCE in the PSYCHOTHERAPY of CHILDHOOD are offered to Medical men and women One Year Course beginning in September

All particulars may be had on application to the Secretary 6 Pembridge Villas London W 11

Preliminary Examinations

The COLLEGE OF PRECEPTORS holds Preliminary Examinations for Medical and Dental Students in London and at Provincial Centres in March June September and December For Regulations apply to the Secretary College of Preceptors Bloomsbury Square London W C 1

THE
HOTEL GREAT CENTRAL
Marylebone Road, N W 1

The Hotel Great Central is within a few minutes walk of the London Clinic and Harley Street

Special terms for friends visiting Nursing Homes in vicinity

Apply Manager Telephone Padd 1220

TORQUAY
GRESHAM COURT HOTEL

RECENTLY OPENED Luxurious comfort combined with an earnest desire to please

The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure 'M' TEL 3658

CITY OF LONDON MENTAL HOSPITAL, DARTFORD, KENT

Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upwards

DOCTOR WILL RECEIVE A MALE PATIENT modern Tudor house near Windsor quiet surroundings Wraysbury 310 —Address No 7303 B M A House Tavistock Square W C 1

RESIDENT PATIENT FUNCTIONAL CONDITION bed ridden or otherwise can be received in medical man's large well furnished house garden beautiful country conveniently close to London from about July 28th —Address No 7302 B M A House Tavistock Square W C 1

SOUTHERN RHODESIA MEDICAL SERVICE

GOVERNMENT MEDICAL OFFICER

Applications are invited from fully qualified male Medical Practitioners for appointment as a GOVERNMENT MEDICAL OFFICER in the Southern Rhodesia Medical Service

Salary will be on the scale £600-£25 £/50 per annum There is also a senior grade (£/50-£25 £900) to which promotions are made as vacancies occur Salary will commence from the date of assumption of duty in Southern Rhodesia In addition private practice is allowed

The successful applicant will be required to sign an agreement for three years service in the first instance and thereafter may make application to be placed on the pensionable establishment

A free second class steamship passage to Cape Town and first-class railway ticket thence to Southern Rhodesia will be provided

Canvassing either directly or indirectly will disqualify applicants

The applicants should state the date on which they would be prepared to leave England if appointed

Applications stating age qualifications and experience together with copies of testimonials should reach the Official Secretary Office of the High Commissioner for Southern Rhodesia Rhodesia House 429 Strand London W C (from whom further particulars and application form may be obtained) not later than July 2nd

MIDDLESEX COUNTY COUNCIL

PUBLIC VACCINATOR required for Laleham and Staines district Must be qualified medical practitioner with certificate of proficiency in vaccination Subject to contract with Council according to Ministry of Health Vaccination Order 1930 embodying Council's scale fees Appointment not on pensionable staff at present

Applications giving date of birth qualifications and experience and copies of not more than three recent testimonials should be received by the undersigned by July 23rd in envelopes endorsed Vaccinator No forms provided

Relationship to any member or officer of the Council must be disclosed and canvassing directly or indirectly disqualifies

C W RADCLIFFE Z
Clerk of the County Council

Guildhall Westminster S W 1

KING'S COLLEGE HOSPITAL *London S E 5*

BIOCHEMIST (male) required to commence on October 1st Salary £500 per annum with opportunities for Private Practice Candidates must be medically qualified and have had special experience in Chemistry

Applications should be sent by September 1st to the House Governor King's College Hospital Denmark Hill S E 5 from whom full particulars of the post may be obtained

UNIVERSITY OF LONDON

BRITISH POSTGRADUATE MEDICAL SCHOOL (DEPARTMENT OF PATHOLOGY)

DIPLOMA IN CLINICAL PATHOLOGY

A COURSE OF STUDY in the academic year 1938-39 will be held for this Diploma commencing on October 3rd 1938. The Course will occupy twelve calendar months. The subjects embraced will be:—

HAEMATOLOGY AND CLINICAL PATHOLOGY
PATHOLOGICAL CHEMISTRY
BACTERIOLOGY
MORBID ANATOMY AND HISTOLOGY

The Course will commence with Haematology and Clinical Pathology which will occupy about six weeks and will be followed by the Course in Pathological Chemistry which will occupy about the same time. The Courses in Bacteriology and Morbid Anatomy and Histology will run concurrently and occupy about six months. For the last three months of the Course students will be occupied in the practice of routine work in the laboratories of the Department and in revision work. The number of places in the Course is limited and students will be selected shortly before the Course is due to commence.

Fee forty guineas.

In addition to the full Course it will probably be possible to enrol a limited number of students for the subjects of Pathological Chemistry and Clinical Pathology and Haematology separately. The Course in each subject lasting about six weeks. Fee for either Course nine guineas.

Further particulars may be obtained from the Dean, British Postgraduate Medical School, Ducane Road, Shepherd's Bush, London, W.12.

POST-GRADUATE COURSES

Open only to Members. Annual Subscription £1 1 0

PRIMARY F.R.C.S. PHYSIOLOGY COURSE (Aug. 15th to Nov. 4th, Mons., Weds. and Fris. 5.30 p.m.) M.R.C.P. CLINICAL AND PATHOLOGICAL (National Temperance Hospital, 8.0 p.m. Tues. and Thurs. Sept. 6th to 22nd). M.R.C.P. CHEST (Brompton Hospital, 5.0 p.m. twice weekly). RHEUMATISM AND HYDROTHERAPY (week-end Sept. 16th to 18th, Royal Bath Hospital, Harrogate).

Apply FELLOWSHIP OF MEDICINE, 1 Wimpole Street, London, W.1. (Langham 4266.)

UNIVERSITY EXAMINATION POSTAL INSTITUTION

FOUNDED IN 1882

17 RED LION SQ., LONDON, W.C.1

EXPERT PREPARATION FOR ALL MEDICAL EXAMINATIONS

ORAL CLASSES

POSTAL COURSES

PRIVATE TUITION

THESIS GUIDANCE

MUSEUM DEMONSTRATIONS

THE PRINCIPAL WILL ADVISE ON ANY DIFFICULTY THOSE WHO CARE TO WRITE OR CALL

MEDICAL PROSPECTUS (47 pp.)

CONTENTS. The method and the cost of entering the Medical Profession. *Particulars of all Medical Examinations.* Postal Courses and Oral Classes. Suggestions for the Higher Medical Examinations. Suggestions for the Higher Surgical Examinations. Suggestions for the Special Diploma Examinations. Refresher Courses. Openings for Women. Hints for writing theses.

Medical Prospectus gratis, along with list of Tutors, etc., on application to the Principal, 17 Red Lion Sq., London, W.C.1. (Telephone: Holborn 6313.)

MEDICAL CORRESPONDENCE COLLEGE,

19 Welbeck Street, London, W.1

M.B., B.S. LONDON

Candidates entering for Part I in November 1938 or for Parts II and III in May 1939 under the New Regulations should write for full detail of new courses of postal preparation conforming to the new requirements of the syllabus.

Highly qualified Tutors with accurate knowledge of the special features of these examinations.

Write at once for booklet "The Problem of the Final M.B.B.S. London." Sent free on application.

Address The Secretary,
MEDICAL CORRESPONDENCE COLLEGE
19, Welbeck Street, London, W.1

DIPLOMA IN PUBLIC HEALTH

The Royal Institute of Public Health and Hygiene

The Course of Instruction can be commenced at any time. Special provision is made for students who can give only part time to the work.

A prospectus and further particulars can be obtained from the Secretary,
Telephone: Langham 7731/2
8 Portland Place, London, W.1

UNIVERSITY OF CAMBRIDGE

DIPLOMA IN MEDICAL RADIOLOGY AND ELECTROLOGY

The next Course of Study for the Diploma begins on October 4th, 1938, and lasts three months. It comprises:—

(a) Four months in theoretical physics, RADIOLOGY and PATHOLOGY.

(b) Three months further instruction in RADIOLOGY and ELECTROLOGY together with three months clinical work in the Radiological Department at a hospital approved by the Medical Committee of the Diploma.

(c) Two months experience as CLINICAL ASSISTANT in the Radiological Department of a hospital approved by the Committee. Hospitals in London and in the Provinces and Overseas have been approved for the purpose of the Course.

Examinations for Part I (Physics) will be held in February and July, 1939, and for Part II (Radiology, Electrology and Pathology) in July and October, 1939.

The University has decided that the Diploma shall cease to be granted after 1941. The last Course for the Diploma will start in October, 1940, and the last examination will be held in October, 1941.

The Courses are open to men and women who are medical qualifications approved by the General Medical Council for purposes of registration and who satisfy the Committee that they have had sufficient post-graduate clinical experience.

Further information about the Courses may be obtained from:—

G. STEAD, M.A., Secretary, Diploma in Radiology, Cavendish Laboratory, Cambridge, or
The General Secretary, British Institute of Radiology, 32 Welbeck Street, London, W.1.

THE POLYTECHNIC, REGENT STREET, W.1.

DEPARTMENT OF CHEMISTRY AND BIOLOGY

Head of Department
H. LA BROUSE, M.A., M.Sc., F.I.C.

DAY COURSE IN CHEMISTRY, PHYSICS AND BIOLOGY. AND EVENING COURSE IN CHEMISTRY AND PHYSICS.

For the 1st MEDICAL and PRE-MEDICAL EXAMINATIONS.

New Session Commences

Day	September 30th, 1938
Evening	September 26th, 1938

Fee to London Students

Day	£8 8 0 per term
Evening	£5 5 0 per term

Early application should be made to the Director of Education.

FRCS (Edin.)

EDINBURGH POSTAL COURSES

Full details of above and Oral Classes — H. C. ORRIN, F.R.C.S., Surgeon's Hall, Edinburgh.

BOROUGH OF BEXLEY

ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from fully qualified medical men and women not exceeding 45 years of age for the post of whole time Assistant Medical Officer of Health

Applicants must have had not less than three years postgraduate experience with special experience in the management and dietetics of infancy children's diseases and practical midwifery

The possession of a Diploma in Public Health and/or postgraduate diploma in midwifery will be considered in advantage

The person appointed will be required to reside in the Borough and to work under the direction and control of the Medical Officer of Health principally in connexion with the administration of the Maternity and the Welfare Services and of the Council's Maternity Home

The salary will be at the rate of £550 per annum rising by annual increments of £25 to a maximum of £700 subject to a deduction of 5 per cent under the Local Government and Other Officers Superannuation Act 1922

The successful candidate will be required to pass a medical examination

Women applicants must be single and if appointed will be required to resign on marriage

The appointment will be subject to termination by three months notice on either side

Forms of application may be obtained from the Medical Officer of Health 14 Brampton Road Bexleyheath Kent to whom on completion they should be returned together with copies of not more than three recent testimonials in sealed envelopes endorsed Assistant Medical Officer of Health by August 5th 1938 at the latest

Candidates must disclose in their applications whether to their knowledge they are related to any member of or the holder of any senior office under the Council Failure to do so or canvassing directly or indirectly will be deemed a disqualification

Council Offices W WOODWARD
Bexleyheath Town Clerk

COUNTY BOROUGH OF MERTHYR TYDFIL

APPOINTMENT OF ASSISTANT SCHOOL MEDICAL OFFICER (MALE)

Applications are invited from men under the age of 35 years for the above post

The duties will be mainly in connection with the School Medical Service together with such other duties as the Medical Officer of Health may direct

The salary will be at the rate of £500 per annum rising by annual increments of £25 to a maximum of £700 per annum with reasonable travelling expenses

Forms of application may be obtained from the undersigned and completed applications accompanied by copies of not more than three recent testimonials should reach him not later than July 30th 1938

Town Hall T H STEPHENS
Merthyr Tydfil Medical Officer of Health
July 8th 1938

COUNTY BOROUGH OF SOUTHAMPTON

PUBLIC VACCINATOR

The Corporation invite applications from Medical Practitioners for the appointment of Public Vaccinator for the District comprising areas 3 and 4

The remuneration will be in accordance with the Vaccination Order 1930 which can be inspected at the office of the Medical Officer of Health Civic Centre Southampton

Applicants must possess the qualifications mentioned in the Order

Applications endorsed Vaccinator must be delivered to me not later than July 30th 1938

Civic Centre R RONALD H MEGGESON
Southampton Town Clerk

UNIVERSITY OF BRISTOL

DEPARTMENT OF PREVENTIVE MEDICINE

Applications are invited for a SENIOR BACTERIOLOGIST Salary £700 to £800 per annum according to qualifications and experience Appointment to date from October 1st 1938 Candidates who must be fully qualified and registered must have specialized in Pathology and in Bio-Chemistry and have had considerable experience in a recognized Pathology department

Applications should reach the undersigned from whom further particulars may be obtained on or before August 20th 1938

WINIFRED SHAPLAND
Secretary and Registrar

THE CHILDREN'S CENTRE

THE INSTITUTE OF CHILD PSYCHOLOGY

HONORARY ASSISTANT PHYSICIANS required in September in the Psychotherapeutic Department for work with children—Apply to the Secretary 6 Lambridge Villas W 11

MEDICAL STAFF PRISON SERVICE (ENGLAND AND WALES)

Applications are invited for the post of male MEDICAL OFFICER CLASS II in the above Service Commencing salary £525 per annum rising by annual increments to £800 per annum with unfurnished house (free of rates) or an allowance in lieu The post is pensionable

Candidates must be fully qualified and registered Preference will be given to those who have held House appointments have had experience in mental diseases and psychological methods and are between the ages of 25 and 35 years The commencing salary for those holding the Diploma of Psychological Medicine will be £575 per annum

Of the whole time Prison Medical Officers 16 are Class II and 12 are Class I Promotions from Class II to the rank of Medical Officer Class I on a salary scale of £800 per annum rising to £1 000 per annum with unfurnished house (free of rates) or an allowance in lieu are made as vacancies occur Three of the senior Medical Officers receive an additional allowance of £50 per annum and at certain Prisons Medical Officers receive fees for giving evidence in the Criminal Courts

Forms of application can be obtained from the Secretary (Staff Branch) Prison Commission Home Office London S W 1

ROYAL N Z SOCIETY FOR THE HEALTH OF WOMEN AND CHILDREN (INC.) (PLUNKET SOCIETY)

APPOINTMENT OF MEDICAL ADVISER TO THE DOMINION COUNCIL OF THE SOCIETY

The Dominion Council of the Royal N Z Society for the Health of Women and Children (Inc.) (Plunket Society) invites applications from members of the British Medical Association for the appointment of a Medical Adviser to the Society

The successful applicant will require to reside at Dunedin New Zealand to enter into a contract for a period of five years and to devote his whole time to the work

Salary £1 200 per annum New Zealand currency

Further particulars may be obtained from Dr R C Jewesbury M D F R C I 5 Wimpole Street Cavendish Square London W or from the HIGH COMMISSIONER FOR NEW ZEALAND New Zealand House 415 Strand London W C 2

The successful applicant will be required to take up duty early in 1939

Applications giving full particulars as to age experience and qualifications together with copies of recent testimonials will be received not later than September 30th 1938 and should be addressed to the DOMINION PRESIDENT Plunket Society Queen's Buildings Princes Street Dunedin New Zealand

COUNTY ANTRIM MENTAL HOSPITAL Ulster

The Committee of Management of County Antrim Mental Hospital invite applications for the post of SENIOR ASSISTANT MEDICAL OFFICER

Applicants must be male single under 35 years of age duly qualified in Medicine and Surgery and have had special experience in Bacteriology

Commencing salary £400 rising by £25 annually to £600 together with furnished apartments board laundry and attendance valued at £100 per annum

The person appointed will require to hold or to obtain within three years from date of appointment a Diploma in Psychological Medicine

The appointment is subject to the provisions of the Asylums Officers Superannuation Act 1909 and to the sanction of the Ministry of Home Affairs Northern Ireland

Forms of application which may be obtained from the Resident Medical Superintendent must be returned to him not later than Monday August 1st 1938

July 6th 1938 BY ORDER

CHILSHIRE COUNTY COUNCIL

CHATTERBRIDGE (COUNTY) GENERAL HOSPITAL
(Near Birkenhead) (300 Beds)

JUNIOR RESIDENT ASSISTANT MEDICAL OFFICER

Applications (male or female) are invited for the above appointment which falls vacant on August 5th

The appointment is for a period of six months at a salary of £200 per annum together with the usual residential allowances The appointment may be renewed for a further period of six months

There is a Non Resident Medical Superintendent a Resident Deputy Medical Superintendent and a Consulting Staff from Teaching Hospitals

Applications to be made on forms obtainable from the undersigned and returned not later than July 25th 1938

24 Nicholas Street IAN MACKAY
Chester County Medical Officer of Health

CITY OF MANCHESTER

ASSISTANT TUBERCULOSIS OFFICER

The Public Health Committee invites applications for the position of Assistant Tuberculosis Officer at a commencing salary of £650 per annum rising by annual increments of £25 to £750 per annum

Candidates must be registered Medical Practitioners having special knowledge of Medical and Surgical Tuberculosis and should state whether they possess the Diploma of Public Health

Applications (no special form is issued) stating age qualifications and experience with copies of not more than three recent testimonials and endorsed on the envelope Assistant Tuberculosis Officer must be addressed to the Medical Officer of Health Town Hall Manchester 2 and not to members of the Committee or Council and must be received by him not later than July 27th 1938

The gentleman appointed will be under the administrative control of the Medical Officer of Health and the immediate control of the Senior Tuberculosis Officer He will be required to devote the whole of his time to the duties of his position to execute the Deed of Service and to contribute to the Corporation Superannuation Fund

Canvassing in any form direct or indirect oral or written is prohibited

Town Hall J E WARBRECK HOWELL
Manchester 2 Town Clerk
July 4th 1938

CITY OF BIRMINGHAM

ROMSLEY HILL SANATORIUM (170 Beds)

RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited for a Resident Assistant Medical Officer Candidates must be unmarried and have held a resident hospital appointment since qualifying Experience in the diagnosis and treatment of tuberculosis will be a recommendation

The appointment will be limited in the first instance to six months and subject to satisfactory service may be extended for a further six months The salary will be at the rate of £240 per annum for the first six months and £275 per annum for the second six months with board and residence in each case

Forms of application may be obtained from the Medical Superintendent Romsley Hill Sanatorium Halesowen near Birmingham and should be returned to him not later than July 23rd 1938

J H C WILKINSON
Town Clerk

CITY OF MANCHESTER

BOOTH HALL HOSPITAL FOR CHILDREN
(760 Beds)

The Public Health Committee invites applications from registered medical men for the post of RESIDENT ASSISTANT MEDICAL OFFICER at the above named hospital

The salary for the appointment is £200 per annum with board residence and laundry in addition subject to the Manchester Corporation conditions of service

The appointment will be made in the first instance for a period of six months renewable for a further six months but not renewable thereafter

Full information and forms of application may be obtained from the Medical Officer of Health Town Hall Manchester 2 and applications for the post must be received by him not later than July 23rd 1938

J E WARBRECK HOWELL
Town Clerk
Town Hall
Manchester 2
July 11th 1938

THE UNIVERSITY OF LIVERPOOL

The Council invites applications for the post of LECTURER (Ungraded) in the DEPARTMENT OF PATHOLOGY Salary £600 rising by annual increments of £25 to £700

The duties of the Lecturer will commence on October 1st 1938 The appointment is a whole time one and the Lecturer will be required to comply with the conditions of the Federated Superannuation System for Universities

Four typewritten applications together with three references and (if the candidate so desires) copies of testimonials should be forwarded not later than Saturday September 3rd 1938 to the Registrar

Enquiries for further information should be addressed to the George Holt Professor of Pathology The University of Liverpool

STANLEY DUMBELL
Registrar
July 1938

RADIUM BEAM THERAPY RESEARCH

At the Radium Institute
1 Riding House Street London W 1

ASSISTANT MEDICAL OFFICER required Salary £150 per annum Six months appointment

Applications stating age qualifications and experience with copies of testimonials to be sent to the Secretary Radium Beam Therapy Research Committee not later than Monday July 18th

It is possible for a candidate to be engaged and at the same time to carry on some graduate studies the mornings being free

Appointments for Medical Officers in the ROYAL AIR FORCE

Medical men are invited to apply for Short Service Commissions in the Royal Air Force. Candidates must be registered under the Medical Acts and be not more than 31 years of age on entry.

The period of service is 3 years—extendible to 5 years. A gratuity of £400 or £1,000 is payable at the termination of 3 or 5 years respectively. Permanent commissions are awarded in a number of cases. These offer a pensionable career with the opportunity of extra leave on full pay for specialised study. Applicants who hold—or are likely to hold—post-graduate appointments in civil hospitals may on joining the Royal Air Force be seconded until the termination of their appointments (for a period not exceeding one year). An antedate of commission up to twelve months is allowed for appointments held at approved hospitals.

Fuller information can be obtained from The Director of Medical Services, Air Ministry, Kingsway, London

ROYAL NAVAL MEDICAL SERVICE.

Vacancies exist for Medical Officers in the Royal Navy, and applications are invited for entry in September, 1938.

Candidates below the age of 28 years are preferred and they must be registered under the Medical Acts. No examination in professional subjects will be held, but candidates will be required to attend for interview by a Selection Board.

Selected candidates will be entered for Service for a period of three years, which if desired is usually extended to five years at the discretion of the Admiralty.

At the end of three years' service, officers may retire with a gratuity of £400, but those who serve for five years will receive £1,000.

At the end of five years' Short Service, permanent commissions will be given to selected officers who wish to make the Naval Medical Service their permanent career. Officers transferred to the permanent list will receive a gratuity of £1,000 (less Income Tax).

Full opportunities exist for transfer to the permanent list, and periods of unemployed or half pay are very rare. The assistance of private income is not necessary for the purpose of supplementing official pay and allowances.

Opportunities are available for officers on the permanent list for post-graduate study, to specialise, to take higher examinations and to obtain further qualifications.

Naval Medical Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers.

Copies of the regulations for entry and conditions of service, including rates of pay, allowances and retired pay, may be obtained from the Medical Director General of the Navy, Admiralty, S.W.1, and from the Deans of all Medical Schools.

Applications for entry from intending candidates must be received not later than 31st August, 1938.

AMENDED ADVERTISEMENT

CITY OF COVENTRY

ASSISTANT SCHOOL MEDICAL OFFICER AND ASSISTANT MEDICAL OFFICER OF HEALTH (MALE)

The Coventry City Council invite applications for the above post from registered male medical practitioners under 40 years of age Applicants should possess a Diploma in Public Health and previous experience is desirable The duties are in connection with the medical inspection etc of school children and there are also opportunities for experience in general public health work

The commencing salary will be £600 rising by annual increments of £25 to a maximum of £700 per annum

The post is designated under the Local Government and Other Officers Superannuation Act 1922 as amended in regard to annuities to widows by the Coventry Corporation Act 1936 and the successful applicant will be required to pass a medical examination as to fitness and to contribute to the superannuation fund and to the Coventry Staff Widows and Orphans Pension Fund

Applications stating age qualifications and experience together with copies of three recent testimonials should reach the undersigned on or before July 27th 1938

The Council House FREDERICK SMITH
Coventry Town Clerk
July 11th 1938

CITY OF SALFORD

HOPE HOSPITAL

Applications are invited for the post of RESIDENT OBSTETRIC OFFICER at Hope Hospital Salford to commence duty as soon as possible Commencing salary £460 per annum maximum £520 per annum plus board lodging attendance and laundry A deduction of 5 per cent will be made from salary and estimated value of emoluments for superannuation purposes

The Hospital contains 1 150 beds and is equipped with Pathological Laboratory X Ray and Electro Cardiograph and affords full facilities for clinical investigation

The Resident Obstetric Officer is one of the three Senior Residents and will be responsible for work in the obstetric and gynaecological division Candidates must have had recent extensive practical experience in obstetrics and in gynaecology and must possess the M C O G Diploma Preference will be given to candidates who also possess one of the higher surgical qualifications

Further particulars and application forms may be obtained from the Medical Officer of Health 143 Regent Road Salford 5 to whom they must be returned accompanied by copies of not more than three recent testimonials not later than Saturday July 23rd 1938

H H Tomson Town Clerk

HERTFORDSHIRE COUNTY COUNCIL

MATERNITY AND CHILD WELFARE

ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited for the post of Medical Officer for Maternity and Child Welfare work in the County of Hertford Applicants must be registered Medical Practitioners and have had special experience in Maternity and Child Welfare and Ante natal work and have had at least three years experience in the practice of their profession Commencing salary £500 per annum rising by annual increments of £25 to a maximum of £700 per annum

The post is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful applicant will have to pass a medical examination

The Officer appointed should possess a car for the use of which a mileage allowance according to the County Scale will be paid

Particulars of experience qualifications and copies of three recent testimonials should be sent to the Clerk of the County Council Clerk of the Peace Office Hertford not later than Monday July 18th 1938

ELTON LONGMORE
Hertford Clerk of the County Council
July 1938

CITY AND COUNTY OF NEWCASTLE UPON TYNE

NEWCASTLE GENERAL HOSPITAL (800 Beds)

ASSISTANT RADIOLOGIST

Applications are invited from duly qualified and registered Medical Practitioners for the post of Assistant Radiologist in charge of the Deep Therapy Department at the above mentioned hospital

Salary £.00 rising by two annual increments of £ 0 to £600

Applications which should give full details of training and experience together with copies of two testimonials should be submitted to the Medical Officer of Health Health Department Town Hall Newcastle-upon Tyne 1 not later than Wednesday July 27th 1938

DURHAM COUNTY COUNCIL AND CHESTER LE STREET URBAN DISTRICT COUNCIL

DISTRICT TUBERCULOSIS MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH (MALE)

Applications are invited for the above appointments Candidates must be registered in the Medical Register as holding a Diploma in Sanitary Science Public Health or State Medicine and must have had a satisfactory experience in the diagnosis and treatment of Tuberculosis

The salary will be £800 per annum in the proportion of £572 15s payable by the County Council and £227 5s payable by the Chester le-Street Urban District Council

The officer appointed must either have held a previous appointment as Tuberculosis Medical Officer with the approval of the Minister of Health or

(i) have had at least three years experience in the practice of his profession

(ii) have spent in general clinical work a period not less than eighteen months of which not less than six months have been spent in a Hospital as Resident Officer in charge of beds occupied by general medical and surgical cases and

(iii) have received special training for a period of not less than six months in the diagnosis and treatment of tuberculosis

Travelling and subsistence allowances according to a scale from time to time in force will be paid by the County Council in respect of the duties of District Tuberculosis Medical Officer and the officer will subject to the directions of the County Medical Officer be under the control of the Central Tuberculosis Medical Officer

It will be a condition of the appointment that if either post is terminated the other post will be automatically vacated

The appointments will be subject to the approval of the Minister of Health and the officer will not be permitted to take part in private practice

The person appointed will be required to live in or near Chester le Street

Applications endorsed T M O and M O H and accompanied by copies of not more than three recent testimonials must be addressed to the County Medical Officer Shire Hall Durham and must be received by him not later than July 23rd 1938

Shire Hall J K HOPE
Durham Clerk of the County Council
July 4th 1938

COUNTY BOROUGH OF BIRKENHEAD DEPARTMENT OF THE MEDICAL OFFICER OF HEALTH

BIRKENHEAD MUNICIPAL HOSPITAL (560 Beds)

RESIDENT SURGICAL OFFICER RESIDENT MEDICAL OFFICER

Applications are invited for the above posts which will fall vacant on October 1st 1938 The appointments are for twelve months

Candidates must be male unmarried and fully qualified registered medical practitioners

The duties attached to the post of Resident Surgical Officer are mainly surgical and obstetrical and preference will be given to candidates who have had previous post graduate surgical (including operative surgery) experience either in a Municipal or Voluntary General Hospital

The duties attached to the post of Resident Medical Officer are mainly medical and preference will be given to candidates who have had previous post graduate medical experience

Salary £300 per annum with board residence and laundry

Applications must be made on forms to be obtained from Dr D Morley Matheson Medical Officer of Health 9 Hamilton Square Birkenhead

Applications endorsed Resident Medical Officer to be received by the undersigned not later than July 25th 1938

Town Hall E W TAME
Birkenhead Town Clerk

HAMPSHIRE COUNTY COUNCIL

ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited for the post of Assistant County Medical Officer Possession of a Diploma or Degree in Public Health is essential and previous experience in the various branches of public health work especially tuberculosis and school medical service is desirable

The successful candidate will devote a portion of his time to the work of Medical Officer of Health of a County District The salary will be £767 a year rising on approved service to a minimum of £800 a year (subject to deductions for pension) in addition to travelling expenses

Applications with copies of not more than three recent testimonials upon a form which with the conditions of appointment may be obtained from the County Medical Officer The Castle Winchester should be sent to him as soon as possible and not later than July 15th 1938 Canvassing is prohibited

The Castle F V BARBER
Winchester Clerk of the County Council
July 2nd 1938

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

MIDDLETON IN WHARFEDALE SANATORIUM

APPOINTMENT OF JUNIOR RESIDENT MEDICAL OFFICER

The County Council of the West Riding of Yorkshire invite applications for the appointment of Junior Resident Medical Officer (male unmarried) at the Middleton in Wharfedale Sanatorium near Ilkley (300 Beds) Salary £350 by increments of £25 to £450 per annum with board

Candidates should have previously held an appointment as House Physician or House Surgeon and experience in Pulmonary and Non Pulmonary Tuberculosis and Anaesthetics will be an advantage

The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922

Further particulars and form of application may be had from the undersigned by whom all applications together with copies of not more than three recent testimonials must be received not later than Monday July 25th 1938

J CHARLES McGRATH
Clerk of the County Council
County Hall Wakefield
July 1938

LANCASHIRE COUNTY COUNCIL

APPOINTMENT OF DENTAL SURGEON

The Lancashire County Council propose to appoint a full time Dental Surgeon and invite applications from fully qualified and registered Dental Surgeons who must not be over 40 years of age The duties of the post include the dental inspection and treatment of school children work under the Maternity and Child Welfare Acts and such other duties as may from time to time be imposed by the County Council

The salary will be at the rate of £550 per annum rising subject to satisfactory service by annual increments of £25 to a maximum of £700 per annum together with allowances for travelling etc The person appointed will be required to pass a medical examination and to contribute towards the Council's Superannuation Scheme

Applications must be made upon a form which can be obtained together with further particulars from County Medical Officer of Health School Medical and Child Welfare Department County Offices Preston to whom the completed form should be returned not later than July 25th 1938 All communications must be endorsed Dental Surgeon Canvassing is strictly forbidden and will disqualify

County Offices GEORGE ETHERTON
Preston Clerk of the County Council

CITY OF BIRMINGHAM

PUBLIC HEALTH DEPARTMENT

LITTLE BROMWICH HOSPITAL FOR INFECTIOUS DISEASES

JUNIOR RESIDENT MEDICAL OFFICERS

Two Junior Resident Medical Officers (one male and one female) required Candidates must be unmarried and must have held previous resident posts in general or children's hospitals

Salary at the rate of £300 per annum together with board etc valued at £150 per annum These appointments are limited to twelve months

The officers appointed will be required to pay to the Council all fees allowances and emoluments (other than the foregoing) received by them They will be required to take up duty at the end of September

It is not feasible to attend classes for the D P H in conjunction with these appointments

Forms of application may be obtained from the Medical Superintendent Dr J McGarrity Little Bromwich Hospital Birmingham 9 and should be returned to him on or before July 25th

The Council House F H C WILTSHIRE
Birmingham Town Clerk

COUNTY BOROUGH OF BURNLEY

MUNICIPAL GENERAL HOSPITAL

JUNIOR RESIDENT MEDICAL OFFICER (Male)

Applications are invited from fully qualified medical men for the position of Junior Resident Medical Officer at the Municipal General Hospital Burnley to take up duties on or about A 1938 The appointment will be for a period of twelve months

Salary at the rate of £150 per annum for the first six months £200 per annum for the second six months plus full residential emoluments

Applications together with copies of two testimonials should be forwarded as early as possible to the Medical Officer of Health St James's Burnley

Town Hall HARRY FLOWMAN
Burnley Town Clerk
July 6th 1938

CITY OF MANCHESTER

PUBLIC HEALTH DEPARTMENT

APPOINTMENT OF LOCUM PATHOLOGIST

CRUMPSALL HOSPITAL (1,400 Beds)
WITHINGTON HOSPITAL (115 Beds)
BOOTH HOSPITAL (760 Beds)

The Public Health Committee invites applications from qualified medical practitioners for the appointment of Locum Pathologist (non-resident) in connection with the municipal hospitals pathological service for a period of approximately three months. The remuneration of the position will be at the rate of £10 10s. per week.

The person appointed will be required to commence duty as soon as possible and will work chiefly at the Crumpsall Hospital, but may be required to act at any of the three hospitals of the service.

The appointment is of a temporary nature and does not carry with it a right of entry into the Corporation Superannuation Fund. No guarantee of re-election of services offered to the successful candidate in the event of a permanent appointment of a similar nature being established.

Applications stating in full the age, qualifications, particulars of experience in clinical pathology and the names and addresses of three referees, and endorsed on the envelope "Locum Pathologist," are to be addressed to the Medical Officer of Health, Town Hall, Manchester, 2, and are to be received by him not later than July 18th, 1938.

Prospective candidates who desire further particulars should apply to the Medical Officer of Health.

Town Hall, Manchester. F. E. WARBRECK HOWELL
July 11th, 1938. Town Clerk.

CITY OF LIVERPOOL

HOSPITALS AND PORT HEALTH COMMITTEE

RESIDENT ASSISTANT MEDICAL OFFICERS

Walton Hospital (1,969 Beds)
Smithdown Road Hospital (1,150 Beds)
Mill Road Infirmary (756 Beds)

Applications are invited for the above appointments which fall vacant on October 1st, 1938.

The appointments are for a period of one year at a salary of £250 per annum, together with the usual residential allowances. Canvassing will be deemed a disqualification.

Application forms obtainable from the Medical Officer of Health, Municipal Annexe, Dale Street, Liverpool, to be endorsed "Resident Assistant Medical Officer," and returned to the undersigned not later than Monday, July 18th, 1938.

Municipal Buildings, Liverpool. W. H. BAINES
July 13, 1938. Town Clerk.

CITY OF LIVERPOOL

RESIDENT ASSISTANT MEDICAL OFFICER

FAZAKERLEY SANATORIUM (68 Beds)

Applications are invited for the above appointment for a period of one year at a salary of £150 per annum, together with usual residential allowances.

Candidates must possess a registered medical and surgical qualification, and it is desirable that they should have held previous appointment in a teaching hospital.

Canvassing will be deemed a disqualification.

Applications to be made on forms obtainable from the Medical Officer of Health, Municipal Annexe, Dale Street, Liverpool, to be endorsed "Resident Assistant Medical Officer," and returned to the undersigned so as to be received not later than Monday, July 18, 1938.

Municipal Buildings, Liverpool. W. H. BAINES
July 13, 1938. Town Clerk.

CITY OF LIVERPOOL

RESIDENT ASSISTANT MEDICAL OFFICERS (Male and Female)

ALDER HEY HOSPITAL (95 Beds)

Applications are invited for the above appointments which fall vacant on October 1st, 1938. The appointments are for a period of one year at a salary of £200 per annum, together with the usual residential allowances. Canvassing will be deemed a disqualification.

In addition to acute medical ward there are special departments for ophthalmia, ear, nose and throat and orthopædic cases.

Applications to be made upon form obtainable from the Medical Officer of Health (Hospitals Department), Municipal Annexe, Liverpool 2, to be endorsed "Resident Assistant Medical Officer," and returned to the undersigned so as to be received not later than Monday, July 25th, 1938.

Municipal Buildings, Liverpool. W. H. BAINES
Dale Street, Liverpool. Town Clerk
July, 1938.

COUNTY COUNCIL OF DURHAM

EDUCATION DEPARTMENT

ASSISTANT SCHOOL MEDICAL OFFICER

The County Education Committee invite applications for the post of Assistant School Medical Officer (woman) to act under the School Medical Officer in connexion with the inspection of school children and such other duties as may be required by the Education Committee.

Commencing salary £450 per annum (provided the candidate has had not less than three years' postgraduate experience), rising by annual increments of £15 to £500 per annum, together with travelling expenses according to the County Scale. The successful candidate will be required to devote her whole time to the duties of the office and to reside in or near the district in which she may be attached at a place to be approved by the Education Committee. The appointment will be subject to three calendar months' notice on either side terminating on the last day of any calendar month. Applicants must have had experience in the work of a school medical inspection and preference will be given to candidates who:

(a) Have had experience in the work of School Clinics.

(b) Have been accustomed to make special reports on Mentally Defective, Physically Defective, Epileptic and other Defective Children.

The possession of a Diploma in Public Health is considered to be essential.

Canvassing directly or indirectly is prohibited and will disqualify.

A deduction of 5 per cent. will be made from the salary in accordance with the Local Government and Other Officers' Superannuation Act, 1937, and the appointment will be subject to the candidate passing the medical examination in connexion therewith.

Forms of application to be returned not later than Saturday, August 13th, 1938, may be obtained from the Director of Education, Shire Hall, Durham, on receipt of a stamped addressed foolscap envelope.

Shire Hall, Durham. THOS. B. TILLEY
July 11th, 1938. Director of Education.

ESSEX COUNTY COUNCIL

SECOND ASSISTANT MEDICAL OFFICER

The County Council of the Administrative County of Essex invite applications for the appointment of Second Assistant Medical Officer at the Black Notley Sanatorium, near Braintree.

This Sanatorium contains 400 beds for the treatment of pulmonary and non-pulmonary tuberculosis in men, women and children, and possesses all modern facilities for diagnosis and treatment and a training school.

The appointment is limited to a period of four years. The salary will be at the rate of £450 per annum and will rise by annual increments of £25 to £475 per annum, together with residential emolument valued at £160 per annum. Applicants must have held a resident appointment in a general hospital. The successful applicant will be required to pass a medical examination and will be subject to the Council's Sick Pay Rules and Regulations, a copy of which will be forwarded on application.

Applications, stating age, qualifications and experience, accompanied by copies of not more than three recent testimonials (which will not be returned), should be addressed to me and delivered at the County Hall, Chelmsford, not later than 10 a.m. on Thursday, July 21st, 1938.

County Hall, Chelmsford. E. S. HOLCROFT
July 5th, 1938. Clerk of the County Council.

COUNTY BOROUGH OF PRESTON

SHAROE GREEN HOSPITAL
(250 Beds)

JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER (FEMALE)

Applications are invited from fully qualified and registered practitioners for the above appointment. Salary at the rate of £100 per annum with full board and residence. The appointment will be for a period of six months and can be renewed for a period not exceeding 1 month.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, should reach the Medical Superintendent not later than first post on July 23rd, 1938.

PRESTON AND COUNTY OF LANCASTER

QUEEN VICTORIA ROYAL INFIRMARY

The Board of Management invite applications for the post of HOUSE PHYSICIAN with resident charge of twenty-five medical beds. Total resident staff eight. Salary at the rate of £100 per annum with board, residence and laundry.

Application, stating age, qualifications and experience, together with copies of testimonials, to be forwarded to Mr. John Gibson, F.H.O.A., Superintendent and Secretary, Royal Infirmary, Preston.

COUNTY COUNCIL OF DURHAM

EDUCATION DEPARTMENT

SCHOOL DENTIST

The County Education Committee invite applications from fully qualified and experienced Dentists for appointment as a School Dentist to act under the School Medical Officer in connexion with the treatment of dental defects of children attending school in the County area, and to undertake such other duties as may from time to time be required by the Education Committee.

Commencing salary £400 per annum, rising by annual increments of £25 to a maximum of £600 per annum, together with travelling expenses in accordance with the County Scale. The successful candidate will be required to devote his whole time to the duties of the office and to reside in or near the district in which he may be attached at a place to be approved by the Education Committee. The appointment will be subject to three calendar months' notice on either side terminating on the last day of any calendar month. Applicants must have had experience in the work of a school dental clinic, and preference will be given to candidates who:

(a) Have had experience in the work of School Clinics.

(b) Have been accustomed to make special reports on Mentally Defective, Physically Defective, Epileptic and other Defective Children.

The possession of a Diploma in Public Health is considered to be essential.

Canvassing directly or indirectly is prohibited and will disqualify.

A deduction of 5 per cent. will be made from the salary in accordance with the Local Government and Other Officers' Superannuation Act, 1937, and the appointment will be subject to the candidate passing the medical examination in connexion therewith.

Forms of application to be returned not later than Saturday, August 13th, 1938, may be obtained from the Director of Education, Shire Hall, Durham, on receipt of a stamped addressed foolscap envelope.

Shire Hall, Durham. THOS. B. TILLEY
July 11th, 1938. Director of Education.

BOROUGH OF STALYBRIDGE

MEDICAL OFFICER OF HEALTH

Applications are invited for the position of Medical Officer of Health, School Medical Officer and Maternity and Child Welfare Medical Officer (male) for the Borough.

The salary will be at the rate of £800 per annum, payable monthly.

Candidates must be duly qualified Medical Practitioners and possess a recognised Diploma in Public Health and the respective qualifications required by the Statutory Orders Order and the regulations of the Minister of Health, to whose approval the appointment will be subject.

The appointment will be subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1937, and may be determined by three months' notice in writing.

Particulars of duties and terms of appointment and form of application may be had on application to the undersigned.

Applications must be marked "Medical Officer of Health," and must be sent to the undersigned not later than July 16th, 1938.

Canvassing in any form, personal or written, directly or indirectly will disqualify.

Dated July 11th, 1938.

L. O. BOTTOMLEY
Town Clerk.

Town Clerk's Office, Stalybridge.

BOROUGH OF JARROW

MEDICAL OFFICER OF HEALTH

Applications are invited from persons having the qualifications set out in the Sanitary Officers (Outside London) Regulations, 1935, for the appointment of Medical Officer of Health, School Medical Officer and Superintendent of the Infectious Diseases Hospital for this Borough.

The salary will be £500 per annum, exclusive of travelling and other expenses.

A form of application giving particulars of the appointment can be obtained from me and applications must be received by July 23rd, 1938.

CHARLES S. PERKINS
Town Hall, Jarrow. Town Clerk.
Co. Durham.
July 6th, 1938.

VICTORIA CENTRAL HOSPITAL
Wallasey

General Hospital of 115 Beds

Applications stating age and qualifications are invited for the following positions:

SENIOR HOUSE SURGEON: male, £120 per annum.

JUNIOR HOUSE SURGEON: male, £100 per annum.

Period of six months from October 1st, 1938.

Application, with copies of testimonials, should be addressed to the undersigned.

FRANK DEAN, F.C.I.S.
Secretary-Superintendent.

MOUNTAIN ASH URBAN DISTRICT COUNCIL AND EDUCATION COMMITTEE

ASSISTANT MEDICAL OFFICER

Applications are invited from Qualified Male or Female Doctors for the combined posts of ASSISTANT MEDICAL OFFICER OF HEALTH and ASSISTANT SCHOOL MEDICAL OFFICER under the Sanitary and Education Authorities of the above area The officer appointed must be a Registered Medical Practitioner and will be required to devote his or her whole time to official duties and to reside within the district The principal duties will be attendance at Ante Natal Baby School and Birth Control Clinics the Medical Inspection of School Children including examination of their eyes for errors of refraction and the prescription of suitable glasses and other public health duties The person appointed will act under the direction of the Medical Officer of Health who is also School Medical Officer and the appointment may be terminated by either side giving three months notice

The salary will be at the rate of £500 per annum rising by annual increments of £25 to a maximum of £700 per annum but the commencing salary will be increased by £25 per annum in respect of each year of experience in practical work up to a maximum period of three years

Applications stating age qualifications and previous experience accompanied by copies of not more than three recent testimonials must reach me not later than the first post on Saturday July 27th 1938

Canvassing either directly or indirectly will disqualify

CYRIL F THATCHER
Clerk and Solicitor to the Council

Town Hall Mountain Ash
July 13th 1938

BARRY URBAN DISTRICT COUNCIL

ACCIDENT AND SURGICAL HOSPITAL

Applications are invited for the post of RESIDENT SURGICAL OFFICER to commence duties in October next Salary at the rate of £350 per annum rising by two increments of £50 per annum to £450 together with board and lodging the appointment to be terminated by three months notice on either side

Candidates must not be over 45 years of age and must be capable of performing major surgical operations Preference will be given to applicants holding higher surgical qualifications and able to assist in carrying out the x ray work of the Hospital The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination

The successful candidate will act under the direction of the Medical Superintendent and the Surgeon

Applications stating age and full particulars with regard to experience with copies of three recent testimonials to be sent to Dr E I DAVIES Medical Officer of Health Public Health Offices Barry Glam so as to reach him not later than July 30th 1938

Council Offices T D HOWELLS
Barry Clerk to the Council
July 13th 1938

THE GLOUCESTERSHIRE ROYAL INFIRMARY AND EYE INSTITUTION GLOUCESTER
(232 Beds Six Residents)

Applications are invited for the post of CASUALTY OFFICER (male) Salary at the rate of £150 per annum with board residence and laundry

The appointment is for six months which may be extended for similar periods by re-election from time to time

Applicants must have held a resident appointment and have had experience in fracture work The elected candidate will also be required to deputise for the Resident Surgical Officer during his absence

Applications stating age qualifications experience and nationality with copies of not less than three recent testimonials should be sent to the undersigned

The elected candidate will be required to enter upon his duties at once

F J SYMONS
July 6th 1938 Secretary

VICTORIA HOSPITAL DEAL
(50 Beds)

Applications are invited for the post of RESIDENT MEDICAL OFFICER (male) British nationality unmarried The appointment to commence immediately for six months Salary £150 p a with board lodging and laundry Special knowledge of Anaesthetics is desirable

Applications stating age and qualifications together with copies of three recent testimonials to be sent to the Secretary Medical Board Victoria Hospital Deal Kent

---

BARRY URBAN DISTRICT COUNCIL

ACCIDENT AND SURGICAL HOSPITAL

Applications are invited for the post of HOUSE SURGEON (male) Salary at the rate of £150 per annum together with board residence and laundry Candidates must be duly qualified and registered and the successful applicant will be required to commence duties in August

The appointment will be for a period of six months subject to extension in accordance with the rules of the British Medical Association and will be terminable by one month s written notice on either side

Applications stating age qualifications positions held with copies of three recent testimonials to be sent to Dr E I DAVIES Medical Superintendent Public Health Offices Barry so as to reach him not later than Saturday July 30th 1938

Council Offices T D HOWELLS
Barry Clerk to the Council
July 16th 1938

STAFFORDSHIRE WOLVERHAMPTON AND DUDLEY JOINT BOARD FOR TUBERCULOSIS

PRESTWOOD SANATORIUM (200 Beds)

Applications are invited for the post of JUNIOR ASSISTANT MEDICAL OFFICER (male) at the above named Sanatorium which is approximately nine miles from Wolverhampton The successful candidate will have opportunities of obtaining experience in the work of a Dispensary He will be required to take up duty during the third week in September The appointment will be for six months in the first instance renewable for a further maximum period of six months

Salary at the rate of £300 per annum with board residence and laundry

Forms of application may be obtained from the undersigned and should be returned by first post on July 28th 1938 together with copies of not more than three recent testimonials

County Buildings H L UNDERWOOD
Stafford Clerk of the Joint Board
July 13th 1938

BIRKENHEAD AND WIRRAL CHILDREN S HOSPITAL
Woodchurch Road Birkenhead

RESIDENT MEDICAL OFFICER (Senior) The Board invite applications for the post of Senior Resident Medical Officer (male or female) for a period of six months from October 1st 1938 Honorarium at the rate of £175 p a with board residence and laundry Previous experience essential

RESIDENT MEDICAL OFFICER (Junior) The Board invite applications for the post of Junior Resident Medical Officer (male or female) for a period of six months from October 1st 1938 Honorarium at the rate of £90 p a with board residence and laundry

The Hospital is a recognized Training School for Sick Children s Nurses

Applications together with copies of testimonials to be addressed to the Hon Secretary at the Hospital not later than July 25th 1938

GRIMSBY AND DISTRICT HOSPITAL
(164 Beds)

HOUSE PHYSICIAN (Male)

Applications are invited for the post of House Physician Remuneration £150 per annum with board residence etc Candidates must be fully qualified and registered and previous hospital appointment experience is desirable Duties to commence August 1st 1938 The successful candidate will be appointed for six months and may apply for re election

Applications stating age qualifications experience together with three recent testimonials to be forwarded to the undersigned immediately

H B COATES
Secretary Superintendent

GRIMSBY AND DISTRICT HOSPITAL
(164 Beds)

Applications are invited for the post of RESIDENT ORTHOPAEDIC OFFICER Salary £225 per annum with board residence The appointment is for twelve months subject to renewal Duties to commence August 1st 1938 Candidates must be registered under the Medical Acts reside in the Hospital and have had experience in Orthopaedic and Fracture work

Applications with copies of not more than three testimonials to the undersigned immediately

H B COATES
Secretary Superintendent

MANCHESTER ROYAL EYE HOSPITAL

JUNIOR HOUSE SURGEON required Salary £120 per annum with residence board etc

Application (with copies of testimonials) endorsed House Surgeon to be addressed to the undermentioned

H R NORTH
Gen Supt and Secretary

KENT AND SUSSEX HOSPITAL

ROYAL TUNBRIDGE WELLS
(210 Beds)

Applications are invited for the post of HOUSE SURGEON Ear Nose and Throat and Ophthalmic Depts and RESIDENT ANAESTHETIST to commence duty on July 29th 1938 Salary £150 per annum with board residence and laundry in the Hospital

The Hospital contains the following Departments Medical Surgical Ear Nose and Throat Ophthalmic Orthopaedic Gynaecological X ray and Electrotherapeutic Massage Pathological Venereal Diseases etc

Applications stating qualifications together with certificate of registration and copies of not more than three recent testimonials should be sent to the undersigned as soon as possible

TOM B HARRISON
July 12th 1938 Superintendent Secretary

MANCHESTER ROYAL INFIRMARY

The Board of Management of the Manchester Royal Infirmary invite applications for the post of RESIDENT MEDICAL OFFICER of the PRIVATE PATIENTS HOME

Applicants must be registered and hold a Medical and Surgical qualification and must have had at least one year s resident experience in a general hospital

The appointment is for twelve months renewable for a further period

Salary £250 per annum with board residence and laundry allowance

Full information is obtainable from the undersigned to whom applicants must send twelve copies of their application and testimonial on or before 9 a m on Thursday July 28th 1938

By Order
I J CABLE
General Superintendent and Secretary

THE GUEST HOSPITAL DUDLEY
(General Hospital—139 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons

Applications are invited from registered Medical Practitioners for the post of RESIDENT SURGICAL OFFICER (male) Duties to commence August 17th 1938 Salary at the rate of £250-£300 per annum according to experience with furnished apartments board and laundry Candidates must have had experience in emergency surgery and preference will be given to those holding the qualification of F R C S or M S

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned

H RAYMOND HURST
House Governor and Secretary
July 11th 1938

THE GUEST HOSPITAL DUDLEY
(General Hospital—139 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons

TWO HOUSE SURGEONS (male) required One to enter upon his duties immediately and the other to commence on August 17th 1938 Salary at the rate of £100-£130 according to experience with furnished apartments board and laundry Candidates must be fully qualified and registered

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned

H RAYMOND HURST
House Governor and Secretary
July 11th 1938

ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL
(296 Beds)

Applications are invited for the following appointments

One RESIDENT ANAESTHETIST

One CASUALTY OFFICER who shall have had some experience in the reduction and treatment of fractures

for the six months commencing July 1st 1938 each at a salary of £150 per annum with board lodging and laundry Candidates must be resident and unmarried

Applications accompanied by not more than three testimonials should be sent to the undersigned immediately

S W BARNES
House Governor and Secretary

ROYAL INFIRMARY PERTH

Wanted two HOUSE SURGEONS on September 1st Salary at the rate of £100 per annum for first six months and £125 for the second six months Apply to Medical Superintendent Royal Infirmary Perth

KEIGHLEY AND DISTRICT VICTORIA HOSPITAL YORKSHIRE (WEST RIDING)
(14 Beds) (Two Residents)

APPOINTMENT OF RESIDENT MEDICAL OFFICERS

Applications are invited from Registered Medical Practitioners (female) for the following posts
First Resident Medical Officer salary £160 per annum to commence August 15th 1938
Second Resident Medical Officer salary £110 per annum to commence September 1st 1938
Proof of registration to be furnished before appointment Full residential emoluments Term 1 month renewable
Applications with particulars of age experience and nature of training together with copies of two recent testimonials to be sent to the undersigned not later than July 30th 1938
J YOUNG
Secretary Superintendent

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL
Cheetham
(Non-Sectarian 10 Beds)

Applications are invited for the post of RESIDENT SURGICAL OFFICER (male) Salary £250 per annum including board residence and laundry The appointment is for twelve months
Applications stating age and qualifications together with copies of three recent testimonials should be sent to the undersigned as soon as possible
M H BOONE
June 21st 1938 Superintendent and Secretary

GENERAL HOSPITAL NOTTINGHAM
(389 Beds)

A RESIDENT CASUALTY OFFICER (Male) is required at the above Institution The appointment is for six months with salary at the rate of £1 0 a year with board residence and laundry
Candidates are desired to send application stating age qualifications and experience together with copies of testimonials to the undersigned at once
Duties to commence on July 14th 1938
HENRY M STANLEY
House Governor and Secretary

BUTE HOSPITAL LUTON

HOUSE SURGEON (male) wanted to commence duties on July 1st or as soon after as possible Salary £150 per annum with board residence and laundry
Applications stating age nationality and experience together with copies of not more than three recent testimonials should be sent immediately to the Secretary of the Medical Advisory Committee at the Hospital
R E LINGARD
Secretary Bute Hospital

MIDLAND HOSPITAL
Easy Row Birmingham (50 Beds)

Applications are invited for the post of HOUSE SURGEON Duties to commence August 1st Salary £200 per annum with board residence and laundry
Applications stating when at liberty age qualifications together with copies of recent testimonials to be addressed to the undersigned
OLIVE FURNEAUX Secretary

COSSHAM MEMORIAL HOSPITAL
Kingswood Bristol

A vacancy will appear at the end of July for a JUNIOR RESIDENT MEDICAL OFFICER Salary £1 0 per annum with board and laundry to remain for six months in the first instance Applicants (male) should be British nationality fully qualified and registered
Applications with copies of recent testimonials to be sent to the Secretary

COSSHAM MEMORIAL HOSPITAL
Kingswood Bristol

Wanted an additional HONORARY SURGEON for general surgical work
Apply with full particulars to the Secretary

SALFORD ROYAL HOSPITAL
(256 Beds)

Applications are invited from duly qualified practitioners for the post of RADIOLOGIST (non-resident) for attendance each morning (Sundays excepted) and at such times as may be required Salary £300 per annum Twelve months appointment renewable The successful candidate will be required to work under the supervision of the Honorary Radiologist
Applications stating age and qualifications together with copies of testimonials and certificate of registration should be addressed to me to the undersigned from whom all particulars may be obtained
By Order of the Board
H B SHELSWELL
General Superintendent and Secretary
July 2nd 1938

BERKSHIRE MENTAL HOSPITAL
Wallingford

Applications are invited from registered medical practitioners for the post of SECOND ASSISTANT MEDICAL OFFICER (male) at the above Mental Hospital Salary £310 rising by annual increments of £30 to £430 per annum together with furnished apartments board and laundry valued at £130 per annum An additional allowance of £50 per annum is payable in possession of D P M Experience in the treatment of mental disorders would be a recommendation The appointment is subject to the provisions of the Asylum Officers Superannuation Act 1914
Applications in writing together with copies of three testimonials should reach the Medical Superintendent before the post is filled July 21st

SWINDON AND NORTH WILTS VICTORIA HOSPITAL

Applications are invited for the post of HOUSE SURGEON (male British or Irish) unmarried Salary £125 per annum with board residence and laundry Appointment is for six months in the first instance There are two residents The hospital is fully equipped for general work and the usual duties Private beds no obstetrics
The post is suitable for a recently qualified man and there is time for reading Applicant must be registered under the Medical Acts
Applications stating age and qualifications with copies of three recent testimonials to reach the undersigned by July 19th
KENNETH N KNAPP Secretary

ROYAL NORTHERN INFIRMARY
Inverness (200 Beds)

Applications are invited for the post of HOUSE PHYSICIAN (male) to the Physician Consultant (Highlands and Islands Scheme) and to the Honorary Visiting Physician Applicants must be Graduates of a University and have had six months H P experience in a large hospital The appointment will be for six months and renewable Salary £150 p a
Applications with copies of testimonials should be sent to Medical Superintendent

STROUD GENERAL HOSPITAL
Stroud Glos

RESIDENT MEDICAL OFFICER required Candidates must be fully qualified and registered Six months appointment duties to commence as soon as possible Salary £160 per annum with board and laundry
Applications stating age nationality etc together with copies of three recent testimonials to be sent to the undersigned from whom further particulars may be obtained
C FORD SPENCER Secretary

THE HARTLEPOOLS HOSPITAL
(95 Beds)

Application are invited for the position of HOUSE SURGEON at a salary of £1 0 p a plus board residence and laundry
Appointment for six months subject to renewal and duties to commence July 15th
Application to be made to the undermentioned
NORMAN O DEANS
Secretary

BRADFORD CHILDREN'S HOSPITAL

HOUSE SURGEON (lady) required immediately Fully qualified Salary £150 with board residence and laundry
Applications with recent testimonials and stating age to
J W LONGLEY
Secretary Superintendent

BURTON ON TRENT GENERAL INFIRMARY

Applications are invited for the position of CASUALTY OFFICER AND HOUSE PHYSICIAN Salary at the rate of £1 0 per annum with board residence and laundry
Application giving age qualifications and nationality together with copies of testimonial to be sent to E W THORNLEY Secretary

THE PRINCE OF WALES'S HOSPITAL, Greenbank Road Plymouth
(Formerly South Devon and East Cornwall Hospital) (260 Beds)

Applications are invited for the posts of HOUSE PHYSICIAN and HOUSE SURGEON Salary £1 0 per annum with board residence and laundry Appointments are tenable for six months and are subject to renewal Duties to commence August 10th
The Hospital is officially recognized for the medical practice required before admission to the Final Fellowship Examinations of the Royal College of Physicians and Surgeons of England
Applicants must be registered under the Medical Acts and be members of either the Medical Defence Union or the London Counties Medical Protection Society
Applications stating age and qualifications with names of three recent testimonials to reach the undersigned by July 22nd
ARTHUR R CASH
July 7th 1938 Secretary

THE LIVERPOOL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST
Mount Pleasant Liverpool

Applications are invited for a FULL TIME RESIDENT MEDICAL OFFICER to the Hospital for Consumption and Diseases of the Chest Previous hospital experience desirable Path Medical and Surgical Treatment of Pulmonary Tuberculosis are undertaken at the Hospital
The appointment will be for a period of one year Salary £1 0 per annum with board and residence
Applications stating age nationality qualifications and experience together with copies of three recent testimonials or names of two local referees to be sent to the Secretary not later than July 20th 1938

THE KING EDWARD VII WELSH NATIONAL MEMORIAL ASSOCIATION

Applications are invited from duly registered medical practitioners (female) for the post of ASSISTANT RESIDENT MEDICAL OFFICER at the South Wales Sanatorium (56 beds for male patients) Cefn Coed Talygarth Brecon
Salary £60 per annum plus maintenance
The appointment is limited to a period of one year
Applications stating age qualifications experience together with copies of three recent testimonials should reach the undersigned not later than Wednesday July 6th 1938
D A POWELL
Medical Officers Principal Medical Officer
Westgate Street Cardiff

WEST NORFOLK AND KING'S LYNN GENERAL HOSPITAL (41 Beds)

RESIDENT HOUSE PHYSICIAN

Applications are invited for the above post Salary £1 0 per annum To have charge of Medical and Ophthalmic beds also to act as Resident Anaesthetist
The post is for six months in the first instance offering valuable experience in both In patient and Out patient work
Applications with copies of recent testimonials should be sent to the undersigned as early as possible
JOSEPH E SEARJEANT FCCS
Hon Governor and Secretary

THE WEST NORFOLK AND KING'S LYNN GENERAL HOSPITAL (41 Beds)

RESIDENT HOUSE SURGEON

The Governing Board invite applications for the above post The appointed applicant will have charge of Casualty Department and one Surgical Ward Salary £1 0 per annum The appointment is for six months in the first instance Preference if suitable will be given to the Resident House Surgeon who on the post of Resident House Physician fall vacant Application stating age nationality qualifications should be accompanied by testimonials and reach the undersigned as soon as possible
JOSEPH E SEARJEANT FCCS
Hon Governor and Secretary

THE BOLTON ROYAL INFIRMARY

(141 Beds including two Auxiliary Hospitals)

Application are invited from Ladies and Gentlemen for the post of HOUSE SURGEON
The duties of the post include ear nose and throat work and gynecology
Salary £150 per annum with board residence and Laundry
Applications for the post stating age nationality and experience together with copies of testimonials should be forwarded to the undersigned as soon as possible
H CORLESS
Secretary

BURY INFIRMARY (LANCS)
(143 Beds)

APPOINTMENT OF TWO HOUSE SURGEONS

Vacancies as above arise on the Resident Medical Staff and applications are invited for the posts

The Resident Staff consists of an R S O a House Physician and two House Surgeons

The appointments are for a term of six months and salaries payable are at the rate of £150 per annum with board residence and laundry the salary being increased to £175 per annum in the event of reappointment to the same or some other office for a period of six months

The services of both House Surgeons will be required on or about August 8th

Applications stating age qualifications and nationality together with copies of three recent testimonials are to be forwarded to the undersigned as soon as possible endorsed House Surgeon

Full particulars of duties may be had on application

H WILKINSON
Superintendent

HOSPITAL OF ST CROSS RUGBY
(120 Beds)

Applications are invited for the post of ONE MALE RESIDENT MEDICAL OFFICER (Three *R M O s*)

Salary to commence at the rate of £100 per annum for the first three months £125 per annum for second three months and at the rate of £150 per annum for subsequent months Full board washing etc provided

Six months appointment and eligible on completion of service for further extension of six months

Candidates must be prepared to commence duties as early as possible

The practice of the Hospital offers excellent opportunities for wide experience

Certificates and other fees shared by R M O s

Applications stating age nationality and full details with copies of three recent testimonials to be sent to the undersigned

(Signed) W COCKBURN
Superintendent and Secretary

KING GEORGE S SANATORIUM FOR SAILORS LIPHOOK HANTS

(Seamen s Hospital Society) for the *Treatment* of Pulmonary and Non Pulmonary Tuberculosis

ASSISTANT MEDICAL OFFICER (single male or female) required as from August 1st for six months Salary at the rate of £200 per annum in the first instance *Applications with copies of not* less than three testimonials to be sent in immediately to the undersigned

F A LYON
Secretary Seamen s Hospital Society Greenwich S E 10

Greenwich July 4th 1938

EAST SURREY HOSPITAL
Redhill Surrey

JUNIOR HOUSE SURGEON (male or female) required on August 18th next Salary at the rate of £100 per annum with board residence and laundry Candidates must be fully qualified and registered Appointment for six months and further six months as Senior at salary £150 per annum

Applications stating full particulars and copies of recent testimonials to be sent to the undersigned before July 25th 19 8

E C AYLING
Secretary

BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY

RESIDENT SURGICAL OFFICER (Male) required *Salary £250 per annum with board* residence and laundry

Preference will be given to applicants holding the F R C S Diploma

Applications stating nationality qualifications and experience together with copies of recent testimonials to be sent to the undersigned

Royal Infirmary T DEWHURST
Blackburn General Supt and Secretary

NORTH LONSDALE HOSPITAL
Barrow in Furness (164 Beds)

Vacancy July 1st 19 8 RESIDENT CASUALTY OFFICER (male)

Applications are invited for the above position *from* fully qualified Practitioners experienced in the admini tration of Anaesthetics Salary £150 per annum with board residence and laundry

Applications stating age qualifications experience and nationality and accompanied by copies only of three recent testimonials should be s nt to the Secretary immediately

ROYAL CORNWALL INFIRMARY
Truro

APPOINTMENT OF HONORARY PHYSICIAN

Applications are invited for the post of Hon Physician Candidates should be Graduates in Medicine of a University of Great Britain or Ireland and must be Fellows or Members of the Royal College of Physicians of London

The selected candidate will be responsible for the care of Medical In and Out Patients and will be *required to contract to engage in private* practice as a Consulting Physician only

Applications together with copies of recent testimonials should be received by the undersigned not later than July 26th

W E GRENFELL
July 9th 1938 Hon Secretary

OLDHAM ROYAL INFIRMARY

SENIOR HOUSE SURGEON required for a period of six months to take charge of the Casualty Department and to work under the Hon Surgeon in charge of the Fracture Clinic (average attendance of 150 to 170 cases per week) Previous hospital experience essential

Salary £250 to £300 per annum according to qualifications and experience with board residence and laundry

Applications stating age experience and qualifications together with copies of three recent testi *monials to be forwarded to the undersigned*

H EWART MITCHELL
General Superintendent

OLDHAM ROYAL INFIRMARY

TWO HOUSE SURGEONS required for a period of six months Salary at the rate of £175 per annum with board residence and laundry

Applications stating age experience and qualification together with copies of three recent testimonials to be forwarded to the undersigned

H EWART MITCHELL
General Superintendent

ROYAL LANCASTER INFIRMARY
Lancaster
(140 Beds—4 Residents)

Applications are invited for the post of HOUSE SURGEON Salary £130 per annum with board residence and laundry The appointment is for six months

Applications stating age qualifications experience and nationality together with copies of three *recent testimonials to be sent to the undersigned*

FRANK A MILNES
Superintendent Secretary

ROYAL SUSSEX COUNTY HOSPITAL
Brighton (272 Beds)

HOUSE SURGEON (male) required end of August 1938 Charge of Leds Salary £150 per annum with board *residence and laundry*

Candidates must hold medical and surgical qualifications of the British Empire and be duly registered under the Medical Acts

They must be unmarried and when elected under thirty years of age

Applications with copies of testimonials should be sent to the undersigned as soon as possible

NEW SUSSEX HOSPITAL FOR WOMEN AND CHILDREN
Brighton (Incorporated)

Applications are invited from suitably qualified Medical Women for the post of HONORARY OPHTHALMIC SURGEON Duties to commence in September next

Applications with copies of testimonials to be sent to the undersigned on or before July 30th

Board Room PERCY F SPOONER
Windlesham Road Secretary
Brighton

NORTH ORMESBY HOSPITAL
Middlesbrough (192 Beds)

HOUSE PHYSICIAN (male and unmarried) required Salary £120 per annum with board residence and laundry

Applications stating age qualifications experience (if any) with copies of three recent testimonials should be sent to the undersigned

GEORGE WATTS
Secretary Superintendent

WEYMOUTH AND DISTRICT HOSPITAL
Weymouth

Wanted July 27th HOUSE SURGEON (male European) Salary £180 per annum with board residence and laundry

Applications stating age qualifications and copies of testimonials *to be sent to the under* signed not later than July 20th 1938

MORRIS LODGE
Hon Secretary

THE ROYAL PORTSMOUTH HOSPITAL
Portsmouth
(Five Resident Medical Officers)

Applications are invited for the posts of HOUSE PHYSICIAN (male) qualified Salary at the rate of £1 0 per annum with board et To commence August 23rd 19 8

CASUALTY OFFICER (male) qualified Salary at the rate of £1 0 per annum with board et To commence September 1st 1938

Six months appointments Eligible on completion of term for appointment to other resident posts

Applications stating age nationality et and copies of three recent testimonials to be sent to the undersigned on or before August 4th 193 from whom all particulars can be obtained

B WAGSTAFF
Secretary

ROYAL EYE HOSPITAL
Pevensey Road Eastbourne

NON RESIDENT HOUSE SURGEON required to commence duty in August The appointment will be for six months in the first instance

Salary £100 per annum and allowance in lieu of board residence £175 per annum

Applications stating age qualifications and ophthalmic experience together with recent testimonials should reach the undersigned as soon as possible

Before engagement candidates have to be interviewed by the Hon Surgeon from whom further particulars could be obtained in person

H BYGRAVE Hon Secretary

THE ROYAL INFIRMARY SHEFFIELD
(500 Beds)

Applications are invited for the posts of CLINICAL ASSISTANT to *the Ophthalmic* Department (male or female) The Ophthalmic Department contains 68 Beds and an Out Patient Department which is open daily

Salary £300 per annum

The appointment will be for one year subject to two months notice and the officer elected will be eligible for reappointment Letters stating age and giving full qualifications present hospital experience etc to be forwarded to the General Superintendent and Secretary immediately June 14th 1938

ROYAL VICTORIA AND WEST HANTS HOSPITAL BOURNEMOUTH

HOUSE SURGEON (male British nationality) required to commence duty at the Poole Road Hospital (88 Beds) about July 25th Salary £1 per annum and additional fees with board lodging and washing The appointment is tenable for six months and candidates must be registered according to the provisions of the Medical Act

Applications stating place of birth and a with copies of three recent testimonials to be sent immediately to the undersigned Women and *married men are ineligible*

GORDON M SAUL
July 7th 1938 Secretary

THE SOUTHAMPTON CHILDRENS HOSPITAL AND DISPENSARY FOR WOMEN

The Board of Management invite applications for the post of RESIDENT MEDICAL OFFICER (Lady) Six months appointment Salary at the rate of £150 per annum with board residence and laundry

Applications stating age and accompanied by copies of testimonials to be sent to the undersigned not later than August 5th The elected candidate will be required to take up her duties on September 1st

ELLA K MATTHEWS
Secretary

ROYAL INFIRMARY BRADFORD
(Regional Radium Centre)

HOUSE PHYSICIAN to the Radium and Skin Departments (Male) wanted Six or twelve months appointment Salary £175 per annum with board residence and washing

Applications stating age qualifications and previous experience (not necessarily in Radium therapy) with copies of recent testimonials should be sent to the undersigned as soon as possible

H TRUSSON
July 9th 1938 House Governor and *Secretary*

ROYAL UNITED HOSPITAL BATH

HOUSE SURGEON required (General Surgery and Ear Nose and Throat) for July 5th Salary £150 per annum with board residence and laundry

Applications with copies of three testimonials to be addressed to the undersigned by July 15th

J LAWRENCE MEARS
Secretary Superintendent

July 8th 1938

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association B M A House Tavistock Square, W C 1 (in the case of Scottish appointments, with the Scottish Secretary, 7, Drumsheugh Gardens Edinburgh)

(a) British Islands

Town or District	Town or District (contd)	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—(contd)	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY (Medical Officer)	MID RHONDDA MEDICAL AID SOCIETY (Assistant Medical Officer)	COUNTY OF ROXBURGH (Assistant Medical Officer of Health)
BLAENAVON MEDICAL SOCIETY (Chief Medical Officer)	NEATH AND DISTRICT (Medical Aid Association)	**DISPENSARY APPOINTMENTS**
GILFACH GOCH GLAMORGAN (Workmen's Medical Scheme)	OGMORE VALLEY GLAMORGAN (Blaenclydach Colliery Medical Aid Society) (Workmen's Medical Scheme)	LIMERICK CITY (Whole-time Dispensary Medical Officers)
LLWYNYPIA CLYDACH VALE, PENYGRAIG GLAMORGAN (Workmen's Medical Scheme)	OAKDALE MON (Medical Officer to Medical Aid Association)	

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association B M A House Tavistock Square, W C 1

Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch
NEW SOUTH WALES (*All Friendly Societies Appointments*)	The Medical Secretary New South Wales Branch 135 Macquarie Street, Sydney N S W	**VICTORIA** (*All Institute and Medical Dispensaries*)	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria	**WESTERN AUSTRALIA** (*Contract and Private Practices*)	The Hon Sec Western Australian Branch British Medical Association "Shell House" 105 St Georges Terrace Perth Western Australia
QUEENSLAND (*British Medical Association Friendly Societies Institute*)	The Hon Sec Queensland Branch British Medical Association B M A House 225 Wickham Terrace Brisbane, B 1"				

July 13 1938 By Order of the Council G C ANDERSON *Secretary*

ROYAL HALIFAX INFIRMARY

Hospital Recognized by the Royal College of Surgeons (England)

Wanted a THIRD HOUSE SURGEON (male unmarried) Candidates must be duly qualified and registered The appointment will be for six months followed by promotion if suitable Salary including all fees required in connexion with Paying Patients Ward £150 per annum with residence board and laundry The Resident Staff consists of a Resident Surgical Officer and three House Surgeons The Hospital contains Maternity and Paying Patient Blocks Also a Pathological Department a large Eye Ear Nose and Throat Department Radiological Department and Radium Clinic

Particulars of the duties may be obtained from the undersigned to whom applications stating age and nationality together with testimonials should be sent on or before the 19th inst nt

A MIDGLEY
July 4th 1938 Secretary

ROYAL CORNWALL INFIRMARY TRURO
(84 Beds)

HOUSE SURGEON (male) required with experience of Anaesthetics to commence duties on August 1st next Salary £1 0 per annum rooms board and washing

Apply with copies of three recent testimonials to the Secretary of whom further particulars may be obtained

Truro W E GRENFELL
July 4th 1938 Hon Secretary

ROTHERHAM HOSPITAL

Wanted CASUALTY HOUSE SURGEON (male) qualified Salary £150 per annum with board residence and laundry To have charge of Out patients (130 beds)

Applications, with copies of recent testimonials to be sent to the Secretary G W ROBERTS 8 Moorgate Street, Rotherham

---

COUNTY MENTAL HOSPITAL, WHITTINGHAM near PRESTON

Applications are invited for the whole time appointment of SENIOR ASSISTANT MEDICAL OFFICER at the above Mental Hospital The salary is £700 per annum An additional £ 0 per annum will be paid for the possession of a Diploma in Psychological Medicine The elected candidate if single will be required to live in the Hospital and will be provided with board lodgings etc for which a charge of £150 per annum is made If the selected candidate is married he may be required to live within reasonable distance of the Hospital until a house or married quarters is available The appointment will be subject to the provisions of the Asylums Officers Superannuation Act 1909 and the successful candidate will be required to pass a medical examination

Application giving full particulars with testimonials (copies only) should be forwarded so as to reach the Medical Superintendent on or before July 20th 1938

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST
Ventnor Isle of Wight.

SECOND ASSISTANT RESIDENT MEDICAL OFFICER (male) unmarried required for six months commencing August 15th 1938 Salary at the rate of £ 00 per annum with board residence and laundry allowance The successful candidate will be eligible for promotion to First Assistant Resident Medical Officer for a further six months at a salary at the rate of £300 per annum with similar emoluments Candidates must be fully qualified in Medicine and Surgery and previous experience in Tuberculosis and Bacteriological work will be an advantage

Applications in candidates own handwriting stating age qualifications and experience (with one copy of three recent testimonials) to be sent to the Medical Superintendent Royal National Hospital for Consumption Ventnor Isle of Wight not later than Saturday July 23rd 1938

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL

Applications are invited from duly registered candidates (male and unmarried) for

a HOUSE SURGEON salary £150 per annum from August 1st

a HOUSE PHYSICIAN salary £125 per annum from July 1st.

The appointments are for six months and include apartments board and laundry The House Surgeon must be an experienced anaesthetist

All applications stating age etc with copies of testimonials to be sent to me at once

FRANK H TOONE
9 Leicester Road Secretary
Loughborough

THE LADY CHICHESTER HOSPITAL HOME
For Functional Nervous Diseases
(60 Beds)

JUNIOR HOUSE PHYSICIAN (woman) required Six months appointment at £7 per annum all found Valuable experience for Diploma in Psychological Medicine Duties to commence middle of July

Application with testimonial to be sent to the Secretary Mr P F Spooner 33 West Street Brighton

July 2nd 1938

WEST SUFFOLK GENERAL HOSPITAL
Bury St Edmunds (11_ Beds)

HOUSE PHYSICIAN wanted Duties include the charge of the Medical Beds Maternity Ward Casualty and the Administration of Anaesthetics Six months post Salary £150 per annum with the usual emoluments

Applicants must be registered Practitioners

Applications stating age experience and nationality with copies of three recent testimonials to be sent to the Secretary

July 4th 1938

(*Appointments continued on p* 56)

CHARGES for ADVERTISEMENTS

CIRCULATION OF THIS ISSUE—41,000 COPIES

CLASSIFIED 6 The *Minimum* charge is 9s, which covers up to 30 words Extra words are charged 1/6 for 5 or less

Example 33 words would be charged as for 35 Name and address should be included when counting words for cost

If *Box Number* is used, it should be reckoned as 5 words in the total

Replies should be addressed separately to each Box No care of this office

Advertisements, accompanied by *remittance, should reach* this office not later than NOON—TUESDAY, TO ENSURE INSERTION IN CURRENT ISSUE Please write CLEARLY

DISPLAYED Whole page £24, and pro rata to one-eighth page Special positions, dates and rates on application

Every effort is made to ensure the accuracy of advertisements appearing in the Journal No recommendation is implied by acceptance and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement

ADVERTISEMENT MANAGER, BRITISH MEDICAL JOURNAL, B M A HOUSE, TAVISTOCK SQUARE, W C 1

EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA TOBACCO GOOD SMOKES at a low price quality guaranteed Box of 50 for 25/ post free—Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"BIZIM" CIGARETTES THESE luxurious deliciously satisfying smokes 50 s or 100 s at 6/3 per 100 58/6 per 1 000 post free—Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"SOLACE CIRCLES" TOBACCO THE finest combination ever discovered of Choice Natural Tobaccos Every pipeful an indescribable pleasure 12/6 per 4 lb tin post free—Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

ARDARA—LEAST KNOWN MOST LOVELY holiday resort in Ireland Best free fishing rough shooting golf bathing an artist's paradise First-class ACCOMMODATION provided by doctor's widow Few guests taken Vacancies now —Address No 7008 B M A House Tavistock Square W C 1

FOR ALL INCOME TAX COMPLICATIONS or difficulties consult or communicate with Mr C G C KILNER (late H M Inspector of Taxes) 7 St James Street Piccadilly London S W 1 Telephone Whitehall 9-78 for appointment

NATIONAL ADOPTION SOCIETY 4 BAKER STREET W 1 Telephone Welbeck 7211 OFFERS ASSISTANCE in the legal adoption of illegitimate and orphan babies into suitable Family life Chairman THE LADY GWENETH CAVENDISH

TYPEWRITING DUPLICATING TRANSLATIONS—Experts in Medical work TESTIMONIALS THESES etc accurately copied in style that command attention—WOBURN BUREAU Drayton House Gordon Street London W C 1 (close B M A House) EUSton 1775

TYPEWRITING—SPECIALISTS IN TYPING Medical and scientific papers lectures theses and books *Shorthand* typists always available Proof reading indexing—MARGARET WATSON LTD 16 Palace Chambers Bridge Street S W 1 WHitehall 3838

WHEN YOU COME TO LONDON STAY AT THE HAMPDEN RESIDENTIAL CLUB FOR GENTLEMEN Hampden Street N W 1 Close Kings Cross and Euston 300 bedrooms 15/- to 22/6 p w includ baths attend and boot cleaning All meals à la carte in dining room *Mod tariff* Large club rms *reading rm* study for students Illus pros Sec Euston 2244/5

48TH AND 61ST SOUTH MIDLAND DIVISIONS R A M C

REUNION DINNER proposed of Old Comrades of R A M C of these Divisions in Birmingham in autumn of this year All interested communicate with Lieutenant Stanford R A M C T A Stockfield Hall Acocks Green Birmingham 27

ASSISTANCIES

WANTED IMMEDIATELY—INDOOR AND Outdoor ASSISTANTS for town and country practices with and without view to Partnership Good salaries offered State full particulars—BRITISH MEDICAL BUREAU 33 Cross Street Manchester 2

WANTED IMMEDIATELY MARRIED ASSISTANT (British) for South Wales colliery practice with early view 30-35 Salary £450 and car allowance or car provided with free unfurnished house—Apply with photograph Address No 7315 B M A House Tavistock Square W C 1

WANTED END OF AUGUST YOUNG *male indoor* ASSISTANT English or Scotch preferred for mixed practice in North London Time for reading Car provided Salary £ 00—Address No 7307 B M A House Tavistock Square W C 1

WANTED ASSISTANT FOR MIXED PANEL and private practice Bristol Salary £400 plus £50 car allowance—Address No 7319 B M A House Tavistock Square W C 1

WANTED EXPERIENCED ASSISTANT with a view to partnership in good-class suburban practice with good surgical opportunities in Cheshire To reside in and develop growing area Preference given to well-qualified Scot Good salary and car allowance until both are satisfied with partnership prospects—Address No 7309 B M A House Tavistock Square W C 1

WANTED OUTDOOR ASSISTANT PANEL and private practice near Manchester State married or single nationality Salary £500 p a and furnished rooms Car required Prospect—Address No 7334 B M A House Tavistock Square W C 1

WANTED INDOOR ASSISTANT (MALE) panel and private view to succession University town near London £350 with board and lodging and car allowance—Address No 7331 B M A House Tavistock Square W C 1

WANTED INDOOR ASSISTANT Glamorgan on July 20th or 27th Protestant Irish or Scotch preferred not essential Newly qualified would suit £300 rising to £350—Address No 7301 B M A House Tavistock Square W C 1

WANTED MALE INDOOR ASSISTANT preferably Jewish panel and private practice in Sunderland must be capable driver Salary £325 per annum all found—Address No 7[illegible] B M A House Tavistock Square W C 1

WANTED—OUTDOOR ASSISTANT MALE married preferred for Practice near Birmingham Some experience in G P essential Good house rent and rates free Salary £450 p a and car allowance Apply with full particulars and testimonials to—Address No 7440 B M A House Tavistock Square W C 1

WANTED INDOOR ASSISTANT FOR SIX *months from September* Mixed General Practice S W country town Salary £ 00 p a —Address No 7308 B M A House Tavistock Square W C 1

WANTED OUTDOOR MALE ASSISTANT (Scotch or English) for Northern City Salary £400 p a plus £50 car allowance State age height and experience—Address No 7331 B M A House Tavistock Square W C 1

WANTED MALE ASSISTANT INDOOR for Durham County practice Salary £300 per annum plus car allowance—Address No 7324 B M A House Tavistock Square W C 1

WANTED PART TIME ASSISTANT (MALE) from Oct 1st Central London *Suit man* doing postgraduate work—Address No 7444 B M A House Tavistock Square W C 1

WANTED ASSISTANT TO LIVE AT Branch Surgery Good salary and allowances Married or single *State nationality* if and when free No objection to recently qualified—Address No 7329 B M A House Tavistock Square W C 1

WANTED IN COUNTRY TOWN IN MIDlands male Outdoor ASSISTANT Salary £400 to £450 according to experience Car provided Ample time for reading—Address No 7[illegible] B M A House Tavistock Square W C 1

ASSISTANT REQUIRED FOR OCTOBER 4TH in panel and private practice N E London Experience essential Salary £3[illegible] with board and residence half night call and half midwifery fee Apply with copie of testimonials stating age experience whether single or married and if able to drive car—Address No 7339 B M A House Tavistock Square W C 1

ASSISTANT WANTED (N I LONDON area) must be energetic reliable and [illegible] qualified Salary to commence £450 per annum with furnished rooms and attendance Abstainer preferred—Address No 7321 B M A House Tavistock Square W C 1

BIRMINGHAM — ASSISTANT WANTED complete charge of branch Salary £450 p a £50 car allowance Free rent rates and [illegible] allowance gas light Increasing and permanent Married man *preferable* must be keen and energetic—Address No 7311 B M A House Tavistock Square W C 1

MB, CHB WITH SOME YEARS EXPERIence seeks post as out door ASSISTANT Large panel and club practice in industrial area preferred—Address No 7445 B M A House Tavistock Square W C 1

PART TIME ASSISTANT REQUIRED N London W C within easy reach medical schools etc work 4 days light—Wednesday free Sleep in if convenient essential Remuneration to be arranged If possible also daily locum (usual rates) Aug 9th to 16th (inclusive entail)—Address No 7344 B M A House Tavistock Square W C 1

QUALIFIED LADY MEDICAL REQUIRED to give HELP in small practice (country) £100 all confinement fees board and lodging Signed usual bond—Address No 7333 B M A House Tavistock Square W C 1

LOCUMS

WANTED POSITION AS LOCUM ASSISTANTSHIP or PART TIME WORK Experienced in panel and private practice Free now Would go any where—Terms £10 (London) or offers—Address No 7349 B M A House Tavistock Square W C 1

WANTED LOCUM MAN OR WOMAN from Aug 7th to Aug 15th London Practice Must be British and drive car 5 Guineas a week—Address No 7341 B M A House Tavistock Square W C 1

EXPERIENCED PRACTITIONER PRACTISING in London wants LOCUM ENCAGEMENT in country August or September own car if required—Address No 7338 B M A House Tavistock Square W C 1

HOLIDAY LOCUMS AND ASSISTANTS—Experienced ladies and gentlemen available immediately or near future are invited to communicate with—THE MEDICAL AGENCY LTD 36 38 Southampton Street Strand W C 2

LOCUM—FOR THREE MONTHS BEGINning middle of August Midlands Three guineas, all found Very small practice Any nationality Salt passed graduate Must drive car—Address No 7347 B M A House Tavistock Square W C 1

MEDICAL POSTS DISPENSERS

WANTED MORNING AND EVENING SURGERIES or evenings only by well qualified man experienced well received residence S W 7 district—Address No 7350 B M A House Tavistock Square W C 1

WANTED SECRETARY DISPENSER WITH knowledge of shorthand typing for good practice in pleasant S W London district Salary £3 3s a week—Reply stating particulars to Address No 7320 B M A House Tavistock Square W C 1

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request qualified and with practical experience in private practice and dispensary work also trained in Bacteriological Laboratories of the LONDON COLLEGE OF PHARMACY FOR WOMEN Preparations for Examinations—Write wire or phone (Bayswater 0969) Secretary 7 Westbourne Park Road W 2

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY and Secretary Dispensers can be supplied to Doctors Sessions January April and September—Apply Principals School of Pharmacy Drayton House Gordon Street W C 1 Phone Euston 3930

DISPENSING CAREER FOR YOUNG LADIES FULL TRAINING for Apothecaries Hall Certificate Enrolments every three months—Apply The Principal Central School of Pharmacy 7 Moreton Street London S W 1 Telephone Victoria 1641

DISPENSER HALL QUALIFICATION SEEKS full time post Hospital Surgeon or Pharmacy Quick neat and accurate dispenser with good references Gener l doctor's work—Address No 7310 B M A House Tavistock Square W C 1

DOCTORS REQUIRING QUALIFIED Dispensers Nurse Dispensers Secretary Dispensers or Chauffeuse Dispensers are invited to write wire or phone Temple Bar 8 8 THE DISPENSERS BUREAU 3 Lindsay House 177 Shaftesbury Avenue London W C 2

LADY SEEKS POST ONE YEARS training London hospital member of B R C S Five years business training knowledge of typing and accounts—Miss E A Frost 11 Barkston Gardens Earls Court S W 5

MALE OR FEMALE DISPENSER REQUIRED for the Borough General Hospital Shirley Warren Southampton Salary £175 per annum Permanent superannuated position non resident For full particulars apply to the Medical Officer of Health Civic Centre Southampton

OVERSEAS DOCTOR (CONVALESCENT) seek TEMPORARY EMPLOYMENT Experienced in all branches in lunacy and tuberculosis—Address No 7314 B M A House Tavistock Square W C 1

POST WANTED AS SECRETARY RECEPTIONIST SHORTHAND TYPIST—Miss Evelyn Dodd Ern House 5 Montrose Avenue Cricklewood Park S E 1

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION 56 Ecclestone Square S W 1 (Telephone Victoria 7) supplies qualified Dispensers Bookkeepers Laboratory Assistants Sanitary Assistants Male Nurses Mental and Special Treatment Orderlies Dental Clerk Orderlies Porters Caretakers etc without charge to prospective employers

YOUNG LADY TRAINED SECRETARY pursuing domestic science and car-driver educated English public school desires position as private secretary with professional gentleman or lady—Address No 7340 B M A House Tavistock Square W C 1

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed

Applications should be separately enclosed and clearly addressed

Address No
B M A House
Tavistock Square W C 1

All communications are forwarded to advertisers under plain cover

PARTNERSHIPS

WANTED PARTNER TO DEVELOP NEWLY built area Midland city site secured for new house and surgery Existing practice increasing steadily Premium £50 for share guaranteed minimum and increments Excellent opportunity for young energetic man—Address No 7339 B M A House Tavistock Square W C 1

NORTH WEST LONDON—DOCTOR COMmencing specialist practice in physio-therapy desires PARTNER Capital of £500 required First-class residential district—Address No 7317 B M A House Tavistock Square W C 1

PARTNER WANTED IN CORNISH TOWN Well-qualified physician married experienced G P £1,000 at 2 years purchase interest later Good house garden garage Most are if desired —Address No 7317 B M A House Tavistock Square W C 1

PARTNER YOUNG AND WELL QUALIFIED wanted for Consulting Surgical Practice Hospital appointment—Write full details to Address No 7316 B M A House Tavistock Square W C 1

PARTNERSHIP YIELDING £1,200 RISING off red after one year preliminary assistantship in revived practice in large Kentish town 10 miles from London modern house available for renting Applicants must be under 35 well qualified and with good experience—Apply with full particulars and recent photograph Address No 7313 B M A House Tavistock Square W C 1

X RAY—PHYSICIAN WITH GOOD EXPERience in X ray diagnosis and own X ray plant SEEKS COLLABORATION with West End doctor or with practitioner with larger practice—Address No 7318 B M A House Tavistock Square W C 1

PRACTICES

WANTED PRACTICE OR PARTNERSHIP £1,500 in town of 10,000 South of England House with garden and garage Panel of 1,600—Address No 7327 B M A House Tavistock Square W C 1

WANTED COUNTRY PRACTICE SMALL or LARGE West Kent E Sussex W Hants with large area Panel minimum—Address No 7330 B M A House Tavistock Square W C 1

WANTED GENERAL PRACTICE IN WEST Riding Yorkshire Income £1,000 or over Good house and garden essential Suitable educational facilities Strictly confidential—Address No 7309 B M A House Tavistock Square W C 1

WANTED BY CAMBRIDGE GRADUATE with 10 years experience assistant and good class PRACTICE mid excellent hospital experience share in practice yielding £1,000 minimum essential Age married Church of England—Address No 7306 B M A House Tavistock Square W C 1

WANTED WOMANS PRACTICE SUFFIcient for two Interim Capital immediately available Abroad No 7331 B M A House Tavistock Square W C 1

WANTED COUNTRY TOWN PRACTICE with £1,000 up to £3,000 Suburbs or environment house good garden essential good golf if near essential Death vacancy considered early interview Address No 7 B M A House Tavistock Square W C 1

WANTED WOMANS PRACTICE ABOUT £600 a year or partnership £500 70 to 80 miles south or west of London House to rent Capital available Experienced—Address No 7335 B M A House Tavistock Square W C 1

A NUMBER OF SMALL PRACTICES AT low premium Excellent opportunities for practitioners wishing to get a practice with no premium—Apply PEACOCK AND HADLEY LTD 67/68 Chandos Street Strand W C

SUSSEX—COUNTRY PRACTICE AVERAGING over £3,000 increasing Panel 1,100 House to rent £70 Good neighbourhood and hunts Premium two-fifths share (with option to purchase later) two years purchase—Address No 7344 B M A House Tavistock Square W C 1

FASHIONABLE S E COAST RESORT Present owner has 10 years £600 partnership 2 years purchase Six bedroomed house and garden Freehold 2,000 must be bought—Address No 6610 B M A House Tavistock Square W C 1

GOOD MIDDLE CLASS PRIVATE PRACTICE for immediate disposal on terms favourable to purchaser North East Coast Panel 300 About £1,550 gross House with surgery £1,600—GARFORTH DRURY AND KNIGHTING Solicitor Newcastle upon Tyne 1

LONDON S E—AN OLD-ESTABLISHED private and panel PRACTICE on the Kentish border for sale 2 years purchase There is a panel of 1,000 Cash receipts £1,000 including £3,5 from transferable appointment Freehold house on prominent corner site Well gentlemen with available capital please write to advertiser—Address No 7304 B M A House Tavistock Square W C 1

LONDON SUBURB (W) PRACTICE FOR sale Established almost 5 years Panel over 700 in reasing Cash receipts nearly £1,400 Expenses low House to rent Premium £850 cash—Address No 7310 B M A House Tavistock Square W C 1

NUCLEUS MIDLAND CITY RAPIDLY growing district Panel about 100 Receipts twelve months about £1,000 Small house rent Good scope Quick sale Premium £1,000 offer—Address No 7330 B M A House Tavistock Square W C 1

NEAR PUTNEY S W—DEATH VACANCY—Old-established PRACTICE Receipts about £1,000 p a Good panel Nice surgery premises on rental Offers—PEACOCK AND HADLEY LTD 67/68 Chandos Street Strand W C 2

NEAR HOLBORN W C—WELL ESTABlished PRACTICE Receipts average £1,000 p a panel 1,104 Splendid urgency accommodation only Long introduction Premium £2,000—Apply PEACOCK AND HADLEY LTD 67/68 Chandos Street Strand W C 2

NEAR VICTORIA SW — WELL ESTAB lished PRACTICE Receipts last year nearly £1 000 fair increasing panel Nice flat on rental Premium £650 —Apply PRACOCK AND HADLEY LTD 67/68 Chandos Street Strand W C 2

OLD ESTABLISHED PRACTICE NORTH Manchester averaging £1 300 Panel 1 450 Considerable increase possible by branch in ad joining suburb Good location available Good house four bedrooms two reception attic garage excellent professional rooms with separate entrance Vendor accepting full time appointment House and Practice priced low Sale urgent — Address No 7104 B M A House Tavistock Square W C 1

OLD ESTABLISHED PRACTICE FOR SALE country town and country South of Scotland easily worked average (3 years) £1 600 p a House with separate surgery entrance garden and garage —Address No 7440 B M A House Tavistock Square W C 1

WOMAN DOCTOR S NUCLEUS CENTRAL Middlesex for sale £370 last year including £108 panel and P M S Scope Small house and garden for sale or would be let One years purchase —Address No 6824 B M A House Tavistock Square W C 1

WITHIN EASY DISTANCE OF LONDON small NUCLEUS with scope together with very attractive house Residential area Cottage Hospital House and Nucleus £2 500 — Address No 7111 B M A House Tavistock Square W C 1

X RAY PRACTICE WITHIN 100 MILES London good mixed panels private prac tice including X ray work infra red ultra violet light therapy faradism and galvanism Plant on premises Increasing branch surgery Income £1 703 Dispensary panel surgery and garage separate House to let or purchase 4 profes sional rooms dining room drawing room 4 bed rooms etc Price 2 years purchase —Address No 7338 B M A House Tavistock Square W C 1

HOUSES, CONSULTING ROOMS

HARLEY STREET AND MEDICAL DISTRICT

For all types of available accommodation

BERTRAM & CO., Surveyors and Estate Agents
59 Connaught Street, W 2 **Paddington 1642 3**

ACCOMMODATION WITH FULL SECRE tarial services available in modern CON SULTING SUITE Phone Welbeck 7351 or write —Address No 7336 B M A House Tavi stock Square W C 1

DEVONSHIRE ST W 1 —AN EXCELLENT CONSULTING ROOM in one of the finest houses in the street available five sessions per week Rent £125 p a inclusive —Address No 6356 B M A House Tavistock Square W C 1

DOCTOR S WELL DETACHED HOUSE good garage excellent position lovely garden new London suburb minute golf £1 275 freehold —Write DR R 57A Dean Street W 1

HARLEY STREET —EXCEPTIONALLY LARGE consulting room in one of the finest houses in the street rent £250 p a Another on second floor (lift) at £150 p a To view and for all particulars —Address No 7110 B M A House Tavistock Square W C 1

FOR SALE ONE OF THE FINEST HOUSES in the Harley Street district Income from lettings of consulting rooms over £1 000 p a Excel lent residential and consulting room accommodation available for purchaser Long lease for sale at low price —Address No 7109 B M A House Tavistock Square W C 1

HARLEY STREET AND DISTRICT —A NUM ber of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application —LEGOOD AND Co 10 Henrietta Place Cavendish Square W 1 Lang 2601

OLTON (6½ MILES CENTRE OF BIRMING ham) The Ideal Benefit Society are de veloping with rapidity 300 acres known as ULVERLEY GREEN ESTATE upon which 1 500 houses will be erected Small deposit and easy terms arranged Ideal Benefit Society (Estates Dept) Coleridge Chambers 177 Corporation Street Birmingham Central 5991

For available

CONSULTING ROOMS PROFESSIONAL HOUSES & FLATS

in Harley Street and the medical area generally including Mayfair

LEY CLARK & PARTNERS,

AUCTIONEERS SURVEYORS & VALUERS
3a Wimpole Street Cavendish Square W 1
Telephone Langham 1095-6 7
Represented at Cannes Nice and Monte Carlo

MODERN RESIDENCE IN MAIN thoroughfare of progressive seaside resort for sale or to be let on lease —Hannam Mansions Skegness Telephone ONE

OPHTHALMIC SURGEON HAVING RETIRED from practice now wishes TO LET his HOUSE The house is modern and situated in a charming residential district on the Lancashire coast A suitable oculist would soon recover the practice Full particulars —Address No 7005 B M A House Tavistock Square W C 1

QUEEN ANNE STREET —ONLY £40 P A secures exceptionally fine CONSULTING ROOM for use when req all services Residential —Address No 6355 B M A Square W C 1

88, PORTLAND PLACE FIRST FLOOR modern FLAT facing west licensed for practice Two reception bow window three bed bath cloak kitchen magnificent entrance lift Unique opportunity to combine residence at little more than consulting rent —Address No 7322 B M A House Tavistock Square W C 1

MISCELLANEOUS SALES, etc

IMPORTANT

to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE Specially Cut Fitted and Moulded to each individual figure made from Finest Quality Materials and in the Best Possible Style cost no more than mass production ready made clothes

The invaluable Practical Experience and Advice of our 14 Expert West End Cutters and Fitters is always at your disposal

ALL HALLZONI Productions are HAND FINISHED IN EVERY ESSENTIAL DETAIL

SPECIAL OFFER

JACKET & VEST (in black or grey)	£1 1
Lined best quality Art Satin Art Silk or Alpaca	
SOLID FANCY WORSTED TROUSERS	£1 8
The Ideal Suit for Professional or Business wear	
LOUNGE SUITS to measure from	£6 6s
OVERCOATS ,	£5 5s
DINNER SUITS	£8 8s
DRESS SUITS from	£10 10s
PLUS FOUR SUITS	£6 6s
THE IDEAL Suit for Country and Sporting Wear	
GOLD MEDAL RIDING BREECHES from	£2 2s
RIDING HABITS ,	£8 8s
RIDING BOOTS ,	£3 3s
COSTUMES & LONG COATS ,	£6 6s

UNSOLICITED APPRECIATION

I strongly advise all medical men who wish to have satisfaction to patronise Harry Hall Ltd as all the clothes I have had from them during 35 years have been perfect in Fit Cut and Finish
(Signed) S J A MA MB FRCPS

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self measure ment Form or Pattern Garments

Visitors to London can order and fit same day Special Patterns would then be cut and Perfect Fitting Clothes supplied after without trying on

HARRY HALL, LTD.

Governing Director Harry Hall

THE Coat Breeches Habit and Costume Specialists

181 OXFORD ST W 1 119 CHEAPSIDE E C 2
Telephones
GERrard 4905 4906 and 4907 NATional 8696/7
Makers of Finest Quality Bespoke Civil Sporting and Hunting Clothes for Ladies and Gentlemen
Highest Awards 12 Gold Medals
Est over 10 years

HIGH GRADE CAR FOR HIRE SPECIAL quotations to the Profession Day and Night service also Garage and Maintenance including collection and delivery under Personal Supervision Ring Padd 4933 B Covell 3 and 4 Bendall Mews N W 1

INCOME TAX

YOUR burden is OUR business
Tax Specialists to the Medical Profession
HARDY & HARDY
19 CHANCERY LANE LONDON W C 2
Telephone Holborn 6650
Write for free copy of Advice on Income Tax

FOR SALE —FULL TRIAL SET LENSES walnut case (Curry and Paxton) adjustable trial frame etc in good condition £20 — Address No 7002 B M A House Tavistock Square W C 1

PATHOLOGICAL APPARATUS FOR SALE second hand nearly complete outfit £70 Incubator centrifuge haemoglobinometer colorimeter etc — Address No 7313 B M A House Tavistock Square W C 1

COVERS FOR BINDING

Vols I and II of the BRITISH MEDICAL JOURNAL for 1937 and previous years can be had price 2s 6d, by parcel post 2s 10d each

Orders with appropriate remittance, should be addressed to

THE SECRETARY
BRITISH MEDICAL JOURNAL
B M A HOUSE TAVISTOCK SQ
LONDON W C 1

APPOINTMENTS —Contd

THE LADY CHICHESTER HOSPITAL Hove Brighton FOR FUNCTIONAL NERVOUS DISEASES (60 Beds)

SENIOR HOUSE PHYSICIAN (woman) re quired six months appointment £100 per annum all found Valuable experience for Diploma in Psychological Medicine

Applications with testimonials to the Secretary Athis Chambers 33 West Street Brighton
July 9th 1938

THE HOSPITAL FOR SICK CHILDREN Newcastle upon Tyne

Applications are invited for the post of HOUSE PHYSICIAN and HOUSE SURGEON (male or female) for six months as from August 1st 1938 Salary at the rate of £100 per annum together with board residence and laundry

Applications stating age and qualifications together with copies of testimonials to be sent to the Secretary Mr NEIL BRODIE 18 City Road Newcastle upon Tyne 1

YORK DISPENSARY

Applications are invited for the post of RESIDENT MEDICAL OFFICER (female) to commence duties as soon as possible As there are TWO VACANCIES

The resident medical staff consists of two pre officers

Candidates must be duly qualified registered and unmarried Experience in the administration of anaesthetics is essential

Salary £200 per annum with board lodging attendance with an allowance towards extra and for laundry

Applications with testimonials to be sent or before July 9th to JOHN C PETERS Secretary
4 New Street York

WORTHING HOSPITAL

Applications are invited for the post of HOUSE SURGEON vacant on July 21st The appointment is for six months Salary at the rate of £100 per annum with board lodging and laundry

Candidate (male) should forward applications stating age nationality qualifications and experience accompanied by testimonials to the undersigned

A V OAKTON
July 6th 1938 Secretary

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St Quintin Avenue North Kensington W 10
(Ladbroke 0133)

The Board of Management invite applications for the combined post of HONORARY ASSISTANT PHYSICIAN with beds and PHYSICIAN IN-CHARGE of the Child Guidance Clinic.

Applicants must be graduates of a University and must hold the M R C P (London) and the D P M and must have had practical experience in a Child Guidance Clinic.

Applications accompanied by copies of three testimonials should be sent to the undersigned at the Hospital from whom any further information can be obtained and should reach him not later than July 9th 1938.

H J ELEY
Secretary

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St Quintin Avenue North Kensington W 10
(Ladbroke 0133)

The Board of Management invite applications for the post of HONORARY ASSISTANT PHYSICIAN with beds.

Applicants must be graduates of a University and must hold the M R C P (London) and the successful candidate will be required to see Out Patients.

Applications, accompanied by copies of three testimonials should be sent to the undersigned at the Hospital from whom any further information can be obtained, and should reach him not later than July 9th 1938.

H J ELEY
Secretary

CONNAUGHT HOSPITAL
Walthamstow E17

(118 Beds with Four Resident Medical Officers)

CASUALTY OFFICER (male) required to commence duties August 1st. The appointment will be for six months with remuneration at the rate of £110 per annum with board residence and laundry.

Applications stating age nationality qualifications and experience accompanied by copies of not more than three testimonials must be delivered to the undersigned not later than Friday July 22nd 1938.

R HALTON HARRISON
Acting Secretary

KING EDWARD MEMORIAL HOSPITAL
Ealing (115 Beds)

CASUALTY OFFICER AND DEPUTY RESIDENT MEDICAL OFFICER (male) required. Six months appointment with possibility of re election for a further period. Salary £52 per annum with usual residential emoluments.

Applications stating age experience and qualifications together with copies of two recent testimonials should be sent to the undersigned immediately.

R A NICKELWRIGHT
House Governor

METROPOLITAN HOSPITAL
Kingsland Road London E 8

Applications are invited for the post of CASUALTY OFFICER AND RESIDENT ANAESTHETIST (male). Salary at the rate of £100 p.a. with board residence and laundry. Duties to commence September 1st. Candidates must possess a registered medical and surgical qualification of the United Kingdom.

Applications should be obtained and returned to the undersigned not later than July 25th.

FRANK JENNINGS
House Governor and Secretary

EVELINA HOSPITAL FOR SICK CHILDREN
Southwark S E.1

Applications are invited for the post of HOUSE SURGEON (male) for six months from August 15th (first two months in the Casualty Department). Salary at the rate of £120 per annum with board and residence.

Applications with copies of three recent testimonials should be sent to the undersigned not later than first post on July 18th.

W H SIDNELL
House Governor

SOUTH LONDON HOSPITAL FOR WOMEN
Clapham Common S W 4

Applications are invited from medical women for CLINICAL ASSISTANTS for Gynaecological Out patients to attend on Tuesday and Friday mornings.

Applications with testimonials to be sent to the Secretary at the hospital.

VICTORIA HOSPITAL FOR CHILDREN
Tite Street Chelsea S W 3
(138 Beds)

The Committee of Management invite applications for the posts of
(a) HOUSE PHYSICIAN
(b) HOUSE SURGEON
both vacant August 1st 1938. The appointments are for six months. Salaries at the rate of £100 per annum with board lodging and washing.
(c) CASUALTY OFFICER (non-resident)
for a period of three months. Duties to commence on August 1st 1938.

Hours 9 a.m. to 1.30 p.m. daily (including Saturday). Salary at the rate of £ 09 per annum with lunch.

Candidates are expected to attend a Sub-Committee for an interview and should send their application and copies of three testimonials to the Secretary not later than first post on Wednesday the 6th instant.

D ST JOHN BAMFORD
Secretary

THE CORDON HOSPITAL FOR DISEASES OF THE RECTUM AND COLON
Vincent Square S W 1

Present accommodation 6 Beds. On completion of Redhill accommodation will be 10 Beds.

SURGICAL REGISTRAR

The Committee of Management invite applications for the appointment of Surgical Registrar. Candidates must hold the F R C S Diploma or the M S degree of a recognised University.

Applications with copies of three recent testimonials, should be submitted by July 30th next addressed to the Secretary at the Hospital from whom details concerning duties and terms of the appointment can be obtained.

MILLER GENERAL HOSPITAL
Greenwich Road S E 10

ANAESTHETIST

Applications are invited for the post of Anaesthetist (to attend on Thursday afternoon) from those who are specially engaged in the practice of anaesthetics.

Honorarium at the rate of 5 guineas per annum for one attendance a week. For each additional attendance one guinea will be paid.

Fuller particulars on application to the Secretary.

Applications together with copies of not more than three recent testimonials to be sent on or before July 19th 1938.

July 5th 1938.

QUEEN MARY'S HOSPITAL FOR THE EAST END
Stratford E 15

Applications are invited from fully qualified and registered medical men (only) for the post of CASUALTY AND OUT PATIENT OFFICER.

The Hospital contains 120 Beds including 40 for maternity patients.

The appointment will be for six months terminating on September 30th 1938 salary at the rate of £120 per annum.

Candidates who must be single and who should preferably have held hospital appointments should send application accompanied by testimonials to the undersigned at once.

RAPHAEL JACKSON (Major)
Secretary

QUEEN MARY'S HOSPITAL FOR THE EAST END
Stratford E 15

An Investigation is being undertaken in case of Chronic Rheumatic Diseases at the above Hospital and a CLINICAL ASSISTANT is required for the specific purpose of assisting the Physician in charge of this work.

Attendance at the Hospital on either Monday or Thursday afternoon is required from 2 p.m.

Applications to be sent to the undersigned as early as possible.

RAPHAEL JACKSON Major
Secretary

WEST END HOSPITAL FOR NERVOUS DISEASES
Out Patient Department
73 Welbeck Street W 1

The Committee of Management invites immediate applications for TWO HONORARY CLINICAL ASSISTANTS for the Child Guidance Department.

Candidates are requested to obtain further particulars as to clinic times etc., from the undersigned to whom applications with copies of not more than three recent testimonials should be posted not later than Monday July 18th.

J P WETENHALL
Secretary and House Governor

WEST LONDON HOSPITAL
Hammersmith W 6 (239 Beds)

There is a vacancy for the newly-created post of HONORARY PHYSICIAN for Psychological Medicine. Candidates who may be men or women should be Members or Fellows of the Royal College of Physicians London and should have had some experience in Child Psychiatry. A Diploma in Psychological Medicine is desirable. The candidate appointed would be expected to undertake at least one Out patient Session per week and such teaching as may be required by the Medical School. The appointment does not carry with it the charge of any Hospital beds.

Applications accompanied by copies of testimonials must reach me not later than Thursday August 4th. Candidates must attend a meeting of the Medical Council at 4.30 p.m. on Friday August 5th and prior to that date call upon and send copies of their application and testimonials to each member thereof. They must not canvass members of the Board but nevertheless must send copies of their application and testimonials to each member thereof and if so notified be in attendance at a meeting of the Board at 5 p.m. on Tuesday August 9th when the appointment will be made.

H A MADGE Secretary

WORCESTER COUNTY AND CITY MENTAL HOSPITAL
Powick near Worcester

Applications are invited for the post of ASSISTANT MEDICAL OFFICER.

Applicants must be male single under thirty five years of age and duly qualified in medicine and surgery. Commencing salary £350 rising by annual increments of £25 to a maximum salary of £450 per annum to either with furnished apartments board laundry and attendance. A further £20 per annum will be paid if the selected candidate holds or obtains a Diploma in Psychological Medicine. Experience in Anaesthetics will be a recommendation. The appointment is subject to the provisions of the Asylums Officers Superannuation Act 1909.

Applications stating age and full particulars of qualifications and experience accompanied by copies of three recent testimonials to be forwarded to the Medical Superintendent not later than Thursday July 21st 1938.

WESTMINSTER HOSPITAL
Broad Sanctuary S W 1

There is a vacancy for a HOUSE ANAESTHETIST (non-resident) for a period of six months commencing August 1st 1938.

The salary attached to the office is at the rate of £100 per annum.

Applications accompanied by copies of three recent testimonials should be sent to the undersigned not later than July 22nd 1938.

By Order of the House Committee
CHARLES M POWER
Secretary

WIMBLEDON HOSPITAL
Thurstan Road S W 19

Applications are invited for the post of RESIDENT MEDICAL OFFICER male unmarried. Duties to commence on October 1st. The appointment is for a period of six months. The salary offered is at the rate of £150 per annum with board residence and laundry.

Applications accompanied by copies of three recent testimonials should be sent to the Hon. Secretary.

A B WARD
Acting Hon. Secretary

WEST KENT GENERAL HOSPITAL
(Incorporated) Maidstone.
(135 Beds)

Applications are invited for the post of HOUSE SURGEON who must be a male of British nationality.

Salary at the rate of £125 per annum with board apartments and laundry.

Candidates must possess registered qualifications.

Applications stating qualifications and experience together with copies of testimonial should be sent to the undersigned immediately.

EDWARD J GREGG
House Governor and Secretary

WARNEFORD GENERAL HOSPITAL
Leamington Spa (164 Beds)

RESIDENT CASUALTY OFFICER and HOUSE SURGEON to one of the Hon. Surgeons required by September 5th 1938. Six months appointment. Salary £120 per annum with board and laundry.

Applications from qualified registered medical practitioners should be sent together with three recent testimonial to the undersigned by July 26th 1938.

EDWARD L WIRGMAN
House Governor and Secretary

FINANCE

for the acquisition

by

PAYMENTS OUT-OF-INCOME

of

Surgery and Other Furniture
Surgical Instruments
Medical Text Books
X-Ray Apparatus
Laboratory Equipment

The above list is illustrative only Under its Equipment Purchase Plan the Company is prepared to assist doctors to acquire ANY article and spread the cost over a period

BRITISH MEDICAL FINANCE LTD.
Tavistock House South,
Tavistock Square,
London, W C 1

BMF

THE CENTURY INSURANCE COMPANY LTD

7 LEADENHALL STREET
LONDON, E C 3

18, CHARLOTTE SQUARE
EDINBURGH

ASSISTS DOCTORS TO PURCHASE A PRACTICE OR PARTNERSHIP

NO GUARANTORS REQUIRED
REPAYMENTS ARRANGED BY EQUAL QUARTERLY INSTALMENTS WHICH DO NOT VARY WITH FLUCTUATIONS IN THE BANK RATE

PLEASE WRITE FOR PARTICULARS, STATING AGE NEXT BIRTHDAY

MENTION B M J

THE MEDICAL AGENCY, Ltd.

DUDLEY HOUSE, 36-38, SOUTHAMPTON ST, STRAND, W C 2

Telephones—Temple Bar 1034 1054 Established in 1893 by J A Resker

LONDON W 12—Old estab G P main road Suit house available Receipts approx £800 Select panel 900 Prem 2 years purchase Scope for full time
LONDON W 7—Growing PRACT new housing Estate Small house to rent Receipts £550 Panel 600—scope Fees 2/6 up Prem £750 or near offer
LONDON S W 12—Old established middle-class G P Residential locality Large house splendid garden Receipts approx £1 500 Select panel nearly 420 Fees 3/6 up Premium 1½ years purchase or near offer
LONDON S E (10 mins Charing Cross)—Working-class G P Main thoroughfare House to rent Receipts £700 Panel nearly 900 Premium 2 years purchase or near offer
HERTS (Border)—Middle-class PRACTICE Residential locality Corner house garden garage Receipts nearly £1 700 Panel over 300 Fees 3/6 up Premium 2 years purchase or near offer
SURREY—Mixed G P Residential locality Small house to rent Receipts approx £1 350 Panel over 400 Premium £1 800
SURREY (Near Croydon)—Middle-class PRACTICE Residential locality Medium sized house for sale or rental Receipts nearly £1 000 Panel 500 Fees 2/6 up Premium open to offer
LONDON S W 18—Middle and working-class G P Well populated locality Shop-fronted premises Receipts approx £900 Panel 500 Premium 1½ years purchase
LONDON N L—Middle-class G P Receipts approx £2 500 Panel 1 200 Premium 2 years purchase or near offer
LONDON E 11—Mixed G P Corner house to rent Receipts £600 Panel 670 Premium £1 250 inclusive Scope for Eye work

MANY OTHERS FOR SALE **DETAILS ON REQUEST**

THE WESTERN MEDICAL AGENCY

LONDON and BRISTOL

Dr K H BENNETT and Dr W J PARAMORE who give personal attention to every client

Financial Assistance for Purchasers and all Classes of Medical Insurance arranged

LOCUMS AND ASSISTANTS SUPPLIED WITHOUT CHARGE TO PRINCIPALS

For exclusive Agency maximum commission is £50 which includes everything sold except house property

1 HAMPSHIRE COAST—Panel 1 600 Receipts £2 000 p a increasing 2 years purchase House rent Personally inspected
2 S CORNWALL COAST—PRACTICE in well known fishing village Beautiful scenery Receipts about £900 p a Panel 500 2 years purchase or near offer
3 S DEVON COAST—Favourite town PRACTICE started 1936 Non-dispensing Great scope Receipts £250 p a House for sale or rent
4 S WALES—PARTNERSHIP Busy port Panel 2 300 Receipts £3 150 p a Old established HALF SHARE at 2 years purchase Good house available
5 KENT—Near London NUCLEUS started 4 years ago Receipts about £300 p a Premium £420 Good house on easy terms
6 N CORNWALL—Unopposed country PRACTICE All sports Receipts about £950 p a Panel about 500 Premium 2 years purchase Good house rent £80 p a
7 LONDON W 7—Mixed Panel PRACTICE Great scope L C C Estate Panel 600 Receipts about £800 p a Premium cash 1½ years or offer

WANTED

SOUTHERN COUNTIES—We have several buyers waiting for PRACTICES from £1 000 to £1 500 p a
LONDON—We have definite buyers for a good type of PRACTICE within twenty miles of London
PARTNERSHIPS—We have many medical men on our books who are looking out for PARTNERSHIPS in the Southern half of England

22, CLARE STREET, BRISTOL, 1
Telegs Medgen Bristol *Tel* Bristol 22089
15, BEDFORD ST STRAND, W C 2
Tel Temple Bar 2532

ESTABLISHED 1868

PEACOCK & HADLEY, Ltd,

MEDICAL TRANSFER AGENCY,

6 [illegible] Strand, W C 2
London
Telephone [illegible] 564

This old established Agency negotiates the Sale of PRACTICES and PARTNERSHIPS on reasonable terms which can be obtained on application LOCUM TENENS and ASSISTANTS supplied free of charge to principals

CAVENDISH NURSES

★ **MALE AND FEMALE**

Head Office
51 BEAUMONT STREET LONDON W 1
Branches MANCHESTER 176 *Oxford Road*
GLASGOW 28 *Windsor Terrace*
DUBLIN 23 *Upper Baggot St*
Telephones London 1277 Welbeck (3 lines)
Manchester 3152 Ardwick
Dublin 62006 Glas 477 Douglas
Telegrams Tactear London Surgical Glasgow
Tactear Manchester Tactear Dublin

ESTABLISHED 1877

LEE & MARTIN, LTD,

The Birmingham Medical Agency,
71, TEMPLE ROW, BIRMINGHAM
Telegrams Locum Birmingham *Telephone* 5963 Midland Birm

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED

MAXIMUM FEE £50 if exclusively entrusted to us

ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORT NOTICE also ASSISTANTS

WANTED TO PURCHASE

1 BIRMINGHAM (or within 50 miles thereof)—Good Mixed PRACTICE Panel of 1 00 or and receipts of from £1 500 £3 000 URGENTLY REQUIRED CAPITAL AVAILABLE
2 REQUIRED—Good English Scottish and Irish LOCUMS Immediate post to offer Also ASSISTANTS required at once Posts with or without view to Partnership

FOR DISPOSAL

1 GLOUCESTERSHIRE—Well established middle and working class PRACTICE Receipts at £1 250 p a Panel 1 700 Scope to increase and good house
2 STAFFS—Rapidly increasing mixed Private and Panel PRACTICE Receipts last year £1 0 Panel 1 230 Excellent house with all services Pleasant locality
3 MIDLANDS—PARTNERSHIP with early succession in well established Ear Nose and Throat PRACTICE Receipts at £1 150 p a plus Appointments £850 p a Incomer should have F R C S and Specialist experience Excellent house to rent
4 YORKS—Old established mixed Private and Panel PRACTICE Receipts last year £1 Panel 1 354 Good house to rent
5 LONDON—Old established mixed Private and Panel PRACTICE Receipts at £1 50 p a Panel 906 Scope to increase and good h
6 SOUTH WALES—Old established middle and working-class PRACTICE Receipts last year £ 200 Panel 2 114 Good house

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partnerships on very reasonable terms Full particulars on application

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE

Telephone Welbeck 7 5
Telegrams ASSISTIAMO London

NURSES

MALE OR FEMALE

TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES

Nurses reside on the premises and are available for urgent calls Day and Night

THE NURSES' ASSOCIATION
(In conjunction with the MALE NURSES ASSOCIATION)
29 York St, Baker St London W 1
Mrs MILLICENT HICKS Sec
W J HICKS Sec

BRITISH MEDICAL BUREAU

(The Scholastic, Clerical and Medical Association Ltd.)

(*FOUNDED* 1880)

NORTHERN BRANCH

33, CROSS ST., MANCHESTER, 2.

Telephones {Manchester - Blackfriars 3925
{Manchester - Rusholme 2549 (*Night Calls*)

Telegrams: "Locum, Manchester"

Branch Offices at Leeds and Belfast

Recommended with every confidence to the profession by the BRITISH MEDICAL ASSOCIATION as a thoroughly trustworthy medium for the transaction of all Medical Agency business

TRANSFER OF PRACTICES AND PARTNERSHIPS INTRODUCTION OF RELIABLE ASSISTANTS AND LOCUM TENENS at Short Notice VALUATION and INVESTIGATION OF PRACTICES, Etc

Practices and Partnerships wanted Large list of bona fide purchasers with ample capital available Enquiries invited from prospective vendors All information treated in strict confidence

FOR DISPOSAL
Full particulars free on request

YORKSHIRE (W R)—Old-established middle and better working-class PRACTICE Cash receipts last year £1 76 Panel (not encouraged) £50 Good house 2 reception 4 bedrooms For sale or may be rented Premium

CHESHIRE TOWN near —Old-established mixed Panel and Private PRACTICE Cash receipts last year £3 646 Panel 2,13 Scope Excellent detached house (in own grounds) 2 reception rooms study 4 bedrooms, 3 Professional rooms, garage with servant's quarters and garden For sale at valuation Premium—Practice—best offer —No 1136

MIDLANDS—Increasing middle and working-class PRACTICE in large town Cash receipts last year £1 050 Panel over 1 200 Scope Excellent modern house 2 reception 4 bedrooms garage and large garden For sale Freehold *Premium—Practice*—£2,000 —No *1123*

LINCOLNSHIRE.—Very old-established PRACTICE in peasant country town Cash receipts last year £ 471 Panel about 1 00 Cottage Hospital Good house 5 bedrooms small garden garage etc Premium—practice—£3 150 for quick sale —No 1132

MANCHESTER—Sound old-established PRACTICE in industrial district Cash receipts last year £ 200 Panel 2,2 0 Scope House 4 bedrooms 2 Professional rooms Rent £50 p a Premium—best offer —No 1084

MIDLAND HEALTH RESORT—PARTNERSHIP in very old-established middle and better working-class Practice Cash receipts last year £2,500 Panel 1,200 Excellent house with ample accommodation garage and garden Premium —one half share—2 years purchase —No 1144

NEAR MANCHESTER —Well established middle and better working-class PRACTICE in pleasant suburban district in present hands 15 years Average cash receipts over £3 000 p a Panel 1 800 Good scope Good corner house 2 reception 4 bedrooms, 3 Professional rooms, garage and garden also Branch Surgery premises. Both may be rented on lease Premium—1½ years purchase —No 1135

NORTH STAFFS —Very old-established better working and middle-class PRACTICE Cash receipts last year £2,431 Panel 1 25 Scope as district developing Excellent house 2 reception 4 bedrooms maid's room separate surgery premises garage and garden For sale Freehold Premium—Practice—1½ years purchase or near offer —No 1140

NEAR MANCHESTER —Very old-established middle and working-class PRACTICE in prosperous town Very suitable for two friends in partnership or may be run by one man and an Assistant Cash receipts last year £3 3,0 Panel 3 000 Nice modern house 2 reception 4 bedrooms separate Professional rooms garage and large garden For sale at valuation Premium—best offer —No 1137

NORTH MIDLANDS —Old-established mixed Panel and Private PRACTICE in Country district near large town Average cash receipts £1 067 p a Panel 970 and transferable appointments £200 p a. Excellent detached house 2 reception 6 bedrooms Professional rooms garage and large garden Price £1,250 Premium—1½ years purchase —No 1117

SOUTH YORKSHIRE.—Well-established middle and better working-class PRACTICE on outskirts of town Scope for increase as district developing Cash receipts last year £1 471 Panel 1 000 Excellent house (built 3 years ago) 2 reception, 3 bedrooms garage garden 3 Professional rooms (separate entrance) Price £1 400 Premium—1½ years purchase or near offer —No 1112

MONMOUTHSHIRE.—*Old*-established Contract PRACTICE Cash receipts last year £2 114 of which over £2 000 containing 3 reception 4 bedrooms garden Rent £52 p a on long lease Premium—best offer —No 1144

SOUTH COAST—PARTNERSHIP (after preliminary Assistantship) in old established good mixed-class PRACTICE in pleasant Seaport town Average cash receipts last 2 years £3 100 p a Panel 1 00 and appointments £250 p a Scope for great increase Suitable accommodation for incoming man Salary as Assistant £4 0 p a Premium—one half or one third share—2 years purchase —No 1129

LANCS TOWN —Very old-established mixed Panel and Private PRACTICE. Cash receipts last year £1 37 Panel 1 9 5 Scope Good house 2 reception 4 bedrooms, 3 Professional rooms (separate entrance) Premium—Practice —1½ years purchase —No 11 1

NEAR LEEDS —Old-established middle and working-class PRACTICE. Cash receipts average £1 00 p a Panel 900 Excellent detached house 2 reception 4 bedrooms, Professional rooms (separate entrance) garage and garden Price £1 000 Mortgage can be arranged Premium—Practice—1½ years purchase or near offer —No 1125

INLAND SPA —Increasing mixed Panel and Private PRACTICE Cash receipts last year £ 00 Panel 00 Good flat to rent at £ 0 p a Premium—best offer —No 1057

MANCHESTER —Well-established mixed Panel and Private PRACTICE in peasant suburban district adjacent to new Housing Estate Cash receipts approximately £1 100 Panel about 1 000 Excellent modern house 2 reception 4 bedrooms garage and garden For sale or may be rented Premium —1½ years purchase —No 1115

SCOTLAND—Mixed Panel and Private PRACTICE in manufacturing town, East of Scotland Cash receipts approximately £1,250 p a Panel 1,—0 Excellent house 2 reception 4 bedrooms, Professional rooms garage and garden For sale Premium—1½ years purchase, or near offer part by arrangement —No 1135

DERBYSHIRE.—Old-established PRACTICE capable of great increase Cash receipts last year £740 (increasing) Panel 86— Excellent house 2 reception 4 bedrooms, 3 Professional rooms (separate entrance) garage and good garden Premium—Practice and house £1 600 —No 983

NORTH LANCS —YORKSHIRE BORDER —Old-established unopposed Country PRACTICE in present hands 20 years Cash receipts £1 000 p a. Panel and appointments approximately £4 0 p a. Well built House with ample accommodation central heating electric light garage and garden of 2 acres Rent £ 5 p a Premium—1 00 Vendor retiring —No 1119

MANCHESTER —Very old-established mixed Panel and Private PRACTICE Cash receipts last year £1 519 Panel 1 340 Scope Good house 2 reception 4 bedrooms, garage and garden Rent £70 p a Premium—11 years purchase (to include debts bringing in £6 per week) Urgent sale owing to illness of Vendor —No 1134

YORKSHIRE (W R)—Old-established mixed Panel and Private PRACTICE in better working-class and rural district Cash receipts last year £1 156 Panel 1 354 Scope Good house 2 reception 3 bedrooms maid's room 3 Professional rooms (separate entrance) garden with tennis court Rent £45 p a Garage rented Premium—1½ years purchase —No 1122

NEAR MANCHESTER —PARTNERSHIP in old-established mixed-class Practice, owing to recent death of senior partner Average cash receipts £2,446 p a (increasing) Panel 2,300 Scope for increase Good house to rent 2 reception 5 bedrooms, 3 Professional rooms garage and small garden. Premium—one half share—1½ years purchase —No 1114

NORTH WALES COAST —Middle-class PRACTICE in select Seaside resort Cash receipts over £1 00 p a Panel 1 415 Excellent house 3 reception rooms 6 7 bedrooms garage and good garden may be rented Premium—£1 700 or near offer —No 929

SHROPSHIRE —Old-established unopposed Country PRACTICE Cash receipts last year £688 Panel 450 Modern house 2 reception 4 bedrooms 3 Professional rooms garage and large garden Electric light Rent £50 p a Premium—best offer —No 1036

MIDLAND SPA —PARTNERSHIP (after preliminary Assistantship) in old established Practice Cash receipts last year £3 74 Panel 1 200 In coming partner may choose own residence Possibility of Hospital appointment Premium—7 24th share—2 years purchase —Further share in three years —No 1069

NORTH WEST LANCS —Old-established mixed Panel and Private PRACTICE in large town Cash receipts last year £1 102 Panel over 1 000 Good house pleasantly situated 2 reception 5 bedrooms garage and small garden Premium—Practice—1½ years purchase —No 1105

NEAR MANCHESTER —PARTNERSHIP in very old-established middle and better working-class PRACTICE, WITH SUCCESSION in one or two years Cash receipts £ 600 p a Panel 1 0 0 Good scope Suitable accommodation available Preliminary Assistantship if desired Premium—2/5th share—2 years purchase —No 1105

LIVERPOOL—Steadily increasing mixed-class PRACTICE in suburbs Cash receipts last year £758 Panel 650 Excellent detached house 2 reception 6 bedrooms garage and garden Premium—Practice—best offer —No 1036

— WANTED —

ASSISTANTS and LOCUMS

For Immediate Engagements

Apply with full particulars to above address

All communications to be addressed to the Branch Manager BRITISH MEDICAL BUREAU 33 CROSS STREET MANCHESTER 2

British Medical Bureau

(The SCHOLASTIC, CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1880)

Tele Address
Triform, Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1

Telephone Euston {1611 / 1612}

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical, Scholastic, and Accountancy business, and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult The Manager in all transactions requiring the services of a Medical Agent

Members of the British Medical Association may take advantage of a reduced scale of charges applicable to them

REDUCTION IN FEES

In cases where the Bureau are sole Agents the commission in respect of any sale of goodwill, book debts, furniture drugs, fittings and other effects (excluding sales of any freehold or lease hold property, or of practices, effects, etc, outside Great Britain) is limited to a maximum fee of Fifty Pounds

FULL TERMS ON APPLICATION

Practices and Partnerships for Disposal — **Full Particulars sent free**

1 LONDON, E C—PARTNERSHIP (with good scope for private practice in a specialty) in Practice mostly derived from valuable appointments Share of £800 to £1,000 at first at two years' purchase Partner must possess the M D or M R C P or I R C S and preferably have City connections

2 S WALES COUNTY TOWN—PARTNERSHIP in Practice, £2,800 p a Panel over 1,000 Visits 5/ to £1 1s, medicine extra One half share on reasonable terms Partner must hold F R C S Eng Hospital and excellent opportunity for surgical scope and appointment on staff Preliminary Assistantship

3 W OF ENGLAND—PARTNERSHIP in Practice about £4,500 p a, in small town Panel 1 750 Choice of two houses One third share at two years purchase Partner aged about 30, who has held hospital appointments Preliminary Assistantship

4 ESSEX (Borders of Epping Forest)—PARTNERSHIP in steadily increasing Practice over £3,600 p a in growing residential district Panel 1,700 House obtainable One fourth share at two years purchase Cottage hospital Scope for anaesthetics

5 KENT—Upper middle class PRACTICE in growing residential district Receipts, 1937 £652 Small panel Modern well planned double-fronted Tudor house for sale or rent Scope Premium one and a half years purchase

6 S E COAST—PARTNERSHIP in non dispensing Practice about £4,500 p a Panel 1 400 One fifth or one fourth share at two years' purchase Preliminary Assistantship Scotsman preferred

7 LONDON, N 12—Middle class increasing PRACTICE in growing district Receipts past year, £420 Panel 163 Modern labour saving house for sale or rent Premium £630

8 S WALES—Contract and small private panel PRACTICE, *over £1,900 p a, in industrial district* Panel over 2,100 House with surgery premises to rent Premium £3 500

9 S COAST HEALTH RESORT—OPHTHALMIC PRACTICE Receipts, 1938, £1,600 House to rent Unlimited scope Premium one years purchase

10 LONDON, S W—ELECTRO-THERAPEUTICAL PRACTICE Receipts 1937, £1 727 Large consulting room and treatment room to rent Premium £1 600, plus apparatus valued about £750

11 LONDON, N—LOCK-UP PRACTICE, £390 p a run by medical woman Panel 327 Rent at surgery 25/ weekly Good scope Premium 1½ years purchase

12 S COAST HEALTH RESORT—Non-dispensing PRACTICE £1,250 p a No panel but ample scope Commodious house for sale Premium £2 500

13 DEATH VACANCY—ESSEX SUBURB—Receipts average £989 p a Panel 733 Well situated house for sale Scope

14 N WALES—Popular seaside resort Good class chiefly non dispensing PRACTICE averaging £870 p a No panel Excellently situated detached residence for sale Good scope Premium two years purchase

15 LONDON, E—Cash and panel PRACTICE averaging £2 800 p a Panel 4 300 House (5 bedrooms) Rent £156 p a Scope Premium two and a half years purchase to include drugs etc

16 W MIDLANDS—PARTNERSHIP in Practice, averaging £6,000 p a, in market town Panel 3 500 One sixth share at first at two years purchase Incoming partner should be aged 28/30, and able to do general surgery and minor E N and T work Hospital Preliminary Assistantship

17 N MIDLANDS—PRACTICE in residential district near progressive town Receipts 1937, £770 Panel about 100 Choice of two houses for sale Good scope Premium £1 000

18 S OF ENGLAND—Well-established SANATORIUM for the open air treatment Receipts at present at rate of about £3,000 p a Premium £1,000, to include furniture etc

19 MIDLANDS—Middle and upper class non dispensing PRACTICE, about £1,200 p a, in prosperous town No panel House could be obtained Moderate premium

20 LONDON, S E—PRACTICE, averaging £800 p a, in populous suburb Panel 800 Detached double fronted house Price of leasehold £1,250 Scope Premium £1,750

21 FRENCH RIVIERA—Old established PRACTICE M D essential Vendor at present in England

22 S W ENGLAND—Country PRACTICE, over £1,400, in beautiful part Panel about 1,100 Exceptionally nice modern house standing in own grounds for sale Hunting and shooting Scope Premium two years purchase

23 EASTERN COUNTIES—THIRD PARTNER required in Practice, £5,200 p a in market town within 90 miles of London Panel over 4 000 House to rent One fifth or one fourth share two years' purchase

24 CENTRAL LONDON PRACTICE—Better class part at comfortable West End family flat Larger lock up branch 10 minutes distant Both increasing Panel 1 650 Receipts past year £1,698 (average £1,460) 2 years' purchase

25 S E COAST—PARTNERSHIP in Practice averaging £4,100 p a, in growing resort Panel 1 350 Good house (4 bedrooms), to rent One fifth share at first at two years purchase

26 Consulting Ear, Nose and Throat PRACTICE in industrial city Receipts average £1 350 p a (in addition appointments worth about £850 p a) Centrally situated house to rent Purchaser should hold F R C S and have specialist experience Premium two years purchase

27 KENT—PRACTICE in developing district 12 miles from London Receipts past year over £500 Panel about 465 House (3 bedrooms) to rent Ample scope Premium £750 to include drugs etc

28 BIRMINGHAM—Medical Woman's PRACTICE averaging £1,269 p a Panel nearly 900 Good house with garage and garden Price £500 leasehold Scope Premium one and three quarter years purchase

29 S AFRICA—PARTNERSHIP in lucrative Practice in Natal Share worth about £1 800 p a at one years purchase Applicant should be competent surgeon and preferably an F R C S

30 WEST END, near Lord's Cricket Ground—PRACTICE averaging about £1,900 p a in ideal residential part Panel about 1 300 with prospects of good increase Well built detached double fronted house with garage and nice sized garden Good introduction Premium £3 [illegible]

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1 50)

Tele Address Triform Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE W C 1

Telephone Euston 1644 1645

Practices and Partnerships for Disposal (continued)

31 S W OF ENGLAND —PARTNERSHIP in mixed country town Practice over £6 000 Panel 4 500 Share worth £1 200 at two years purchase Preliminary Assistant hip

32 W MIDLANDS —PARTNERSHIP in non dispensing Practice about £3 750 p.a in county town House to rent One fourth share at two years purchase Aged about 30 with F R C S preferred Preliminary Assistant hip

33 MIDDLESEX —PARTNERSHIP in steadily increasing town Practice about £2 000 p.a Panel 1 800 House to rent Premium one half share two years purchase Applicant should be English or Scottish

34 SURREY —Medical Woman s PRACTICE over £ 00 p.a in outlying suburban district Panel 130 House for sale or rent Scope Premium £300

35 S AFRICA —Medical Woman holding D O M S required in Ophthalmic Practice Experienced in operative work and not over 40 preferred SHARE about £1 000 offered after ASSISTANTSHIP

36 SUSSEX —PARTNERSHIP in good class Practice nearly £3 000 in favourite market town Panel about 1 200 House to rent Share of £1 000 at two years purchase Preliminary Assistantship

37 S COAST —PARTNERSHIP in Practice over £6 000 p.a in seaside resort Panel about 2 000 Semi detached house (5 bedrooms) for sale or rent Premium one half share £ 000 Excellent hospital and scope for surgery

38 MIDLANDS —Country PRACTICE over £1 300 p.a in hunting district Panel 546 Good house (5 bedrooms) garage and good garden Main water and electricity Price £1 400 freehold Premium two years purchase

39 N E ENGLAND —PARTNERSHIP in non panel Practice doing about £6 000 in one of the chief towns House available One sixth share at two years purchase Partner should be surgically inclined

40 LONDON S.E 1 —PRACTICE about £1 150 p.a in populous district Panel 1 800 Corner house Rent £105 p.a Scope Premium two years purchase

41 S COAST HEALTH RESORT —PARTNERSHIP in Practice about £1 500 p.a Panel over 1 100 House to rent Premium two-fifths share £1 250 to include drugs etc

42 N OF ENGLAND INLAND SPA —PARTNERSHIP in Practice about £1 900 p.a Panel 1 200 Excellent house for sale Premium one half share £1 800

43 S COAST —PARTNERSHIP in non dispensing Practice over £5 600 p.a in health resort Panel about 600 Share worth about £900 at two years purchase

44 S OF ENGLAND —Easily worked PRACTICE about £1 000 p.a in Cathedral city (clubs worth about £160 and panel 1 065) House (6 bed and dressing room) for sale or rent Premium one and a half years purchase

45 WEST END OF LONDON —Good-class non dispensing PRACTICE about £1 150 No panel Large house to rent Premium lease and practice £3 000

46 BUCKS —PRACTICE in growing town Receipts last year £894 Panel about 790 House for sale Well equipped hospital Premium £1 500

47 LONDON W 6 —Non dispensing PRACTICE £1 000 p.a Pleasant suburb No panel House (5 bedrooms) garage and garden Premium house and practice £2 500

48 ESSEX —Country PRACTICE about £700 p.a Panel about 450 Very good house (5 bedrooms) garage and garden Rent £65 p.a Premium £1 050

49 LONDON S W —Medical Woman s PRACTICE about £960 p.a in outlying suburb No panel Suitable accommodation available Premium £950

50 SURREY —Medical Woman s PRACTICE about £500 in developing district No panel Rent of house £100 p.a Scope Premium £500

51 SMALL RADIOLOGICAL PRACTICE in provincial town Good opportunity for young able man Premium £1 600 to include modern plant (value about £1 100)

52 PARTNERSHIP in increasing Ear Nose and Throat Practice in provincial town Partner must be d F R C S

53 MIDDLESEX —FOURTH PARTNER required in Practice over £7 000 p.a in residential district on the Thames Panel 1 600 House (5 bedrooms) to rent Scope Premium 6/30ths share £3 100

54 LONDON N W —PARTNERSHIP in Practice averaging about £5 200 p.a Panel about 6 000 Maisonette (2 bedrooms etc) to rent One fifth share at first at two years purchase

55 N E COAST —Middle and better working class PRACTICE over £1 150 p.a in seaport town No panel Private residence for sale Premium £750 to include furnishings etc of consulting rooms

56 LONDON W 9 —PRACTICE doing between £900/£950 p.a in residential district Panel about 60 but plenty of scope Rent of maisonette (4 bedrooms) £200 p.a Premium £1 000 or offer

COLONIES —Number of Colonial PRACTICES Incomes range from about £750 p.a upwards

Purchasers can raise additional capital for the purchase of approved practices or shares
Particulars will be forwarded on application

All communications to be addressed to The Manager

Manager W M SCOBIE

SCOTTISH BRANCH, 21, Alva Street, Edinburgh, 2

Telephone Edinburgh 1969

FOR DISPOSAL.

A SCOTLAND —Old established City PRACTICE Receipts approximately £2 400 Panel 2 500 House price £900 Premium two years purchase or near offer

B YORKSHIRE —Country PRACTICE Receipts £1 200 Panel 500 Excellent house with garage Price £1 200 freehold Premium one and three quarter years purchase

C E OF SCOTLAND —Manufacturing town Receipts about £1 250 Panel 1 250 Attractive house price £1 500 Premium one and three quarter years purchase or near offer

D EDINBURGH —DEATH VACANCY —PRACTICE averaging £635 Ample scope for private and panel Excellent house for sale Any reasonable offer

E E OF SCOTLAND —Country town Receipts last year £685 (appointments £112 panel 565) Excellent house with garage and garden Price £1 450 Premium £1 000

F N OF SCOTLAND —Country PRACTICE Long established Receipts approximately £1 000 Panel 275

G WALES —PARTNERSHIP in country town Receipts £1 200 Panel over 1 000 Suitable house Price £800 One half share at one year s purchase

H EDINBURGH —PRACTICE doing £450 House must be bought Premium practice and house £1 650

I EDINBURGH —PRACTICE averaging £1 022 Panel 805 Price of house £1 500 might let on lease Premium one and three quarter years purchase or near offer

K EDINBURGH —PRACTICE about £400 Suitable house to rent Reasonable offer considered

For further details apply The Manager 21 Alva Street Edinburgh

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager to whom all communications should be addressed

RELIABLE LOCUMS and ASSISTANTS are URGENTLY REQUIRED by ALL OFFICES of the BUREAU

PERCIVAL TURNER LTD.

MEDICAL AGENCY

Established 60 Years

25, MAIDEN LANE, STRAND, LONDON, W.C. 2

(CORNER OF BEDFORD STREET)

Telegrams "EPSOMIAN, LONDON" *Telephones TEMPLE BAR 9011 (3 lines) After office hours, Walton on Thames 14*

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE, EXCLUSIVE OF HOUSE PROPERTY £50 FULL TERMS ON APPLICATION

LOCUM TENENS AND ASSISTANTS PROVIDED WITHOUT FEE TO PRINCIPALS PRACTICES INVESTIGATED FINANCIAL ASSISTANCE ARRANGED IN APPROVED CASES ACCOUNTANCY AND LEGAL SERVICES PROVIDED WHEN REQUIRED

PRACTICES & PARTNERSHIPS FOR DISPOSAL

1 *NORTHANTS—Country PRACTICE* old est Vendor retiring About £1 600 p a and panel worth £910 p a 4 *Appts Nice* house for sale Premium 11 years purchase

2 HYDE PARK NEAR—PHYSICO THERAPY PRACTICE about £1 600 p a Well est good class Ample accommodation on rental Premium £1 500

3 LANCS TOWN—Old est increasing £1 100 p a Select panel of 1 000 Nice house ample accommodation Premium £1 550 incl drugs and surgery furniture

4 KENT SUBURB—Good middle class about £700 p a increasing select panel visits 7/6 up surgery 5/ Nice Tudor house for sale might let Premium 14 years purchase

5 *SOUTH COAST*—Old established *nearly £1 400 p a* increasing Fair panel mixed middle and better class Nice detached house ample accommodation garden and garage for sale or might let Premium £3 500

6 COUNTY TOWN within 100 miles of London—PARTNERSHIP with early succession in ENT Practice about £1 350 p a and appointments £850 p a 2 years purchase Purchaser *should have* FRCS Choice of house

7 DEVON—Unopposed country over £1 100 p a increasing panel worth £360 p a Appointments £60 p a Premium £1 850 Excellent freehold house ample accommodation garden and garage for sale £2 500 Mortgage arranged *Premium £1 550*

8 BIRMINGHAM NEAR—Well established nearly £800 p a increasing good scope panel nearly 800 developing area Compact house garden and garage for sale at £850 or let at 27s 6d p w Premium £1 500

9 HANTS—Old established average £1 000 p a Panel 1 000 Appointments about £150 p a Good family house nice garden and garage to be sold substantial mortgage arranged Premium 14 years purchase

10 CONTINENTAL PRACTICE—Attractive resort old established good scope M D essential

11 YORKSHIRE DALES—Beautiful country old established *average £1 000 p a* Large house and grounds rental only £60 p a Suit resident patients Smaller house available Panel worth £340 p a Premium £1 500

12 NEAR VICTORIA S W 1—Lock up about £500 p a increasing panel 350 good scope Ample professional accommodation on rental at £70 p a *Resident housekeeper Premium 14 years purchase*

13 MIDDLESEX SUBURB—PARTNERSHIP Half Share of increasing Practice producing about £2 000 p a Panel 600 developing area Choice of house Premium 2 years purchase

14 MIDLANDS—Old established near important town scope Vendor retiring About £650 p a Panel 730 2 appointments £101 p a Premium 2 years purchase House 3 reception 6 bedrooms separate surgery entrance good garden garage and outbuildings for sale or might let

15 GUILDFORD—Nearly £700 p a fast developing good scope increasing panel of 230 Compact house in good position on rental at £70 p a

16 LONDON W 2—Old established average £1 900 p a panel 1 300 with middle and better class Nice house with ample living accommodation also professional on lease Premium 14 years purchase

17 LONDON N E—PARTNERSHIP half share with early succession £1 460 p a Panel 2 300 ample scope Compact house on rent at £45 p a Premium 2 years purchase

18 LONDON N 12—Over £500 p a increasing and scope Panel 50 Fees 5/ to 10/6 *Convenient house in excellent position to let Premium 2* years purchase

19 SCOTLAND (N.)—Country over £1 000 p a including panel of £300 p a Visits 5/ to £5 5s Vendor retiring Good house for sale or rental Premium 14 years purchase or offer

20 KENT COAST TOWN—*PARTNERSHIP* one third or *half* share receipts £3 650 p a Panel over 2 000 Good house on rental at £85 p a Premium 2 years purchase

21 MIDDLESEX SUBURB—£1 0 0 p a panel 600 PMS £100 p a developing residential area Compact modern house garden and garage for sale at £1 500 or might let Premium 2 years purchase

22 Lady Doctor's PRACTICE London S W 6—Lock up £485 p a Panel 500 Good professional accommodation on rental at £80 p a *Premium* 14 years purchase

23 Lady Doctor's PRACTICE London E 12—£1 400/£1 500 p a Panel 3 0 mixed working and middle class Well equipped *living and professional* accommodation on lease at £80 p a Premium 14 years purchase

24 LONDON W 12—Average about £800 p a Select panel of 900 Good scope Vendor gives only part time Nice house *on main road for sale* or rental Premium 2 years purchase

25 NUCLEUS N 12—Developing residential area £470 p a Panel 100 scope Nice double fronted house for sale or let Premium £750

26 JAMAICA B W I—*PARTNERSHIP half share after 6 months* Assistantship Income £2 000 p a Surgical experience an advantage Choice of house Premium 2 years purchase

27 NORTHERN TOWN—Old established middle-class non panel nonda ing average £1 345 p a good scope better class PRACTICE Mod 2 reception 4 bedrooms and attics garage etc To be sold for £1 0 Premium £2 000

28 KENT under 20 miles from London—Country PRACTICE abo t £90 p a Panel 375 easily worked cope Nice house and garden f r sale or let Premium £750 or near offer

29 CROYDON—Small increasing PRACTICE in thickly populated a a £650 p a Increasing panel of 400 Compact house on main road to N let at £104 p a Premium £450 or near offer

30 SURREY SUBURB *NEAR LONDON*—Well est and increasin in fa developing suburb now about £800 p a panel over 600 increasin N modern compact house with professional rooms garden and garag Rent 30/ p w *Premium £1 750* or offer

31 LONDON W—ONE THIRD SHARE available in old est Ha sulting and G P Practice Receipts average £3 000 p a D M R E prefer

32 LONDON W near Marble Arch—Better class non dispensing non p PRACTICE Old est average £1 766 p a Premium £1 750 or near o Nice house with ample accommodation for sale

33 DEVON NUCLEUS—About £400 p a beautiful country panel pr encouraged Nice house 4 rooms on ground floor 5 bedrooms ba on rental at £65 p a Premium £150 to include fittings etc

34 LONDON W 6—Old-established middle and better-class non panel PRACTICE *averaging £808 p a Nice residential* district Detached h reception 5 bedrooms usual offices consulting and waiting room ga and garage for sale at £2 000 Premium for Practice £1 000

35 LONDON S W 19—Well established increasing in nice residential a about £850 at present Panel 400/500 Club £ 00 p a Ample in professional accommodation on rental at £75 p a Premium £1 00 o offer

36 LONDON S E 20—Old est middle and better class nice resi and *increasing* locality at present £700/£800 p a Panel 3 0 Date b 2 reception rooms 6 bedrooms consulting room etc for sale £900 o at £80 p a Premium 14 years purchase

37 SOUTH WALES—PARTNERSHIP half share seaside town *£3 204* Panel 2 300 Appointments Senior partner retiring Nic facing sea 3 reception 5 bedrooms usual offices 3 acres of gard *court* garage etc for sale or rental Premium for half share purchase

38 HANTS—Country PRACTICE averages about £400 p a Panel 140 Nice house 2 reception 4 bedrooms consulting waiting room dispensary 1 acre of garden garage For sale or let at £5 p a Prem £200

39 SURREY 15 miles from Town—Semi-country receipts £400 p a nice house 2 reception rooms 5 bedrooms usual offices consulting roo waiting room ½ acre of garden garage to be let or sold Prem for Practice £400

40 LONDON S E 6—*Fast increasing developing area now produ* £750 p a panel 650 increasing Ample accommodation on rental at p a Branch surgery in thickly populated part *Premium £1 150* drugs book debts and fittings

41 NOTTS—PARTNERSHIP share *producing £500 p a* in *rural Practice mixed with panel of 900 and appointme* country surroundings nice compact house on rental Premium purchase Suit lady practitioner

42 GLAMORGAN—Small increasing PRACTICE near Cardiff at p a growing panel over 50 Nice house with professional accom good garden To be sold for £1 350 Premium for Practice purchase

43 MIDDLESEX SUBURB—PARTNERSHIP half share in first PRACTICE in developing suburb Receipts £1 600 p a *increa* of £ 00 p a Panel 2 200 Suitable house available for Premium 2 years purchase

44 LINCS COAST TOWN—Well established average £1 00 p a £ 50 p a Large semi detached house 2 min from sea reception room usual offices garden and garage *for sale at £1 500* for Practice £ 450

45 LONDON W—Old established non panel mixed PRACTICE retiring Av £2 200 p a Appointment £ 50 p a Middle Corner residence 2 consulting rooms 3 reception and Dis garage Leasehold 36 year to run *Premium 2 years purch*

46 DERBYSHIRE—Old established unopposed nice co £1 090 p a panel 900 Appt £ 00 p a Good detached h and 6 bedrooms consulting and waiting room and d per ½ acre with tennis court and garage Freehold £1 500 Pr tice 14 year purchase

47 CORNWALL—Old established unopposed country PRACTICE £911 p a last year £1 014 Panel 500 Excellent h small 5 bedrooms etc surgery waiting room *dispensary* Pr Premium 2 years purchase

MANY OTHERS NOT ADVERTISED

WANTED—Purchasers waiting for PRACTICES in all parts Incomes from £750 upwards

ASSISTANTS AND LOCUM TENENS WANTED—VACANCIES in Town and Country List on applica

BOVRIL MEDICAL AGENCY, LTD.

ALDINE HOUSE,

10 13 BEDFORD STREET, STRAND LONDON W C 2

Telegrams BOVMEDICAL, LESQUARE LONDON Telephone TEMPLE BAR 1616 (3 Lines)

Chairman and Managing Director Dr J FIELD HALL

The maximum commission payable on the sale of any Practice or Partnership in Great Britain placed exclusively in the hands of this Agency is £50 (fifty pounds) which sum covers goodwill drugs surgery fittings fixtures and furniture instruments and book debts but not house property Schedule of Terms will be forwarded on application

Accountancy and legal services furnished by the Agency where desired at moderate inclusive charges
No charge is made to Principals for the introduction of Locum Tenens or Assistants

1 SUSSEX —PARTNERSHIP with preliminary assistantship in exceptionally good mixed class Practice Share to produce about £1 000 p a House on rental Payment by arrangement to suitable applicant

2. S W ENGLAND —FAVOURITE COAST TOWN —HALF SHARE after preliminary assistantship in chiefly better-class Practice producing nearly £2,000 p a Small panel Choice of residence Must be experienced and preferably knowledge of E N T Premium 2 years purchase part by arrangement

3 NORTHANTS —Old-established Country PRACTICE averaging £1 600 p a Panel of 1,500 Practically unopposed Premium 11 years purchase Long partnership introduction

4 LONDON S E —Well-established PRACTICE chiefly cash Receipts increase about £1 0 0 p a with panel and club producing over £400 p a Can be run as a lock up Suitable premises available Premium 2 years purchase

5 LONDON —WESTERN DISTRICT —NEW ESTATE —Established about 12 months. Receipts £500 p a. Panel of 600 P M S 30 patients Temporary accommodation Purchaser can build own house It is believed there is considerable scope for increase

6 LONDON S W —RESIDENTIAL DISTRICT —Good middle-class PRACTICE producing about £1 400 p a including panel of 500 patients and appointment worth about £400 House on rental Good scope for energetic worker Premium 2 years purchase or near offer

7 SURREY —Well-established increasing PRACTICE situated in developing residential district. Gross cash receipts for last 12 months about £900 including panel of about 500 Small compact freehold house Price £850 part on mortgage or would rent at £85 p a. Premium £1 500 Ample scope for energetic worker

8 GROWING RESIDENTIAL DISTRICT WITHIN 10 MILES OF LONDON —Recently established upper and middle-class PRACTICE producing about £700 p a with definite scope for increase Selected panel of 72. Fees 5 upwards. Prominent corner house with 2 reception 5 bed rooms Separate entrance to Professional rooms. Well laid out garden House on rental Premium 1½ years purchase

9 SURREY —PARTNERSHIP —ONE HALF SHARE in developing middle- and better working-class Practice in favourite residential hospital town Gross cash receipts for last 12 months £1 860 Panel of 500 Low expenses Well built house with 2 reception 4 bedrooms etc. Rent £100 p a Ingoing partner should be experienced aged 25–0 and able to do some surgery Premium 1½ years purchase for quick sale

10 WITHIN 6 MILES WEST OF CHARING CROSS —Very sound old-established PRACTICE in good residential district producing over £3 400 p a Panel of 2,30 Very nice house in prominent position with all modern conveniences on rental Definite scope for increase Suitable for two friends

11

Fees from 5 6 Detached house in own grounds with ample accommodation Rent £150 p a. Premium £ 000

12 LONDON S W —WITHIN EASY REACH OF CITY AND WEST END — Well-established chiefly middle and better-class PRACTICE with surgical scope producing about £1 450 p a Selected panel of 5 Fees 5 and 7 6 Good sized first floor flat with all conveniences Purchaser should be able to do surgery and F R C S would be advantageous

13 LONDON W C —Well-established PRACTICE producing nearly £1 700 p a Average £1 60 Panel of 1 660 Suitable accommodation available and surgery premises used as lock up on rental Premium 2 years purchase

14 LONDON —WESTERN DISTRICT —Old-established non-dispensing non panel PRACTICE producing about £800 p a Capable of expansion especially if panel work undertaken. Well situated corner house on main would

15 ducing uitable works

16 LADY DOCTOR S PRACTICE — BIRMINGHAM O -established PRACTICE producing last £400 from panel Fees 5 upwards. 0 cases p a Suitable house available u 1½ years purchase or would take £2,000 cash for quick sale

17 KENT COAST —FAVOURITE SEASIDE RESORT —Old-established middle-class PRACTICE producing about £670 p a Small panel 200 patients Very good house in best end of the town with ample accommodation Freehold available Premium £1 200 Eminently suitable for retired army officer wishing to augment pension or there is scope for younger man

18 SUSSEX —FAVOURITE COAST TOWN —Old-established PRACTICE producing about £800 p a including panel which brings in about £150 p a Good house on two floors, 2 reception 4 bedrooms et Freehold for sale Premium 2 years purchase with income guaranteed for first year

19 SOUTH COAST SEAPORT —PARTNERSHIP —ONE THIRD SHARE available in old-established and rapidly increasing Practice which last year produced approximately £3 385 including a panel of over 1 600 patients Purchaser can choose his own residence Practice is conducted from central surgery and the expenses are not high

LADY DOCTOR S PRACTICES —Several available Full details on application

with view to Partnership in an old good future prospects. Initial salary the assistant to live out Full details on

appl cation

20 MIDLANDS — FAVOURITE COUNTY TOWN — SURGICAL OPENING —A QUARTER SHARE (after preliminary assistantship of 3 months) is offered in old-established increasing Practice producing approximately £3 900 p a Panel of about 2 500 One appointment worth about £1 5 p a Fees 5 to 0 No dispensing Suitable house with garden and garage Rent £65 p a Premium 2 years purchase part by arrangement Ingoing partner should be under 35 experienced and able to do some surgery

23 SOUTH OF ENGLAND —COAST TOWN —PARTNERSHIP —A HALF SHARE in good mixed class Practice established over 100 years averaging approximately £3 000 p a., with substantial panel Appointments worth about £300 p a Suitable house on rental at £100 p a Premium 2 years purchase

24 MIDDLESEX —PARTNERSHIP —ONE HALF SHARE in increasing Practice producing approximately £1,000 p a Panel of 600 and increasing House with reception 3 bedrooms etc. Rent £100 p a. Premium 2 years purchase

25 LONDON S E.—Old-established chiefly middle-class PRACTICE producing for last 12 months £1,284 p a. Panel of 6 Suitable house on rental Premium 2 years purchase or near offer

6 LADY DOCTOR S PRACTICE.—MIDDLESEX —Chiefly working-class PRACTICE established 10 years and producing over £400 p a., including panel of 32. Two appointments worth about £50 p a not included in receipts Small house with 2 reception 4 bedrooms Leasehold for sale or would rent Premium 1 years purchase Vendor specializing

27 SOUTH AFRICA —PARTNERSHIP —Good surgical opening Present receipts about £2,000 p a with ample scope for expansion with aid of suitable partner Full details on application.

28 SOUTH WELSH COAST —PARTNERSHIP —ONE HALF SHARE in old-established middle and working-class Practice producing over £1 000 p a Panel of 2,300 Good house with ample accommodation Large garden Freehold for sale Premium £3 500 part by arrangement.

29 NORTHANTS —Old-established mixed-class PRACTICE producing nearly £1 000 p a Panel of 1 000 Fees 3 6 to 10 6 Detached house with good garden Freehold for sale or might rent Premium £1 500

30 ESSEX —ATTRACTIVE COUNTRY DISTRICT —PARTNERSHIP — ONE HALF SHARE of old-established mixed-class Practice producing approximately £1,400 p a., with good scope Panel brings in about £700 p a Good house with 4 bedrooms etc. Rent £50 p a. Very reasonable premium for quick sale

31 SOUTH CORNISH COAST —Old-established PRACTICE producing about £900 p a in lucrative panel of 342. Fees 2 6 to 5 Good house with ample accommodation Freehold for sale Premium £1,800

32 HOME COUNTIES —RESIDENTIAL TOWN WITHIN 30 MILES OF LONDON —PARTNERSHIP —ONE FOURTH SHARE (with increase later) is offered in well-established good mixed-class Practice producing about £4,500 p a Panel of 2,000 Appointments worth over £300 p a Ingoing partner must be experienced in surgery and preferably hold Fellowship Preliminary assistantship if wished Premium 2 years purchase

33 LONDON W 9 —Chiefly better-class PRACTICE averaging £900 to £1 000 p a in residential district Panel (recently assisted) about 0 but very good scope Inclusive rent of maisonette £400 p a Premium £1 000 or near offer Vendor specializing

34 SOUTH MIDLANDS —PARTNERSHIP —A HALF SHARE in old established good-class country Practice in beautiful district Gross cash receipts approximately £3 000 p a including panel of about 2 000 Very nice house with garden and garage Freehold for sale Very good hunting shooting and other sport Premium 2 years purchase

35 SOUTH WEST ENGLAND —FAVOURITE SEASIDE RESORT —Old established non-dispensing PRACTICE averaging for last 3 years £1 6 0 p a Selected panel of 400 Good house with ample accommodation garden and garage Freehold £1 700 or might rent Premium £2,800

36 SURREY —Old-established mixed-class PRACTICE in favourite locality within easy reach of London Average gross cash receipts over £1 00 p a. Panel and clubs bring in about £650 p a Choice of houses on rental Premium 2 years purchase

37 WEST COAST —Old-established PRACTICE in residential and holiday resort Receipts for last 12 months nearly £1 900 Panel and appointments worth about £504 p a Well built house with ample accommodation Freehold £1 100 Premium £3 300 Vendor specializing

38 MIDDLESEX — RIVERSIDE SUBURB — PARTNERSHIP — ONE FIFTH SHARE (with increase later) in very sound old-established steadily increasing Practice producing for last 12 months approximately £8 000 Panel of 3 600 Appointments worth about £2 0 p a. Good house on rental Premium 2 years purchase

39 MIDLANDS —Old-established unopposed increasing PRACTICE. Receipts for last 12 months £740 Panel of 500 Very nice detached house 2 reception 4 bedrooms etc good garden Price freehold £1 500 £1 000 on mortgage. Premium 1½ years purchase

40 SCOTLAND — UNIVERSITY CITY —Old-established non-dispensing PRACTICE producing for last 12 months over £900 p a., including £531 from panel and about £70 from appointments. Suitable house with 2 reception 6 bedrooms etc Freehold for sale or might rent. Reasonable offer

41 EAST ANGLIA —ATTRACTIVE COUNTRY DISTRICT —Mixed-class PRACTICE averaging for past 2 years over £1,200 p a including about £500 from panel P M S etc. Good house with ample accommodation and modern conveniences, garden garage Freehold for sale Sport of all kinds Premium £1 700

42 STAFFS —LARGE TOWN —Old-established PRACTICE producing for 1 st 12 months over £2,400 Panel of about 1,230 Good house with 2 reception 4 bedrooms, etc garden garage Freehold for sale Premium 1½ years purchase or near offer

The Agency has made arrangements for special facilities on very favourable terms to be afforded to approved purchasers for the advance of part of the premium for any suitable practice or partnership Full details on application

INDEX TO ADVERTISEMENTS

PUBLISHERS

Baillière Tindall & Cox 6
British Medical Association Cover iii
Churchill J & A Ltd 5
Lewis H K & Co Ltd 3 6

ASSURANCE & INSURANCE

Century Insurance 58
Medical Defence Union Supp i
Medical Insurance Agency 11
Yorkshire Insurance Co Ltd 36

BANKS & FINANCE

British Medical Finance Ltd 58
Century Insurance Co 58
London Investment & Mortgage Co Ltd 34

CHEMISTS

Abbott Laboratories Ltd 29
Allen & Hanburys Ltd 31
Bell & Croyden Ltd 13
Beman Sales Ltd 33
British Colloids Ltd 28
British Drug Houses Ltd 17 19 20
Boots Pure Drug Co Ltd 18
Burroughs Wellcome & Co Cover ii
Coates & Cooper Ltd 24
Continental Laboratories Ltd 18
Duncan Flockhart & Co 16
Eli Lilly & Co Ltd 27
Eno J C & Co Ltd Cover iv
Evans Sons Lescher & Webb Ltd 19 20
Fassett & Johnson Ltd 15
Iron Jelloid Co Ltd 14
Kaylene Ltd 22
Parke Davis & Co 30
Peat Products Ltd 64
Prentif Ltd 22
Roberts & Co 14
Saccharin Corp Ltd 24
Smith Martin H Co 21
Valentine's Liver Extract Supp ii
Warner W R & Co Ltd 26

FOODS, BEVERAGES

Bickiepegs Ltd 37
Cow & Gate Ltd 32
Genatosan Ltd 25
Glaxo Laboratories Ltd Supp i
Hovis Ltd 15
Husband, J K & Co Ltd 16
Lactagol Ltd 15
Millers Mutual Association 33
Polley & Co Ltd 37
Rayner & Co Ltd 12
Robb Alex & Co Ltd 35
Ryvita Co Ltd 23
Typhoo Tea Ltd Supp ii
Vichy Celestines 14
Wander, A Ltd 21

FOOTWEAR, TAILORING, & CLOTHING

Clark C & J Ltd 12
Puritan Tanneries Ltd 36
Regent Dress Co 37

MOTORS & ACCESSORIES

Henlys 2
Hodgkinson & Crossley Ltd 34
Lodge Plugs Ltd 36
Wolseley Motors Ltd 9

PRINTING, TYPEWRITERS, etc

Taylor's Typewriters 37

SURGICAL APPARATUS

Allen & Hanburys Ltd 31
Compri Vent Ltd 37
Curtis H E & Son Ltd Supp iii
Everett S & R J & Co Ltd 34
Fleming A & Co 37
Hilliard 37
Paragon Razor Co Supp iii
Roussel J Ltd 35
Salt & Son Ltd Supp iv

NAME PLATES, etc.

Cooke's Ltd 37
Hall F B & Co 37
Herd S J & A 37
Lewis H K & Co Ltd 6
Osborne F & Co Ltd 37
White Bronze Co 37

TOBACCO & CIGARETTES

Du Maurier 8
Wills's Three Castles 6

X-RAYS & ELECTRO-MEDICAL

Multitone 4
Portable X Rays Ltd 37
Short & Mason Ltd 6
Victor X Ray Corporation Ltd 35

HOMES & INSTITUTIONS

Pages 38 39 40 41

HOUSE AGENTS

Page 56

HOSPITALS & CLINICS

London Clinic 43
Ruthin Castle 39

SANATORIA

Cornish Riviera San 42
Cotswold Sanatorium 42
Holloway Sanatorium 42
Montana Hall 44
Mundesley Sanatorium 42

SPAS, HEALTH RESORTS, & HYDROS

Czechoslovakia 43
Bax 43
Harrogate 43
Pistany Spa 43
Smedley's Hydro 44
Stanboroughs Hydro 41
Woodhall Spa 41

MEDICAL SCHOOLS TUTORS, & LECTURERS

Page 44 45

NURSING, etc

Page 45

TRANSFER AGENTS

Bovril Medical Agency 61
British Medical Bureau 59 60 61
Medical Agency Ltd 58
Lee & Martin Ltd
Peacock & Hadley Ltd 58
Turner Percival Ltd 6
Western Medical Agency 58

CONTRACT PRACTICE

Page 53

HOSPITAL VACANCIES, etc

Pages 46 47 48 49 50 51 52 53 57

CLASSIFIED ADVERTISEMENTS— (Wanted & Vacant)

Pages 54 55

GENERAL

British Commercial Gas Assoc 10
British Motor Boat Co, Ltd 37
British Oxygen Co Ltd 13
Frankland E J & Co Ltd 36
Hawkins A L & Co Ltd 34
White H, Mfg Co Ltd 36

PERSISTENT ERUPTIONS QUICKLY RELIEVED*

Because it contains a perfectly natural antiseptic—distillates of peat—Sphagnol Ointment has a rapid and beneficial effect on skin eruptions It has a twofold action From the first dressing it soothes irritation and burning sensations Then as its antiseptic peat distillates penetrate the local treatment effectively assists in general measures to clear away the toxic matter which is the source of the trouble We have on record many cases in which a decided improvement has been shown after only three days and where before a week had elapsed marked benefit had resulted

In case you have had no personal experience of Sphagnol we shall be pleased to send you a clinical size sample for testing if you will write to Peat Products (Sphagnol) Ltd Dept B M J 9 21 Bush Lane London E C 4

CONTAINS DISTILLATES OF PEAT

* **Sphagnol**

MEDICAL SOAPS OINTMENT SUPPOSITORIES, ETC

Published by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Eyre and Spottiswoode Limited East Harding St Fleet St, London E C 4 Printed in Great Britain Entered as Second Class at New York, U S A, Post Office

ARCHIVES OF DISEASE IN CHILDHOOD

JUNE 1938

CONTENTS

Intracranial Haemorrhage in the New-born By W S Craig, M D, F R C P Ed

Vitamin C Excretion in Children with Particular Reference to Rheumatic Fever By J D Keith, M D, and Evelyn M Hickmans, Ph D, M Sc

Otitis Media and Mastoiditis in Infancy By Grace McConkey, M B, B Ch, B A O, D C H, and Edward C Ross Couper, M B, Ch B, F R F P S

Radiology in the Diagnosis of Hypertrophic Pyloric Stenosis By Leonard Findlay, D Sc, M D, F R C P

The Blood Phosphorus in Egyptian Infants By I A Sabri, M R C P, D T M and H, and M A Abboud, M R C P, D C H

Osteopetrosis. By A M Nussey, M D, M R C P

The Cooley Syndrome in an English Child By E G L Bywaters, M B, B S, M R C P

Case Report A Case of Diabetes Mellitus in a Young Infant By John Devine M B, Ch B

PUBLISHED QUARTERLY

Yearly subscription (4 numbers) 25/ To members 20/-
Single Number 7/6

Issued by the British Medical Association. Tavistock Square. London. W C 1

This cookery book is based on the latest scientific standards Medical practitioners can particularly recommend it to those of their patients who have to get a full penny worth of food value from every penny of their outlay

THE DOCTORS' COOKERY BOOK

21 Menus and 82 Recipes for Family Meals

21 PAGES OF PHOTOGRAPHS

PUBLISHED BY THE BRITISH MEDICAL ASSOCIATION

Obtainable from all booksellers news agents Railway bookstalls and Co-operative Societies

Enquiries to the B M A Tavistock Square London W C 1

PRICE 4D

EQUIVALENT ALKALIZING VALUES

"The benefit to health which so generally results from the use of diets consisting largely of fruits and vegetables . . may be attributable in part to the fact that these yield alkaline residues . . . in the body"

(Chemistry of Food and Nutrition)

The following table, based on our researches and published data, demonstrates that a teaspoonful of Eno's 'Fruit Salt'—an ordinary dose—is equal in systemic alkalizing value to relatively large quantities of fruit and vegetables Eno is also far more economical

SUBSTANCE	WT OF SUBSTANCE	COST
ENO'S "FRUIT SALT"	0·2 oz = 1 teaspoonful	¼d
Banana	6·4 oz = 2 bananas	2½d
Apple	9·6 oz = 2½ apples	2½d
Tomato	6·4 oz	3d
Pear	9·9 oz = 3 pears	3d
Dates	3·2 oz = 2/5th box	4d
Celery	4·6 oz	4d
Orange Juice	8·0 oz = 3 oranges	4d

The above weights apply to edible portions
The potential alkali reserve of above weights equals 10·2 ccs n/1 Sodium hydroxide

ENO'S 'FRUIT SALT'

NO SUGAR – NO SULPHATES

An effective and economic systemic alkalizer

BRITISH MEDICAL JOURNAL

JOURNAL OF THE

BRITISH MEDICAL ASSOCIATION



SATURDAY JULY 23 1938

PRINCIPAL CONTENTS

President's Address
Profession and Public p 163

Treatment of Cancer of Pharynx and Larynx 167

Diagnosis of Undescended Testicle 168

School Epidemic of Measles 171

Subvesical Diathermy Prostatectomy 175

Rupture of Uterus during Pregnancy 177

Leading Articles p 183

Correspondence 195

Surgery in General Practice
Injuries to Elbow-joint 189

Epidemiology Section 206

Reviews 180

Charge of Procuring Abortion
Trial at Old Bailey 199

Annual Representative Meeting at Plymouth (See Supplement)

WITH SUPPLEMENT AND EPITOME

LONDON

BRITISH MEDICAL ASSOCIATION

TAVISTOCK SQUARE

No 4046 WEEKLY PRICE 1/3

Copyright

REGISTERED AS A NEWSPAPER

No 31

'Elastoplast' in the treatment of displaced Semilunar Cartilage

(excerpts from the film "The Use of 'Elastoplast' in Modern Surgery")



Bandage cut to form "tails"



Bandaging completed

SURGEONS and General Practitioners who may be interested to see this sectionalised film are invited to communicate with *T. J. Smith & Nephew, Ltd., Dept. B 10, Hull,* for details regarding its exhibition

B.M.A. BRANCH Secretaries are invited to write for available dates for projections

A NEW edition of "Elastoplast Technique" has recently been published and a complimentary copy will be sent on application to address above

Elastoplast TRADE MARK THE MODERN SURGICAL DRESSING

ELASTIC ADHESIVE BANDAGES, PLASTERS, DRESSINGS

BRITISH MEDICAL JOURNAL

JULY 23 1938

CONTENTS

British Medical Association

ONE HUNDRED AND SIXTH ANNUAL MEETING, PLYMOUTH 1938

President's Address THE PROFESSION AND THE PUBLIC By COLIN D LINDSAY M D

ADDRESSES AND PAPERS

Treatment of Carcinoma in Pharynx and Larynx and its Results LIONEL COLLEDGE F R C S 167

Diagnosis of Undescended Testicle DENIS BROWNE F R C S 168

Conduct of a School Epidemic of Measles F G HOBSON D M F R C P 171

Subvesical Diathermy Prostatectomy R O WARD M Ch F R C S 175

Rupture of Uterus During Pregnancy JAMES RIDDELL M D F R C S Ed and JOHN SCHOLEFIELD M B F R C S 177

SURGICAL SERIES

Injuries to Elbow-joint S L HIGGS F R C S 189

CLINICAL MEMORANDA

Concurrent Puerperal Streptococcal and Staphylococcal Septicaemia Recovery J STARKIE M B and G N M WISHART M R C S 178

Simultaneous Fracture of Both Wrists R SALISBURY WOODS M D F R C S 179

Locked Twins H C PETCH M B and T A BEST M R C S 179

MEDICO LEGAL

Charge of Procuring Abortion Acquittal of Mr Aleck Bourne at the Old Bailey 199

An Action Withdrawn 205

GENERAL ARTICLES AND NEWS

London Fever Hospital 191

Medical Students' Conference 192

PREPARATIONS AND APPLIANCES 182

UNIVERSITIES AND COLLEGES 205

MEDICAL NEWS 207

LEADING ARTICLES

The Presidential Address 183

Cancer of the Lung 184

The Trial of Mr Bourne 185

SUPPLEMENT

Annual Representative Meeting

Full Report of Proceedings of July 15 and 16

Annual General Meeting

Adjourned General Meeting

Representatives Dinner

Oversea Luncheon

Annual Exhibition Opening

CORRESPONDENCE

ASSOCIATION DIARY AND NOTICES

VACANCIES AND APPOINTMENTS

ANNOTATIONS

Incomplete Descent of Testicle 185

Chemical Aspects of Antigens and Antibodies 186

Book of Plymouth 186

Birmingham Medical School 187

Electrocardiographic Changes due to Smoking 187

Harvey Cushing 188

Successful Vaccination with Dead Tubercle Bacilli 188

National Radium Trust 188

Half-yearly Indexes 188

EPIDEMIOLOGY SECTION

TABLE OF INFECTIOUS DISEASES AND VITAL STATISTICS 206

EPIDEMIOLOGICAL NOTES 207

CORRESPONDENCE

Testimonial to Dr Robert Hutchison Sir LANCELOT BIPPINGTON WARD F R C S and others 195

Cancer and Heredity W CRAMER D Sc 195

Origin of Cancer C M BEADNELL M R C S 196

When to Start Sulphonamide Treatment in Gonorrhoea D KATHLEEN BROWN M B 196

Anti-venereal Measures R FOX C S F R C S 196

Chicken-pox followed by Panophthalmitis S G CORNER M D 197

Psychomatic Illness E K MACKENZIE M D 197

The Unconscious Mind and Medical Practice ERNEST JONES M D CHARLES BERG M D 198

Abortion and the Law Lord HORDER M D and others 198

REVIEWS

An Anthropologist Speaks Out 180

Control of Disease 180

A Study of Cerebral Function 180

A Manual of Otology 181

Intracranial Tumours 181

Haematology 181

Notes on Books 182

LOCAL NEWS

ENGLAND AND WALES—

Voluntary Hospitals Committee for London 194

Atmospheric Pollution 194

SCOTLAND—

Surgical Research Department at Edinburgh University 195

LETTERS AND ANSWERS

Case for Diagnosis 208

Income Tax 208

Lunatics as Pets 208

Bed-bug in the Human Ear 208

Qualifications for Caretaking 208

Holidays and the Milk Supply 208

A KEY TO CURRENT MEDICAL LITERATURE will be found at the end of the JOURNAL

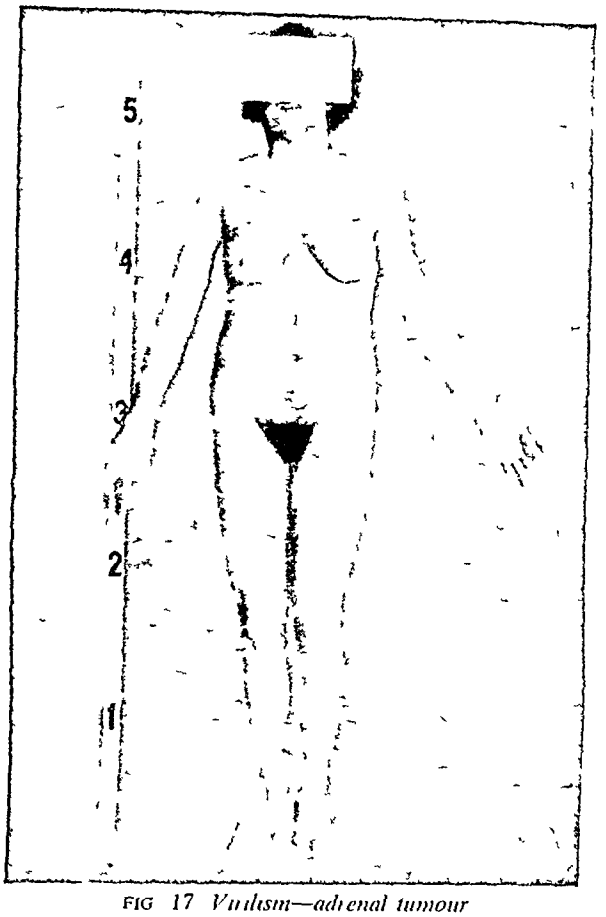


FIG 17 *Virilism—adrenal tumour*

JOHN BALE MEDICAL PUBLICATIONS LTD

MAJOR ENDOCRINE DISORDERS

By S LEVY SIMPSON, M D, F R C P

200 pp, 25 full pages of illustrations, bound in Sundour cloth, price

10s. 6d. postage 6d

85 GREAT TITCHFIELD STREET, W 1

FOREWORD BY

SIR WALTER LANGDON BROWN, M D, F R C P

Emeritus Professor of Physic, Cambridge

Advances in endocrinology have been occurring so rapidly that it is indeed difficult for the busy medical practitioner to keep pace with them There are encyclopædic works, full of detail, which, however valuable for purposes of reference, are on too large a scale for him to assimilate There are also books dealing purely with the physiology of the ductless glands, necessarily cautious in tone, which naturally do not include the therapeutical aspect There are others which are more frankly speculative

This is a condition of affairs which Dr Levy Simpson has set himself to remedy He is already well known as an original worker and writer on the subject He has, in my judgement, succeeded in a really difficult task, for within a comparatively small compass he has included all the important recent advances Where matters are still *sub judice* he has stated the arguments for and against and then expressed his own opinion, where there is general agreement the reader is not left in doubt His statements are clear and precise and are largely the outcome of his own experience The profession at large should be grateful to him for providing such a useful and much-needed book

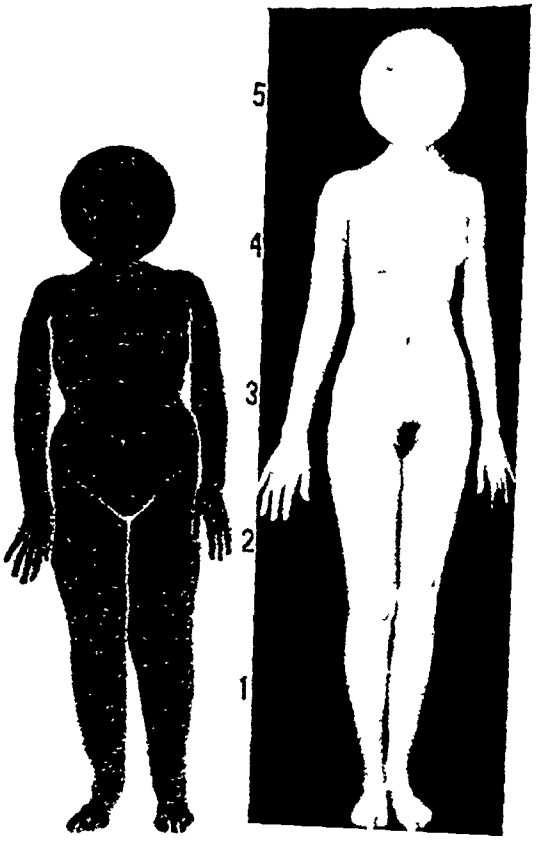


FIG 11 *Frohlich's syndrome*

JUST PUBLISHED!

HERMAN'S PRACTICE of UROLOGY

A Practical Book

by

LEON HERMAN, B.S., M.D.

Professor of Urology University of Pennsylvania Graduate School of Medicine Octavo of 923 pages with 736 illustrations on 504 figures Cloth 45s net

Dr Herman's new book is truly **To-day's Practice of Urology** It brings to everyone concerned with urological disease a clear concise and specific presentation devoted to the practical everyday methods of diagnosis and treatment

But it is the Family Physician who will especially appreciate and welcome this work Dr Herman has taken into account those factors that enter into the treatment of urological disease as it is most commonly met in general practice He describes each method of examination how to apply it and what it means He contrasts normal with abnormal gives you tests such as the Mosenthal test McLean urea concentration test phenolsulphonphthalein test, etc and their clinical interpretation He gives you methods of treatment that you can institute at once in your own practice Systemic and dietetic measures, with actual prescriptions and menus diuretic treatment use of antiseptics, solutions drugs etc and indications for surgical interference are given in full detail

There is an especially fine discussion of **Gonorrhoea in the male** covering six chapters in which Dr Herman omits no detail of practical importance and assistance The use of sulphanilamide, diathermy repressive treatment hand injection irrigation vaccines intraprostatic injection and other methods are described in the light of Dr Herman's own clinical experience

Five unusually complete chapters are devoted to the **Prostate Gland** and there is a full consideration of **venereal ulcers** including the treatment of chancroid

For sound practical and authoritative guidance in **to-day's methods of clinical diagnosis and treatment** we believe this entirely new book is unsurpassed

THE LANCET says

Professor Herman's book does supply as few textbooks do just those facts about urology of which the medical adviser of a patient should be possessed The chapters on prostatic obstruction for instance contain a description of the various methods of prostatectomy to avoid surgery of the added risk and details of the after-treatment

Here is much information carefully tabulated and statistics formed a to an added risk of certain procedures attached to each are duly Rare diseases of interest mainly to the specialist and all matters are excluded from the text but many conditions such as hæmaturia of the fetal kidney are not generally mentioned in current textbooks are noted and studied

Dr Herman's work is thus exactly what he intends it to be—A practical treatise of diseases of the urogenital system for the use of general practitioners and surgeons

The subject matter is skilfully arranged and the text is well illustrated

W B SAUNDERS COMPANY, LTD., 7, Grape Street, LONDON, W.C.2

H. K. LEWIS & Co. Ltd., Publishers and Booksellers

BOOKSELLING DEPARTMENT { TEXTBOOKS and Works in Medical, Surgical, and General Science FOREIGN BOOKS

PROMPT DELIVERY URGENT ORDERS BY TELEPHONE OR POST CAN BE DISPATCHED FROM STOCK IMMEDIATELY

Telephone EUSton 4282 (5 lines)

Books Advertised or Reviewed in this Journal supplied promptly from Stock or to order

STATIONERY DEPARTMENT Special Stock of Medical Stationery, Card Index Systems Name Plates, etc
MODELS DEPARTMENT Anatomical Models Charts Osteology, etc

MEDICAL AND SCIENTIFIC LENDING LIBRARY
Annual Subscription from One Guinea Prospectus on application
SECOND-HAND BOOKS DEPARTMENT, 140, GOWER STREET W C 1

LONDON H K LEWIS & Co Ltd, 136, GOWER STREET, W C 1 Telegrams PUBLICAVIT WESTCENT LONDON

CONSTANT FAVOURITES

BERKELEY & BONNEY: A Textbook of Gynæcological Surgery
Third Edition 863 pp 17 Colour Plates, 530 Descriptive drawings *45s net*

CHOYCE: A System of Surgery
Third Edition Three Vols 3,300 pp 176 Plates, 60 in Colour, 929 Text figures *£4 net the set*

GREY TURNER: Modern Operative Surgery
Second Edition Two vols 1,780 pp 11 Plates, 860 Text figures *£3 3s net the set*

HUTCHISON & HUNTER: Clinical Methods
Tenth Edition 658 pp 21 Plates, 19 in Colour, 142 Text-figure 12s 6d net

MANSON-BAHR: Manson's Tropical Diseases
Tenth Edition 1,004 pp 37 Plates, 22 in Colour, 381 Text figure *45s net*

PATERSON: Sick Children. Diagnosis and Treatment
Third Edition 600 pp 15 Plates, 76 Text figures *12s 6d net*

THOMSON & NEGUS: Diseases of the Nose and Throat
Fourth Edition 976 pp 29 Plates, 13 in Colour, 386 Text figure *45s net*

THOMSON-WALKER & WALKER: Surgical Diseases and Injuries of the Genito Urinary Organs
Second Edition 974 pp 58 Plates, 25 in Colour, 283 Text figure 32s net

Cassell and Company, Ltd., La Belle Sauvage, London, E C 4

WRIGHT'S PUBLICATIONS

EMERGENCY SURGERY

By HAMILTON BAILEY F R C S (Eng) Third Edition Fully Revised Large 8vo 852 pp With 816 Illustrations a large number of which are in colour 30/- net postage 8d

Forms a reliable guide and the author merits praise for the high standard which is consistently maintained —THE LANCET

DEMONSTRATIONS OF PHYSICAL SIGNS IN CLINICAL SURGERY

By HAMILTON BAILEY F R C S (Eng) Sixth Edition Fully Revised 296 pp With 318 Illustrations some of which are in colour 21/- net postage 6d

It fully maintains the very high standard of its predecessors —BRITISH JOURNAL OF SURGERY

ANÆSTHESIA AND ANALGESIA FOR NURSES AND MIDWIVES

By J K WATSON M D (Ed) Just Published Crown 8vo 135 pp 49 Illustrations 3/6 net postage 3d

We consider that medical practitioners and dental surgeons will welcome it —MEDICAL WORLD

SYNOPSIS OF PHYSIOLOGY.

By A RENDLE SHORT M D B Sc and C F C HEATH M B M D Third Edition Fully Revised 320 pp Illustrated 10/6d net postage 5d Interleaved for Notes 17/6 net postage 6d

There could be no better form of recapitulation than is afforded through this book —THE LANCET

Bristol JOHN WRIGHT & SONS LTD London SIMPKIN MARSHALL LTD

HENRY KIMPTON'S PUBLICATIONS

NEW (SEVENTH) EDITION *THIS DAY*

DISEASES OF THE NOSE, THROAT AND EAR
Medical and Surgical

By WILLIAM LINCOLN BALLENGER M.D. F.A.C.S. and HOWARD CHARLES BALLENGER M.D. F.A.C.S.

SEVENTH EDITION THOROUGHLY REVISED

Royal Octavo 1030 pages with 376 Engravings and 30 Coloured Plates Cloth

Price 50s. net

This new edition will be found absolutely authoritative and up to date. Complete additional matter has been added and important new material and new chapters have been added.

NEW (THIRD) EDITION *JUST OUT*

ELECTRO THERAPY AND ELEMENTS OF LIGHT THERAPY

By RICHARD KOVACS M.D.

THIRD EDITION THOROUGHLY REVISED

Royal Octavo 744 pages with 307 Engravings and a Coloured Plate Cloth

Price 35s. net (Postage 9d.)

This is an excellent book on a subject which should be more thoroughly comprehended by the medical profession.

NEW (FIFTH) EDITION *JUST OUT*

MANAGEMENT OF THE SICK INFANT AND CHILD

By LANGLEY PORTER B.S. M.D. M.R.C.S.(Eng.) L.R.C.P.(Lond.) and WILLIAM E. CARTER M.D.

FIFTH REVISED EDITION

Royal Octavo 874 pages with 94 Illustrations Cloth

Price 42s. net

An excellent production and the best modern book in the English language with which we are acquainted.—*Boston Medical and Surgical Journal*

NEW BOOK *JUST READY*

ESSENTIALS OF OBSTETRICAL AND GYNECOLOGICAL PATHOLOGY

By MARION DOUGLASS M.D. F.A.C.S. and ROBERT L. FAULKNER M.D.

Royal Octavo 187 pages with 148 Illustrations Cloth

Price 21s. net (Postage 6d.)

The plan of the book is to picture and discuss briefly from a clinical point of view the normal histology and the more important pathology of structures from the lower genital tract upward.

NEW WORK *JUST READY*

HEMORRHOIDS

By MARION C. PRUITT M.D. L.R.C.P.S.(Edin.) F.R.C.S.(Edin.) F.A.C.S.

Royal Octavo 75 Illustrations including 7 in Colour Cloth

Price 18s. net (Postage 6d.)

This book gives the comparative value of the various methods of treatment and includes detailed description of the technique of injection treatment with a discussion of the several solutions advocated and a full and detailed description of the application.

NEW BOOK *JUST OUT*

CAUSE AND PREVENTION OF DISEASE

By WILLIAM HARVEY PERKINS M.D.

Royal Octavo 715 pages Cloth

Price 35s. net (Postage 9d.)

This work is an important contribution to the practice of preventive medicine. The author has summarized the causes and origin of disease and has applied the material that embraces to the particular for an influence on the effective prevention of disease and all health charitable and enlightened progressive concepts.

NEW (SECOND) EDITION *JUST READY*

PHYSIOLOGICAL AND CLINICAL CHEMISTRY

By WILLIAM A. PEARSON M.D. Ph.D. and JOSEPH S. HEPBURN M.S. M.D.

SECOND EDITION REVISED AND ENLARGED

Royal Octavo 467 pages with 46 Engravings Cloth

Price 25s. net (Postage 6d.)

This work confines itself to the demonstrated truths of science arranged in the most convenient form and selected for their practical value to student and practitioner. It is a notable condensation of modern chemical knowledge prepared for the clinician as well as the student.

DENTAL SURGERY
FOR MEDICAL PRACTITIONERS

By B. A. KOPKIN, L.D.S.

Crown Octavo 109 pages 36 Illustrations Cloth

Price 5s. net (Postage 4d.)

This book conveys just the right amount of information clearly set out.—*The Lancet*

We have undoubtedly been awaiting the advent of such a book for years.—*British Medical Journal*

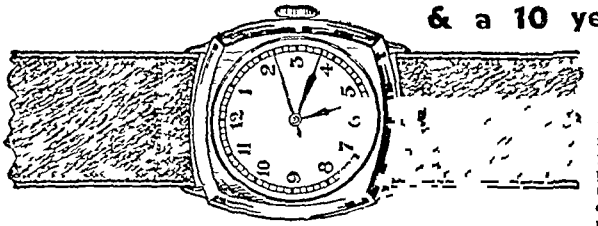
NEW CATALOGUE OF STANDARD MEDICAL PUBLICATIONS FREE ON REQUEST

263, High Holborn HENRY KIMPTON London, W.C.1

In acting as an executor or trustee, the Westminster Bank aims at putting itself in the position of a private trustee It is therefore its practice to employ the family solicitor, if there is one, or any other solicitor the client may name, by such means the Bank succeeds in combining domestic tradition with business efficiency A book showing the advantages of corporate executorship and the terms of appointment may be had at any branch or at the branch situated in B M A House, Tavistock Square, W C 1

WESTMINSTER BANK LIMITED

OUR 50 YEARS' REPUTATION
& a 10 years' guarantee



stand behind these watches Offered to Doctor and Nurses for immediate possession without displacement of capital they represent the highest possible value and perfection of workmanship and are made especially for your professional needs

FRANKLAND'S VITAL PULSE WATCH (Regd)
(For Doctors) Fully jewelled lever movement
Silver chrome 60/ or 13 payments of 5/ Gold £5 17 6 or 16/ down and 11 payments of 10/ 10 YEARS GUARANTEE

Visit our showrooms, or Selections sent on Approval

DEPARTMENTS—Furs Fur Coats Jewellery Plate Cutlery Furniture etc Write for Catalogue

PROTECTIVE MONTHLY PAYMENT TERMS

E J FRANKLAND & Co, Ltd (Dept M) 12 57, Imperial Buildings
Estab 1885 Phone Central 2188 Rudgate Circus London E C 4

CATALOGUE OF SECOND-HAND SURGICAL INSTRUMENTS



OSTEOLOGY, MICROSCOPES, POST FREE Telephone Temple Bar 2206

Half Sets of Osteology, Articulated Skeletons and Disarticulated Skulls and Microscopes

MILLIKIN & LAWLEY, 67 & 68, CHANDOS PLACE, STRAND, W C 2
(Adjacent to Charing Cross Hospital Medical School)

If you have any OVERDUE ACCOUNTS
which require firm but tactful handling write to —
NORWICH & EAST OF ENGLAND MEDICAL PROTECTION SOCIETY
2 & 4, VALENTINE STREET, NORWICH
(Prospectus on application)

BOOKS ON SURGERY

A TEXTBOOK OF SURGICAL PATHOLOGY
By C J W BLINCWORTH MD FRCS Ed, and B M DICK MB FRCS Ld New (3rd) Edition
299 Illustrations 30

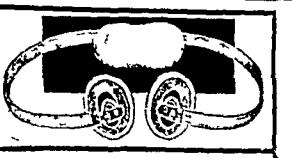
A SHORT TEXTBOOK OF SURGERY
By C J W BLINCWORTH MD FRCS Ld 8 Plates and 179 Text figure 21

SURGICAL NURSING AND AFTER TREATMENT
By H C R DARLING MD FRCS New (6th) Edition 206 Illustration 7s

THE SCIENCE AND PRACTICE OF SURGERY
By W H C ROMANIS, MB FRCS and PHILIP H MITCHINER CBE MS FRCS Sixth Edition 800 Illustrations Two Volumes 7s

THE OPERATIONS OF SURGERY
Eighth Edition By R P ROWLANDS MS FRCS and PHILIP TURNER MS FRCS Vol I 435 Illu 35s Col 36s Vol II 514 Illus 4 in Col 3

J & A CHURCHILL LTD
104 Gloucester Place London W1



DOCTORS PRESCRIBE
the famous
SALMON ODY BALL & SOCKET TRUSS

Most scientific and reliable yet devised Perfect support comfort reliency

Single 30/ Double 50/

Most of our clients are sent to us by Doctors

WRITE FOR BOOKLET

NOTE NEW ADDRESS
SALMON ODY LTD
Truss Makers for 130 years
74, NEW OXFORD ST.,
LONDON, W C 1
Phone Museum 4313

ARCH SUPPORT



Addmeter Money ADDING MACHINES 77 6 st
TAYLOR'S TYPEWRITERS
SELL HIRE HIRE PURCHASE EXCHANGE BUY and REPAIR ALL MAKES of Typewriters Duplicators and Calculating Machines
Desks Tables and Chairs
Est 1884
Write for Bargain List 32 or Phone—Holborn 3793
BUY A BIJOU FOR 15/ a Month
THE QUIET BIJOU The best portable Typewriter Complete in Travelling Case £14 14s
74 CHANCERY LANE (Holborn End) W C 2

NB—Ask for a useful attachment for UK Telephone (pedestal style) holding Memo Block sent post free on application
General Agents (Wholesale only) for UK and Colonies

When patients need sparkling wine
ACKERMAN-LAURANCE
"Dry Royal"
"may be recommended with every confidence"
(Vide Report The Royal Institute of Public Health and Hygiene)

Obtainable everywhere
Per bottle 8 6
Per half bottle 4 6
Per quarter bottle 2 6

ANDERSON DOBSON & CO LTD 13 COOPERS ROW LONDON E C 3 Telephone Royal 1

In the most unexpected places



Illustrated above—Norton a hamlet near Shrewsbury Player s can be purchased at this picturesque cottage which is reputed to be 300 years old Nearby are the ruins of the old Roman City Uriconium

Numerous letters from smokers tell of pleasure in finding their favourite "Player's" on sale here, there and everywhere in the most remote places The vast demand which alone makes this possible, also ensures their constant freshness and is proof supplied by smokers themselves that there is no better Cigarette at 10 for 6d

MEDIUM OR MILD — CORK-TIPPED OR PLAIN Ask for which you prefer and please yourself whatever your taste

Player's Please

MEDIUM OR MILD

PLAYER S NAVY CUT CIGARETTES "MEDIUM OR 'MILD' CORK-TIPPED OR PLAIN 10 FOR 6D 20 FOR 11½D

M.C.C.430

BMF

A Comprehensive Financial Service for Medical Men

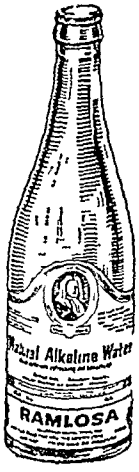
The scope of the facilities offered by the Company has been greatly extended and finance can now be obtained by a doctor for ANY purpose connected with the running of his practice or his house. The charges are unusually low and the service is strictly confidential as between the Company and the doctor. Further particulars and proposal forms may be obtained from the Company

BRITISH MEDICAL FINANCE LTD.
TAVISTOCK HOUSE SOUTH, TAVISTOCK SQUARE, LONDON, W.C.1

THE SWEDISH ALKALINE TABLE WATER

RAMLÖSA

Supplied by Special Warrant to H.M. the King and H.R.H. the Crown Prince of Sweden and also to H.M. the King of Denmark



50 years' reputation
For Medicinal and Table Use

This famous natural water contains practically no lime or iron and so does not affect the hydrochloric acid in the gastric juice. Ramlosa considerably increases the amount of urine and is therefore indicated in the treatment of diabetes rheumatism gout kidney disorders etc.

ANALYSIS (per litre)
Sod Bicarb 53 gm Pot Bicarb 0003 gm Sod Chlor 041 gm Potass Sulph 0003 gm Mag Carb 0016 gm Silicon Ox 006 gm Protoxide of Iron 000015 gm

Retail Prices (per dozen)
Large 13/ Small 9/ Splits 7/

Supplied by Army & Navy Stores Selfridges Harrods Barkers and the Trade generally

SAMPLE BOTTLE FREE ON REQUEST

Sole Agent in Gt Britain
COL. DRAGE, CRICCIETH

Sole Wholesale Distributors
INGRAM & ROYLE LIMITED
45 Belvedere Road S.E.1

RA 2

Binding covers for the B.M.J.

2/6 per vol or 2/10 post free

Preserve your copies for convenient reference

Covers for Vol I, 1938, also Vols I and II of 1937 and previous years, now obtainable

Order and remittance should be forwarded to—

THE SECRETARY,
BRITISH MEDICAL ASSOCIATION HOUSE,
TAVISTOCK SQUARE, LONDON, W.C.1

SULPHAQUA BATH CHARGES

For upwards of thirty-five years largely prescribed for the local treatment of

GOUT RHEUMATISM ECZEMA SCABIES and all SKIN DISEASES

Relieve Pain and Intense Itching Soothing Sedative in Effect Instantly prepared Odourless objectionable Odour

SAMPLES AND LITERATURE ON REQUEST

THE S.P. CHARGES CO. LTD. JAMES

STOCKED BY ALL THE LEADING WHOLESALE HOUSES IN SOUTH AFRICA CANADA AUSTRALIA NEW ZEALAND INDIA &c.

SULPHAQUA SOAP

Extremely effective in Disorders of the Sebaceous Glands and in Eczematous and other Skin Troubles

In boxes of ½ doz and 1 doz BATH CHARGES 2 doz TOILET CHARGES and ½ doz SOAP TABLETS

MODERN HEARING AIDS

FOR THE **deaf**

TRUE TO TONE
HIGH EFFICIENCY
VALVE INSTRUMENTS

THE NEW

Illustrated booklet will gladly be sent on request

All instruments are available for home trial

Belclere REGD. TRADE MARK

Made by

JOHN BELL & CROYDEN

WIGMORE ST, LONDON, W 1 *Acoustic Department*

Telephone Welbeck 5555 (20 lines) *Telegrams Instruments Phone London*

£2,733 for £191

The above is one of many examples of the supreme value of

PERMANENT SICKNESS INSURANCE

The member paid £191 in premiums and drew £2,733 in benefit over a period of 32 years

HAVE YOU A POLICY ?

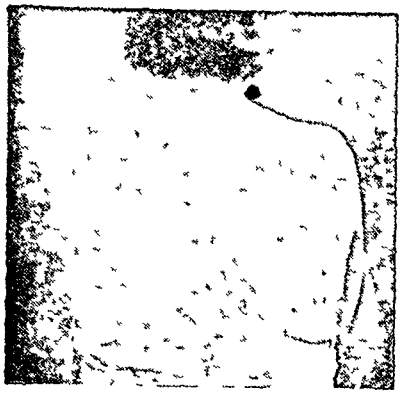
If not write for booklet B 30 to the Manager and Secretary

THE MEDICAL SICKNESS, ANNUITY & LIFE ASSURANCE SOCIETY, LTD.

300, HIGH HOLBORN, LONDON, W C 1

TELEPHONE HOLBORN 5722

• CASE STUDIES WHICH CONVINCE





• These untouched photographs illustrate a case of Psoriasis of fifteen years duration Finally **BELZEMA** *Ointment and* **BELZEMA** Soap were prescribed The result was dramatic Complete elimination of the complaint was achieved in 26 days This single case is typical of many hundreds of clinical reports on our files We believe that your confidence in **BELZEMA** will be established soundly *after a clinical trial* Trial supplies will be gladly *sent to any practitioner on request*

BELZEMA SOAP

cleans and prepares the skin for the absorption of Belzema Ointment It is absolutely pure—contains no synthetic perfume—no artificial colouring—no free alkali—recommended for personal hygiene

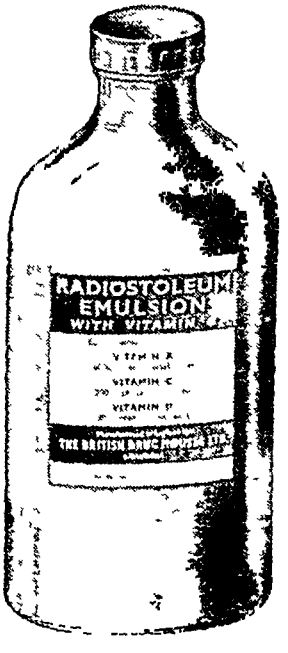
BELZEMA publicity is confined absolutely to the Medical Profession and the fullest co operation of its manufacturers and ourselves may be expected

BROOKS & WARBURTON LTD
232 40 Vauxhall Bridge Road London S W 1
Sole distributors for The Belmont Laboratories Inc

Physicians reports show that the **BELZEMA** treatment gains controlling power over the progress of many difficult skin disorders including those of microbic and parasitic etiology Absorption of the ointment appears to be complete and relief from the inflammation and exudation is usually prompt ***No bandaging is required***

Indications for **BELZEMA brand ointment include ECZEMA, PSORIASIS, ALOPECIA, RINGWORM, DANDRUFF, ACNE, and other skin disorders**

BELZEMA BRAND OINTMENT



RADIOSTOLEUM EMULSION WITH VITAMIN C

Radiostoleum Emulsion with Vitamin C provides a satisfactory medium through which to administer Vitamins A C and D to infants, particularly those which are artificially fed It is most palatable and mixes readily with the feed or it can easily be given direct from a spoon Each teaspoonful contains 6000 international units of Vitamin A, 200 international units of Vitamin C and 1200 international units of Vitamin D

Radiostoleum Emulsion with Vitamin C is issued in bottles of three sizes containing 4 fl oz, 16 fl oz and 80 fl oz respectively

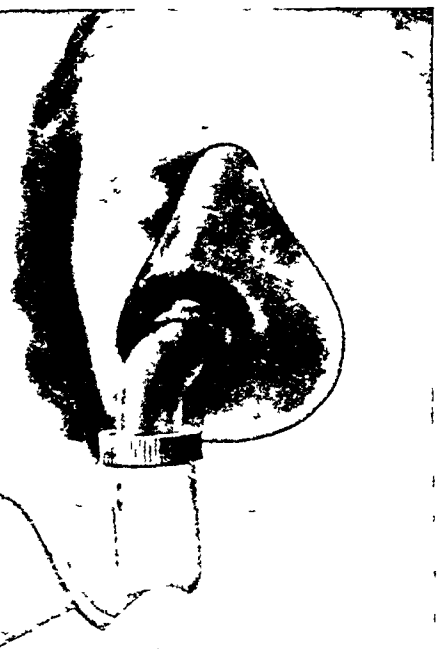
Sample on request

THE BRITISH DRUG HOUSES LTD
LONDON N.1

RstmC/1 m/S/356

Asthma

SUCCESSFULLY TREATED WITH SANABRONCHIN INHALANT AND RESPIROSAN TABLETS



Samples and Literature on request

FRANCIS RIDDELL LTD. AXTELL HOUSE WARWICK ST LONDON W.1

MARMITE

its value in reduction of puerperal death rate

PARTICULARS OF GROUP	NUMBER OF WOMEN IN GROUP	PUERPERAL DEATH RATE FROM SEPSIS (per 1 000 total births)
Cases receiving special food ★	10 384	0 09
Cases not receiving special food	18 854	2 91

★ The food given consisted of a certain milk preparation and Marmite The Marmite was rich in the vitamin B complex which was a neuro muscular stimulant

Another point was that Marmite had a very important haemopoietic action which was not understood and was probably not associated with any of the vitamin B constituents at present recognized (*Brit Med Journ Jan 22nd 1938 p 191*)

for VITAMIN B COMPLEX

For sample and literature apply to—

THE MARMITE FOOD EXTRACT CO LTD Walsingham House Seething Lane London E C.3

In jars 1-oz 6d 2-oz 10d 4-oz 1s 6d 8-oz 2s 6d 16-oz 4s 6d Special quotations for Marmite packed for use in hospitals clinics welfare centres etc 38

ONE RESTORATIVE AND FORMATIVE TONIC WHERE TWO WERE NEEDED BEFORE ..

MINADEX

Minerals IRON COPPER MANGANESE with glycerophosphates of CALCIUM SODIUM, POTASSIUM

Vitamins VITAMIN A (18 000 international units) and VITAMIN D (3 000 international units) per fluid oz



An ideal reconstructive tonic for run-down Children ..

Syrup Minadex combines the active principles of two established routine remedies—syrup ferri phosph co and cod liver oil, the vitamins A and D of the latter being incorporated as concentrates free from oil Clinical experience abundantly confirms the value of Syrup Minadex as a restorative and formative tonic For infants it can be safely administered in the bottle feed, while its enjoyable flavour ensures that Syrup Minadex is readily taken even by "difficult" children Syrup Minadex contains no alkaloidal stimulants Every component contributes directly to the return of bodily health

Prices (excepting Eire) 6 oz bottles, 2'6,- 12 oz , 4'6, 80 oz winchesters, 22'6

Less usual professional discount

GLAXO LABORATORIES LTD GREENFORD MIDDLESEX PHONE BYRon 3434

d[p] GL 250

TRADE MARK

'AMYTAL'

BRAND

Iso-amyl Ethyl Barbituric Acid

FOR SEDATION AND HYPNOSIS

The tranquil sleep of children is always the envy of less fortunate adults to whom at times this boon is denied because of sickness or other conditions which upset the psychic or emotional equilibrium

'Amytal' supplies the relaxation and sleep which are essential to recuperation of vital forces It may be prescribed wherever there is need to combat insomnia, restlessness, or apprehension A noteworthy margin of safety is characteristic of 'Amytal,' and since destruction of the hypnotic within the body appears to be accomplished rapidly there is little tendency to unwelcome side reactions or after depression

'Amytal' is supplied in ½-gram, ¾-gram, and 1½ gram tablets in bottles of 40 and 500

Lilly

TRADE MARK

ELI LILLY AND COMPANY LIMITED

2, 3 & 4 Dean Street, London, W 1

Distributing Agent in Britain for ELI LILLY AND COMPANY, INDIANAPOLIS U S A

PITUITARY EXTRACT B.D.H.

(POSTERIOR LOBE)

Pituitary extract of uniform potency doubly standardised for pressor effect and for oxytocic power

PRESSOR EFFECT

Used in the control of hæmorrhage as, for example, in typhoid fever Pituitary Extract B D H is also injected prophylactically about a quarter of an hour before operations upon the nose and throat as a safeguard against hæmorrhage In large doses the rise of blood pressure produced is utilised in the treatment of surgical shock

OXYTOCIC ACTION

Employed for the induction of labour in the absence of mechanical obstruction, and for the control of post-partum hæmorrhage

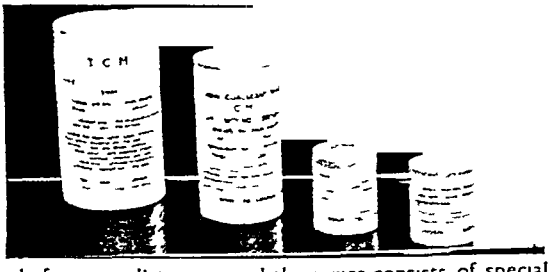
Literature and sample on request

THE BRITISH DRUG HOUSES LTD LONDON N1

THE 1S 6

THROMBIN-COAGULANT-MAW DRESSINGS HAVE PROVED THEIR EFFICIENCY!

In the short time they have been on the market Maw s T C M Dressings have achieved remarkable success Members of the profession who have used them have been impressed by the rapidity with which coagulation is achieved and numerous instances are recorded of severe haemorrhage being checked almost instantly T C M Dressings are treated with Thrombin Coagulant Maw a preparation of natural Thrombin which accelerates blood coagulation and causes clotting within 5 15 seconds They are supplied sterile in sealed drums ready for immediate use and the series consists of special Lint Squares suitable for most purposes Special T C M Dressings can be supplied when required



They cost only a trifle more than ordinary Dressings and are well worth the extra charge We ask you to give them a fair trial for we are confident that you will be satisfied with the results

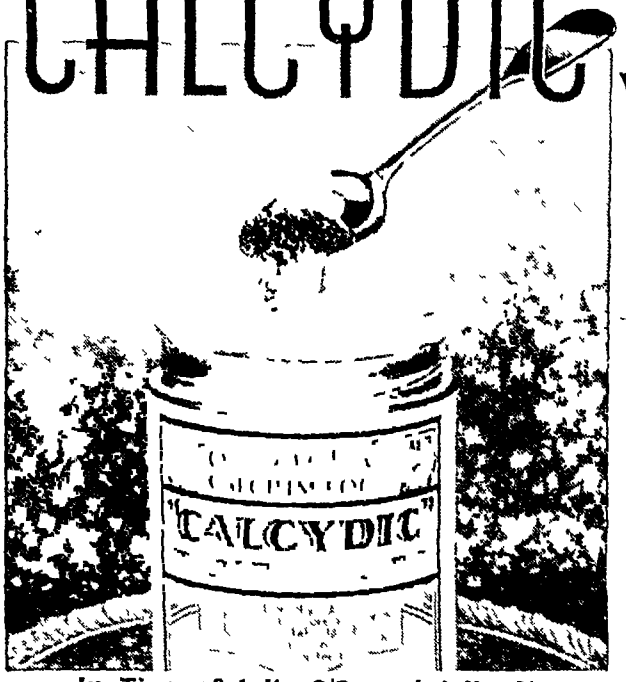
A Product of the Maw Laboratories

VISIT OUR STAND AT THE PLYMOUTH EXHIBITION

Full details and technical information on request

S MAW, SON & SONS LTD, 7/12, ALDERSGATE ST, LONDON, EC1

"CALCYDIC" calcium vitamin D granules



In Tins of ½ lb 2/3, and 1 lb 4/-

Descriptive literature and clinical trial sample will be sent on request

Supplies of calcium and phosphorus are essential to the action of vitamin D Whereas ordinary calcium phosphate contains 1 part by weight of phosphorus to 2 of calcium, dicalcium phosphate ($CaHPO_4$) contains 3 parts of phosphorus to 4 of calcium "Calcydic" Granules are delicious Each teaspoonful contains—

Dicalcium phosphate	7½ grains
Vitamin D	1,500 units

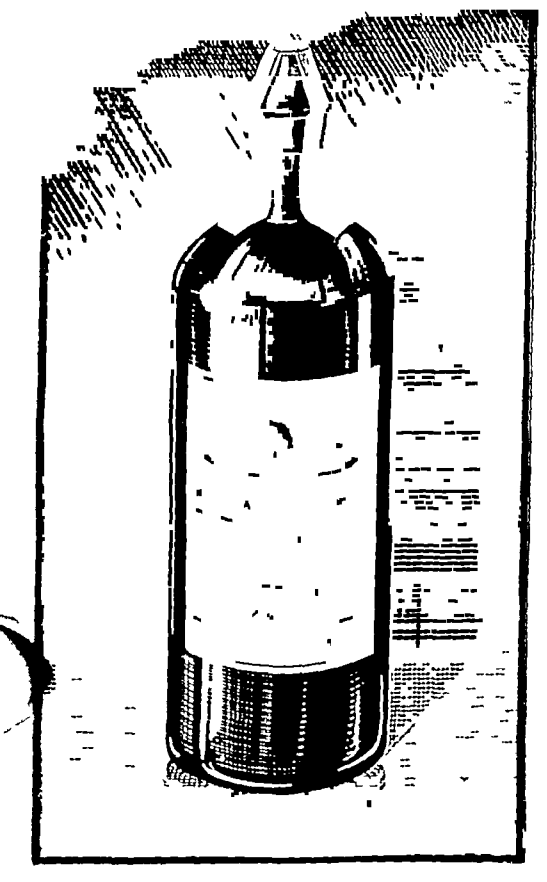
Glucose Chocolate and Cane Sugar

These granules may be given to children or adults, prophylactically or therapeutically, in rickets, pregnancy, lactation, osteomalacia, menorrhagia, convalescence, chilblains, and urticaria

Manufactured in England by

ALLEN & HANBURYS Ltd, LONDON, E 2

Telephone [illegible] Telegrams [illegible]



"HEPATAGEN"

COMPOSITION—Ext Casearae Ext Rhei Jalapin Podophyllin Cocaine Hydrochlor 1 20th gr in each fluid drachm

This preparation does not come under the Dangerous Drugs Act

A POPULAR remedy for Chronic Biliousness, Catarrhal Jaundice and the Jaundice of simple Hepatic Torpor In **passive or habitual Congestion of the Liver it has been used with marked benefit**

In the treatment of acute or temporary constipation in convalescents and in pregnancy, or in the constipation due to sedentary habits, to a deficiency of intestinal secretion and peristalsis, the mixture can be prescribed with wonderful effect

The dose is from 10 to 60 minims, according to the age and condition of the patient One drachm is a direct aperient and is not accompanied by griping or tenesmus

This preparation is also supplied "sine Cocaina," the dose and price remaining the same

C. J. HEWLETT & SON, Ltd.,

Wholesale and Export Druggists and Manufacturing Chemists

35 to 42, CHARLOTTE ROAD, LONDON, EC 2

Specially designed for use in the treatment of **Pneumonia, Bronchitis, Pleurisy** *and similar affections of the Chest and Lungs*

"Gamgee Tissue"

PNEUMONIA **JACKET**

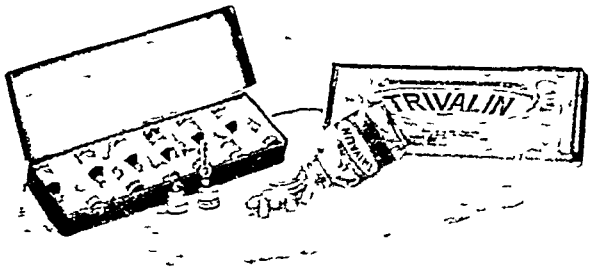
Made from the uperfine grade of Gamgee" ti ue made exclu ively by Robin ons of Che terfield and reputed as the finest dre ing for u e in Thermal treatment Invented by and prepared exactly according to the direction of the late Samp on Camgee F R S E. Con ulting Surgeon to the Queen s Ho pital Birmingham Made in ix ize 9½d to 3 Obtainible from all Chemi t

SOLE PROPRIETORS & MANUFACTURERS ROBINSON & SONS LTD OF CHESTERFIELD & 168 OLD ST LONDON E C 1

TRIVALIN

THE FINEST ANODYNE

(Supplied sol ly to the Medical Profession)



In Ampoules for injection, Capsules and Tablets

Extracts from Clinical Reports

Cancer. I have used Trivalin with most satisfactory results in Carcinoma of the Mamma No preparation I have tried including Morphia (which produced vomiting) gave so much relief

I consider the addition of Hyoscine valuable in Morphia suppression and have found the combination valuable in hysterical frenzies and other forms of mental excitement

I shall continue to use it when Morphia is indicated and particularly when Morphia action is indicated but Morphia it elf contra indicated

LITERATURE AND PRICE LIST ON REQUEST

THE SACCHARIN CORPORATION LTD

(Pharmaceutical Department)

72, OXFORD STREET, LONDON, W 1

Telephone Museum 8096 Telegram Sacarino Rath London

Australian Agents
J L BROWN & CO
1 Moreland Road Moreland N 13 Melbourn

New Zealand Agents
THE DENTAL & MEDICAL SUPPLY CO Ltd
1 5 Wakefield Street Wellington

PLEASANT PROTECTION

'DETTOL' owes its ever increasing use to the fact that it combines high germicidal efficiency with cleanliness and pleasantness

'DETTOL' can be used at really effective strengths without discomfort or even staining—marked advantages over carbolic and cresylic antiseptics Its high bactericidal power is maintained in the presence of blood and other organic matter

'DETTOL' is a clean, clear, non-poisonous fluid, with a most agreeable odour



Sold by chemists in bottles, 1/-, 1/9 3/-, 5/- and 7/6, and in larger sizes for Medical and Hospital use These prices do not apply in Eire or Overseas Sample, and full information on request

'DETTOL'
TRADE MARK
THE MODERN ANTISEPTIC

RECKITT AND SONS (PHARMACEUTICAL DEPARTMENT) HULL LONDON 40 BEDFORD SQUARE W.C.1

ALASIL

Safe Salicylate Therapy

THE popularity of acetyl salicylic acid is undoubtedly due to the fact that it is one of the safest and most effective non-narcotic analgesics available Too often however its use has been discarded by the physician on account of its tendency to irritate the stomach and because entirely pure preparations are not always available

Alasil provides the beneficial therapeutic effects of pure acetyl-salicylic acid in such a form that it is acceptable even by disordered digestions This tolerability is due to the fact that it combines calcium acetyl salicylate—the least irritating salicylate compound—with Alocol a potent gastric sedative and antacid

Since Alasil is better tolerated than acetyl salicylic acid its use can be pushed or prolonged to a much greater extent than the latter Alasil is therefore an analgesic antipyretic and anti rheumatic which can be employed with complete confidence in all the many conditions in which such an agent is indicated

A supply for clinical trial with full descriptive literature sent free on request

A. WANDER, Ltd. Manufacturing Chemists.

184 Queen's Gate London S.W.7

Laboratories and Works KING'S LANGLEY HERTS

APPLICATION OF

B.D.H. GONADOTROPIC HORMONES

IN THE MALE

Of the two gonadotropic hormones Serogan and Gonan, prepared by the B D H Serogan stimulates the germinal epithelium of the testis leading to active spermatogenesis while Gonan acts primarily upon the interstitial cells and corrective tissue leading to increase in size of the testis marked internal secretory activity and added mobility of the undescended organ

Serogan is thus indicated in the treatment of impotence and sterility in the male Gonan is employed when there is a failure in development of the secondary male sexual characteristics—especially when this is associated with undescended testis

DOSAGE OF SEROGAN IN MALE IMPOTENCE

One ampoule 1000 R U twice weekly for one month Thereafter 200 R U injection may be administered when required

DOSAGE OF GONAN IN UNDESCENDED TESTIS

Gonan 500 R U twice weekly for six weeks Since treatment is designed to cause as gradual a descent of the testis as possible in order to promote closure of the processus vaginalis, a treatment-free interval of one month should be allowed between each six weeks course The optimum age for treatment is generally regarded as being between 9 and 13 years

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

SHor/S 42

Cadburys have perfected a SPECIAL CHOCOLATE

which is Sugar Free and therefore a suitable addition to the dietary of diabetics

This chocolate is extremely palatable, and because Cadburys have unlimited facilities for laboratory research and the subsequent manufacture and marketing of such a product it sells at a very low price. Further details and analysis with a sample of this Special Chocolate will be gladly forwarded to anyone interested. Please write to Cadburys Laboratories, Bournville.

...ria
...nesi lite comp...
a potent ...astric

...BROS BOURNVILLE ENGLAND

A supply for clinical trial
A. WANDER, Ltd.
184 Queen ...
Laboratories and Works KING'S ...

The commencement of Treatment

The pathological changes observed in the various organs in most diseases are due to the absorption of poisons, either locally or from the intestine

After treating the cause, the next step is essentially elimination of the toxin by the bowels, kidneys and skin

This is especially important in the infectious and acute febrile diseases

It is sometimes overlooked in chronic diseases such as rheumatism, catarrhal diseases and skin diseases, etc

A safe and efficient aperient is found in Andrews Liver Salt Palatable to young and old alike, antacid in action, it is especially useful in febrile conditions, where its effervescing properties relieve thirst and cool the dry, parched mouth

★ N.B.—A large size tin will be sent free on request to any member of the Medical Profession



ANDREWS
LIVER SALT

SCOTT & TURNER LTD Works and Laboratories at Newcastle on Tyne

INDICATIONS FOR 'SANATOGEN' No 6

TUBERCULOSIS

PUBLIC ENEMY No. 5

Since the beginning of the century, the death rate from all causes has fallen by one-third The death rate from Typhoid has dropped from 113 per million to 6 3 in 1936, that from Influenza from 189 to 109, whilst from Measles the death rate has fallen from over a thousand to under three hundred In the first five years of the century, the average mortality rate from Tuberculosis was over 1700, in 1936 it was 657—but it still holds fifth place in the list of causes of death in this country

For these improvements, better sanitation and the raising of the economic level of the poor are mainly responsible Environmental circumstances are important, but so far as Tuberculosis is concerned, *nutrition is evidently the most important factor* An adequate supply of nourishing food constitutes the first line of defence The food must be ample, digestible and absorbable, and must include a sufficiency of proteins, *vitamins and minerals*

'Sanatogen', which is a carbohydrate-free product of 95% pure milk casein with 5% sodium glycerophosphate, has proved itself to have great value in building up the body's resisting power to hostile bacilli It is easily digested and assimilated, and markedly increases the nutritional value of other foods taken with or after it It is notably helpful to the debilitated, rejuvenating cellular activity (including that of the white blood corpuscles) and promoting healthy tissue-building

'SANATOGEN'

(Trade Mark)

A brand of Casein and Sodium Glycerophosphate

Sold by all chemists price 2/3 to 19/9

DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants ½ teaspoonful added to each bottle feed

The word SANATOGEN is the Trade Mark of Genatosan Ltd Loughborough Leicestershire for its tonic preparations of Casein and Sodium Glycerophosphate

Clinical samples and literature available on request to

GENATOSAN LTD., LOUGHBOROUGH, LEICESTERSHIRE.

The Scourge of Diphtheria

can be mitigated by timely immunization

The following prophylactics are made and standardised at
THE EVANS BIOLOGICAL INSTITUTE

APT Evans
(Alum Precipitated Toxoid)

A 'two dose' prophylactic prepared by precipitating the antigenic fraction of formol toxoid of high value with alum. The first injection should be 0·1 to 0·2 cc. and the final injection 0·5 cc. after two weeks. For children of eight years and under.

TAF Evans
(Toxoid Antitoxin Floccules)

T.A.F. should be used when the subject is more than eight years of age. T.A.F. has a high immunizing efficiency whilst reaction is rare.

TAM Evans
(Toxoid Antitoxin Mixture)

Produces immunity more slowly and is generally recognized to be less efficient than A.P.T. and T.A.F.

FT. Evans
(Formol Toxoid)

An efficient prophylactic. It may cause disturbance in some older children and in adults. It is recommended that its use be restricted to children between 1 and 8 years of age.

Dosage of F.T., T.A.M., and T.A.F.

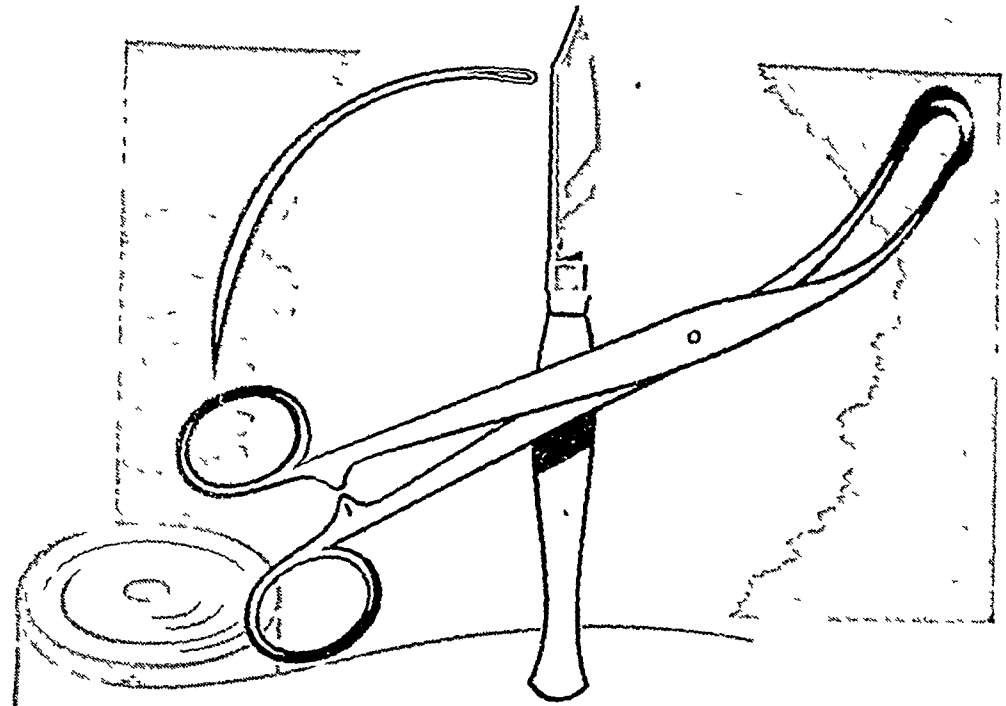
These three dose prophylactics are administered subcutaneously. With the F.T. and T.A.M. the doses are 0·5 cc., 1 cc. and 1 cc., but with T.A.F. each 1 cc. A course of 0·5 cc., 1 cc. and 1·5 cc. has also been suggested. It is recommended that the intervals between the injections should be one or preferably two weeks.

In the very few instances where a positive Schick reaction is obtained after such a course of treatment further injections are necessary to establish immunity. It is recommended that the Schick Test be made not earlier than eight weeks after the third injection.

(Special prices and detailed literature will be forwarded to Public Health Authorities)

Evans Sons Lescher & Webb Ltd
LIVERPOOL and LONDON

Your patient . . .



has undergone an operation

He is very weak His diet must include nothing that can put the slightest strain on an enfeebled digestive system At the same time, it is imperative that his existing strength be maintained and increased

Here is a case where the unique properties of Brand's Essence can be used to full advantage Brand's is a basically pure stimulant. precipitating no solids in stomach or intestines and containing no irritants Rapid and easy assimilation enables its pronounced protein-sparing properties to take effect without delay Excess acid is effectively controlled by protein-adsorption

BRAND'S CHICKEN OR BEEF ESSENCE

is never contra-indicated

BRAND & CO., LTD . SOUTH LAMBETH ROAD, LONDON S W 8



RELIGIO MEDICAL SERIES No 152—CELTIC

TRADE MARK **'WELLCOME'**

DIPHTHERIA PROPHYLACTICS

For Active Immunisation

Entirely manufactured, tested and packed in England Four products are available each one the result of long periods of research and clinical trial

'WELLCOME' Brand A.P.T.

DIPHTHERIA PROPHYLACTIC ALUM PRECIPITATED TOXOID

'WELLCOME' Brand T.A.F.

DIPHTHERIA PROPHYLACTIC TOXOID ANTITOXIN FLOCCULES (5 to 15 c.c.)

Price and literature describing the action of the product to Medical Men on request

'WELLCOME' Brand T.A.M.

DIPHTHERIA PROPHYLACTIC TOXOID ANTITOXIN MIXTURE

'WELLCOME' Brand F.T.

DIPHTHERIA PROPHYLACTIC FOR TOL TOXOID

Prepared at
THE WELLCOME PHYSIOLOGICAL RESEARCH LABORATORIES
LANGLEY COURT BECKENHAM KENT

Supplied by
BURROUGHS WELLCOME & CO. LONDON
Address for communications SNOW HILL BUILDINGS E C 1
Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W 1

Associated Houses
NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

O O O O O

AN ALTAR OF ROMAN BRITAIN DEDICATED TO THE CELTIC GODDESS SUL —There is abundant evidence of the Celtic belief in the magico-medical power of waters and their wells became the popular holy wells of mediæval times which preserved many of the curious customs introduced by the Celts Among the Celtic places which have become famous for their healing springs Bath is pre-eminent in England The Romans named it Aquæ Sulis after the goddess presiding over its waters They identified Sul with their own Minerva Altars such as the one here reproduced were erected to Sul in supplication for health or healing or in gratitude for cure granted



DATE Traditional The altar A D c 100—00

COPYRIGHT

'A.B.' BRAND PROTAMINE INSULIN

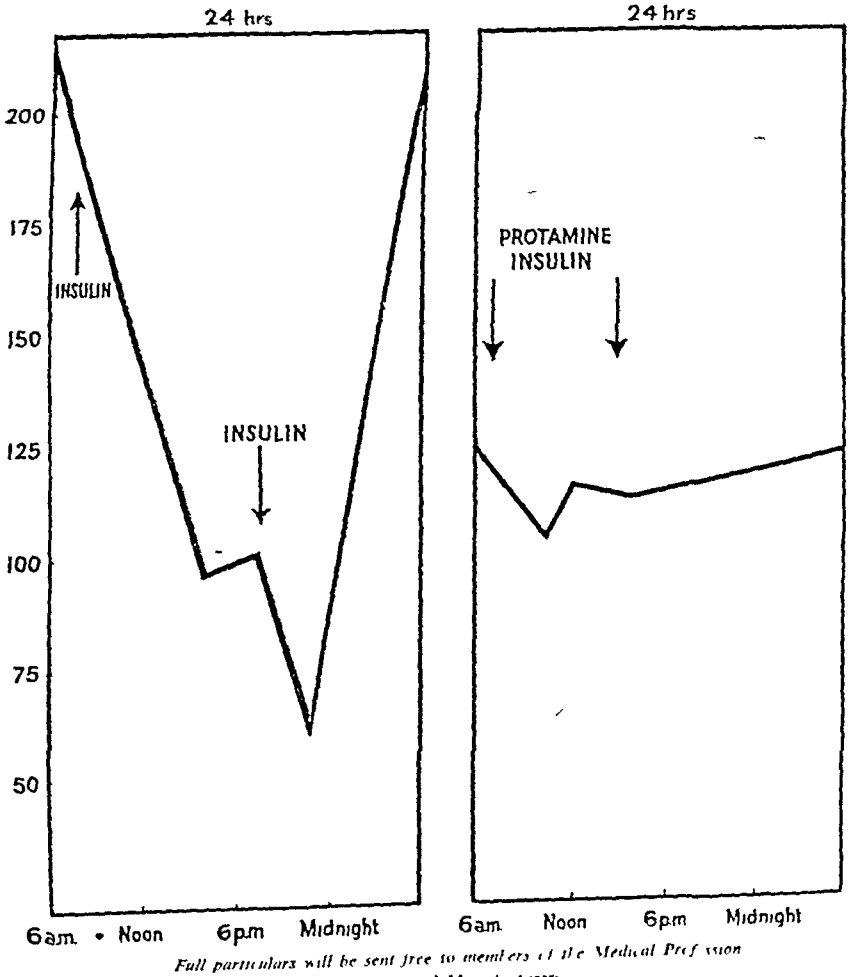
(with zinc) **SUSPENSION**

The absorption of insulin injected in the form of 'A B' Brand Protamine Insulin (with Zinc) Suspension is much prolonged and closely resembles the natural secretion of the pancreatic islets This insulin has a steady action and exerts a better control than that of ordinary insulin over the carbohydrate metabolism The number of injections can be reduced, a lower total dosage is usually necessary and the subjective symptoms of diabetes markedly improve

40 units per c cm	**80 units per c cm**
5 c cm (200 units) 2/4	5 c cm (400 units) 4/6
10 c cm (400 units) 4/6	

INSULIN 'A B' was the first British insulin offered commercially to the medical profession, and has a world wide reputation for its strictly safeguarded sterility its carefully standardised strength its freedom from toxic reactions and its stability in hot climates

Effect of Insulin without and with Protamine



Full particulars will be sent free to members of the Medical Profession

Joint Licensees and Manufacturers

THE BRITISH DRUG HOUSES LTD ALLEN & HANBURYS LTD

BRITISH MEDICAL JOURNAL

LONDON SATURDAY JULY 23 1938

British Medical Association

ONE HUNDRED AND SIXTH ANNUAL MEETING, PLYMOUTH, 1938

President's Address

THE PROFESSION AND THE PUBLIC

BY

COLIN D LINDSAY, M D,

Emeritus Physician Prince of Wales's Hospital Plymouth Consulting Physician Royal Eye Infirmary Plymouth Consulting Physician Tavistock Hospital

In the first place I wish to thank you for the honour you have done me in electing me President of the B M A Specially I wish to thank my colleagues in the Division who by nominating me have given me a token of friendship that I prize above most things I consider this honour one of the greatest within the profession and my sense of inadequacy is at its height at this moment when I am faced with the problem of delivering an address that will be worthy of the head of this great Association Previous holders of my office have often been pre-eminent in one or other branch of medical science and they have made this address the vehicle of some valuable addition to or survey of medical knowledge I can claim no such pre eminence For forty years I have been in practice both as a general family doctor and as a consulting physician They have been eventful years in the development of medicine as a public service using this expression in its widest sense One might almost say that they cover the evolution of our work from a purely private affair between individuals to one of the vital public services of the community

An Age of Planning

It is some aspects of this evolutionary process that I have chosen to form the subject of my address and to consider once again the relationship between us doctors and the public for it is by those we cure and even more by those we do not cure (so long as they are not dead) that we are ultimately judged It was Mr Bernard Shaw who proclaimed from the mouth of one of his characters that the medical profession was not a profession but a conspiracy though he hastened to add that all professions were a conspiracy against the laity

This is rightly said to be an age of youth but I still think that there is a lot of truth in the old Latin tag Experientia docet I think that I can lay claim to that experience—experience moreover as a working member of the rank and file of the profession The rank and file from their very nature are singularly unvocal For that reason if for no other I welcome the opportunity that your action in making me your President has given one of them to speak publicly on their behalf I have said that this is an age of youth It is also an age of planning *Laisser faire* that principle beloved of our fathers has done great things but it has outlived its time All the signs and symptoms point to the fact that whether we wish it or not in every field of human activity some form of control of planning is necessarily coming We may not like the thought but it is useless to kick against the pricks and it rests largely with us what form that control is going to take

Medicine as an Industry

I want you to look for a moment on medicine as a great industry an industry whose product is the health both physical and mental of the community which it serves I have a moment's hesitation in using this simile as the word industry has come to have a meaning that throws the emphasis on the indirect product—money—rather than on the direct product of the labour involved This emphasis is and I hope always will be, foreign to our own work As I see it this industry is one which is provided with a plant that is excellent efficient and up to date in practically every way I do not think however that the best use is made of this plant It has grown up haphazardly and piecemeal There is great want of correlation great duplication of effort

General Practice

First look at what we may call the selling end of the industry If you want to buy some unusual article you go to a retail shop and make use of their experience with wholesalers and the like to get what you want from the most appropriate source Some such arrangement is necessary in medicine and as things are at present this arrangement is not working smoothly The fault is perhaps largely an administrative one but I believe clear thinking on the exact nature and function of the medical practitioner is also lacking The matter of health and its maintenance is so essentially a personal thing that the personnel of this (retail) division of our health industry must have a close personal relationship with the public as individuals This relationship is only possible in a family doctor either in his present form or in some altered but essentially similar form At present there is a tendency for this branch of the profession to sink

lower and lower in the estimation both of the public and of the student body from which the profession itself is recruited

The practice of medicine itself has been brought into disrepute by the indiscriminate administration of medicines The faith of the public in a bottle of medicine is pathetic I grant it may be used on account of the psychological effect, but often it is quite unnecessary and is only prescribed because the public expect and insist on it On the other hand there is even a section of the public which considers that the training, knowledge, and ability of even the best doctors in the land ought not to be used in helping the sick, that in fact their talents should be hidden in a napkin and reliance placed solely on prayer, and not to do what I believe the Almighty wishes and expects us to do ourselves The principle which I have learned to follow is to avoid drugs if possible, but when necessary to give them in adequate doses—often in much bigger doses than those suggested in the textbooks—until a definite effect is produced I possess a very interesting work on *The Practice of Physick* written by Dr Willan 257 years ago, in which the author recommended all physicians to follow what he invariably did and take a dose himself of every medicine he prescribed for others I imagine this is hardly practicable in these days—especially in the case of panel practitioners in the midst of an influenza epidemic!

A Family Doctor Service

The credit of the general practitioner I have said is sinking A reaction from this attitude is inevitable The more the public is educated and the more the health services extend and intrude into the lives of the people the more will there be required an active and an intelligent family doctor service It will be no corps of clerks It will require a wide professional training to ensure the early recognition of diseased states and the proper co-ordination of the specialist services becoming daily more abundant

A good general education will be essential, also personality and mental agility, so as effectively to inspire confidence and assist in the education of a public which is rapidly becoming more enlightened Again it is in this sphere that the Cinderella of the *medical sciences*, medical psychology, may well come into its own The amount of minor and major functional nervous diseases in the community is admittedly very large The earlier they are recognized and treated the more hopeful is the outlook, and owing to the lack of any obvious disability, except in the later stages it is only the general practitioner who can lead the attack His position as trusted counsellor and family friend lends itself admirably to the purpose and it is true even now that all general practitioners are to a greater or lesser extent psychotherapists They would be much more effectively so if their training included some instructions in the principles of medical psychology This family doctor is the obvious connecting link for our medical industry All direct contact with the public as individuals should be in the first instance through the family doctor There should be no short circuiting or duplication of his services

Specialism

At the back of this family doctor service there must be a specialist service Medicine has grown so enormously that it is quite impossible for any one person to be proficient in every branch The specialist is concerned more with one branch of disease but in these days of specialism when the tendency is to dissever the various organs of the body it is wise to bear in mind the truth of the ancient saying, If one member suffers all the members suffer with it' That great surgeon the late Lord Moynihan is reported to have said that he liked to consider himself a physician who had sometimes to employ surgery to cure some of his cases There is moreover, a lot of mistakenly loose thinking on the subject of specialism The family doctor when all is said and done is also a specialist—a specialist in the recognition of disease in its early stages and in the helping of his fellow men in the many little ills and troubles that beset them, and these may be important, for a serious breakdown in health in later life may have its origin in trifling and unrecognized ailments of twenty to thirty years before To take a case in point The intensive research into the origin and development of cancer points to the probability that malignant growths rarely develop suddenly, but there is a precancerous stage usually lasting for years in which cancer has developed from minor ailments which might often have been rectified if their significance and possible danger were recognized

I would like to see more attention paid to the treatment of the so-called 'minor ailments It has been estimated that 40 per cent of all sickness is due to the patient's own action If this be true (and from my own personal experience I have found it so) think what a vast amount of sickness and ill-health might be avoided, but this requires a willingness on the part of the patient to talk over his minor ailments with his doctor instead of going in for self-medication assisted by the chemist Remember it is the general practitioner who sees the beginning of disease the specialist mainly the end There is no real reason why one branch should be from its nature more eminent than the other They are essentially complementary, and each requires for its proper performance attainments of the highest order

Now in order to get material for practising his art and facilities wherewith to treat them the consultant specialist is inevitably associated with a hospital With the entry of the local authorities into the hospital field things are in a state of chaos in many areas There are strong points in both voluntary and municipal systems and each can learn from the other The one thing that is absolutely essential is the will for exponents of both sides to get together and work out for their own particular areas a scheme that will ensure this co operation of both systems taking the best points of each and not allowing one to swallow the other It is this will to get together that is all too often lacking

Public Health and Co-operation

Apart from the curative specialist services there is another specialist service which is necessary to the modern community—the medical officer of health service or the specialist in social and legislative medicine While the knowledge necessary for this branch is in many ways different from that necessary for the successful practice of individual Medicine, it is dependent on and very closely related to that branch This correlation as things are at present is often extremely deficient, and for any smooth working of the medical services in a community more effective measures of amalgamation must be applied between the two branches I believe that this can be supplied by the provision in each administrative locality of a Medical Advisory Board consisting of representatives of each branch of the medical services—administrative, specialist, and general practitioner Even now in a small

way there are regulations which permit of some such council and in the few neighbourhoods in which it has been tried it has been an unqualified success

Financial Consideration

I have already said that the main emphasis in this industry of ours is rather on the results in the nature of the better health that it brings to its members The real reward to the good doctor must always be the knowledge of having served the cause of humanity Do we not all know how often the cases that give us most satisfaction are those that bring us least money?

The B M A is an Empire wide association of doctors for the advancement and dissemination of knowledge and the maintenance of a high standard of honour in the profession and secondarily for a just and fair remuneration from Government and public bodies This is where the difference is found between the medical profession and a trade In the former the primary motive should be to help the public with profit as a subsidiary factor There are few indeed who could practise so time and soul consuming a work on a purely honorary basis The vast majority of us must depend on our work for the expenses of living and the upbringing of our families

I do not think I am wrong in saying that the whole subject of our remuneration is one that is more and more preoccupying members of every branch of the profession The correspondence columns of our journals and the agenda papers of our Divisions Branches and Committees will bear me out I do not presume to offer a solution for problems the complexity of which has taxed the brains of multitudes much more financially experienced than myself There are however one or two principles which are to my mind fundamental

Free Choice, and Other Principles

The first point which is at the same time the least controversial is what is known as the principle of free choice of doctor You may say that this is hardly a question of remuneration That is true but indirectly it is of enormous importance because its acceptance makes extremely difficult the provision of any sort of salaried family doctor service This I believe must be remunerated on a capitation basis as under the present National Health Insurance system We as an Association have just prepared a revised version of our proposals for a General Medical Service for the Nation, in which the two vital principles of free choice of doctor and of payment on an insurance basis are reaffirmed and their wide extension advocated

The first great extension we propose is the inclusion in the system of all members of all families within an income limit of £250 a year We are seeking to double—no less—the number of individuals who receive medical service through N H I The second extension we propose is that the service given should be medically complete—that is to say that it should include all forms of specialist consultant and auxiliary service as well as that provided by the general practitioner I should not like to say which of these changes can do most for the public health

Such is our official policy far-reaching in scope and well suited to secure the full co ordination of each and all of the country's health services Our proposals would bring three quarters of the community within an official system of medical service Illness is not a steady event from season to season or from year to year and for this reason it lends itself particularly to treatment on an insurance basis Both patient and doctor must surely prefer regular to irregular outgoings and incomings

Within the last six months the Association has been instrumental in forming a National Federation of Provident Associations which extends the insurance method up to a maximum income of £500 according to the number of individuals in the family or to a maximum of £550 in the case of London also taking into account the family income I suggest to you that the principle adopted is one which in the future may well be much more widely applied It is of course the amount of the premium that is the difficulty No man enters the profession of medicine with the idea of making a fortune Equally no man can possibly fulfil the responsible and difficult role for which the family doctor of the future is surely cast without the possibility of sufficient remuneration not only to provide the necessities of life but also the cultural and social activities on which his full usefulness so much depend Any capitation payment must provide this minimum and provide it on a basis of a number of patients per doctor which is not too large to prevent his giving the necessary time to each This time is becoming increasingly more as our knowledge of therapeutic and diagnostic methods increases

Fees for Consultative Work

The remuneration of the consultative branches is subject to rather different conditions Private consultative fees are high relative to those in the other branches The reason for this is that the consultant has a relatively short earning period He has to serve a long and practically unpaid apprenticeship It is hard on him this I would prefer a system where he starts on a fixed salary depended on hospital and clinic appointments carrying a reasonable salary which would vary with their responsibility Were this so the payments for outside consultative work could be considerably lowered and would allow the young consultant while always assured of a livelihood to look forward to an improvement in his circumstances as his repute grew These salaries would come from the funds of the hospitals whether these were supported by the State or by voluntary contributory schemes The days when the hospitals could be regarded as pure charities are gone Very few hospital patients could not afford to join some sort of contributory scheme

Publicity and Education

Let us return a moment to our simile Every industry apart from its productive side always has in addition a public relations or publicity side Hitherto it has always been a keystone of medical policy that publicity or advertising is in direct antithesis to the best interests of the profession and of the public alike The truth of this in regard to advertising by individuals is I think still undisputed I think however that some form of group advertising by the profession as a whole is seriously overdue In fact this publicity side of our industry hitherto neglected could be developed to the benefit both of the industry itself and of the public which it serves Consider a moment this public Taken as individuals and in times of sickness and stress we all know that there can be nothing quite so touching as the almost blind trust which they repose in the science of medicine and in the particular practitioners that happen to be giving them the benefits of that science This is true of the public as sick individuals but the public taken in the mass and in health does not trust either medicine or the medical profession Their attitude is an extraordinary blend of ignorance and

superstition, in which they have unbounded confidence Everybody thinks he knows all about medicine, without training or instruction Test it by telling a group of friends that you have a pain in your hip and at once you have it diagnosed and half a dozen different suggestions of treatment given, all of them 'infallible from carrying a potato in the pocket to wearing a ring of elephant's hair Next day tell the same friends that you have trouble with your neighbour, whose apple tree has blown down across your wall, and as he will not remove it you propose to do so yourself These same friends will at once advise you to do nothing rash, but to consult your lawyer first Thus they think they know medicine, but are not ashamed to admit a complete ignorance of the law

The public want the ailment or disease to be definitely named and then ask why they cannot be cured by such-and-such a treatment which did so much good to their friends What is good for one is good for another,' they say This is where the greatest mistake is made—no two people are exactly the same There is much truth in the old saying One man's meat is another man's poison I remember the case of a man who took five grains of aspirin (a very common and useful remedy) but in this case it was followed in half an hour by acute swelling of the face, tongue and throat, and he was in great danger of suffocation until relieved by the appropriate remedy

Countering Credulity

What opportunity is there at present for the public to outgrow this ignorance and superstition? In the long run I suggest that education of the people must be the basis of any effective remedy I think that this theme of public education in health is particularly apt at the moment The health of the nation is very much in the public eye and unless we guide the enormous enthusiasm that lies behind this campaign there is a real danger that it may do more harm than good I think we should go further than that I think that teaching in elementary biology, anatomy, and physiology should be an essential and important part of all education however elementary Surely it is up to us and to no one else to see that it is included in the curricula of our schools? Similarly, courses of popular lectures could be arranged if not officially, possibly by Branches and Divisions of our own Association I have very little doubt that were they provided there would be no difficulty in finding audiences for them

Secondly, I would suggest that there is a great opportunity awaiting both the Press and the B B C to do more in the educational field Members of the medical profession could do much to help them in that task Surely it should be up to us to see that a supply of well-informed and informing articles is available to whatever papers wish to use them, and equally that the B B C should be given all possible help in the provision of talks which would satisfy these two same conditions? Yet, I do not think that we must expect too much We have to remember that both the Press and the B B C are limited by the educational attainments of those they serve They can help and to some extent anticipate improved education on these matters in the schools They cannot I am afraid take its place That is why I have given first place to education in what I have said

Thirdly, I feel sure that it is only through education of the public that the public credulity in regard to advertised remedies can be removed You all know what I mean when I speak of the evil of patent medicines There are good proprietary medicines as well as bad Some we make use of ourselves, others we could on no account condone or recommend What matters is that because of the superstitious ignorance of the public there has grown up an enormous mass of advertisement literature for remedies that are framed to cure not only every disease known to the profession but also many diseases invented purely for the sake of being cured by some particular remedy It may be true that many of these remedies are in themselves quite harmless or even beneficial when properly used That is not the point The advertisement is designed to create a demand, and the demand can only lie in ill-health, imagined or real, or (more insidiously) by the suggestion that a certain product is necessary for the maintenance of health These advertisers know their job Their writings are carefully couched in pseudo scientific terms and we see daily in our practices how enormously receptive and almost universal is their audience It may be unreasonable to criticize unduly those who for their own profit play the tune which the public wants As I have said by no means all of these advertised remedies are intrinsically undesirable It must be in the interests of the reputable manufacturers that the demand for their products should be based on sound knowledge and not on ignorance and fear For the rest, the trade as it is now conducted could only flourish in a public which knows little or nothing of the true principles of health and healing The schools can educate the public and we as a profession can tell the public The more the public trusts us the more we are able to help and the sooner they will believe that we are truly endeavouring to protect them against themselves It is by measures such as these and not by restrictive legislation that the true cure of the evils which I have mentioned will come

Medicine in the World of Science

I believe further that there is another sphere of education in which our entry might be of incalculable value I like to believe, and in doing so I do not think I am entirely governed by prejudice, that the scientific world is a whole is to a large extent free from most of the jealousies which poison the interrelation of humanity in the world to-day Scientists as a body approach nearer to the ideal world community than any other large division of mankind Who has ever heard of class-warfare between workers in any field of science or of an embargo on the exchange of knowledge, whether intra- or international? Even when something of the latter kind has been imposed from some political sphere it has been met with prolonged and emphatic protests from the entire scientific world The medical profession forms one of the most important divisions both numerically and influentially of the world of science The profession as a whole is really working for the common good of the community and not with the idea of screwing the last penny out of them It is a true brotherhood, and in ordinary practice the individual doctors continually assist one another and pool their knowledge and advice to an extent quite unknown to the patient and the public at large, but it is also unique in that world because of its close relationship with the lives of the non-scientific laity Are we not, then, in an ideal position to bring the ways of life and thought of one world to the benefit of the other?

I do not presume to dictate a programme, but I humbly suggest that there are possibilities in the idea that at least merit our consideration both as individuals and as an organized profession I would like to suggest that as members of this great profession we have possibly an important missionary function in this cause

TREATMENT OF CARCINOMA IN THE PHARYNX AND LARYNX AND ITS RESULTS*

BY

LIONEL COLLEDGE, F.R.C.S.

Surgeon, Ear and Throat Department, St. George's Hospital

The introduction of irradiation has rendered the problem of treatment in various situations infinitely more complicated because the results of its use are neither so good that the method can claim to supplant simple surgical treatment altogether nor so bad that they can be dismissed as negligible. In certain situations other than the pharynx and larynx the matter is much simpler; for example, in the floor of the mouth irradiation has taken the place of surgery almost entirely, whilst in the stomach the abdominal surgeon does not need to concern himself with it. Unfortunately it is also true that in many situations such as the oesophagus where the results of surgery are bad those of irradiation also are poor and conversely many of the best results obtained by irradiation are in situations where the tumour is most amenable to surgery. This applies to the larynx and pharynx. If surgical treatment is chosen then an operation suited to the site and extent of the tumour must be designed; if irradiation is chosen, then the type of radiation and the method of its application must be settled.

It is proposed to deal first with tumours in the oropharynx—that is tumours of the tonsil and fauces—and then to deal rather more fully with the lower pharynx—that is, the laryngopharynx and the larynx itself. My own endeavour will be chiefly to indicate what can be expected from surgery, and I will leave it to others to show the best that can be obtained by irradiation. A great variety of tumours may be encountered in the situations under consideration but I think that this discussion will have more value if it is limited to epithelioma which is the common form of malignant tumour.

In the oropharynx epithelioma usually begins either on the lower part of the anterior pillar or in the angle between the lower pole of the tonsil and the side of the tongue and is usually seen spreading over the tonsil and fauces and into the side of the tongue. There may or may not be a palpable gland in the neck; often there is, not but if the cervical glands are enlarged the size is often in inverse proportion to that of the primary growth.

Where the growth is comparatively early without fixation and there are no palpably enlarged glands in the neck the tumour may be removed by diathermy as Norman Patterson has long advocated. Such cases must be kept under observation lest enlarged glands appear in the neck. If a gland dissection has to be combined with removal of the primary tumour it should precede the diathermy operation by ten or fourteen days to avoid difficulties from the changes which diathermy produces in the neck. Patterson records that out of fifty patients treated by diathermy nine died and thirteen survived for more than three years.

In more advanced infiltrating growths where the tongue is more invaded or the growth has become adherent to the inner surface of the mandible diathermy is not applicable alone and the operation required includes removal of the mandible from the canine fossa to the condyle. This is naturally a mutilating operation and must be followed by a careful reconstruction. Dickie records that in thirty cases so treated there were seven deaths and fifteen recurrences in less than five years but eight patients survived for more than five years and one for over eleven years. Radiation employed in such cases may take the form either of radium applied at a distance or of the implantation of radon seeds.

The treatment by irradiation is most attractive because when successful the pharynx is almost normal in appearance but the question remains whether in treating epithelioma it gives a sufficiently high proportion of lasting good results to displace surgery. Biopsy must take an important place in making this decision because sarcoma and Group IV epithelioma which in its clinical course may be said to have more affinity to sarcoma than to keratinized epithelioma give uniformly bad results with surgery and are radiosensitive.

In the lower pharynx the growths to be considered are those on the lateral wall of the pharynx, the epiglottis, the arvepiglottic folds, the fossa pyriformis and the post cricoid area. Of these various types the growths on the lateral wall of the pharynx, the epiglottis, the arvepiglottic fold and in the post cricoid area may be treated by lateral pharyngotomy combined with a subsequent plastic operation if in an early stage. For these tumours in a more advanced stage and for tumours of the fossa pyriformis almost always operation must be a pharyngolaryngectomy. That operation includes clearance of the glands on at least one side of the neck and removal of the whole larynx and either a portion or a complete segment of the pharynx. A somewhat elaborate plastic operation is required later to reconstruct the pharynx, the patient being left with a laryngectomy.

The classification of cases in these groups into those suitable for lateral pharyngotomy or for pharyngolaryngectomy and those which are inoperable must be decided by clinical experience which takes into account the extent of the primary growth, the invasion and degree of fixation of lymphatic glands and the general condition of the patient.

Gluck and Soerensen record fifty-eight operations by subhyoid pharyngotomy, but this method is applicable only to carcinoma of the epiglottis. In 334 cases of extrinsic cancer treated by laryngectomy combined with resection of the pharynx with seventy-seven deaths they obtained a permanently good result in 10 per cent. In Gluck's clinic patients whenever possible were submitted to operation so that no attempt was made to make the statistics appear favourable by selection of cases. Of my own patients treated by pharyngotomy or pharyngolaryngectomy between 1920 and the beginning of 1935 the following are some particulars:

TABLE I

	No.	Died	Recurrence	Remain Well
Pharyngotomy: Private patients	13	0	-	6
Hospital	26	9	10	7
Total	39	9	17	13
Pharyngolaryngectomy: Private patients	7	1	4	2
Hospital	9	2	3	4
Total	16	3	7	6

* Read in opening a discussion in the Section of Oto-rhino-laryngology at the Annual Meeting of the British Medical Association, Plymouth, 1938.

Of these cases five of pharyngotomy and two of pharyngolaryngectomy have remained well for more than eight years That is, out of fifty-five operations nineteen were successful, or 29 per cent Against this must be taken into account that some cases have to be rejected as inoperable and that some of the operations are of a mutilating character, but, again, the operation has succeeded in some cases after the failure of radiation

On the other hand, at any rate until recent years, the results obtained by treatment with x rays or radium in this class of lower pharyngeal or extrinsic laryngeal tumour were almost negligible and the condition of many patients was aggravated It is in this class of case, in which the operations are particularly difficult and require ceaseless care and patience in the subsequent management, that an alternative treatment by *x* rays or radium would be welcome if a reasonable percentage of successful results can be obtained

In the group of intrinsic cancers of the larynx, including tumours of the vocal cords—a few being on the ventricular bands or having origin in the ventricle, and some being of subglottic origin—the operative treatment is either by laryngo-fissure (with which partial laryngectomy may be included) or by total laryngectomy The position and extent of the growth here again determine whether simple removal of a vocal cord on one side is done, or whether the front of the larynx or the whole larynx has to be removed

Gluck and Soerensen record, for intrinsic cancer, 141 cases of laryngo-fissure with nine deaths from the operation and ten recurrences, 122 patients remaining well for at least three years They also record 501 cases of total laryngectomy for intrinsic cancer This number includes a series of 100 with two deaths, and in the last 181 cases there were twelve deaths from the operation During the last ten years there were 30 per cent of lasting good results

The following are particulars of operations on my own cases of intrinsic cancer

TABLE II

	No	Died	Recurrence or Untraced	Remain Well
Laryngo fissure or partial laryngectomy				
Private patients	16	1	1	14
Hospital	7	1	2	4
Total	23	2	3	18
Total laryngectomy				
Private patients	42	2	9	31
Hospital	33	12	7	14
Total	75	14	16	45

Of these cases nine of laryngo-fissure and eighteen of laryngectomy have remained well for more than eight years, including three for more than fifteen years

In this group, out of ninety-eight operations seventy-three were successful—that is, 74 per cent Here, again, some of the operations are of a mutilating character, but in early cases where only a vocal cord is removed the voice is often normal and much better than after treatment by radium This group also includes patients in whom the cartilages had been attacked by growth or in whom perichondritis had supervened, rendering them unsuitable for treatment by radiation

It is in this group that irradiation has had most success, and therefore that line of treatment is the most attractive, but it has to be shown that it can produce a large percentage of good results I suggest that if radiation be employed it should be in the form of the radium beam, and that needles should no longer be used

The figures for the operations have been given separately for the private and hospital patients because, although the numbers of each are approximately equal, the results in private practice are very much superior owing to the better condition, both general and dental, of the patients, the segregation of the patients in private rooms, the avoidance of changes in nursing staff, and the constant personal supervision of the surgeon

In introducing this discussion I wish to avoid undue emphasis upon any particular method of treatment This is particularly dangerous in discussing malignant disease, because in practice individual cases have to be considered, and, whatever the treatment, the prognosis of any one case is always doubtful, however favourable it may appear on the one hand or unfavourable, short of being quite hopeless, on the other There is therefore, when failure ensues, often a feeling of regret that different treatment was not instituted, especially when irradiation fails to cure an operable case Operation, too, might have failed, and I am concerned only to bring forward some points in the hope that the ensuing discussion may help to clarify the position

I have to thank Mr Arthur Pereira registrar at St George's Hospital, for his help in following up the fate of the patients and in preparing the statistical tables

THE DIAGNOSIS OF UNDESCENDED TESTICLE

BY

DENIS BROWNE, F.R.C.S

Surgeon to the Hospital for Sick Children Great Ormond Street London

There are few conditions upon which more contradictory diagnosis and advice can be obtained from the medical profession than those which fall into the vague and elastic category of "undescended testicle" I know a parent who was told that her son's testicles

(*a*) Needed immediate operation if he were not to be practically a eunuch (A surgeon of great experience)

(*b*) Should be left for five years to see what happened (Another reputable surgeon)

(*c*) Should be treated by hormone injections (A physician)

(*d*) Should on no account be operated upon as the operation invariably failed (The family general practitioner)

(*e*) Were normal (Myself)

(*f*) Were held up owing to a displaced vertebra (An osteopath)

It is hardly necessary to say that the last diagnosis and the treatment that followed are now held responsible for the present obviously satisfactory condition of affairs Admittedly this is an extreme case, but others like it are only too common

When I first began to see numbers of these cases I was continually in doubt as to what advice to give, but latterly they appear to me to belong to certain well-defined groups It may be of interest to put forward my present classification I am far from thinking it a final one, but it is certainly much better than anything I had to start with One of my difficulties was that the testicle in almost all its varied positions is extremely mobile, so

that it can only be properly charted as somewhere on a range of movement between two points I have tried describing the variations by the names of these points but the result was so clumsy that I have been forced to coin names for them

Misconceptions

Most of the confusion is due to three widely held misconceptions upon elementary points

1 *The Failure to Recognize the Normal Variations in Positions of the Developing Testis* I believe that any position in childhood from which the testicle will in

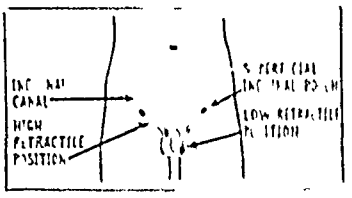


FIG 1—This is the diagram which I use for recording the positions of testicles It shows by conventionalized signs the inguinal canal and the superficial inguinal pouch The position of the testis is charted by a black oval at each end of the range of movement connected by a fine line

variably reach the scrotum should be classed as normal The custom at present is to describe as undescended any testis that is not in the position which would be normal for an adult

2 *The Idea that a Testicle which can be Felt in the Deep Tissues in the Region of the Inguinal Canal Is Actually in that Canal* In the young child the testis frequently disappears upwards out of the scrotum It is almost universally assumed that it goes into the inguinal canal It does not It runs into a space between the fascia of Scarpa and the external oblique muscle which is filled with the loosest of areolar tissue and bounded at whence it slips easily into the canal If this disposal is thought too geometrical, it is possible to try the direct experiment of endeavouring to thrust the testicle up into the intact canal during, for instance, a hernia operation Leckie (1904), again, speaks of trying to push down a testicle that is in the inguinal canal by manipulations from outside

It seems impossible that such a notion should exist so long I can only point to the way in which surgeons have confidently operated for generations upon a demonstrably very inaccurate classification of the anatomy of the whole region involved (Browne 1933)

A testis that is in the inguinal canal cannot be felt through the skin It is a soft elongated sausage-like object sunk in the soft floor of the canal hold it from touch by the tense tendon of the external oblique In consequence I find it difficult to take very seriously the long lists of cases in which testicle described as found before treatment in the inguinal canal, have descended into the scrotum after treatment by manipulation

3 *The Classing of the Commonest Varieties of Ectopic Testis as Undescended* This is that variety of ectopia well recognized by certain writers as the migrated inguinal Barrington Ward (1927) described only and drew the important distinction between operation upon the and operation upon the testis Unfortunately the term universal in almost every of cases for undescended is the term the cryptorchid testis is the is the commonest the gland tumbles over the the stimulus the pubic in which testis not think that a testis may through the stimulus of unfortunately the hindrance of descent

Variation in the Position of the Testis

It has yet should position which

birth, and there is never any question of the correctness of their position

(B) *Low Retractile*—In this common variety the lower limit of the range of movement is the same as in the adult—the bottom of the scrotum But the testis is so light and small, and the cremaster so active, that it is often pulled up over the bar of the pubic bone Once over this it runs freely into the superficial inguinal pouch, and may stay there for days, though it can always be forced down with the fingers

Diagnosis—It is often diagnosed as undescended testicle"

Treatment—I have known these patients given injections of pregnyl with excellent results I hope they are never operated upon Needless to say they only need leaving alone

(C) *High Retractile*—In these the testis remains habitually running freely in the superficial inguinal pouch, and does not spontaneously descend thence during childhood It can, however, be pushed down well below the external ring, over the pubic bone, and into the neck of the scrotum This lower range of movement is the very important distinction between it and the superficial inguinal ectopic position

Diagnosis—It is almost invariably diagnosed as "undescended testicle'

Treatment—I believe that this class supplies the greater number of the successes of pregnyl treatment, which undoubtedly in many cases does enlarge the size of the gland and hurry its descent A considerable number are operated upon, usually with good results

In my experience in these cases descent invariably occurs spontaneously when the testicle begins to enlarge to the adult size and weight I have never seen or heard of an adult testicle with this range of movement Certain cases for which I advised operation, and which to my confusion developed normally without it, undoubtedly belonged to this category They are also the justification of the policy of waiting to see what happens, and account for 'undescended testis" being about three times as common in children as it is in adults

2 UNDESCENDED POSITIONS

(A) *Emergent Inguinal*—In this position the testicle can be felt popping in and out of the external ring, moving freely in the hernial sac that invariably exists, much as an ovary often behaves in an infant of the opposite sex It should be noted that the testis only emerges or withdraws according to the mechanical forces acting upon it, such as increased abdominal pressure in one direction or the surgeon's finger in the other It is never pulled in by a contraction of the cremaster, which is always very poorly developed in these cases

Diagnosis—This may be as difficult as that of a small inguinal hernia the testis may be easy to feel one day and impossible the next This is fortunately of no great importance as the treatment is the same as that of the conditions with which this variety may be confused

Prognosis—I am not sure what would be the fate of a testis of this sort if left untouched till adult life, as I have never felt it justifiable to do so If bowel descends into the hernial sac it would probably drag the testis down into the scrotum with it Apart from this, as the enlargement of puberty caused the testis to become a tighter and tighter fit in the external ring it would finally be shut out permanently, as the forces which drive it out are so much stronger than those which draw it in Probably it would end up in the superficial inguinal pouch rather than make its way into the atrophic scrotum which is usually present in these cases It is impossible to say that these testes never descend either spontaneously or after the administration of pregnyl but I have never seen one do so

Treatment—In every case operation, at which the coexisting hernial sac is removed

(B) *Middle Inguinal*—These testicles run in a hernial sac from one end of the inguinal canal to the other They are invariably badly developed, soft, and elongated to fit the space in which they lie It is curious to see how they change into the normal compact rounded shape if they are successfully shifted into the scrotum

Diagnosis—The main point is that it is impossible to diagnose this position without operation, since, as has been said, it is impossible to feel a testis in the inguinal canal Consequently till the canal is opened one cannot say whether the testis is in it, in the abdominal cavity, or is absent altogether

Prognosis—I believe that these testes never descend spontaneously or as a result of hormone treatment Descent of bowel into the hernial sac would probably bring one down

Treatment—Operation in every case

(C) *Entrant Inguinal*—The testis varies in position between the upper end of the inguinal canal and the abdominal cavity Its only important point of distinction from the preceding class is the greater difficulty of bringing it down at operation

(D) *Abdominal*—Here the main point of interest is whether, if one does not find a testicle in the inguinal canal, one is justified in opening the abdomen to search for it

3 ECTOPIC POSITIONS

(A) *Superficial Inguinal*—In this position the testis lies in the lower part of the superficial inguinal pouch, free to move up in it to an extent determined by the length of its cord To arrive there it has turned sharply upwards and outwards on leaving the external ring, apparently because of an abnormal attachment of the fascia of Scarpa to the pubic bone This means that instead of the inguinal pouch having an open lower end, the way from it into the scrotum is blocked by a strong fibrous hammock, in which the testis lies supported As I have said, some surgeons recognize this common position as an ectopia, but many do not Ombredanne (1932) does not figure it in his diagram of the directions in which ectopia may occur, and McAdam Eccles shows several examples of it in his classic work as inguinal retention and not as ectopia A point of interest is that if a large hernia develops in this position it will descend into the inguino-crural fold, not into the scrotum

Diagnosis—The most important single point in the diagnosis of testicular position is the distinction between this displacement and the high retractile testis One needs operation and one does not One responds to pregnyl and one does not One develops normally if left alone and one does not

Prognosis—There is no possibility of spontaneous descent

Treatment—I have known vast amounts of pregnyl employed in attacks upon this variety, with no result whatever on the position It is the one which accounts for the fact, still being confirmed, that cases of unilateral undescended testis average much poorer results with hormone treatment than bilateral ones Incidentally I would have thought that if one testis had descended normally it might be assumed that whatever was keeping up the other, it could not be lack of hormones However, I have never had this objection taken seriously as a reason against giving a course The only treatment is operation It is easier than in a true undescended testicle, owing to the extra length of cord

(B) *Emergent Superficial Inguinal Ectopic*—The distinction between this and the emergent inguinal position is merely a fine shade of diagnosis In everything else they are alike

(C) *Other Ectopic Positions*—The penile, femoral, perineal, and other well-recognized positions present no diffi

culties in diagnosis As a curiosity I may mention being called to operate upon what was diagnosed as an acute appendix Actually it was a torsion of a testicle between the two oblique muscles over McBurney's point

Summary

To recapitulate some of the points which have been put forward

1 A testicle that is in the inguinal canal cannot be felt through the skin Conversely a testicle that can be felt is not in the inguinal canal

2 The testis is never withdrawn into the inguinal canal by the cremaster

3 When the testis ascends from the scrotum it runs into a somewhat similar pouch above external to the abdominal muscles

4 A testis that can be easily seen through the skin anywhere except in the scrotum is ectopic

5 A testis that can be pushed down over the pubic bone will invariably descend spontaneously by the time full growth is reached

6 Prenatal treatment will not bring down any testis that would not have descended without it though it will hurry the descent Whether this acceleration is worth the risk of certain disquieting possibilities is a matter of opinion

REFERENCES

Bailey Hamilton (1936) *Diseases of the Testicle* Lewis London
Barrington Ward L (1937) *Abdominal Surgery of Children* Oxford University Press
Browne Denis (1933) *Lancet* 1 460
Eccles W McAdam (1903) *Imperfectly Descended Testis* Baillière Tindall and Cox London
—— (1920) *Surgery* edited by G E Gask and H W Wilson J and A Churchill London
Ombredanne L (1932) *Chirurgie Infantile* (Fig 611) Masson Paris

MEASLES

THE CONDUCT OF A SCHOOL EPIDEMIC

BY

T G HOBSON, D S O, D M, F R C P

Honorary Physician to the Radcliffe Infirmary and County Hospital Oxford

What should be the course and outcome of an epidemic of measles in a school community? The answer to such a question must depend upon a number of considerations —clinical seasonal domestic and economic—and yet each medical officer of a school community must have before him an ideal that it will be his endeavour to realize when faced with the inevitable and recurrent onslaught of measles in the community for which he is responsible

Agreement is still incomplete upon the elementary data (Hobson 1934) which may conveniently be stated as under

1 Measles is due to a virus—as yet unidentified—and a *natural* attack of the disease is generally regarded as conferring a permanent immunity Second and third attacks of the disease are well known to occur but are so rare that they can safely be ignored within the age limits of school life It is frequently stated and generally assumed that an attack of measles *attenuated* by the administration of immune serum confers an immunity as permanent as that which results from a natural attack This reasonable assumption may prove to be well founded but as yet it rests upon no solid body of clinical evidence

2 Infection is by droplets from the nasopharyngeal excretions of infected individuals and a patient may be infectious six days before the appearance of a rash (Hobson 1934) The catarrhal discharges of the infected may also be the vectors of secondary virulent organisms to other susceptibles

3 The incubation period is more than ten days and in serum treated cases may be twenty one days In serum treated cases there may be no clinical evidence of infection before the explosive appearance of a rash on the twenty first day (Hobson 1934)

4 Quarantine should be observed for twenty one days in all cases

Measles vies with influenza and whooping-cough as the most infectious disease in a closed or semi-closed community such as a school and the prospects of limiting the spread of the disease by early diagnosis and segregation of infected individuals are very small indeed Koplik's spots appear too late and too inconstantly to be of any real value in early diagnosis and may be recognizable only with the appearance of the rash in serum treated cases

The First Principle

If these data be accepted the first principle in conducting a school epidemic will be that the epidemic shall be allowed to take its course and that the susceptibles who succumb shall experience a natural attack of the disease in the maximum *security* thereby acquiring a permanent immunity This principle requires amplification

1 *Susceptibles*—In each school there will be a small number of delicate susceptibles for whom an attack of measles will entail an unusual risk particularly in the case of those children who are liable to otorhinological or pulmonary diseases For these cases which should be selected by the school medical officer serum prophylaxis is clearly indicated For a few specially delicate susceptibles the dose should be one that will ensure *protection*—such children should then be removed from school to avoid further exposure to infection on a falling tide of passive immunity For the majority of such delicate susceptibles the dose of serum (see later) should be so timed and adjusted as to secure *attenuation* of the attack and these protected susceptibles should be allowed to continue with normal school routine The routine use of convalescent serum for all susceptibles is not recommended until the time comes when serum therapy has a scientific posology and it has been established that the immunity from an *attenuated* attack is as permanent as that which results from a natural attack of the disease The deliberate postponement of an attack of the disease by *protecting* all susceptibles cannot be considered as wise although special circumstances may justify such a practice (Hobson 1934) Such special circumstances must be judged by the medical officer concerned but a coincident epidemic due to *S pyogenes* or *H pertussis* might be mentioned as a circumstance such as would justify an attempt at *mass protection* or *mass attenuation*

2 *Security*—The complications of measles present the real danger to health and life such complications arising from secondary infection by pyogenic cocci particularly from *S pyogenes* Complications may derive from an intrinsic or extrinsic source of infection they come far more frequently from the latter *Complications are most usually secondary infectious diseases* arising from cross infection by neighbours nurses or doctors (Okell and Elliott 1936 Keevil and Camps 1937) Security from cross infection can be attained only by strictly observing the established rules of environmental hygiene and nursing which are familiar to the profession in treating all highly infectious diseases The measures so indicated can be briefly summarized under the headings of

Bed Spacing—A minimum of six feet should be preserved *between the edges of adjacent beds* in well ventilated sick rooms or alternatively effective barrier nursing. (Where cubicles are available no difficulty arises.)

Masking—Nurses and doctors should invariably wear masks when in close contact with the patients *

Sterilization—All table-ware, cutlery, etc, used by the patients should be sterilized after each meal

Personal linen towels etc must be so supplied as to avoid common use or exchange, while paper handkerchiefs, which can be destroyed, should be employed for all nasopharyngeal discharges

The fact that those who succumb are suffering from the *same disease* must never be used as an argument for the relaxation of any of these accepted rules

The self-contained preparatory boarding school is an ideal community for epidemiological study, in that its inmates are usually housed in one building, have minimal opportunities for contact with the outer world, and have become "salted" to their indigenous flora The school environment, "the stage" on which an epidemic may be set, is a fixture that must be adapted to the requirements of an epidemic, and in this process of adaptation and in the strict conduct of environmental hygiene in the sick-rooms the personal ingenuity and industry of the medical officer have full play (Dudley, 1926 Glover *et al*, 1932) No step should be omitted to ensure that the child shall sustain the attack of an epidemic disease in conditions of safety comparable to the isolation of an independent sick-room in the family home

The power of the responsible medical officer to order the conduct of an epidemic is, however, subject to those limitations which may be imposed by parental acceptance or refusal of a proposed course of action Any course which involves the use of a therapeutic agent other than the traditional bottle of medicine, or entails a specific extra charge, is in practice referred for parental consent even when the action or dilatoriness of a few individuals may prejudice or frustrate a plan of action designed to safeguard the interests of a community as a whole

In relation to any new prophylactic or therapeutic practice the measure of the average parent's knowledge is uncertain, and opinions may therefore be influenced by prejudice, ignorance, and anxiety For these reasons a clear statement of the relevant facts should be sent to all parents without delay, with the usual notice of the appearance of the initial case, since the prophylactic administration of serum for protection or attenuation must be prompt if it is to be effective The form of this statement is of some importance, and the following is suggested as likely to secure the co-operation of parents, although it will be obvious that no attempt has been made to distinguish between *protection* and *attenuation*— a distinction difficult to make intelligible to the layman and impossible to ensure in practice

QUARANTINE NOTICE

"A case of measles developed on and it must be anticipated that further cases will occur

'By the injection of human serum (from persons who have themselves had measles) it is possible *temporarily* to protect an exposed susceptible individual from the disease with very reasonable prospects of success

The immunity conferred is only temporary, and the child becomes again susceptible to the disease in from six to twelve weeks time the duration of this temporary immunity is always a matter of doubt

This practice merely postpones an attack to a later age The normal expectation is that one attack of measles confers a permanent immunity and will be well sustained by the vast majority of children

'In view of the fact that reliable protective serum is only available in very limited quantities it is suggested that any child who may be considered delicate or for whom an attack of measles may entail some special risk shall be *protected* by an injection of serum

'It is suggested that in the case of children who are in good health events should be allowed to take their normal course"

Signed

For "delicate susceptibles" a footnote is added

"It is recommended that your child be given an injection of serum It is impossible to ensure complete protection but this treatment can be expected to mitigate the severity of an attack"

For specially selected "delicate susceptibles"

"It is recommended that your child be given an injection of serum at once and taken home until the school is out of quarantine'

Serum Prophylaxis

Since Gunn (1928) introduced prophylactic serum therapy into this country there has accumulated a considerable body of evidence as to its value (L C C Measles Epidemic 1931–2, 1933–4, Gunn, 1938) The use of serum prophylaxis calls for judgment and discretion, and it may be helpful to give a brief summary of the known facts

Three preparations are available

A *Convalescent Serum*—Obtained from individuals who have recently recovered from an attack of measles There is at present no uniformity in the practice of collecting such serum (In the Oxford service an arbitrary limit has been employed—namely, that such serum should be collected within one month of the rash of the donor)

B *Adult Serum*—From adults who have experienced an attack of measles (In Oxford an arbitrary limit of ten years from the attack of measles is observed)

C *Immune Globulin* (Lederle)—This is the pooled globulin obtained from human placentas

It is well to recognize the comparative and common merits and defects of these three preparations, the powers and dosage of which are often stated with a precision which is not justified by the known facts Until such time as it is possible to determine the antibody content of a given preparation the posology must be empirical The practice of pooling will favour an approximation to a standard potency, and the efficiency of the three preparations is likely to be in the order given The rate of deterioration of the antibody content of serum is unknown, and in this respect the immune globulin may have an advantageous quality All three preparations, when administered in adequate dosage prior to the "critical day,' can undoubtedly exercise a favourable influence upon the course of an attack of measles It is probable that the 'critical day'—that day of the incubation of the disease after which no protective therapy can influence its course—is the sixth day after exposure calculated from the first appearance of the rash of the infecting case (L C C Measles Epidemic, 1931–2) By this time the disease may have been incubating in the susceptible individual for six to ten days *

* The Miskon celluloid mask supplied by Down Bros, is an efficient and convenient type

* Gunn (1938) in a review of the clinical results of serum prophylaxis of measles in L C C hospitals fails to make clear the basis of calculation in arriving at the *date of exposure* As in the previous L C C reports (1931–2 1933–4) this point has never been clarified The date of the appearance of the rash of the infecting case must in practice be the clinical event about which there can be no argument or doubt A given case may have been infectious for one to five days before the appearance of the rash and the *earliest* day of infectivity can rarely be determined on clinical evidence The practice of serum prophylaxis will be less confused if the *date of exposure* is the date of the appearance of the rash of the infecting case

Protection.—Where complete protection is desired the maximum dose should be given at the earliest moment after exposure later than the third day after the rash of the infecting case the prospects of success are small A protective dose confers no more than a temporary passive immunity

Attenuation can be achieved by two methods (*a*) the early injection of a submaximal dose—that is before the third day (*b*) the injection of a maximum dose late in the incubation period (L C C Measles Epidemic 1931–2)—that is on the sixth day This latter method has in my experience proved to be the more satisfactory and for obvious administrative reasons (obtaining parental consent etc) the more practicable

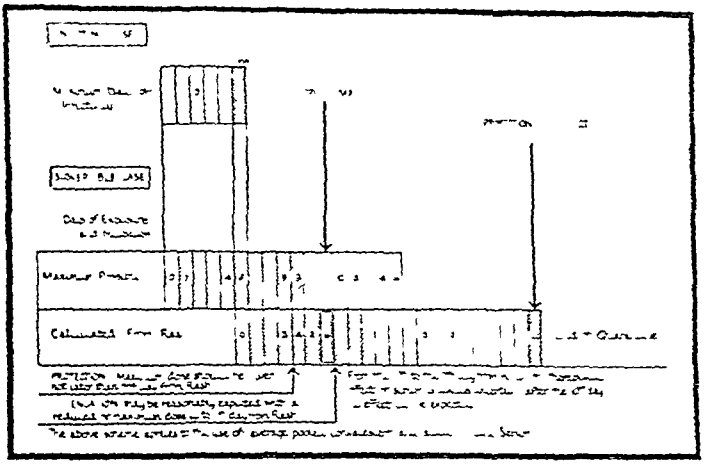


FIG 1.—Scheme of protective therapy (Reproduced by courtesy of Oxford University Press)

An Epidemic in a Preparatory School

The epidemic now to be described developed in characteristic fashion from a single case in the first week of the Lent term 1938 in a school of ninety five boys This school experienced a previous epidemic in 1929 (School A Fig 2 Table II)

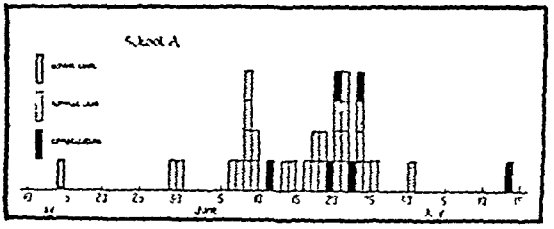


FIG 2.—Measles in School A in 1929

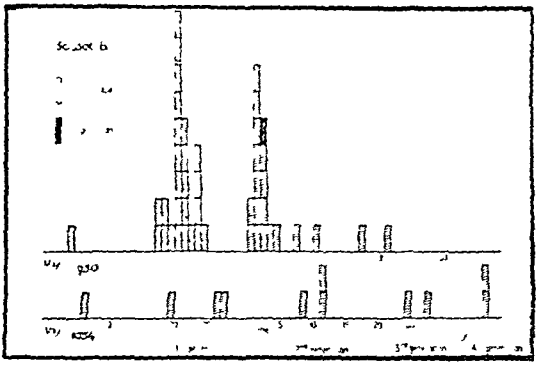


FIG 3.—Measles in School B in 1930 and 1934

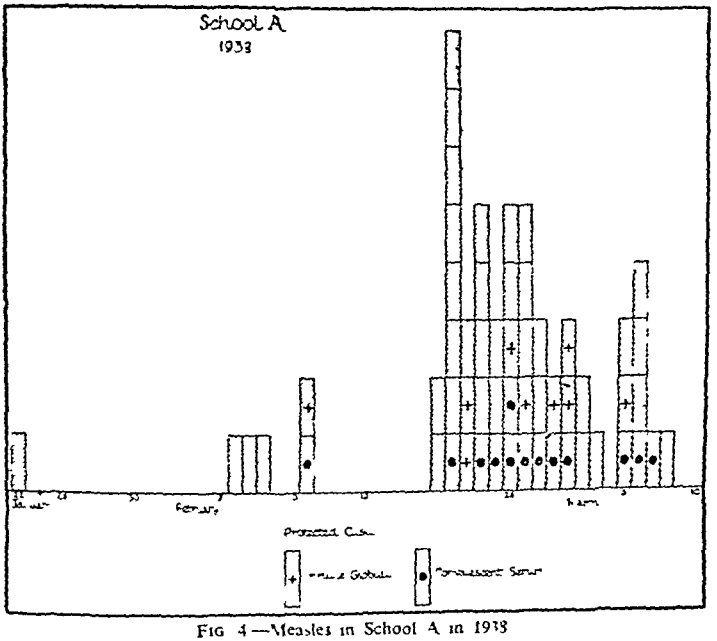


FIG 4.—Measles in School A in 1938

There were fifty six susceptibles In view of the fact that there was no intercurrent infection in the school or any other special circumstance which might expose those attacked to any undue risk it was decided

1 To attenuate the attack in all known *delicate susceptibles* with (C S) convalescent measles serum (10 c cm) on the sixth day after exposure to the initial case Delicate susceptibles were those children who had suffered from known pulmonary or oto rhinological disease in the previous year or who had an unsatisfactory previous medical history Thirteen such cases were selected and *the parents were notified of this proposed protective therapy*" all agreed to its employment

2 To allow the epidemic to follow its natural course in the remaining forty three cases Parents of these children received a notification of the appearance of measles in the school with a recommendation against protection (see letter given above) The parents of nine children insisted upon serum therapy and in each case the child received (I G) immune globulin (10 c cm) (£2 2s) on the *sixth* and *seventh* days after exposure to the initial case

No specific therapy was employed for the remaining thirty-four boys

3 The environmental hygiene and nursing precautions described earlier in the paper were rigidly observed

The results of conducting the epidemic on the above principles and the clinical data so provided may conveniently be summarized under separate headings

General Results

1 *No complication of any kind occurred in the fifty-six cases attacked*

2 *All of the C S-protected and I G-protected cases showed attenuated attacks* (Fig 4, Table V)

Morning and evening temperatures were taken from the first day of term until the completion of the epidemic, and any boy showing a temperature of over 99 5° was isolated for observation Every child who showed any febrile disturbance was inspected daily

Prodromal Fever—The prodromal fever was appreciably shortened in the protected cases In two cases the rash appeared on the twenty-first day after exposure to the initial case without any prodromal fever or the appearance of any Koplik's spots (One case C S, one case I G)

Koplik s Spots—Even in the unprotected the appearance of this characteristic lesion is so late as to be useless as an *early* diagnostic sign, six of thirty-two unprotected cases showed no Koplik s spots before the rash, this applied to eleven of twenty-two protected cases

TABLE I

	No	Average Days Prodromal Fever	Average Days Koplik s Spots	No
Unprotected	32*	2 6	1 0	
Protected	22	1 8	0 5	
		Actual Days	Actual Days	
Unprotected	32			
Maximum	10	4 0	4 0	1
Minimum	7	1 0	0	6
Protected	22			
Maximum	2	4 0	2 0	3
Minimum	3	0	0	11

* Two boys of the original thirty four unprotected cases were taken home on the appearance of the initial fever

Protection (that is, attenuation) was secured by the administration of (C S) convalescent serum 10 c cm (thirteen cases) and (I G) immune globulin 10 c cm (nine cases),* which was injected on the sixth day—the "critical day With one exception—a patient who had been given only 4 c cm of immune globulin by his family doctor—the attack of measles was definitely attenuated as regards both severity and the height and duration of the febrile reaction Two C S cases had aborted attacks—that is a minimal febrile reaction (99 5° to 100°) for three days and a transitory rash

The convalescent measles serum was obtained from the medical officer of health for Oxford, and was "pooled" serum the evidence suggests that this was less potent than the convalescent serum employed in School B, 1934, and the larger dose was given on this assumption (Fig 3, Table IV)

* The claim that immune globulin modifies an attack of measles is sustained but as the author was sceptical of the claims of this preparation 10 c cm was employed although the makers recommend no more than 2 c cm The single case which received a small dose showed *no attenuation*

Previous experience with measles epidemics can be graphically demonstrated and the lessons learned emphasized

TABLE II—*School A (1929) Thirty-six Susceptibles*

	No	Measles	Escaped
Unprotected	36	36	0
Protected	0	0	0
Total	36	36	0

100 per cent infected, none escaped 6 complications (otitis media, 3 cases, bronchopneumonia and otitis media 3 cases)

Lesson—The high incidence of complications was attributed to overcrowding, inadequate bed-spacing, and failure to observe a strict environmental hygiene

TABLE III—*School B (1930) Sixty eight Susceptibles*

	No	Measles	Escaped
Unprotected	65	46	19
Protected	3	2	1
Total	68	48	20

70 per cent infected, 30 per cent escaped, 1 complication, 2 protected children who developed measles had modified attacks

Lesson—Strict observance of environmental hygiene and a very limited use of convalescent serum proved eminently satisfactory

TABLE IV—*School B (1934) Fifty one Susceptibles*

	No	Measles	Escaped
Unprotected	2	0	2
Protected	49	10	39
Total	51	11*	41

20 per cent infected, 80 per cent escaped, no complications 10 protected children developed measles and 6 of them had modified attacks

Lesson—An extensive use of convalescent serum to produce a mass "attenuation" produced an almost complete mass "protection '

During the previous term whooping-cough and a widespread nasopharyngeal epidemic due to *S pyogenes* suggested the wisdom of such an attempt to mitigate the severity of measles in a population which might contain numerous carriers of virulent streptococci The convalescent serum employed for this purpose was obviously of a very high potency (the bulk having been obtained from two recently recovered adults), as shown by the fact that the protected susceptibles were exposed for ten weeks to fresh cases An average dose of only 6 c cm was given on the sixth day after exposure (Hobson, 1934)

TABLE V—*School A (1938) Fifty six Susceptibles*

	No	Measles	Escaped
Unprotected	34	34	0
Protected	22	22 (attenuated)	0
Total	56	56	0

100 per cent infected, none escaped, 6 complications (otitis protected cases all had attenuated attacks

Discussion

The preparatory school of about 100 inmates is an almost ideal unit for purposes of epidemiological study, and the experience gained in handling such units may reasonably be expected to provide the materials for the formulation of principles in the conduct of epidemic disease in larger communities The size, character (day or boarding), composition (age and sex), and location of a given school may introduce a number of variable factors into the problem of the conduct of an epidemic, nevertheless the principles in conducting such an epidemic must hold if such be correctly conceived Measles is a disease which is peculiarly suitable for such a study

* One boy stated to have had measles and therefore not protected by serum developed measles, possibly a second attack

I have endeavoured in this article to formulate those principles which seem to me fundamental and to demonstrate that in practice they can be effective

Conclusions

The principles for the conduct of an epidemic of measles in a self contained school community are discussed and their application in practice is illustrated in four epidemics These principles are

1 That healthy susceptible individuals should be permitted to experience a normal attack of measles after exposure to infection

2 That delicate susceptibles should be protected " Delicate susceptibles fall into two categories (*a*) those for whom complete protection should be secured (*b*) those for whom attenuation should be a sufficient safeguard from undue risks

3 That environmental hygiene must be strictly practised in sick rooms for all cases

Experiences in the use of protective serum are described and emphasis is laid upon the inherent difficulties of posology In practice the date of administration should be calculated from the rash of the infecting case For *protection* a maximum dose should be given at the earliest opportunity after exposure and never later than the third day For *attenuation* a maximum dose should be given on the sixth day

REFERENCES

Dudley S F (1936) Med Res Coun Spec Rep Ser No 111 London
Glover J A *et al* (1932) *Proc roy Soc Med* 25 1781
Gunn W (1928) *Lancet* 2 690
—— (1938) *Proc roy Soc Med* 31 823
Hobson F G (1934) *Lancet* 2 1408
Keevil N L and Camps F E (1937) Ibid 2 207
L C C Measles Epidemic (1931–2)
Ibid (1933–4)
Okell C C and Elliott S D (1936) *Lancet* 2 836

SUBVESICAL DIATHERMY PROSTATECTOMY

BY

R OGIER WARD, M Ch, F R C S

Consulting Genito urinary Surgeon Miller General Hospital Assistant Surgeon St Peter's Hospital Genito urinary Surgeon Royal Masonic Hospital

Perurethral resection of an obstructing prostate seems by now to have won an established place in genito urinary surgery Opinions vary as to the type of case in which it is best employed though most surgeons are agreed in preferring prostatectomy when dealing with a prostate which is much enlarged It should be remembered that when the enlargement is of a benign type the chief indication for advising such treatment is precisely the same as when prostatectomy by any other method is chosen—that is to say the presence of residual urine If this amounts only to an ounce or two it is unnecessary to employ either perurethral resection of the prostate or any other surgical treatment But although the measure of the residual urine is by far the most important guide to treatment obstruction may sometimes call for operation when the volume of it is not large for if the act of micturition is unduly difficult and prolonged the patient may experience much inconvenience particularly when nocturnal frequency is present Attention should also be given to the cystoscopic appearances of the bladder wall and marked signs of stress as evidenced by the presence of excessive trabeculation or more important still sacculation are an indication for the relief of the obstruction

The Usual Method of Resection

When early cases are treated very few cuts with the diathermy loop in the middle line and to right and left of it are all that is necessary and the same applies when the prostate is of the small but highly obstructive type It is when the prostate is moderately or much enlarged that the operation becomes more difficult and more formidable The dangers which attend it are *haemorrhage* and *sepsis* *Haemorrhage* is inevitable It is slight when fibrous prostates are treated and not usually abundant in cases of carcinoma though in some of these it is severe It is more profuse when cases of benign enlargement are operated upon Much of the bleeding comes from the region of the internal meatus where the diathermy loop cuts through the highly vascular trigonal mucosa beneath which lie also some of the most important arteries supplying the prostate itself It is from this same region that a very large amount of bleeding occurs in prostatectomy by enucleation *Sepsis* is common and often serious It occurs because necrosis is produced by cutting with the diathermy loop In the ordinary method of resection not only is the surface of the residuum of the gland which surrounds the prostatic urethra thus necessarily affected but a large portion of the trigone is also removed sometimes almost up to the ureters for it is only by sacrificing this that the diathermy loop can be engaged in the lateral lobes after the intravesical projection has been dealt with This is because the loop only moves and cuts along the axis of the resecto cope sheath If at the end of such a resection the bladder is opened it will be found that a cone of tissue has been resected from the prostate The apex of this is in the region of the verumontanum and its base corresponds to the trigone and the area immediately around the internal urinary meatus An exploratory finger now passes along the posterior bladder wall over the intereureteric bar and down into the prostatic region which is found to be laid wide open because a large part of the bladder base has inevitably been cut away This is of course quite different from the condition which exists when the operation of prostatectomy by enucleation is employed whether by the suprapubic or the perineal route In such cases the internal meatus though expanded is still comparatively small beneath the neck of the bladder there is a recess the prostatic fossa between it and the triangular ligament from which the prostate has been removed It is easy to feel and to see that the trigone itself has been left almost intact

The Modified Technique

It has seemed to me that such methods of perurethral prostatectomy should be avoided and that an endeavour should be made to make the anatomical result resemble as closely as possible that of prostatectomy by enucleation To achieve this it must be practicable to resect the gland from around the prostatic urethra and from beneath the trigone without cutting or in any way damaging this structure except to a very limited extent in the neighbourhood of the posterior mid line where this occurs in the process of removing the intravesical projection itself With this in view I suggested to Mr Schranz of the Genito Urinary Company that an inclined plane should be built into the end of the beak of the McCarthy resectoscope which would push forward the supports of the loop as this

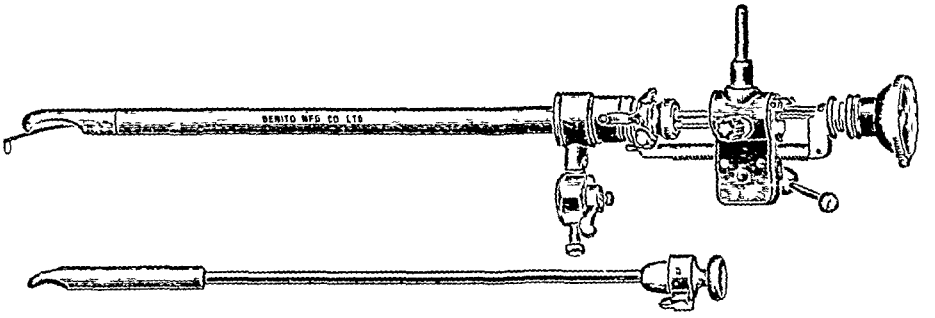
is wound out of the sheath into the cutting position (See Fig) This has been successfully achieved in the model which he has produced for me, and as a result the whole extent of the loop projects in front of the sheath when it is in the extreme forward position For this reason, and because it is firmly supported the loop when activated by the diathermy current can be buried into the prostate much more deeply than is possible in the older type of instrument At the conclusion of the cut it is automatically withdrawn into the confines of the sheath The resection is begun in the middle line posteriorly first the loop may be placed over the intravesical projection in the usual manner until it is hidden from view, one such cut being usually sufficient After this the loop is not again allowed to enter the bladder cavity but from now on is placed always under vision in position against the prostate within the urethra at a level immediately below the internal meatus At the moment when the current is turned on the loop is first embedded in the tissues at this level by pressing the beak of the sheath firmly in the required direction, and then the cut is made from there downwards In other respects the procedure is that usually practised—namely, as much resection as is desired is carried out on one lateral lobe before treatment of the other side is begun These cuts, beginning always within the prostatic urethra resect chiefly the lateral lobes but must be continued well round to include the front of the gland on both sides Even with the aid of these new loops and the advantage which they give, it will be found that sooner or later a stage is reached when further cutting into the lateral lobes is mechanically impossible

At the end of a perurethral resection conducted in this manner if the instrument is withdrawn so that the objective of the telescope lies at the level of the verumontanum one finds oneself looking into a recess which has been excavated beneath the bladder and at the top of this is a small opening into the bladder, in other words the result is very similar to that which is produced after a prostate has been enucleated The opening into the bladder can easily be enlarged if it is desired, but I feel sure that the less of the trigone that is resected the better from the point of view of immediate haemorrhage and subsequent sepsis Because the aperture which leads from the prostatic fossa into the bladder is small some care is necessary in passing the catheter, which is to be left in position, as the point of it tends to be held up in the prostatic bed

If this technique, which may be called *subvesical* diathermy prostatectomy or prostatic resection, is employed it will be found that haemorrhage is less than with the older method and that it is more easily controlled Sepsis is also much diminished owing I believe to the fact that the trigone is left almost entirely intact instead of being mutilated One complication which is unavoidable when this new type of diathermy loop is employed is that the pieces resected are often too large to wash out through the resectoscope, and it becomes necessary to recover them at the conclusion of the operation by aspiration, using the bulb of a Bigelow's evacuator attached to the sheath of the resectoscope by a short metal adaptor or by grab forceps Since larger pieces are cut away by these loops than by those of the original type it is possible to work through a smaller sheath, and one of 26 Charriere scale will be found very efficient The risk of damage to the urethra is thereby lessened

The New Model Resectoscope

The new model of McCarthy resectoscope made by the Genito-Urinary Company is in several other respects a great improvement upon the previous models, from which it has been evolved The sheath, like the recent American pattern, is metal outside with the exception of the



bakelite beak, and this part of the instrument is now made shorter than in the original models—a modification which is essential if resection is to be carried out beneath the trigone, for which same purpose, as has been explained, the projecting loops have been specially designed The projecting loop has the further advantage that it is more easily seen than are those of the older patterns, being nearer to the centre of the telescopic field when in the extreme forward position from which the cut is begun These loops, the manner in which they are supported, and the new system of flushing are the only components for which I can claim originality The tap will be found satisfactory, as it gives simplified control and allows of a larger current of water Particular care should be taken not to over-distend the bladder, and therefore the top water-level in the irrigator should not be more than eighteen inches above the patient's abdomen

---

A course of lectures and clinical instruction for medical practitioners on problems connected with retarded and difficult children has been arranged by the University Extension and Tutorial Classes Council, in co operation with the Central Association for Mental Welfare, and will be held from Monday, November 7, to Saturday, November 12 It is open to those practitioners who have already attended the course on mental deficiency and allied conditions, or who have specialized experience approved for the purpose of the course The lectures will be delivered at the University of London, Senate House, Bloomsbury (entrance from Russell Square), unless otherwise stated on the students' time tables, and will be given from 10 a m to 12 30 p m each day Detailed time tables will be sent by October 31 to each person proposing to attend the course, and forms of application should be filled in and returned not later than October 7 The University will grant certificates of attendance to those who attend regularly, taking both theoretical and practical work Registration fee, 10s 6d, fee for the course £3 3s All communications should be addressed to Miss Evelyn Fox, c/o University Extension Department, University of London, W C 1

RUPTURE OF THE UTERUS DURING PREGNANCY

BY

JAMES RIDDELL M.D., F.R.C.S.Ed., M.C.O.G.

Honorary Gynaecological Surgeon Prince of Wales's Hospital Plymouth

AND

JOHN SCHOLEFIELD M.B., Ch.B. F.R.C.S.

Resident Surgical Officer Prince of Wales's Hospital Plymouth

The case of rupture of the uterus during pregnancy which is described in detail and discussed in this paper was that of a primigravida aged 20 admitted to the Prince of Wales's Hospital Plymouth

Clinical History

The patient was thirty-two weeks pregnant and had been attending an ante-natal clinic and had enjoyed health during the whole of her pregnancy. There was no history of any pelvic pain even during the early weeks of pregnancy. On the morning of admission to hospital she sat up in bed and was seized with severe abdominal pain. During the course of the morning she sent for a midwife who found her walking about her room complaining of a pain in the lower part of the abdomen on the right side. The midwife put the patient to bed and sent for the family doctor. He sent the patient to hospital having diagnosed acute appendicitis. She was admitted to hospital shortly after midday and was observed by one of us (J. S.).

On admission the patient looked pale and toxic. There was not any restlessness but her respirations were rather rapid and there was some dyspnoea. The pain was referred to the right hypochondrium and was of a colicky nature. There was some tenderness in the right hypochondrium but not any rigidity and pressure here resulted in a series of short rapid respirations. The uterus appeared normal for a thirty-two week pregnancy and a living child in the left occipito-anterior position was diagnosed.

The urine was carefully examined to exclude a pyelitis and a physician's opinion obtained to exclude an acute diaphragmatic pleurisy. The tenderness appeared to be too high for appendicitis and the history did not support such a diagnosis. A provisional diagnosis of an acute cholecystitis complicating pregnancy was made and the patient was placed in the Fowler position and put on fluids for observation. During the next few hours the pain did not show any signs of abating and the tenderness had increased. A further opinion was sought.

Further Examination of the Case

The patient was referred to me (J. R.) at 10 p.m. on the evening of her admission to hospital. She was complaining of severe pain under the costal margins and under the shoulder blades and was in great distress particularly with dyspnoea. There was not any pain referred to the shoulders.

The outline of the uterus was regular and was clearly defined. The uterus was enlarged to the size of a thirty-two week pregnancy. The foetal heart sounds were heard. Above the level of the uterus the abdominal wall was flaccid but there was pronounced tenderness under the costal margins. There was slight bleeding from the vagina. The external os was closed. The patient was not in labour. Examination of the chest did not disclose anything abnormal. The urine was free from pus cells and *B. coli*. The temperature was 98.8°, pulse 120, respirations 28.

I was not able to make a diagnosis though I considered that an acute abdominal emergency might be in progress, possibly an internal haemorrhage. I was not able to satisfy myself that there was sufficient evidence to warrant opening the abdomen that night. I desired to wait and to make further observation. An hourly pulse chart was arranged for and a request was made that I should be called if the pulse rate increased appreciably. A third of a grain of omnopon was administered hypodermically. The patient slept and the pulse rate fell to 90 by 6 a.m.

I saw the patient next day shortly before 1 p.m. when I found that the clinical picture had changed. The patient was sleeping but her face had a more distressed expression, she looked pale with shallower rather quicker and slightly more embarrassed respiration.

The abdominal wall was rigid and tense, the uterine outline was not manifest any longer, there was a more diffuse swelling of the abdomen due to some distension. Liver dullness was absent. I made a diagnosis of internal haemorrhage. Rupture of the uterus was discussed but there was not sufficient evidence to support that diagnosis with confidence. There was only sufficient evidence to warrant a diagnosis of internal haemorrhage.

Operation

The patient was removed to the operating theatre. I opened the peritoneal cavity through a left paramedian incision partly above the umbilicus and partly below, in order that I might have liberty to enlarge it upwards or downwards depending upon what was discovered to be the source of the bleeding.

On opening the peritoneal cavity a bag of membranes was seen. Rupture of the uterus was not obvious. The incision was extended downwards. The uterus was felt contracted in the bottom of the pelvis. The foetus (dead), membranes and placenta were removed. The uterus was lifted up. At the right cornu a four-inch rent extended down the right side of the uterus. The uterus was elongated and marrow-shaped.

At the site of the rent the wall of the uterus was thin. Bleeding was not in progress though there was a considerable quantity of blood in the peritoneal cavity. I did not waste time exploring the inside of the uterus. The right tube was not continuous with the uterine wall. It looked natural and healthy except that it ended proximally in a healed stump as though it had been amputated. The centre of the rent in the uterus corresponded with the point at which the tube would normally have become continuous with the uterus. The right ovary was calcified. The left tube and ovary were natural.

The rent in the uterus was sutured, most of the blood was removed from the peritoneal cavity, drainage was provided and the patient was returned to bed as quickly as possible. She recovered quickly and went home on the fifteenth day after operation.

Remarks by Mr. James Riddell

In the case of rupture of the uterus during pregnancy which I described in 1926 there had been previous damage to the uterus following miscarriages. Hysterectomy was employed and the patient recovered. In the case now under review there had not been any operation upon the uterus. There was not any history of injury or violence of any kind.

Munro Kerr has described angular pregnancy and he states that atypical examples may be encountered partly interstitial, partly angular. It is suggested that this case is an example of a pregnancy partly interstitial partly angular. Munro Kerr quotes Kupferberg who described a case in which the body of the child was in the tube and the head in the uterus. The interstitial element would account for the erosion of the tube by the

trophoblast and its gradual amputation from the body of the uterus It is not possible for a developmental defect to account for the want of continuity between the tube and the uterus The tube was properly developed, and was not in any way under-developed The uterus was properly and naturally developed It is possible that after the erosion of the tube the ovum may have moved a little more downwards and embedded itself more comfortably in the uterus

The ovum developed not *in substantia uteri* but towards the uterine cavity though almost wholly in it, and that constitutes the "angular" element which led to thinning out of the wall of the uterus at the right cornu Eventually the wall of the uterus became so thin that the exertion of sitting up in bed was enough to rupture it There was not any recognizable lateral distension of the uterus in the region of the uterine cornu Obliquity of the uterus was not observed before the operation and there was not any evidence of it at the operation There was only thinning of the wall at the right cornu

Lateral distension of the uterine cornu is one of the main features described by Munro Kerr Therefore there must be grades of cases—if my explanation is correct—some without much lateral distension of the uterus Most "angular" pregnancies produce great pain and lead to abortion If there were not much sacculation at the cornu but only thinning of the uterine wall and if the ovum found a more secure resting place, then abortion would not be likely to occur This would explain why the patient did not abort

If my explanation is not correct then one must suppose that the ovum was properly embedded in the uterus from the start and that the amputated tube and the thinned-out cornu did not have any relation to it, but were entirely unconnected with it, being due to some pre existing unexplained disease or injury

The patient has promised to report if she becomes pregnant again in order that her progress may be watched

Summary

1 The clinical history of a case of rupture of the uterus during pregnancy is reported The patient recovered after suture of the rent

2 It is suggested that the cause of the rupture was a pregnancy partly "interstitial," partly "angular"

BIBLIOGRAPHY

Munro Kerr J M (1937) *Operative Obstetrics* p 700, (1934) *British Medical Journal* 1, 1113
Riddell, J (1926) *J Obstet Gynaec Brit Emp* 33, 1

The two Chambers of the Swedish Riksdag have passed a Bill for public dental care The new Act provides for dental treatment for all infants and school children, as well as for adults at a nominal charge, or free of charge in the case of families of small means As regards children public dental treatment will be available to all between the ages of 3 and 15 years The annual fee is 5 kr for the first child, and 3 kr and 2 kr for the next two children, of a family registered at one and the same time for receiving State dental care If there are more than three children in a family the rest will be treated free As regards adults treatment is to be given at cost price or at a reduced fee or gratis when warranted The Act provides for a division of Sweden into dental districts, with whole time dentists and attendants for each The cost of organizing and maintaining the service will be divided between the State and the county councils or municipalities

Clinical Memoranda

Concurrent Puerperal Anaerobic Streptococcal and Staphylococcal Septicaemia with Recovery

We feel that points worthy of notice in this case are, first, the unusual combination of organisms in the blood stream, secondly, the response to staphylococcal antitoxin in a patient who was gravely ill, and, thirdly, the presence of septicaemia after a considerable amount (66 grammes) of sulphanilamide had been given The response to the staphylococcal antitoxin suggests that the presence of the anaerobic streptococci in this case was of minor importance

Mrs M, aged 32 years was delivered of her second child on February 15 1938 The first and second stages of labour were normal, but there was delay in the delivery of the placenta, which was removed manually under general anaesthesia On the following day the patient complained of intense headache, shivering, and insomnia She vomited several times In the evening her temperature rose to 101° F

She was admitted to hospital on February 17 Her temperature was 98° F, pulse 108, and respirations 24 She was pale and appeared ill The fundus of the uterus was palpable two inches below the umbilicus and was not tender Vaginal discharge was scanty and haemorrhagic Examination of other organs showed no abnormality Sulphanilamide 4 5 grammes was given daily by mouth, and 1 c cm pituitrin hypodermically twice a day

The day after admission she passed a piece of membrane per vaginam Next morning her temperature rose to 101 2° F and her pulse rate to 120 per minute Her condition became steadily worse, and on February 24 the temperature was 103 2° F and she had a slight rigor On the following day 20 c cm scarlatinal antitoxin were given intramuscularly and 60 c cm intravenously on the 26th, after this her temperature fell to normal for the first time for seven days but rose again next day and continued to swing between a maximum of 104 2° F and a minimum of 99° F for the next three weeks

On March 3 a blood count showed Red cells 2,164 000 per c mm White cells 3,600 per c mm (polymorphs 64 per cent, lymphocytes 32 per cent, monocytes 3 per cent, eosinophils 1 per cent) Haemoglobin 30 per cent Colour index 0 7 Reticulocytes 4 5 per cent There was marked anisocytosis and some poikilocytosis of erythrocytes

Blood culture on March 4 gave a growth of non pigmented staphylococci which were thought to be due to contamination of the culture Her clinical appearance now became typically that of septicaemia, and on March 6 she was given a transfusion of 15 oz of her husband's blood, this was followed by some temporary improvement On the 9th the blood culture was repeated and gave a similar growth of staphylococci which were haemolytic and showed slight pigmentation of the *aureus* type at the end of forty eight hours' incubation An anaerobic culture was made simultaneously, and this showed the presence of anaerobic streptococci as well

It was now decided to give staphylococcus antitoxin As she had had serum a fortnight previously she was given two small desensitizing doses of the antitoxin subcutaneously at an interval of three hours, and later the same day (March 12) 10 000 units intramuscularly This latter dose was repeated on the following day By this time her condition was very poor temperature 104° F, pulse rapid, skin yellow, and mucous membranes pale, there was a systolic bruit at the apex and she was incontinent of urine and faeces She had also developed a massive generalized oedema involving all limbs, face, and back, which may have been due to the serum

On March 14 another 10 000 units of staphylococcal antitoxin were given intramuscularly followed by 10 000 units intravenously Just after this the patient collapsed but rallied a little on the injection of adrenaline ieoral and continuous rectal saline and glucose During the next three days she seemed to be *in extremis* but on March 17 the temperature and pulse rate began to fall and by the 22nd were normal Her general condition improved she became rational the oedema disappeared and she regained complete sphincteric control From this time steady progress was made without complications or rise of temperature

On April 22 a blood count showed Red cells 3 046 000 per c mm White cells 8 600 per c mm (polymorphs 55 per cent lymphocytes 36 per cent large mononuclears 7 per cent eosinophils 1 per cent basophils 1 per cent) Haemoglobin 65 per cent Colour index 0 9 Reticulocytes 1 6 per cent A blood film showed hypochromia of red cells otherwise nothing of note

The patient was discharged well on April 30 Other medicaments used in the treatment of the case were vaginal douches potassium citrate Blaud's pill and various sedatives Total dosage of sulphanilamide was 66 grammes Administration of this latter drug was stopped on March 3

We wish to thank Dr W Edge medical superintendent Ladywell Isolation Hospital for permission to publish this case

J STARKIE MB MRCS DPH
G N M WISHART MRCS LRCP
Ladywell Isolation Hospital Salford

Simultaneous Fracture of Both Wrists

The following case of simultaneous fracture of both wrists may be of interest as demonstrating the rapid restoration of function and the minimal period of disability under treatment by Bohler's technique

CASE REPORT

On November 7 1937 a Cambridge undergraduate a member of the Climbing Club fell 20 feet from a tree landing on both hands with the wrists in flexion He could use neither hand owing to pain and swelling and was brought to see me by a friend The right wrist was swollen and very painful and there were fusiform swellings on the dorsum of the wrist more marked on the radial side corresponding to the extensor sheaths There was no bony displacement palpable and no history of cracking at the time or of crepitus since he sustained the injury The left wrist joint was also generally swollen and there was tenderness and more marked swelling over the styloid process of the ulna with no obvious sign of fracture The patient was unable to use either hand in any way He could not lift a cup of tea fasten a button open a door or do anything at all for himself For this reason he was admitted to a nursing home and the wrists were at once supported by elastoplast reinforced with interlocking split tailed strips of plaster the right wrist being put up temporarily on a Carr's splint A ray examination showed a fracture of the lower end of the right radius just above the wrist joint with no displacement and a fracture through the base of the styloid process of the left ulna with minimal displacement In addition there was obviously acute traumatic synovitis of both wrist joints and acute traumatic tenosynovitis of most of the extensor tendon sheaths on both sides

On November 8 after the results of the x ray examination were known a 6 inch dorsal cellona slab was applied to the right forearm from just below the elbow to the level of the heads of the metacarpals The cast was completed according to Bohler's method of treating a Colles's fracture with the palm left free save for a copper wire across the distal crease a modification suggested by K Pridie The left forearm and wrist were treated in the same way The patient was instructed to use both hands freely On the following day at 9 30 a m the patient was able to write his name legibly but poorly he gripped and used a tumbler with either hand picked up small objects and was able to help in dressing himself By 5 o'clock that day his signature had improved he was able to lift both arms above his head and he could carry a bag of instruments without pain His grip was already much stronger Later he was able to use a knife and fork and take his own dinner After three days he returned to his college attended all his lectures and dined nightly in Hall In fact he lived a normal life except that he did not play games Three and a half weeks later the plaster casts were removed and the movements of the wrist-joints were found to be practically normal as regards flexion and extension Pronation and supination became full in a few days time

Cambridge R SALISBURY WOODS MD FRCS

A Case of Locked Twins

Owing to the rarity of locking complicating labour in twin pregnancies the following notes on a case recently met with may be of interest

HISTORY OF CASE

A woman aged 24 was pregnant for the second time the first pregnancy having ended in abortion at 12 weeks During the present pregnancy she had a threatened abortion at twelve weeks and later developed mild albuminuria which settled with rest in bed

Labour started in the morning of February 2 a fortnight before term Uterine contractions were weak and infrequent but by 5 p m on February 3 the second stage of labour appeared to have begun At 5 p m a vaginal examination was made and a vertex (right occipito anterior) felt low down in the pelvis the cervix was fully dilated and the membranes ruptured By 6 30 p m no progress had been made and meconium began to pass per vaginam At this time the patient's general condition was very fair Pains were regular the uterus was rather tender and irritable making abdominal examination difficult but a head could be made out entering the pelvis

Vaginal examination under anaesthesia revealed a small head low down in the pelvis presenting as a right occipito-anterior with a loop of cord prolapsed alongside it this was pulsating regularly On further investigation a second head was found in the pelvis presenting as a left occipito posterior somewhat to the left of and posterior to the first It was at a higher level in contact with the anterior shoulder of the first foetus which it was preventing from descending further The membranes of the second sac were intact

The second foetus was pushed up out of the pelvis and the first delivered with the forceps It was rather shocked but soon recovered After fifteen minutes the second head was found to have descended on to the pelvic floor and the membranes were ruptured and five units of pituitrin given as uterine contractions were very weak There was little response to the pituitrin so this foetus still occipito posterior was also delivered with the forceps It was in good condition and cried at once The third stage lasted about fifteen minutes when both placentae were expelled together There was very little haemorrhage

The children were female binovular twins weighing 4 lb and 3 lb 12 oz respectively The placentae were entirely separate Subsequent progress of all three patients was uneventful

Locking of twins is generally attributed to deficiency of liquor amnii in cases where there is a relatively large pelvis In the case reported the pelvis was of average size (external measurements 10½ 11½ and 8 inches) but the foetuses were small At the time of delivery the first amniotic sac was dry and the second contained only an ounce or two of liquor

H. CRAVEN PETCH.
THOMAS A. BEST
Harrogate

Reviews

AN ANTHROPOLOGIST SPEAKS OUT

Apes Men and Morons By Earnest Albert Hooton (Pp 307 10s 6d net) London George Allen and Unwin 1938

Dr Earnest Hooton, the distinguished professor of anthropology in Harvard University, has come to occupy a favoured place in the minds and hearts of his fellow-countrymen This is because he has added to the erudition of his special subject a power to see things with the humorous eye of Mark Twain and the courage to force unpleasant truths upon the consideration of his readers The burden of his book is this Unless civilized humanity pays some attention to the kind of progeny it begets, then its doom is sealed "Man has tried to improve everything except himself," he exclaims And again "Man is a tottering biped and we must look to his organic underpinning'—the underpinning being man's "animal self In brief, what is needed first and most is that the great public should become familiar with the elements of their own physiology But alas! it must also be added that Professor Hooton has no confidence in the wisdom or judgment of the man in the street

It must not be inferred that *Apes, Men and Morons* is a sermon preached on a single text Taking it all and all it is the best popular summary available of the hundred and one problems that are now occupying the attention of anthropologists and eugenists in all countries of the world Although the contents of this book represent a series of addresses given at sundry times to diverse audiences, yet the subjects were so chosen that the whole field of anthropology is covered in a systematic manner The history of man, as revealed by fossil bones, is well told then follows an exposition of our present knowledge—and lack of knowledge—of the evolution of man Then living races and types of mankind are passed in review then follows a special section—Professor Hooton's own section—that of social anthropology Lastly, a eugenist chapter—"What must we do to be saved?"

There may be exaggerations and excesses here and there, but there is also much real wisdom as well as learning, there is certainly not a dull page in the book

A K

CONTROL OF DISEASE

General Hygiene and Preventive Medicine A Textbook for College Students Medical Students Nurses Public Health Workers and Social Workers By John Weinzirl M S, Ph D Edited by Adolph Weinzirl B S, M D (Pp 424, 18s net) London Henry Kimpton 1937

In presenting a medical subject to the generality it is sometimes difficult to fix upon a grouping or arrangement of the material which will appear sensible to the non-medical reader without doing violence to the facts of medicine The purely aetiological approach is usually barred since it presumes previous knowledge, and other ways, less good in themselves, may have to be sought out In their recent work on hygiene, addressed in part to lay persons, including teachers, philanthropists, publicists, and others, Professors J and A Weinzirl have grouped the disease conditions which they describe in the light of the means adopted for their control 'An attempt has been made they say to subordinate facts to methods So spake, or might have spoken Procrustes as he lopped or stretched his guests to fit the notorious bed Here and there in the book as is almost inevitable in the circumstances, we encounter the Procrustean touch, as where it is said that the "incubationary stage" of acute alcoholism is a matter of hours Nevertheless, for a work written with a view to the enlightenment of laymen, the criterion "what is being done' is, we think, happily chosen It is calculated to appeal to the practically minded average man, who, after all, will not go far wrong if he thinks of small-pox as a disease to be controlled by vaccination, scurvy by correct feeding, malaria by dealing with the mosquito, and moronism, *Anglice* feeble-mindedness by the application of eugenic measures

The book by the two professors is sound in the essentials It is wide in range, adequate in detail, and informative without over-elaboration It will interest those for whom it is principally intended and will be found of service also by medical officers

A STUDY OF CEREBRAL FUNCTION

The Brain and its Environment By Joseph Barcroft (Pp 117, 30 figures 9s net 2 dollars) London Humphrey Milford Oxford University Press, New Haven Yale University Press 1938

This book is founded on the Terry Lectures delivered by Sir Joseph Barcroft at Yale University in 1937 and is a study of the relation between the functional activity of the mammalian brain and the internal environment during the changes from intra-uterine to adult life

The investigation has been carried out in both sheep and goats It is shown that the oxygen supply does not increase during the last third of pregnancy, although the weight of the foetus increases tenfold The result of this is a marked fall in the oxygen pressure in the blood supplying the brain over this period A study of the reactions of the developing nervous system reveals that at the end of the first third of pregnancy movements can be elicited in response to tactile stimulation which correspond to the locomotor and respiratory functions which will come into play after birth Such movements are either abolished by asphyxia or are replaced by a more primitive and generalized response During the remainder of pregnancy these reflex activities are inhibited by the development of higher centres in the nervous system which are themselves put out of action and he early reflexes re-established by asphyxia

At birth both the external and internal environment of the brain undergo abrupt change The oxygen saturation of the carotid blood was directly measured electrically, and in this way a comparable photographic record was obtained of the activity of the respiratory centre and the oxygen supply to the brain From this the author comes to the conclusion that the respiratory centre is stimulated at birth primarily by cutaneous sensations (cold, manipulation, etc), and secondarily by the effect of asphyxia in releasing the primitive respiratory movements from the inhibitory control of the higher centres It is also shown that the cardio-inhibitory, the cardio-accelerator centres, and those responsible for the maintenance of muscular tone are brought into play by the advent of sustained respiration at birth

With regard to the factors controlling the oxygen supply of the brain at birth, it is shown that the nature of the haemoglobin is changed before birth, so that the foetal type of oxygen dissociation curve is replaced by the adult type, which is more suitable for the higher oxygen pressures encountered in post-natal life Furthermore, evidence is brought forward to show that the ductus arteriosus is closed abruptly at birth by a neuromuscular mechanism developed during foetal life Finally, the

author discusses the effect of changes in the internal environment in the brain of adult human beings and shows that excess or deficiency of oxygen carbon dioxide glucose water and salts and variations in temperature produce effects which can be classified as either excitatory or depressive He concludes with a reaffirmation of Claude Bernard's words that the fixity of the internal environment is the condition of the free life —that is to say the development of the intellectual powers of man

Clearly this is a valuable contribution to the study of cerebral function which is one of the most important fields of research at the present time

A MANUAL OF OTOLOGY

Kurzes Handbuch der Ohrenheilkunde By Dr Hermann Marx (Pp 846 465 figures many in colour RM 46 bound RM 48 50) Jena Gustav Fischer 1938

Professor Marx's recently published *Short Manual of Otology* runs to over 800 pages and covers the whole ground in an extremely able manner The matter is arranged on the recognized lines a general section dealing with a description of the anatomy and physiology of the ear and the functional tests (142 pages) a special section (600 pages) dealing with the diseases of the ear—inflammatory new growths traumatic lesions and congenital deformities in that order The author's views and theories are mostly the orthodox ones but in many sections the more individual teaching of the Wurzburg school is obvious In the physiology chapter the tympanic muscles are described as a protective mechanism and it is stated that there is not sufficient evidence to support an accommodation theory The two tympanic muscles are not antagonistic and their contraction serves only one purpose which is to protect the cochlea against too intensive sound impressions especially of the high pitched variety

The semicircular canal function and tests are dealt with exhaustively On the other hand the reflexes of the otolith end organs in spite of the enormous literature which already exists on the subject are dismissed in a one page paragraph because it has now been shown that tonic labyrinth reflexes function even after destruction of the macula in the saccule and therefore the question of the reaction of position is still unsolved A most useful distinction is made between the pathology of acute and that of chronic middle ear suppuration The usual end result of acute middle-ear suppuration is *restitutio ad integrum* (p 197) Chronic suppuration does not result from neglected acute suppuration but has an insidious origin and the seeds of chronicity are there from the beginning Here the author on the whole accepts Wittmaack's theory of the infantile hyperplastic changes in the tympanic mucous membrane Much futile discussion would be saved if this aspect of the pathology of middle-ear suppuration were always borne in mind

In the after treatment of mastoid abscess Professor Marx advises against packing because this carries a risk of fistula The wound is closed straight away except for a strip of gauze in the lower angle The so called recurring mastoiditis is not an osteitis but simply a formation of pus in the old scar tissue a stab incision to let out the pus is sufficient in such cases An interesting end result of sinus thrombosis not usually described in textbooks is the organization and calcification of the clot A complete bony occlusion of one transverse sinus may result and one such specimen is illustrated In the chapter on syphilis of the inner ear it is clearly stated that salvarsan is not the cause of the damage to the eighth nerve When deafness tinnitus and vertigo arise in the course of treatment the salvarsan injections must be persevered with until the inner ear symptoms disappear Acusticus tumours although arising in the cerebello pontine angle are dealt with because they must be considered as tumours of the ear origin

The illustrations throughout the book are well chosen and well printed As a model of clearness one may specially commend Fig 33 which illustrates the complicated anatomical relation of the levator palati and tensor palati muscles to the Eustachian tube The series of actual photographs of benign and malignant tumours of the pinna and meatus and those illustrating congenital deformities of the outer ear are particularly successful We note as a useful feature the full references to current literature which are given at the end of each chapter In Professor Marx's own words this manual is intended for the young otologist starting in practice (angehender Ohrenarzt) and it may be confidently recommended as a reliable textbook The German style is easy to read

INTRACRANIAL TUMOURS

Tumeurs Intracraniennes Etude Analytique de 2000 Tumeurs Verifiées et de leur Mortalité Operatoire By Harvey Cushing (Pp 194 111 figures table 20 frs) Paris Masson et Cie 1937

The French translation of Dr Harvey Cushing's book on *Intracranial Tumours* which appeared in 1932 has been enlarged by two studies on the late results of operation for cerebral tumours one by Dr van Wagenen and the other by Professor Hugh Cairns These statistical studies show a surprisingly long period not only of survival but also of useful life in many forms of intracranial tumour Van Wagenen gives an average period of working life of a year or more in all forms of intracranial tumour except medulloblastomas glioblastomas and metastatic cancers In Cairns's statistics it is surprising to note that individual cases of cerebral glioma pituitary adenoma and tumour of the acoustic nerve have survived for twenty five years after operation While the average survival period is much less for cases in which the tumour cannot be completely removed the results obtained justify the unique position which Dr Harvey Cushing's clinic holds in neurosurgery and the faith in the future of his specialty which has sustained him throughout his career

The French edition also contains a short chapter on basophil adenomas of the hypophysis a form of tumour which was scarcely recognized at the date of the American edition and on which the author has since contributed valuable knowledge Owing no doubt to difference in the paper used the illustrations appear to be clearer and more brilliant than in the original edition

HAEMATOLOGY

A Textbook of Haematology By William Wagner M D D P H (Pp 395 23 figures 3 coloured plate 3 charts 18) London J and A Churchill 1937

It seems that every professor of pathology is expected to publish his own book of haematology for the special use of his large class of students the result is a superfluity of haematological textbooks overlapping each other for of late the format of these books has become and stereotyped and choice is only narrowly is noticeable that with the increasing n the professors have become more ca opinions Professor Wagner introd versial questions such as the deve white cells the origin of platele

views of several authors for and against some particular theory but refrains from expressing his own personal views of these questions It would be useful to know which special form of haemoglobinometer he favours, also on which haemocytometer chamber and methods he relies for the enumeration of cells He makes no mention of "Price Jones" mean diameter distribution curves for determining the size of red cells and the degree of anisocytosis, which is so essential for the correct diagnosis of anaemias and is in common use in this country

Owing to the employment of surfaced paper the weight of the volume is unduly great but the reader is recompensed by the excellence of the coloured plates It is a pity the photomicrographs are not sharp and do not convey very much It may be a mistake to include in a book of this character the clinical and therapeutic aspects of the anaemias described, but this is a common habit, and Professor Magner is in good company

Notes on Books

The Psychology of Early Growth including Norms of Infant Behavior and a Method of Genetic Analysis, by ARNOLD GESELL M D, and HELEN THOMPSON, Ph D, is published by the Macmillan Company at 17s This important book of reference comprises a summary of the work of Professor Gesell and his colleagues at Yale University on the mental development and behaviour of infants Thanks to this work we are beginning to obtain a very fair idea of what the normal infant can do at various ages and how far deviations from the normal are to be regarded as non-pathological It is only by establishing this norm that we can study abnormalities with intelligence and discover what conditions in infancy may be recoverable and what must be regarded as inevitably permanent handicaps The medical man who is concerned with the diagnosis and prognosis of injuries and developmental defects in infancy will find a wealth of material in this volume which will serve him in very good stead in controlling his own observations

Der Schwachsinn by F DUBITSCHER (Leipzig, Georg Thieme) is the first of a series of volumes edited by Arthur Guett director of the Health Department in the Reich and Prussian Home Ministry, under the general heading *Handbook of Hereditary Diseases* The first part of the volume deals with mental defects (classification, aetiology normal personality, physical symptoms of feeble-mindedness, mental symptoms, general pathological-anatomical and pathological-histological findings, special kinds of feeble-mindedness, ethical deficiency, diagnosis, social importance of feeble-mindedness, measures against feeble-mindedness legal aspects) The second part is devoted to intelligence tests The main tasks of the health administration in the fight against feeble-mindedness appear to be to determine biological psychic unities and to study the heredity of these single characters, to identify diseases, related to feeble-mindedness belonging to the oligophrenia group in the sense of Weygandt, to study the connexion of social conditions and feeble-mindedness, to examine systematically all the children who leave special school classes for feeble-minded children or who leave school prematurely Will it be possible to eliminate feeble-mindedness by legal measures based on considerations of heredity? Certainly not But the problem is not "When will feeble-mindedness have ceased to exist?" but "How much would feeble-mindedness spread in a certain period without such legal measures?"

In the *Annales de Merck* for 1938 (first part) there is an article by Dr Albert von Szent-Gyorgyi on "New Perspectives in Vitamin Therapeutics

Preparations and Appliances

ELECTRICALLY HEATED COT

Dr WILLIAM MORE (Stockport) writes The problem of maintaining the body temperature is one of the chief difficulties in the management of premature infants Warmth is usually maintained by hot-water bottles wrapped in blankets, by electric blankets or by some form of incubator Enclosed incubators in which the air is stagnant are not advisable, an electrically heated cot in which there is a gentle current of warm air is preferable In the incubator described below there is no thermostat, but the temperature can be maintained

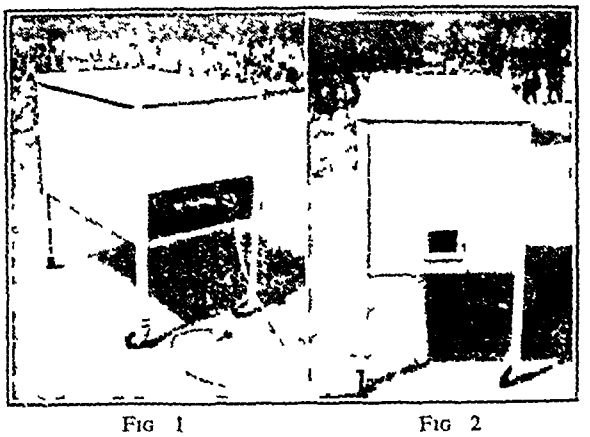


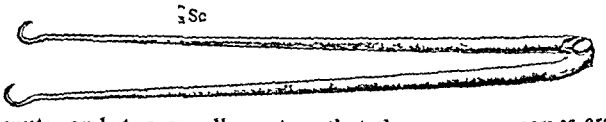
FIG 1 FIG 2

at a level between 70° and 80° F The details of its construction are as follows The cot is made of angle iron, electrically welded and covered with 17 s gauge gauze on the outside and 22 s gauge gauze on the inside A space is left between the inner and outer walls, the space being heated by six 16 c p carbon filament lamps, controlled by three switches, as seen in Fig 1 Each switch controls two lamps A glass pane is inserted in one end of the cot so that it can be ascertained which lamps are in use (Fig 2) All the wiring is asbestos-covered and an efficient earth is provided The number of lamps used to attain the required temperature will vary with the room temperature, but once the desired temperature has been reached this remains at a constant level However if the room temperature varies a great deal occasional adjustment of the switches on the cot will be necessary Three of these cots have been used with success in Stepping Hill Hospital during the past two years I am indebted to Mr Shawcross, the hospital engineer, for his skill in constructing them

A SKIN RETRACTOR FOR PLASTIC SURGERY

Mr GRAHAM HUMBY (London, W) writes

It is with deference that this retractor is offered because it is only of use to those who are interested in plastic surgery, and it is apparent that their numbers are limited The utility of fine hooks for skin retraction in this work is beyond



dispute and it is equally certain that the surgeon's nerves are often frayed when two such hooks are being used, because, unfortunately, telepathic control of an assistant's hands is an ideal rather than a reality It is for this reason that two hooks have been joined together at their proximal ends, thus eliminating a separate hook and a separate tremor The retractor can be used as a single hook when the two arms are approximated or as a double hook by inserting a finger in the acute angle formed by the arms the number of fingers inserted determining the distance and the tautness of the skin between the two hooks This instrument was made for me by Messrs Down Bros

BRITISH MEDICAL JOURNAL
LONDON
SATURDAY JULY 23 1938

THE PRESIDENTIAL ADDRESS

Successive Presidents of the British Medical Association have of recent years devoted a considerable portion of the presidential address to a consideration of the public relations of the profession and to a discussion of its future development and organization in view of the needs of the community. Dr. Colin Lindsay at Plymouth gave his address the simple title 'The Profession and the Public' indicating that the interrelations of these two bodies continue to be the appropriate subject of thought and pronouncement even at the inauguration of a meeting the intent and content of which are predominantly scientific. We print the address in this issue of the *Journal* at p. 163. The new President speaks from an experience of more than forty years as a general practitioner and consulting physician. He emphasizes in particular the pressing need for continued education both for the public and for the practitioner, and the value and wisdom of the policy of the Association in this regard and of its recently revised and re-issued Proposals for a General Medical Service for the Nation. This was both opportune and helpful at the end of a year during which the Council has devoted a great deal of time, care, and attention to the re-presentation of those proposals, to the formulation of its policy on some other very important medico-sociological questions, and to the development of methods by which the work and opinions of the Association can properly be made more widely and accurately known and its influence extended.

It was timely, too, that the President should remind the public of the unity and equality of the three main branches of the profession—the general practitioners, the consultants, and the members of the public health service. They have a common basic training and tradition; each branch provides a specialist service in its own sphere; and "there is no real reason why one branch should be from its nature more eminent that the other. They are essentially complementary and each requires for its proper performance attainments of the highest order." It is probably true at the present time that while it is to the family doctor that individual members of the public give their greatest confidence, general practitioners collectively have a less high place in the public regard than the other two branches. Perhaps Dr. Lindsay in his address overemphasizes this, as indeed have several recent pronouncements. He goes so far as to say that "there is a tendency for this branch of the profession to sink lower and lower in the estimation both of the public and of the student body from which the profession is recruited." He puts it in this way merely to heighten the contrast between this situation and what the general practitioner really is, and the fact that 'a reaction from this attitude is inevitable'. The more the public is educated, and the more the health services extend and intrude themselves into the lives of the people, the more will there be required an active and intelligent family doctor service." There are indications that this reaction has already begun. There appears in fact to be less and less dissent from the proposition that any reconstruction of medical organization for the public health must be based upon the work of the general practitioner. As to this future work the President declares that "all direct contact with the public as individuals should be in the first instance through the family doctor. There should be no short-circuiting or duplication of his services' and in a rather striking phrase he says that the family doctor service will be no corps of clerks but a highly trained and skilled body of persons who will ensure the early recognition of diseased states, the application in ordinary cases of those psycho-therapeutic methods which are becoming more and more a national need, the proper co-ordination of extending specialist services, and the more effective education of the public in medical and health matters.

In the President's reference, in the passage previously quoted, to the opinion of general practitioners held by the medical students from whom they are to be recruited, there is a shrewd touch. It is perhaps intended to convey to the teachers in medical schools a warning that it is both easy and very unwise to create in those schools an atmosphere which is unfavourable or detrimental to the status of the general practitioner. This is not a new thing. It was probably more prevalent thirty or forty years ago than it is to-day, though the effect produced was not and is not deliberate or intentional. Three-quarters of the students still pass into general practice, and no effort should be spared to present to them a high ideal of what such practice should be and usually is, and a sense of its paramount importance in the medical field.

The whole Association—and indeed, the whole profession as well as others—will wish to join in the welcome given to the President at Plymouth and in the hope that his year of office will be both pleasant and successful.

CANCER OF THE LUNG

"Any disease which throughout a quarter of a century develops from a position of obscurity to one of comparative prominence can scarcely avoid exciting the interest of the inquiring medical mind" This opening sentence forms the justification for Dr E J Simons's monograph[1] on carcinoma of the lung, and affords an opportunity of reviewing here some of the facts and fancies about this condition Is the increased incidence of bronchial carcinoma fact or fancy? Is it real or apparent only because of such factors as improved diagnosis? There can be no doubt that methods of diagnosis have improved and that therefore more cases have probably been diagnosed than would have been formerly but in addition to this Simons believes that the rate of increase in cancer of the lung has accelerated considerably since the early years of the present century He also finds that in some localities the greatest incidence seems to have been reached in 1924, and that in others it is still on the increase As with cancer in other parts of the body, the question of aetiology raises many baffling problems There is little evidence of any hereditary influence, and injury to the chest does not seem to be important, although cases have occasionally been found in which a single severe injury preceded the development of a growth in the lung In the cancer of the lung of the Schneeberg miners inhaled dust appears to be an undoubted aetiological factor the dust contains a variety of irritants, including bismuth, nickel, and cobalt, but the balance of evidence incriminates arsenical dust or radioactive substances Active tuberculosis is present in about 10 per cent of cases of bronchial carcinoma, this, however, cannot be held to have relevance to the question of causation Although it has been suggested that there is some connexion between chronic disease of the lung and cancer of the lung, so many different diseases have been suggested and so few cases have been put forward in support of each individual condition, that the causal relation is by no means clear-cut The inhalation of dust tar particles petrol fumes, and poisonous gases has been blamed but it is not easy to say where the blame lies if any In view of the extent of tobacco smoking it was to be expected that the possible part played by this in the development of cancer of the lung should be subjected to inquisition From what has already been published it is plain that the innocence of tobacco is by no means clearly established Further study of this question is needed

When we come to pathology we are on surer and more familiar ground The main group of tumours is composed of undifferentiated cells which take their origin in the deeper layers of the bronchial mucous membrane This membrane is composed of transitional epithelium, with a basal layer of rounded or oval cells and a superficial layer of columnar cells the whole membrane is derived originally from the primitive hypopharynx, which produces the squamous epithelium of the mouth and oesophagus From these cells the three common histological types of carcinoma are derived the "oat-celled" (which is the most primitive), the columnar-celled and the squamous carcinoma It is not uncommon to find some mixture of these types in a single tumour Distribution may occur by the blood stream or by the lymphatics the cerebral metastases being obviously haematogenous, and the thoracic and abdominal deposits being commonly carried by the lymphatic vessels The clinical study of bronchial carcinoma shows that it tends to occur most frequently at a rather earlier age than most other cancers, the chief incidence being in the fifth decade although many cases have been described in quite young patients A clinical classification is of much help, not only in diagnosis but also when treatment has to be considered Tuttle and Womack classify bronchiogenic carcinomata according to whether they arise in a major bronchus or in a bronchiole Rabin and Neuhof group their cases into circumscribed and non-circumscribed forms Each of these classifications indicates that there is a type of tumour situated in the hilum and close to vital structures, and another, discrete, type which in the earlier stages at least is situated deep in the surface of the lobe Cough and haemoptysis are likely to be early symptoms when a tumour is related to the main bronchi, whereas the deeply situated growth may cause few or no symptoms until metastases have occurred

The clinical findings are not usually due to the growth itself but rather to involvement of surrounding structures It is common to find collapse of a lobe, or of a lung, caused by obstruction of a large bronchus When the tumour is situated under the pleura the first signs are often those of an effusion If the diagnosis of bronchial carcinoma is to be made at a stage when treatment can be effectively applied it is necessary to abandon all thought of relying on physical signs and to attempt to base the diagnosis on the combination of suspicious symptoms and judicious investigation Any middle-aged patient who has persistent cough, especially with slight haemoptysis, should be subjected to x-ray examination without delay The other investigation which is of particular

[1] *Primary Carcinoma of the Lung* By Edwin J Simons M D Year Book Publishers Inc Chicago London H K Lewis and Co 21s

importance and which has been widely employed during the past few years is bronchoscopy and this should never be omitted when there is the slightest possibility of malignant disease Lipiodol examinations are helpful in demonstrating obstruction in the smaller bronchi which are out of reach of the bronchoscope It is as yet too early to discuss the value of tomography in the diagnosis of malignant disease The increasing safety of intrathoracic operations has made exploratory thoracotomy a procedure which should be seriously considered in suspicious early cases for it may be the only means by which a diagnosis can be made Successful treatment of bronchial carcinoma is still only to be achieved in those comparatively rare cases in which diagnosis is made at a sufficiently early stage to enable the growth to be removed The usual operation is lobectomy or even total pneumectomy and the mortality from the actual operative procedure has been strikingly lowered of recent years but it still happens only too rarely that the patient maintains freedom from recurrence for an appreciable length of time It has lately been recognized that there is a small group of cases in which a tumour of relatively low malignancy projects into the bronchus, and this type can sometimes be successfully removed through a bronchoscope The value of radiotherapy is still a subject for discussion but it appears to be definite that x ray treatment has not yet cured a proven case of bronchial carcinoma There is little reason to doubt that the duration of life has been prolonged in a considerable number of cases by the use of deep x rays and that the results are steadily if slowly improving

THE TRIAL OF MR BOURNE

On Monday and Tuesday of this week Mr Aleck Bourne obstetric surgeon to St Mary's Hospital and consulting obstetric surgeon to Queen Charlotte's stood his trial at the Central Criminal Court on a charge of unlawfully using an instrument with intent to procure the miscarriage of a girl The girl had become pregnant after being raped Mr Aleck Bourne's acquittal after a hearing which was in accordance with the highest traditions of British justice expresses the jury's view of his motive and his action—a view which will be endorsed by an overwhelming majority of their fellow-citizens It was courageous and public-spirited of him to invite prosecution in order to get the law declared on a matter of great importance to the public and more especially to the medical profession His claim cogently stated by Mr Roland Oliver, K C, was "What I have done is lawful right and honest and I have committed no offence at all" The case for the Crown put forward with moderation and respect by the Attorney General was that what he did was contrary to the law Mr Justice Macnaghten in his summing up emphasized the point that the case did not touch that of the professional abortionist

So far as the members of the medical profession themselves are concerned they alone are the persons who could properly perform such an operation It is to be hoped and expected that none of them would ever lend themselves to the malpractices of the professional abortionist No doubt they would act only in consultation with some other member of the profession of high standing so as to confirm the view that the circumstances were such that an operation had to be performed and was legal The jury having had the law expounded to them brought in a verdict of Not guilty Thus Mr Aleck Bourne has obtained the court ruling he sought and has earned the applause of his colleagues A report of the trial appears at page 199 but the medico-legal aspects of the case must be reserved for future discussion

INCOMPLETE DESCENT OF THE TESTICLE

A truly undescended testicle is an extreme rarity but the diagnosis of undescended testicle covers a multitude of degrees of incomplete descent an amended classification of which is suggested by Mr Denis Browne in his thoughtful and stimulating article on page 165 of this issue A further terminological complication in the literature of this difficult subject is that in this country the phrase ectopia testis is meant to describe a position of the testis other than in the normal line of its descent In Continental writings the term is applied perhaps more logically to any position of the testicle other than its normal one so that it usually includes cases of incomplete descent Mr Browne tilts at the custom of describing as undescended any testis that is not in the position which would be normal for an adult and he would have any position in childhood from which the testicle will invariably reach the scrotum classed as normal It may be urged that since it is normal for male children to be born with the testicles in the bottom of the scrotum any departure from that rule is abnormal and should not be classed as normal merely because in time the abnormality will right itself It may be doubted too whether most surgeons have enough prophetic insight to enable them to say that any given incompletely descended testicle will be certain to reach the scrotum spontaneously Mr Denis Browne may well be right in not taking very seriously those long lists of cases in which testicles described as being before treatment in the inguinal canal have descended into the scrotum as a result of pregnyl injections yet it is difficult to agree that 'a testis that is in the inguinal canal cannot be felt through the skin because it is a soft elongated wormlike object sunk in the soft

floor of the canal, shielded from touch by the tense tendon of the external oblique" The tendon of the external oblique is not always tense, and it allows an inguinal hernia—which one might similarly describe as a soft, elongated, wormlike object—to be felt It seems more reasonable clinically to classify non-scrotal testicles as (1) those that can be felt—which may be but are probably not in the inguinal canal—and (2) those that cannot be felt, which may be anywhere Mr Denis Browne lays valuable emphasis on the varieties of mobile testicle, in which, because of cremasteric spasm acting on a small gland, the testis, though sometimes lying in or near its normal position, is at other times much higher A large measure of agreement must be accorded to his belief that "this class supplies the greater number of the successes of pregnyl treatment" Again, in considering cases with mechanical obstruction, he stresses "the fact, still being confirmed, that cases of unilateral undescended testis average much poorer results with hormone treatment than bilateral ones," and most justifiably observes that "if one testis had descended normally it might be assumed that whatever was keeping up the other it could not be lack of hormones" Apart from the fact that incomplete descent of the testicle is usually a unilateral condition, another objection to the present wave of indiscriminate hormonic enthusiasm at which he hints is the accompanying risk of premature sexual stimulation If the volcano is activated too early may it not become prematurely extinct?

CHEMICAL ASPECTS OF ANTIGENS AND ANTIBODIES

In order to record the rapid advances that have been made in the field of immunochemistry the Medical Research Council has issued a revised edition of Professor Marrack's report on the chemistry of antigens and antibodies [1] That a second edition should be called for within such a short space of time speaks much for the usefulness of this concise and lucid account of the chemistry of antigens and antibodies and for the success that has been achieved in explaining certain immunity reactions in terms of the fundamental sciences The division of the report into five chapters has been retained, but the new edition has been extensively revised An account of the work of Svedberg and his school on the determination of the molecular weights of different proteins has been included, together with a fuller survey of the bacterial polysaccharides and a critical discussion on the relationship that has been shown to exist between chemical constitution and immunological specificity A more detailed explanation of serological cross-reactions in terms of chemical and physical structure and the important work of Heidelberger and Kendall are treated at some length by Professor Marrack and add much to the value of the report Within the last few years Heidelberger and Kendall have considerably advanced our knowledge of antigen antibody reaction by developing a theoretical treatment of the combination which appears to be in general agreement with the results of a large number of carefully planned quantitative experiments It is unfortunate that Professor Marrack did not include in the new edition an account of the recent work on the nature of bacterial antigens This work has developed rapidly during the last five years, and to-day it seems an established fact that the specific antigens of certain of the Gram-negative organisms at least are non-protein in nature Until recently it seemed probable that bacterial antigens were composed of a polysaccharide substance, with which the immunological specificity of the antigen was closely associated, combined with bacterial protein which endowed the complex with antigenic properties The demonstration of the non-protein nature of some bacterial antigens again brings forward the question why certain complexes should possess antigenic properties Large molecular size appears to be an essential characteristic of antigenic molecules, but not all large molecular complexes are antigenic It seems probable that a detailed study of the chemical and physical properties of these protein free antigens will contribute a good deal towards our understanding of the properties essential for antigenicity Workers in the field of immunochemistry and others interested in this subject are much indebted to Professor Marrack for preparing for them this reliable and up to date account of the chemical aspects of immunity reactions

[1] *The Chemistry of Antigens and Antibodies* By J R Marrack Medical Research Council Special Report No 230 H M Stationery Office 1938 (3s net)

THE BOOK OF PLYMOUTH

It might be said that Plymouth needs no book, for it is in itself a complete volume on the shelf of English history A statue of Drake stands on the Hoe to remind the passer-by of all that the sea has meant to England and of the greatness that has been built upon the audacity and courage of her sea captains From Plymouth Sound Sir Walter Raleigh and Sir John Hawkins sailed on their adventures—not all to end well And Plymouth has high responsibility to history because from here in 1620 the *Mayflower* sailed with the Pilgrim Fathers These things and others are set down in print in the *Book of Plymouth*, so ably edited by Mr F A Mayne, who wisely has not allowed the title to impose too strict and narrow limits on what is included in 248 pages of a book of exceptional interest He points out in some introductory remarks that both Devon and Cornwall are represented in the preparations of the 106th Annual Meeting of the B M A , and that therefore "no part of these counties" has been omitted in the accounts given by various experts on various aspects of the West Country The first part of the book is on Plymouth itself and the second on Cornwall and Devon The historical notes on the former by Mr C W Bracken are full of interest and instruction, and give the reader a clear picture of Plymouth's historical meaning Chapters follow on the medical history of Plymouth by Mr J Elliott Square, on vital statistics and municipal hygiene by Dr Mildred A Thynne, and on the water supply of the town by Mr Alan Atkinson In the second part of the book—on the two counties—special attention may be drawn to the well-illustrated chapter, "Before Written Record," by Mr R Hansford

Worth who learnedly discusses geological formations and their relation to human skeletons found in certain caves. On the other side of the River Tamar medicine says Mrs. Charles Henderson in her chapter on Cornwall has not always been held in great respect and the spirit of Molière seems to have dwelt in the writer of the fifteenth century verse play of the Life of St. Meriasek in this the doctor confides to his dispenser that

> If falsehood helps not
> A physician will never rise

The same standard of excellence and interest is maintained in the other chapters and we would finally refer to the pictorial maps of Devon and Cornwall by Colonel M. Orr Wilson which form the end papers of the volume and to the delightful photograph of Dr. Colin D. Lindsay the President.

THE BIRMINGHAM MEDICAL SCHOOL

The opening of the Hospitals Centre at Birmingham which was the subject of an article in our last issue is the occasion for the publication of a booklet by the Faculty of Medicine giving a short history of the Birmingham School and an account of its new buildings and environment. Systematic clinical instruction of medical students in Birmingham goes back to the opening of the General Hospital more than 150 years ago. The foundation of the School of Medicine proper was the work of William Sands Cox, the son of a Birmingham surgeon who qualified in 1824 and in the following year began a course of Anatomical Lectures with Physiological and Surgical Observations with a class of nineteen students. The school was astonishingly successful. By 1835 it had ninety students and a panel of lecturers and in 1836 William IV. became its patron and decreed that its style should be the Birmingham Royal School of Medicine and Surgery. Afterwards Queen's Hospital was established as an institution primarily for the teaching of students and when Queen Victoria granted a charter to the school in 1843 it became known as Queen's College. In 1851 a rival school Sydenham College was founded in association with the General Hospital and was administered by local practitioners. Presently steps were taken to amalgamate the two schools. This was successfully accomplished and the Birmingham Clinical Board was founded to co-ordinate the clinical teaching at the two hospitals—that is, the General and Queen's. The school owes a great deal to Joseph Mason, one of the self-made men of Birmingham at whose college the students of Queen's took their preliminary science training. In 1892 when there were upwards of 250 medical students the Medical Faculty of Queen's became the Medical Faculty of Mason's College. The booklet goes on to describe the advent of the Hospitals Centre Scheme and the planning of the new school buildings which are an integral part of the enterprise. A remark is made on the apparent anomaly that there is no provision for the teaching of medicine and surgery in the school itself: this is deliberate: the Faculty of Medicine believing that these subjects should be taught in the hospital. It is proposed as soon as the school is in working order at Edgbaston to set up three research departments—namely, in industrial hygiene, cancer and mental diseases. The school is provided with a large department for dentistry and all dental instruction, including that which has up to now been given at the Dental Hospital, will in future be given in the new buildings. The number of medical students taken each year will only be sixty-six, a slight increase on the present entry limit of sixty; but facilities will be available for the admission of a certain number of students in excess of that figure when they have finished their pre-clinical studies elsewhere—for instance at Oxford or Cambridge—and wish to take up clinical work in Birmingham. It is also proposed at a later date to make arrangements for postgraduate study seeing that the clinical material available in the city and surrounding areas is exceptional both in its size and range. When the new hospital has its full complement of beds (740) one of the other general hospitals in the city will probably be reserved for postgraduate study. The booklet is an interesting souvenir ably written and includes an aerial photograph of the new buildings and site.

ELECTROCARDIOGRAPHIC CHANGES DUE TO SMOKING

The advice he receives on smoking is to the patient with heart disease a most important aspect of his treatment since very often he has been a heavy smoker and finds drastic reduction hard to carry out. It is generally agreed however that smoking is apt to increase blood pressure and the frequency of the heart beat and cause a dry cough all of which are better avoided in cardiac disease. The patient is therefore usually advised not to smoke at all or at most a little after meals—a restriction which he finds difficult to follow as the habit is usually ingrained and pleasurable. More precise observations of the effect of tobacco smoking on the heart are supplied by A. Graybiel, R. S. Starr and P. D. White[1] who have investigated the electrocardiographic changes in forty-five subjects four of them being non-smokers and the majority tobacco addicts eleven had heart disease. After a control electrocardiogram and other records had been taken the smoke from a cigarette was inhaled until toxic symptoms appeared or it was finished. In some cases two or three cigarettes a pipe or cigar were smoked. During the test twenty-eight complained of symptoms—cerebral cardiac or gastro-intestinal. The electrocardiogram showed changes apart from those of rate in twenty of the forty-five subjects seventeen being heavy smokers and three moderate or non-smokers. The commonest change was a decrease in the amplitude of the T wave in Leads I and II and in one instance T became negative or diphasic: flattening of the previously well-developed positive T wave was not infrequent. In a few cases atropine sulphate (2 mg. intravenously) was also tried, and the effects on the tracing were found to be very similar to those of smoking. Discussing the way these changes are brought about Graybiel and his colleagues

Amer. Heart J. 1938, 15, 89

state that only three toxic substances need be considered—pyridine bases, carbon monoxide, and nicotine They believe that neither carbon monoxide nor pyridine bases are usually absorbed in amounts capable of inducing the changes recorded, and hold nicotine responsible for them all Some of the effects—for example, the increase in pulse frequency and in blood pressure, which occurred in the majority—may be attributed to stimulation of the sympathetic nervous system, but there is less evidence that the changes in the T wave were brought about in this way, though it was noted that they were conspicuous in the young and healthy but emotionally labile subject and absent in the more stolid, even with severe coronary disease Amyl nitrite was without effect on the altered wave, and the authors do not regard the changes in the T wave indicative of coronary vasoconstriction They believe that any aggravation of angina pectoris caused by smoking is due not to an action on the coronary arteries but to the well-known action of nicotine on the frequency of the heart and on the blood pressure, which are usually both increased

HARVEY CUSHING

We welcome to this country Dr Harvey Cushing, emeritus professor of surgery, Harvard University, and congratulate him on the honorary degree of Doctor of Science which was conferred on Saturday by the University of Oxford Dr Cushing has many ties with this country, for in his early days he worked in several laboratories of physiology here During the war he came in contact with many surgeons of the British Army In the course of his long tenure of the professorship of surgery at Harvard he built up his world-wide reputation as a peerless operator on the central nervous system, and inculcated his methods into men from all over the world Eminent not only in surgery, he has distinguished himself also in the field of letters and his biography of Sir William Osler will remain a monument to his literary style and his appreciation of the spirit and achievement of a great man It is only right that the biographer of the late Regius Professor of Medicine at Oxford should be honoured by the University which Osler graced during the latter part of his life Those who have worked with or been acquainted with the "Chief" have always been impressed with Dr Cushing's surgical skill and his knowledge of literature, and, more particularly, with his wisdom and understanding of patients in his care He has not only a genius for making friends but that greater genius of being able to keep them

SUCCESSFUL VACCINATION WITH DEAD TUBERCLE BACILLI

Some unusually successful results from vaccinating guinea-pigs with dead tubercle bacilli have been obtained by G Hensel [1] Twenty-one animals were inoculated, presumably subcutaneously, with 0 005 gramme of tubercle bacilli suspended in 1 c cm of lanolin or soft paraffin The organisms had been killed by exposure for two hours to a temperature of 65° C Ten to eighteen months later, when still tuberculin-positive, the animals were injected intracutaneously into the hind leg with 0 00001 mg of living tubercle bacilli from a four-weeks-old culture Ten control animals received the same infecting dose simultaneously Cultures put up from the inoculum showed that living tubercle bacilli were present Three months later all the animals were killed In the control group the focal glands were enlarged and partly caseous, and in nine out of the ten animals the spleen was obviously tuberculous In the vaccinated group, with one exception, not a single animal showed any lesions in either the glands or the spleen Examination of the vaccination site showed the presence of a capsulated lesion containing apparently unaltered vaccine material with intact acid-fast bacilli Only in the animal showing tuberculosis had the lesion developed into an abscess and discharged part of the vaccine material The reasons for the extraordinarily successful result of this experiment are discussed The author lays stress on the long period of allergy—ten to eighteen months—elapsing before infection, on the smallness of the infecting dose used and on the choice of the intracutaneous route for infection which ensured that the living bacilli gained access to the tissues slowly

[1] *Beitr klin Tuberk* 1938 91 442

NATIONAL RADIUM TRUST

The National Radium Trust met on July 12 at the Privy Council Office, with Viscount Hailsham, Lord President of the Council, in the chair The Earl of Donoughmore was reappointed for a further period as chairman of the Radium Commission (the expert body set up under the Charter which allocates the Trust's radium and supervises it in use) Various matters were reviewed affecting the supply of radium to the Trust The Trust, £150,000 of whose funds was contributed by public subscription in 1929 as a thank-offering for the recovery of his late Majesty King George V, welcomes gifts and bequests of all kinds in furtherance of its objects, including trusts subject to special conditions, which it is expressly authorized to accept under the Royal Charter granted by King George V in 1929 Its headquarters are at the New Public Offices, Whitehall, S W 1

THE HALF-YEARLY INDEXES

The usual half-yearly indexes to the *Journal* and to the *Supplement* and *Epitome* have been printed, they will, however, not be issued with all copies of the *Journal*, but only to those readers who ask for them Any member or subscriber who wishes to have one or all of the indexes can obtain what he wants, post free, by sending a postcard notifying his desire to the Finance Department, British Medical Association House, Tavistock Square, W C 1 Those wishing to receive the indexes regularly as published should intimate this

At the quarterly meeting of the Council of the Royal College of Surgeons of England held on July 14, Mr Hugh Lett, F R C S, consulting surgeon to the London Hospital, was elected President for the ensuing year

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

INJURIES TO THE ELBOW-JOINT

BY

S. L. HIGGS, F.R.C.S.

TENNIS ELBOW

Much has been written but little is known with certainty about this common minor ailment. It is an annoying condition not only to the patient but also to the doctor as treatment so often fails to effect a cure with consequent dissatisfaction to all concerned.

Diagnosis

The condition may sometimes be mistaken for arthritis of the elbow or some other painful disorder but the diagnosis may be made in a few moments as the signs and symptoms are definite and vary but little. The patient complains of pain at the outer side of the elbow and sometimes down the forearm on gripping with the fingers as in shaking hands or opening a door and on such movements as lifting quite small objects—a teapot or even a tumbler. Tennis and other games requiring a firm grip become impossible.

On examination the appearance of the arm is quite normal. The elbow should be moved passively with the muscles relaxed. No pain or stiffness is experienced so that the joint itself is thereby excluded as the site of the trouble. On active extension of the wrist against resistance especially if this movement is combined with supination the typical pain occurs. If this active extension is maintained the site of the pain can be localized. There are three usual situations all of them beneath the common origin of the extensor supinator group of muscles. The first and most usual is over the radio-humeral joint the second rather higher up in the region of the external epicondyle, and the third and least frequent rather more forward beneath the bulky part of the muscle origin. The moment the active contraction is relaxed the pain disappears. An exactly analogous condition is very occasionally found on the inner side of the elbow just below the tip of the internal epicondyle at the origin of the flexor pronator group of muscles.

The condition is rarely seen in patients under 35. The trouble is provoked by vigorous use of the arm as in playing tennis fly fishing and gardening. Although sometimes seen in industrial workers it is the occasional overuse as in games rather than regular activity which seems to determine an attack. There is often a history of rheumatism lumbago sciatica and so on suggesting that an infective factor may be at work. Frequently the history is given of a tennis elbow lasting two or even three years, but rarely longer. The trouble seems to run a certain course and then to disappear spontaneously.

These observations seem to throw some light on the nature of the disorder and to indicate the line of treatment. When the elasticity of youth has passed and at an age when focal sepsis is common unaccustomed vigorous use of the forearm muscles may lead to trauma to their deep fibres of origin. Instead of clearing up in the manner of an ordinary strain the painful symptoms persist owing it may be supposed to a low grade infective process becoming established in the damaged tissues. In a case explored by operation eight weeks after the onset of the trouble a patch of granulation tissue was discovered—an observation which lends support to this theory.

In course of time the active stage of inflammation passes into one of fibrosis and adhesions and ultimately the lesion heals and symptoms disappear. In these later stages a chronic inflammatory area resembling ash-leather may be discovered at operation.

Treatment

The multitude of methods that have been advocated only indicate the uncertainty of the results. Many patients are seen who have already tried a number of remedies—massage bone setting and the like—and are disappointed at their lack of success. Some account of the nature of the trouble should therefore be given and its chronic character and ultimate spontaneous recovery explained. The advice however will depend on the duration of the trouble when the patient is first seen.

At the onset or if it has been present for a few weeks only it is sometimes possible to cut short the attack by rest heat and avoidance of the painful movements. The arm should be kept in a sling and heat applied by antiphlogistine at night. In addition diathermy may be given. The elbow joint should of course be moved through its full range each day to prevent stiffness but the forearm muscles must be kept out of action. Focal sepsis should be sought and an x-ray examination of any crowned dead or suspicious looking teeth carried out and apical infection dealt with if discovered. Massage movements and electrical stimulation appear to make matters worse rather than better and should be avoided. Most patients do not seek advice at the early stage but only when the condition has been present for some months.

In the early chronic stage which may last a year or more treatment is most difficult. This is rather to be expected if we believe that a localized chronic inflammatory process is at work. During this period there is no actual contracture of the affected muscles and this would explain the frequent lack of success of rapid manipulative methods. It should be pointed out that a very certain cure within a short space of time can be effected by means of an operation. The majority however will not welcome this suggestion as they regard a tennis elbow as a minor nuisance not worthy of such drastic treatment. Nevertheless there are some who find a disabled arm such a hindrance to sport or work that they will agree to operative measures especially when other means have failed and for them a speedy cure is assured.

The Operation

The whole arm is given the usual thorough preparation. Then to render the operation field bloodless an Esmarch bandage is bound round from the hand upwards and finally made fast by a few turns about the middle of the upper arm. The lower part of the bandage is then unwound and the elbow held in mid-flexion with its inner side resting on a sandbag. In no circumstances

may the rubber bandage be kept on for more than half an hour, but far less time than this should be sufficient

A slightly curved incision four inches long is made on the outer side of the elbow behind the external epicondyle In this situation the resulting scar is hardly noticeable The skin is retracted forwards and then the muscles of the extensor-supinator group are reflected from the epicondyle and the capsule of the radio-humeral joint In some cases definitely pathological tissue is visible beneath the muscles No special search is made and since the object is not so much to remove anything but to relieve tension the muscles are stitched back again with a few interrupted No 0 catgut sutures It is as well to take off the Esmarch bandage and pick up any bleeding points before sewing up the skin The arm is kept in a sling until the stitches are removed one week after the operation, and then gradual return to active use is allowed The arm is usually strong and comfortable once more by the end of a further two weeks

For the majority of patients other measures must be tried Success, by operation or otherwise, is achieved by relieving tension at the painful muscle origin, and the method described by Cyriax is giving promising results, treatment can be carried out by a masseuse familiar with the technique The patient's elbow is flexed to a right angle and fully supinated Deep friction is then applied to the muscles in front of the external epicondyle over the tender area This is continued for four or five minutes after which the elbow is extended in full supination and the forearm adducted forcibly Some "cracks" may or may not be elicited The treatment is carried out three times a week, and in a short time relief should be experienced if the method is going to be successful

In the late chronic stage where adhesions have formed a tennis elbow can usually be cured in a dramatic manner by a single manipulation The suitable case can be detected in the following way The fingers and wrist are flexed and the forearm pronated The elbow is then extended By these means the affected muscle group is put on the stretch If the range of extension is limited and causes pain at the elbow we may assume that contractures have formed and that the case will respond to forcible stretching The manipulation (Mills's method) can be done without an anaesthetic, less painfully after an injection of 2 c.cm. of 2 per cent novocain into the area of maximum tenderness, but best of all under anaesthesia from gas or from an evipan injection Only a moment's relaxation is required The muscles are put on the stretch in the manner described With one hand the operator grasps the flexed fingers and wrist, and with the other the elbow, placing his thumb behind the radio-humeral joint The elbow is then forcibly extended and simultaneously the flexion of the hand and pronation of the forearm are increased to the full extent A "crack" is usually heard and felt in the region of the muscle origin at the elbow No after-care is necessary, and the patient should be encouraged to resume active use of the arm

DISLOCATIONS AND SPRAINS

Next to the shoulder-joint the elbow is most frequently dislocated Unlike the former it occurs more often in children than in adults It is an injury fraught with serious consequences because of the great damage that inevitably occurs to the ligaments and their periosteal attachments and to the neighbouring muscle insertions By far the commonest type is the posterior dislocation, due to a fall on the outstretched arm, causing hyperextension at the joint and levering of the coronoid process backwards over the articular surface of the humerus More rarely the elbow is displaced sideways, either inwards or outwards, but this is usually accompanied by fractures Anterior dislocation is rare

The diagnosis is as a rule quite obvious from a consideration of the deformity and position of the bony points What is not so evident by clinical examination alone is whether or not there is associated bony injury An x-ray examination is therefore most necessary for the purpose of both treatment and prognosis If, however, x-ray apparatus is not available, then to avoid delay and suffering the elbow should be reduced, but radiographs must subsequently be taken Frequently, in a posterior dislocation, a fracture of the coronoid process or radial head will be revealed and in a lateral dislocation more serious fractures involving the condyles may be seen

Treatment

In fresh cases reduction is easy, the ligaments and soft structures being so torn that little resistance is offered except by the bony contours It is more satisfactory in every way for the reduction to be carried out under a general anaesthetic, affording good relaxation and ample time In a posterior dislocation the coronoid process of the ulna which has slipped back beneath the lower end of the humerus, must be made to retrace its path An assistant steadies the upper arm, and the forearm is grasped and pulled firmly but gently in the line of the limb If the dislocation is of several days' duration, or difficult to reduce, then hyperextension will lever the coronoid process over the humeral surface and the joint will be felt to slip back into place The arm is then put up in fairly full flexion, but as the swelling may give rise to pressure symptoms this must not be overdone or forced A period of rest in the flexed position is most necessary, not only to allow the swelling to subside, but also to prevent recurrence of the displacement to save the torn ligaments from further trauma during the first stage of repair A sling, with early movement, is not a wise line of treatment It is better to immobilize the elbow in a moulded plaster A four-inch or six-inch plaster bandage, depending upon the size of the arm, is immersed in water and, keeping it wet, a "slab" of the requisite length from upper arm to wrist is prepared It is then put on straight over the skin to the back of the upper arm, elbow, and forearm and as it sets it is fixed in position by a lightly applied domette bandage This should leave the elbow region free in front, in order to prevent pressure and provide for inspection of any swelling The whole is supported by a sling In uncomplicated cases this splint should be retained for a fortnight and then replaced by a collar-and-cuff sling for a few days until the elbow gains the position of a right angle This is followed by an ordinary sling for at least a further week

The complications to be feared are the formation of new bone around the joint at the site of the torn up periosteum, ossification in the ligaments, and myositis ossificans in the tendon of the brachialis anticus The danger of these may be reduced but not eliminated by careful treatment, and therefore when the case is first undertaken it is advisable to inform those concerned of these possibilities-and to record them in writing

During the period when a sling is worn and also later when it has been discarded, restoration of movement should be left to the patient's own efforts Massage,

stretching and forcible measures of any kind must be absolutely forbidden as such misguided attempts instead of hastening matters may only lead to further trauma and increased stiffness and even to periarticular ossification that would otherwise not have taken place Return to normal movement is usually slow but no anxiety need be felt provided that the range steadily improves Should this become stationary or the stiffness increase then an x-ray examination must be made to determine whether ossification is occurring in the neighbourhood of the joint

Treatment of Complications

The radiographs may show a shadow above the coronoid process of the ulna indicating the onset of myositis ossificans in the brachialis anticus muscle Complete fixation of the joint for a long period is essential This is best carried out by applying a wet plaster slab direct to the back of the arm with the elbow flexed to a right angle the plaster being held in place by an evenly applied bandage Finally a few turns of a plaster bandage surround the whole In this way immobilization is assured, with maximum strength and minimum weight of plaster The hand is left free and can be used At intervals of one month fresh radiographs are taken after removal of the plaster case in order to observe progress The extent of the ossification continues for a time reaches a maximum and then begins to wane It may be six months or more before the condition becomes stationary and during the whole of this time the plaster fixation must be continued Absorption of the new bone is rarely complete Usually a branch like growth of well defined bone persists The elbow is given its freedom but no treatment is desirable With time and active use a certain range of movement will return In most cases this range is adequate but not complete If, however the limitation is serious even after a full six months of activity and it is clear that the bony growth has formed a block then this should be removed by operation Too early surgical intervention will only lead to recurrence of the ossification so patience and careful judgment based on the x-ray findings are necessary

Ossification in the ligaments or bony spurs at the periosteal attachments also require rest and avoidance of any form of irritation by massage or by passive movements Complete immobilization in plaster is not necessary, but a sling should be worn for a month or more until there is radiographical evidence that the new bone formation has ceased

Treatment of Old Dislocations

Although reduction of a dislocation is very easily accomplished soon after the injury with every day's delay it becomes more difficult In these old unreduced cases another method must be employed as *forcible stretching* with the elbow in extension may not only fail to effect reduction but may also cause further injury to the soft tissues To obtain the necessary purchase the upper arm is attached by means of a loop of broad firm bandage to a radiator or to some fixed point on the wall Strong traction is then applied to the fingers and thumb with the elbow bent at a right angle It is difficult however, to get the necessary grip and Bohler's method of applying the pull through gauze stuck to the patient's fingers and thumb with 'mastisol' is most valuable By these means steady force can be applied and the coronoid process of the ulna made to retrace its path beneath the lower end of the humerus The after treatment by a period of fixation followed by increasing activity is the same

Reduction by open operation is rarely either necessary or satisfactory as it entails so much soft part injury and subsequent stiffness

Sprains

A sprained elbow should not be regarded so lightly as a similar injury to other joints An x-ray examination is advisable since the general swelling and stiffness may conceal a fracture of the head of the radius or other bony damage neglect of which may lead to serious consequences Strapping active use and physical treatment may suffice for other sprains but in the case of the elbow rest and an unhurried and unaided return to activity is the right policy It cannot be too strongly emphasized that stiffness must not be treated by manipulation, massage or forcible stretching

LONDON FEVER HOSPITAL

OPENING OF THE NEW BLOCK

H R H the Duke of Kent on July 14 opened a new isolation block which has been added at a cost of £111,000 to the London Fever Hospital in Islington This replaces an older building which was in its time extremely up to date isolation block in the world

The New Isolation Block

The new building different from the old in almost every respect is the result of many years experience of fever hospital administration It is a three storey structure with seventy three beds so designed that each patient is isolated and it will act principally as a clearing house for incoming patients whose symptoms have not been clearly defined Doubtful cases will be observed until they can be placed in their appropriate category when they will be transferred to the corresponding ward There may also be patients with more than one disease who will need single room accommodation

Each of the three floors of the block has a wide veranda in front continuing around both ends of the building and forming a service corridor behind thus there are no closed spaces which in old fashioned buildings were responsible for a certain amount of room to room infection Except for the top floor with its two four bedded wards each floor is of the same design arranged in single rooms The rooms are separated by glass partitions which give the nurse a view of the whole length of the floor from the central kitchen though curtains afford privacy when necessary for adult patients A portable bath sink enables each patient to have a bath in his own room Each patient has his own thermometer torch spatula basin treatment tray and doctor's nurse's and visitors gowns The washing and sterilizing plant in the central kitchen is cast in one piece of stainless steel The crockery is washed in one sink, and after rinsing transferred in specially designed racks to be sterilized in a steam jacketed tank There are many such interesting contrivances and safeguards in this modern building

History of the Hospital

The London Fever Hospital was the first voluntary fever hospital in this country and is still the only one of its kind in the London area It was formed as a result of the deplorable social and hygienic conditions which existed in London 140 years ago Like many other movements of the time it originated in a tavern—the Thatched House Tavern—where a meeting of citizens was held in 1802 to institute means of dealing with the contagious diseases then so prevalent Its original home was in Gray's Inn Lane after which it moved to a site now occupied by King's Cross station It has been on its present site in Islington for

nearly ninety years During the first half of the nineteenth century the hospital was closely associated with the pioneer work of those men and women who fought to awaken the country to the appalling housing and sanitary conditions then existing Southward Smith one of the leaders in the agitation which led to the passing of the first Public Health Act in 1848, was a physician of the hospital Among the friends of the hospital who brought it into public notice were William Wilberforce, Florence Nightingale and Charles Dickens the last named in 1861 wrote a vivid account of the hospital in *All the Year Round* It was as the result of a series of confirmatory tests and observations at this hospital that Edward Jenner's discovery that vaccination with vaccinia lymph was a protection against small-pox was finally accepted by the medical profession, it was here also that Sir William Jenner, working at a table which is still preserved, established the clinical differentiation of typhus from typhoid fever

The hospital receives patients from all parts of the country, and its local character has long since disappeared Up to now it had suffered under the handicap that the public regards infectious diseases as a matter for the local authorities, and 'fever' has not the appeal of some other afflictions It has had great difficulty in raising money for its work, and this new extension is financially rather a venture of faith

Opening Ceremony

The Duke of Kent was received by Field Marshal LORD MILNE the president of the hospital, who referred to the special difficulties under which a fever hospital had to carry out its work When the life of a fever patient was saved by sound diagnosis and skilled medical attention and nursing little was said of it and few people were inclined to visit a patient unless it was their plain duty to do so, a very different state of affairs from what happened when a life was saved by surgery The result was that too few people heard of the work of the London Fever Hospital, and no spectacular gifts came its way Of the £30 000 required to build a new isolation block £20,000 had still to be found

The DUKE OF KENT praised the design of the new building, whereby the possibility of infection from patient to patient was completely avoided The hospital provided facilities which were not given in the ordinary fever hospitals, and admitted all cases of infectious diseases except small-pox His Royal Highness added a special greeting to the patients, to whom the opening ceremony was relayed

Sir WILLIAM WILLCOX speaking to a vote of thanks to the the Duke of Kent, said that the special isolation block had been desired by the medical staff for many years He gave a brief outline of recent progress in the treatment of infectious diseases There was now he stated, a reasonable hope of stamping out diphtheria by the preventive inoculation of healthy children with the diphtheria toxoid Municipal authorities were beginning to establish immunization clinics against the disease a movement worthy of every encouragement At the hospital there had been virtually no deaths from scarlet fever for several years The mortality for measles was now seven times that for scarlet fever, and during the past year over 1 000 had been completely protected from measles by the use of the preventive serum prepared at the hospital from convalescent patients

---

The International Labour Office decided in 1935 to publish a supplement to *Occupation and Health* which was an encyclopaedia of hygiene pathology and social welfare issued by the Office in 1925 The first instalment of the supplement has now been published and consists of brochures on (1) allergy and occupation (2) asbestos (3) beryllium (glucinium) (4) pneumoconiosis and (5) silicosis A special loose leaf binding cover will be offered to subscribers to the supplement The subscription rate for 500 pages including the cover is £1 and orders may be addressed to the International Labour Office at 12 Victoria Street London S W 1

MEDICAL STUDENTS' CONFERENCE

THE TRAINING OF THE DOCTOR

A medical students' conference under the auspices of the National Union of Students, was held in London from July 12 to 15, when the general subject of discussion was "The Training of the Doctor" The conference was preceded by a dinner at which Lord Horder was the principal guest At the end of the conference visits were paid to the Pioneer Health Centre at Peckham and to three London hospitals—Middlesex, Royal Free, and University College—where special demonstrations were arranged for the benefit of the students The conference was attended by delegates from all the universities in Great Britain and Ireland

The Medical Curriculum

The first address was given by Sir HENRY BRACKENBURY chairman of the British Medical Association Committee on Medical Education He began by referring to four important documents on the subject issued during the last few years These were in chronological order, a volume entitled 'Medical Education'—an exhaustive study principally of the conditions in the United States—a valuable treatise compiled by the Health Section of the League of Nations the report of the British Medical Association committee and a report by a body representing the Universities and Royal Colleges The last named was compiled by teachers only, the B M A report by a composite committee

Sir Henry Brackenbury described in detail the attitude of the General Medical Council towards the proposals in the B M A report Four main suggestions came forward (1) that the standard of general education for admission to the profession should be raised, (2) that the preliminary scientific requirements should be widened (3) that departments in medical schools should not be segregated, and that more attention should be paid throughout to the preventive aspects of medicine and to the living body rather than the cadaver and (4) that there should be a period of responsibility under supervision at the end of the training but included in the medical course *Some of the B M A suggestions had been* implemented though imperfectly, by the General Medical Council others had been negatived including the suggestion that it was not necessary that dissection of the whole cadaver should be undertaken by every medical student The B M A committee believed that a knowledge of the human frame could be taught partly by dissection by the students on a part of the cadaver, but also by demonstrated dissection by some more expert hand specimens in museums, and, above all demonstrations on the living human body One surgical member of the B M A committee, indeed had held that dissection was of no use at all because what had been learned in dissection had to be unlearned in operative surgery The objection to the dissection of the whole cadaver, on which the General Medical Council insisted was that it took a great deal of time which might be saved during the first two years of the curriculum Another important suggestion was that at the end of the student's training before registration six or perhaps nine months should be passed as a period of responsibility under supervision following which there would be an oral examination on that experience only This was being pressed and he fully expected that at the next revision an arrangement somewhat on those lines would be introduced

The Teaching of Psychology

During the ensuing discussion a good deal of interest was evinced by the students in the teaching of psychology Sir Henry Brackenbury in reply to questions said that the demand for the inclusion of the teaching of psychology in the first two years in connexion with physiology and in the clinical years in connexion with medicine came very emphatically from the students themselves The longer a man was in practice the more aware he became of the paramount

importance of the teaching of psychology in its clinical aspects But such instruction was very difficult—some teachers said impossible—first because the student by the mere fact of his youth had not sufficient experience to appreciate psychological problems and again because the actual treatment of persons with psychoneuroses had to be conducted in seclusion so that it was difficult to introduce even a small body of students Both these were formidable obstacles but he believed they could be overcome by proper teaching and wherever effective teaching of this kind had been introduced to judge from the earnest attention given it was the most popular course of all

Pre-clinical Subjects

Professor C A Lovatt Evans addressed the conference on the relation of pre-clinical subjects to the medical curriculum as a whole He began by quoting Stephen Leacock to the effect that if he founded a university the first thing he would do would be to establish a smoking room then a dormitory and afterwards when funds permitted a decent reading room and library finally going on to get some textbooks and hire a professor This was his way of suggesting that the essential thing in university education was contact with other people particularly those studying other subjects British medical education said Professor Lovatt Evans was still one of the outstanding trainings in the world Other countries might have longer or more specialized courses or on paper more searching requirements or examinations but the fact remained that medical education in Great Britain was of as good general standard as in any other country and better than in a good many

Were all the pre-clinical subjects essential to medical education? Of late there had been a good deal of talk of the need for a more vocationally directed training with rather less of pure science Was this claim at all justified? People like himself who were educators had to examine themselves as to whether the students coming to them had the right sort of preliminary education whether they were the right sort of student whether they were too numerous or too few Was there any means of knowing at an early stage whether a student had an aptitude for medicine or not? He felt there was some room for improvement in the opportunities offered at school before entering the medical curriculum Many lads who made their way to the university nowadays had been forcibly fed in their education with a view to getting matriculation or a scholarship at an early age with the result that their general culture suffered Although a fair proportion of students at the Intermediate showed a reasonable standard of literacy far too high a proportion had a standard so low and shocking as would be a disgrace to any child of 11 or 12 and of average mentality It was clear that such students had an unsuitable early education or were intellectually unfitted to enter the profession Examiners had a duty to the public to the profession and to the candidates themselves to keep such candidates from going on into a profession to which they would be no credit

Too Many Students in Medicine?

Professor Lovatt Evans went on to ask whether there were too many students in medicine Up to the present it seemed that those entering were absorbed but in all countries there were now twice as many students as there were before the war and in some countries the greatest increase had been in medicine It would be very serious to have an unemployed professional proletariat Was there any way of finding out early whether students had a right aptitude? Aptitude tests had been devised in the United States to estimate a candidate's adaptability by trying to find out what remained to him after most of the forgettable things had been forgotten and also to test his ability to work under pressure A special mental aptitude test which had been devised showed that most of the medical students could pass the test very much better than students in other branches of learning

He discussed the pre-clinical subjects one by one and came to the conclusion that all of them were necessary What about biology for example? It should not be forgotten that many of the ills which afflicted or threatened the world were products of the supremacy of the exact sciences whereby the hopes of mankind were based upon the possible rescue by comparable advances in biological science meaning sociology economics ethics perhaps heredity and race purity but free from political claptrap of all kinds He believed that the subject matter of all pre clinical subjects was so ample that all of them could be and usually were arranged so as to provide a maximum of all that was educationally desirable and vocationally useful Anatomy was of the same absolute importance as in former years but of less relative importance and in the University of London half the student's time was now given to the physiological group In the sense that the anatomy now taught was of the living body rather than of the cadaver there has been an advance in anatomical teaching. He regarded the physiological group—biochemistry biophysics experimental physiology and pharmacology—as representing the central point of pre-clinical education In this group the human body was studied along dynamic lines and if this teaching sunk deep into the student's spirit gave him a new outlook on life

The practice in some foreign countries had been deliberately to sacrifice the training of the general practitioner to the interests of the man who intended to devote himself to research Professor Evans thought that was wrong but in this country the curriculum was not as well adapted as it might be for the research worker Possibly two curriculums could be devised—one for the research worker on the scientific side and the other for general practice but nothing should be done to make it difficult for a practitioner who found that he had talent or opportunity to practise research to indulge his bent Some valuable pieces of research had been carried out in the absence of special facilities by general practitioners At the present time there was too much money available for the doing of research and not enough for the training of men to do it

Adequacy of the Curriculum

Mr Epic Pearce Gould in addressing another session of the conference said that he held that there was no profession which made the same contribution to individual and collective well being as did the medical profession nor was there an industry which made the same demand upon a man's memory his general level of intellect his kindliness of heart his understanding of human nature and his readiness to adapt himself to changing conditions and advancing knowledge If this was so it must follow that only those who were by Nature endowed with considerable intellectual gifts were fitted to take up the medical profession There were already upwards of 60,000 names on the *Medical Register* and during the last five years the average annual rate of increase was 1,800 The medical profession was bound because of the need for numbers to accept a standard lower than that which might be considered as ideal Thus it would appear that the curriculum nowadays was designed not so much to ensure a high standard as to see that the standard was not too low

Mr Pearce Gould went on to discuss the various grounds on which in his experience the curriculum was criticized—namely that it was too full that the teaching was too much in the hands of specialists that specialists took an undue part in examinations that no instruction was given during the curriculum in the art of practice and that too many people were ploughed in examinations As a member of a conference which had considered the whole subject, he had come to the conclusion that it was out of the question seriously to lighten the curriculum One had no choice but to accept the inclusion in the curriculum of some instruction in every branch of the practice of medicine and the ancillary sciences on which that practice was based Unless the students were given a very wide view not only of the fundamentals but of the widening avenues of actual practice they could not be given the background which enabled them to grasp the subsequent advances He declared

that candidates did not get 'ploughed' in surgery because they were not surgeons They ploughed themselves because they had not learnt to appreciate the fundamentals of just that part of medical practice which happened to have a surgical value He desired to see in all examinations in anatomy and physiology actual physicians and surgeons sitting in the examinations with the professors in those subjects

Teaching the Art of Practice

The difficulty in teaching the art of practice Mr Pearce Gould continued was to find the right type of man to give the right type of instruction Surely the art of practice was something which could not be taught The difficulty of the examiners was to decide whether the candidates were fit the very next day, to go out and assume the rights and responsibilities of qualified medical practitioners That being so, quite a heavy proportion of people were bound to be ploughed"

One woman student from Birmingham University in the discussion, mentioned the value of lectures on national health insurance practice, which had been given in Birmingham by Dr Guy Dain Mr Pearce Gould said that it would be a matter of machinery for the Ministry of Health to prohibit any qualified practitioner from going on the insurance panel until he had received such instruction But in his view the art of practice was much wider than learning the regulations of such a system as national health insurance It was fairly easy to give such instruction because it was all cut and dried He held that one could not really teach the coming doctor how to handle people how to evaluate those outside conditions which had a bearing not only on diagnosis but also on treatment how to talk to patients, how to judge whether someone was telling the truth or his motive in withholding it how much sympathy to express and when to adopt if necessary a dictatorial tone

In reply to another student speaker who complained that the curriculum was too full Mr Pearce Gould said that he saw a good deal of medical students and noticed very little sign of serious overwork The curriculum as prescribed was only a daytime thing The student had his evenings and week ends, and he thought it required only a moderate degree of industry to get through the necessary reading

One male student declared that if the profession was equally open to both sexes in all the medical training schools it would be possible to enlarge the scope of student material by bringing in numbers of intelligent people (women) who were able to make good doctors in due course

The final event of the conference was a general discussion on preventive medicine which was opened by Professor W W JAMESON

At a meeting of the last court of directors of the Society for Relief of Widows and Orphans of Medical Men, with Mr V Warren Low president in the chair three new members were elected Grants amounting to £2,423 were voted for the half yearly payments to the widows and orphans in receipt of relief. Included in this sum was one of £78 for special grants to enable three orphans to study for professional careers A gift of three articles of jewellery and two small Dutch paintings had been received from the executors of the late Mrs Braley Thomas A widow of a deceased member applied for relief and she was voted an annual grant of £50 from the ordinary funds and one of £25 from the Bricknell Fund It was decided that the proposed dinner to celebrate the 150th anniversary of the foundation of the society should not be held The directors desire to bring to the notice of medical men the great advantages that may accrue by joining the society Membership is open to any registered medical man who at the time of his election is residing within a twenty mile radius of Charing Cross Relief is only given to the necessitous widows and orphans of deceased members Full particulars may be obtained from the secretary 11, Chandos Street Cavendish Square W 1

Local News

ENGLAND AND WALES

Voluntary Hospitals Committee for London

The Voluntary Hospitals Committee for London, whose office is at 10, Old Jewry E C 2 has recently extended its area and the term of office having expired, a new committee has been elected for the next five years Officers have been elected as follows chairman Mr Oliver N Chadwyck-Healey vice-chairman Dr A M H Gray, treasurer Lord Annaly secretary Mr A G L Ives The following is a list of the members elected by the hospitals

Hospitals with Undergraduate Schools

Dr H E A Boldero
Lt Gen Sir George Cory
Professor L S Dudgeon
Dr Geoffrey Evans
Dr A M H Gray
Mr Norman Lake F R C S
Capt H L Milsom
Sir Frank Newnes Bt
Mr Austin Taylor
Mr F P Whitbread
Mr G T Whiteley
Sir Charles Wilson, M D

Hospitals without Undergraduate Schools

West and West Central
Sir John Weir, M B

South West
Capt G M Eden
Dr T A Matthews

East
Mr Percival Cole, F R C S
Mr G A Hepworth
Major Raphael Jackson
Mr Frank Jennings

North-West
Mr Harold Pearson

South-East
Mr F A Lyon
Mr F L Richardson
Dr C E Sundell

North
Mr G G Painter
Mr F D Saner F R C S

Special Hospitals

Children's
Mr O N Chadwyck-Healey
Dr Reginald Jewesbury
Mr Arthur Morley K C
Sir Edward Penton

Women and Maternity
Mr J V O Sullivan, F R C S
Mr L Curnac Rivett, F R C S
Mr C S Wentworth Stanley

Chest
Sir A Kaye Butterworth

Ophthalmic
Mr A J M Tarrant

Nervous
Mr J P Wetenhall

Ear Nose and Throat
Mr Harold Kisch F R C S

Ungrouped
Lord Annaly
Mr J Swift Joly F R C S
Capt Robert Whitney

Atmospheric Pollution

Twenty-four representatives of local authorities and other organizations co operating with the Department of Scientific and Industrial Research in investigations into the nature and extent of atmospheric pollution met recently at the offices of the Department Alderman D Adams, M P of Newcastle presided over the conference, which has now been meeting regularly for ten years It was reported that during that period there had been a marked increase in the number of places at which observations of deposited and of suspended matter were being regularly made by co operating bodies, and that in addition a continually growing number of regular observations were now being made of sulphur gases in the atmosphere by methods which had since been introduced The conference expressed strong belief in the importance of continuing and extending the investigation in order to provide the assured basis of fact necessary for determining the nature of remedial measures desirable and for estimating their effect when introduced Dr G M B Dobson, F R S Chairman of the Atmospheric Pollution Research Committee presented a report on the progress of the investigations carried out under his committee He dealt first with

the work in progress at the special survey of atmospheric pollution in and around Leicester Routine measurements had now been systematically made for a year over a considerable area to obtain information about the behaviour of pollution under various weather conditions It was proposed to continue these for a further year at least The work of the survey also included tests under practical conditions of new types of instrument and research on methods of measurement

SCOTLAND

Surgical Research Department at Edinburgh University

The Minister of Health Dr Walter Elliot, opened the extensions to the surgical research department of Edinburgh University on July 20 They consist of an extra floor for laboratories and research rooms The operating theatres which were a leading feature in the original building have been refitted and compare favourably with those of any modern hospital There is also a medical art studio staffed by two fully trained medical artists When this department was opened in 1926 it was the first *of its kind in the Empire but similar departments have* since been introduced elsewhere Dr Elliot at the opening ceremony said that the function of the department was threefold (1) the use of the experimental method in medical research (2) the intimate study of the anatomy and the pathology of the spread of disease (3) the gathering together of the younger members of the school for discussion of experimental physiological pathological, and clinical problems The importance of correlating all the most recent advances in physiology with practical problems in surgery could not be overemphasized That the younger generation of surgeons should be trained in the controlled observations of the laboratory was the best guarantee that a high standard of observation and record would prevail in our hospitals Referring to the experimental work of the department Dr Elliot mentioned the researches into the causes of gall bladder disease and of peptic ulceration of the stomach and duodenum and into the cause of death in various forms of intestinal obstruction The mechanism of massive collapse of the lung following operation had been studied as also had the relation of kidney disease to rise in blood pressure The successive changes which resulted when the outflow from one kidney was obstructed had formed the subject of a prolonged and delicate group of experiments A series of experimental observations had been made on the relationship of disturbed nerve function to disorders of the abdominal viscera With regard to the spread of cancer in man a special feature of the department had been the use of microscopical sections of whole organs combined with a detailed study of the spread by the lymphatic route Thus cancer of the stomach of the colon, and of the rectum had been the subjects of elaborate investigations and authoritative data had been obtained The feature common to all the research work Dr Elliot continued, had been the co ordination between clinical problems in the hospital and experimental investigation in the laboratory It was this stimulus of human interest and human need which lent to the work of a surgical research department the living interest which was often lacking in purely academic investigations

The tenth French Paediatric Congress will be held at the Hopital des Enfants Malades Paris from October 6 to 8 when the following subjects will be discussed Severe anaemias in infancy introduced by Dr Louise Weill of Lyons toxi infections in infancy introduced by Dr R A Marquézy and Mlle Ladet and megacolon and dolichocolon introduced by Drs Rohmer and Boppe Further information can be obtained from Dr Maurice Lamy, 94 Rue de Varenne Paris, 7e

Correspondence

Testimonial to Dr Robert Hutchison

SIR —The election of Dr Robert Hutchison to the Presidency of the Royal College of Physicians has given the greatest pleasure to a very wide circle of friends to whom Robert Hutchison has stood for all that is sound in the practice of medicine and all that is good in tradition We feel that this occasion provides the opportunity of showing our esteem to him personally and acknowledging in some degree his fine contribution to medicine

It is proposed to commemorate the occasion by presenting Dr Hutchison with his portrait and with this purpose in view we venture to make known the project to old students friends and societies in London Edinburgh and the Provinces

Personal donations should not exceed three guineas Cheques should be sent to the Manager National Provincial Bank 10 Marylebone High Street London W1 for the credit of the Robert Hutchison Testimonial Fund —We are etc

LANCELOT BARRINGTON WARD	FREDERICK KAY MENZIES
HUBERT BOND	GEORGE NEWMAN
EDWIN BRAMWELL	GEORGE ROBERTSON
DAWSON DE PENN	HUMPHRY ROLLESTON
DUNCAN C I FITZWILLIAMS	BERTRAM SPEARS
FRANCIS FRASER	FREDERICK STILE
R S FREWEN (Hon Treasurer)	G A SUTHERLAND
WILLIAM GOSCHEN	JAMES TAYLOR
F J MCCANN	JAMES WALTON
MACMILLAN	DAVID WILKIE
ARTHUR MACNALTY	

Cancer and Heredity

SIR —The question whether malignant cells differ from normal cells in their genetic constitution is one of the central problems of cancer If the existence of such a difference could be demonstrated conclusively it might justifiably be claimed that an explanation of that phase of the causation of cancer which in a recent lecture I called the growth of cancer had been found The statement made recently (*Journal* July 9 p 93) by Dr P A Gorer in which he refers to certain observations as presenting evidence for the existence of such a difference deserves therefore the most careful consideration The observations referred to by Dr Gorer are first that a virus induced tumour in the rabbit will regress spontaneously and secondly that the members of a pure line can be immunized against leukaemic cells derived from other members of the line

The virus induced tumour of the rabbit referred to by Dr Gorer is the infective papilloma discovered by Shope The argument underlying this conclusion is if I understand Dr Gorer correctly that the production of cytotoxins which he assumes to be responsible for the regressions of tumours demonstrates necessarily the existence of a genetic difference between the normal cells of an organism and the tumour cells which have arisen from them It is presumably true that cytotoxins can be produced in the organism by cells having a different genetic constitution but it does not seem to me to follow logically that we can invert this argument and accept the appearance of cytotoxins as conclusive evidence of the existence of such a genetic difference Furthermore, neither the infective papilloma nor leukaemia is a representative example of the phenomenon of malignancy In fact, the frequency with which the rabbit papilloma regresses spontaneously after an initial cellular prolifera-

tion distinguishes the behaviour of this tumour sharply from the behaviour of a spontaneous malignant growth The property which characterizes a malignant growth is its autonomous continued growth Regression of a spontaneous malignant growth is a phenomenon so exceptional and so incalculable that it may be given as the modern example of a miracle The initial epithelial proliferation of the Shope papilloma and its subsequent regression is a phenomenon exhibited also by a number of other virus diseases Thirty-five years ago Borrel by a close comparative study of such virus diseases which he called *épithélioses infectieuses* and of the epitheliomata arrived at the conclusion that *il y a analogies il n y a pas identité*

If we are to accept the spontaneous regression of the rabbit papilloma of Shope as evidence for the existence of a genetic change in the cells of this virus-induced epithelial proliferation, there seems to me no reason why such an argument should not apply also to the regression occurring in epithelial proliferations produced by other viruses We should then arrive at the conclusion that the entrance into epithelial cells of a number of different viruses leads to a change in the genetic constitution of these epithelial cells The regression of the virus-induced rabbit papilloma does not, therefore, present very convincing evidence for the existence of genetic differences between normal cells and the cells of this papilloma, or of malignant cells generally But even if, for the sake of the argument, we accept the line of reasoning adopted by Dr Gorer, there remains still the outstanding fact that the overwhelming majority of malignant tumours arising spontaneously in an organism as distinct from those induced by viruses never show any regression If the occurrence of regression is to be interpreted as evidence for the existence of genetic differences between normal and malignant cells does the absence of regression not present evidence for the absence of such genetic differences?—I am etc

Imperial Cancer Research Fund, Mill Hill N W 7 W CRAMER

The Origin of Cancer

SIR,—As an evolutionist let me assure Dr J V Fiddian (*Journal* July 9 p 92) that no one was more disappointed than myself on learning—after making careful inquiry at the fountain head—that the hypothesis of the conjugation of the cells of a malignant neoplasm had been abandoned for if true, it would have lent strong support to the view of the genesis of cancer in terms of reversion But it is worse than useless hugging a fancy in the face of plain plump fact Dr Fiddian will probably not persist in cherishing an illusion after reading the following statement by Dr Bashford in the Annual Report of the Imperial Cancer Research Fund for the year 1905 to 1906 than which nothing could better show the true scientific spirit with which that investigator was imbued

During the past year a paper has been communicated to the Royal Society (*Proc Roy Soc* 1906 Series B **77**) showing that the nuclear figures in cancer cells believed to indicate the occurrence of a true reducing division are in reality of the ordinary type In that paper we withdrew categorically any support which our observations might be conceived to furnish to this hypothesis or to the inference others have based upon it that essential similarities existed between cancer and reproductive tissue The attempt to explain the continued power of growth and the fluctuations in cancerous proliferation on the assumption of a reducing division followed by a nuclear fusion has been abandoned'

—I am etc

Esham Surrey July 13 CHARLES M BEADNELL Surgeon Rear Admiral

When to Start Sulphonamide Treatment in Gonorrhoea

SIR,—I was much interested in the letter from Colonel L W Harrison in the *Journal* of July 9 (p 90) His advice that sulphonamide remedies should not be given in the early acute stages of gonorrhoea has also been borne out in the treatment of children Since August, 1937, at the Children's Medical Home, Waddon, and at the South London Hospital for Women, twenty eight children, aged from 3 to 13 years, have had courses of prontosil album The response was most satisfactory clinically and bacteriologically in all except five cases It is significant that in four of these unsatisfactory cases treatment was started within two to seven days of the onset of infection They showed a slight clinical improvement, but this was not maintained, and tests remained positive for gonococci

The twenty-three cases which reacted well to treatment had infections varying in duration from three days up to three and a half years before their admission to the home They have now been watched for periods of from eight to thirty-five weeks since the completion of treatment Thirteen have passed full tests of cure—that is, a minimum period of six months' observation and at least twelve negative tests, including the final set after a provocative vaccine Six cases have had courses of uleron Three, with durations of infection of two, four, and nine weeks respectively, have now been watched since the completion of treatment for twenty-seven, twenty-four, and twenty weeks respectively without relapse The remaining three cases did not respond to prontosil album and they showed no improvement under subsequent treatment with uleron It is noteworthy that in the treatment of gonococcal vulvo-vaginitis in no case where the initial response to sulphanilamide treatment was good has there been as yet a relapse while the child remained in the home Follow-up reports from the venereal disease clinics, however, show that two of the chronic cases had "suspicious smears" and received further courses of sulphanilamide after leaving the home

In recent weeks, working in conjunction with the venereal diseases department of Guy's Hospital, fourteen children have had courses of T 693 The immediate clinical and bacteriological response has been excellent in every case, but no child has yet been watched for a longer period than two months since the completion of treatment The duration of infection before starting treatment in five cases has been from two up to twenty five days, and in the remaining nine cases from five weeks up to eight months It is too early at present to speak with any degree of certainty but there is a possibility that this new drug will prove more efficacious in the treatment of early acute cases than have other drugs of the sulphonamide series—I am, etc,

London W 1, July 12 D KATHLEEN BROWN

Anti-venereal Measures

SIR—I am obliged to Miss Alison Neilans (*Journal*, July 9, p 94) for correcting the inaccuracy in my reference to the decline of syphilis in Denmark, and even more so for admitting that Denmark and Sweden in this respect have "certainly achieved better results than England and Wales I regret however, that she seems to be as hostile to compulsion as in the controversy over the Edinburgh Bill of 1928, when it was argued that wherever compulsion had been tried it had proved a failure, that it

was bound to result in concealment of disease in resort to treatment by unqualified persons blackmail and police persecution of prostitutes If the interpretation of statistics is a debitable matter there is no ambiguity about the statements in the Scandinavian Report regarding these other subjects Colonel Harrison and his colleagues (p 120) could find no evidence that the operation of the law has led to concealment of disease to any appreciable extent or imposed undue hardship on the people As regards blackmail (p 116) they made careful inquiries in Denmark and Sweden, both of the public health and the police authorities whether any trouble has been experienced in this respect In both countries we were informed that there had been some instances in the past especially in the years immediately following the coming into force of the *lex veneris* in each country but that nowadays anything of this sort is very rarely found

With the old arguments against compulsion thus demolished by testimony that Miss Neilans accepts I would rest content but for a most misleading phrase in the last paragraph of her letter The choice before us she writes is to go on continuously improving our national fight against V D on voluntary methods or of abandoning our present system and going all out for compulsion The choice is nothing of the sort' No sane critic of our present methods of dealing with venereal diseases suggests abandoning them It was wise policy to provide facilities for treatment and educative propaganda in the years immediately following the war, before making treatment compulsory in this country But in the opinion of many of us it is more than time that these measures were supplemented by the granting to public health authorities of powers to trace sources of infection and to secure necessary treatment if need be by compulsion The Trevethin Committee in 1925 recommended the trial of compulsory measures in a limited area in this country In the light of the Commissioners report —their evidence *not* their conclusions—no fair minded person has good grounds for opposing such an experiment

In conclusion let me remind Miss Neilans whose work is directed so untiringly to the welfare of women that under the present voluntary system it is the women and children who suffer most The infant death rate from syphilis is all but three times as great in England as it is in Sweden (p 119) In that country too there were many who were afraid that compulsion would do more harm than good Thus runs the report (p 114) In Sweden it appears that there was acute divergence of opinion in the early years of the present century on the most suitable methods for dealing with venereal diseases and the associated problem of prostitution Notwithstanding the divergent views held on the matter of compulsory treatment prior to 1918 we did not find in any quarter the opinion that the law of 1918 was a mistake and there appears to be general agreement that the ill results which some authorities anticipated would follow the introduction of a system of compulsory treatment have in fact not occurred —I am, etc

Brentwood July 9 ROBERT FORGAN

Chicken-pox followed by Panophthalmitis

SIR —The reports of unusual cases of chicken pox in recent issues of the *Journal* prompt me to record the following case of chicken pox which was followed by panophthalmitis The clinical history has been supplied by Dr M D Mellersh house physician to the Chelmsford Hospital

A male child aged 2 years and 10 months was admitted to Chelmsford Hospital on February 16 1938 with fever and a petechial rash He had had scarlet fever at the age of 12 months On the morning of February 15 the child had complained of aching pains in the limbs and of sore throat In the afternoon a rash appeared and during that evening he had a convulsion lasting three quarters of an hour On February 16 he was delirious and vomited he was admitted to hospital On admission the child had a petechial rash mainly distributed on the legs thighs and forearms and a temperature of 102 F The throat was inflamed The pupils were equal in size and dilated but reacted normally No rigidity of the neck was present Kernig's sign was negative On February 17 the temperature was 101 F and the petechial rash was fading The left eye showed conjunctival oedema

I was asked to see the child on February 18 and found a panophthalmitis of the left eye with pus in the anterior and vitreous chambers There was no evidence of meningeal infection The corneal epithelium was intact and showed no staining on the application of fluorescein On February 19 the child developed a typical chicken pox rash at about the same time other children of the same family developed chicken pox at home This fact was communicated to me by the doctor who sent the first child to hospital the chicken pox in his case pursued a mild course The eye gradually deteriorated and its tension became subnormal its contents were eviscerated Dr F E Camps pathologist to the Chelmsford Hospital reported that cultures from the pus in the vitreous chamber grew colonies of *Staphylococcus aureus*

I have been unable to find any record of a case of panophthalmitis in chicken pox but cases have been recorded in typhus typhoid fever variola scarlet fever anthrax influenza and diphtheria —I am etc,

Chelmsford July 9 S G CORNER M.D

"Psychosomatic Illness"

SIR —All who, within recent years, have studied the writings of Dr James L Halliday upon what one might call the psychic side of everyday illness must have been deeply impressed and influenced and the further reading investigation and observation to which these studies led have profoundly influenced our practice I am indeed grateful for a widening of my outlook and I am confident that my patients to no small degree have benefited by my learning even a little of what I was taught nothing in my student days over thirty years ago I was, however while interested somewhat shocked upon my perusal of his paper in the *Journal* of July 2 and the reason was that he should do injury to a good case by calling upon the aid of Dr P L McKinlay the medical statistician to the Department of Health for Scotland I have great admiration and respect for the gifts of Dr McKinlay, and not a little fear

When we consider the anxiety state created in so many of our young men at the most vital time of their lives by unemployment the strain upon multitudes of our young women by employments for which either mentally or physically they were not created the excessive cocktail drinking of so many females in the seventeens to twenty-fives the excessive smoking amongst both young men and young women and the strain generally incurred as a result of the work sport and the actual living of modern life we cannot but believe in the profound influence of a psychoneurosis and a disturbance of the psycho neuro endocrine system in the promotion of modern invalidism and the burdens—physical mental and financial—which this invalidism is inflicting upon all classes involved We must not however allow the realization of these facts the influence of papers by men in the mental and official groove of Dr Halliday and the

statistics of Dr McKinlay to overweigh our sense of the physical "Mechanistic treatment' and investigation are necessary in the majority of the cases of the disorders of which Dr Halliday writes

I have had within the last few months a case of carcinoma of the stomach at the age of 19 years two cases at the age of 22 years, and one case at the age of 27 years It would have been worth the risk of "fixing symptoms to have saved these lives by a mechanistic investigation and treatment, the failure to carry out which on account of the early vagueness of the symptoms, cost the lives concerned Rheumatoid arthritis in the young and osteo arthritis in the middle-aged mean absolute ruin for these lives unless we invoke every means of investigation and treatment It is folly to call these diseases "psychosomatic"—at least no proof has been given—and, whatever the risk of "fixing symptoms" may be, to avoid any means of investigation or treatment known would be unpardonable Then there is heart disease in the young We general practitioners spend many moons pulling these cases over their rheumatic fever with its complications—peri-, myo-, and endocardial Our patient appears before the regional medical officer just when we allow him or her to move gently about, and the heart is apparently, but not in reality, sound "Ah! ' says the regional officer, "a case of defect of the psycho-neuro endocrine system" Up go the statistics, back to duty goes the patient, and a life is ruined because an official mind clouded by a theory ignored practical experience and common sense

I accept and admire much of Dr Halliday's work, he has opened up a comparatively new and most helpful line of thought for us all but do not let him go too far Above all, in such an indefinite sphere as the psychic, let him avoid the statistician or his whole work will tumble down like a pack of cards—I am etc,

Tain Ross-shire, July 7 E K MACKENZIE

The Unconscious Mind and Medical Practice

SIR—In your issue of July 9 (p 93) the late Dr Harry Campbell complained that psycho analysts give no precise definition of the term 'unconscious This definition has been given so many hundreds, or thousands of times, and has never varied since psycho analysis began fifty years ago that I had not thought it necessary to include it once more in my article It is simply 'that part of the mind of which the subject is not conscious —I am, etc,

London W 1 July 12 ERNEST JONES

SIR,—One can quite understand your correspondent, the late Dr Harry Campbell being puzzled at a first introduction to the concept unconscious fantasy' To the practising analyst all psychogenic symptoms, dreams, and much behaviour are merely outward and visible signs of fantasies which are still unconscious If for instance, a patient has a phobia of entering a tunnel it means that he is the victim of a fantasy that dreadful things will happen to him in that tunnel In that he does not know what these things are, or, indeed why he is afraid the fantasy is an unconscious one Similarly if a patient asks if the door is properly closed it usually means that he has the fantasy of somebody listening and overhearing his secrets though here the fantasy may not be entirely unconscious It is the business of analysis to bring these fantasies into the patient's consciousness in order to free him from their domination over his feelings and conduct and as an essential step towards cure—I am etc

London W 1 July 15 CHARLES BERG M D D P M

Abortion and the Law

SIR—Much publicity is being given in the lay Press to an alleged breach by a distinguished medical man of the law relating to abortion The question has therefore been raised of how far this law is open to criticism on medical, social, and genetic grounds We are aware that the subject is now being fully considered by a Departmental Committee, but we understand that the findings of this committee will not be made public in the immediate future Many arguments have been advanced in favour of widening the grounds upon which it should be legally permissible for pregnancies to be terminated It is to one only of these arguments—namely, the genetic—to which we would like to draw attention Certain recommendations have been made by a Departmental Committee on Sterilization as to the categories of persons for whom facilities for voluntary sterilization should be made available on genetic grounds We associate ourselves with these recommendations

From the biological standpoint we consider a sterilizing operation to be a more significant and drastic procedure than a termination of pregnancy, in that the first measure destroys fecundity, while the second does not We therefore think that facilities for the voluntary termination of pregnancy should be made available to those persons specified by the above-mentioned Departmental Committee on Sterilization as being appropriate candidates for voluntary sterilization We further think that similar facilities should be extended to women who have become pregnant as the result of an incestuous union or of rape That a child who has been brutally conceived as a result of a criminal assault on its mother will be handicapped later in life by environmental and nurtural factors can scarcely be disputed It is no less obvious that the child is liable to inherit from the father some at least of the qualities which prompted the action which gave it life These are not qualities which anyone would wish to be perpetuated

The force of these considerations has been recognized by at least one foreign country In Denmark there took effect on April 1 of this year a law according to which a pregnant woman may have a pregnancy terminated in the following cases

1 If the termination of pregnancy is necessary in order to avert serious danger to the life and health of the woman

2 If the woman has become pregnant as a result of an incestuous union or of rape

3 If there is obvious danger that the child owing to hereditary disposition will suffer from insanity mental deficiency from grave mental disorder epilepsy, or serious incurable physical disease

(A translation of this law appears in the *Eugenics Review* volume xxx No 1 (April 1938) p 43)

The grim predicament of the mother, the future well being of the child thus inauspiciously launched into existence and the interests of posterity simultaneously call for a widening of the grounds upon which abortion should be permitted—We are, etc,

HORDER (President)
HAVELOCK ELLIS
JULIAN HUXLEY
E MAPOTHER
R RUGGLES GATES
J A RYLE
W LANGDON BROWN
C P BLACKER (General Secretary)

The Eugenics Society
London, S W 1 July 20

Medico-Legal

CHARGE OF PROCURING ABORTION

Mr Bourne Acquitted

On July 18 and 19 Mr Aleck William Bourne FRCS was tried at the Old Bailey for unlawfully using an instrument with intent to procure the miscarriage of a woman (The police court proceedings were reported in the *Journal* of July 9 p 97) The indictment as first drawn did not contain the word unlawfully This appears in the Offences against the Person Act 1861 sect 58 on which the charge was based and the word was added to the indictment on the motion of Mr Roland Oliver KC leading counsel for the defence who maintained that nearly the whole of his case rested on the interpretation of the word Mr Bourne pleaded Not Guilty

Mr Oliver also asked that any member of the jury who might consider on religious grounds that there were no circumstances in which a pregnancy ought to be terminated should withdraw The Attorney General Sir Donald Somervell KC associated himself with the request and Mr Justice Macnaghten warned the jury that if any of them by reason of any preconceived view felt in a difficulty about giving a verdict according to law and evidence it was desirable in the interests of justice that he or she should retire from the trial None of the jury, however left the box Two members were women

Case for the Crown

The Attorney-General who appeared with Mr L A Byrne and Mr Henry Elam in opening the case read the words of sect 58 of the Act

Whosoever with intent to procure the miscarriage of any woman whether she be or not with child shall unlawfully use any instrument or other means whatsoever with the like intent shall be guilty of felony

He explained that the girl had been criminally assaulted and raped and a man had been convicted of the offence At that time she had been under 15 and a virgin On May 21 she was taken to see Dr Joan Malleson who came to the conclusion that the girl was pregnant and wrote to Mr Bourne a letter which after introduction, stated

Dear Mr Bourne

"I have been consulted by the organizer of the Schools Care Committee about a girl of 14 called —— It is possible that you saw in the paper some three weeks ago that this girl was assaulted in Whitehall by some soldiers The actual facts were that she was with two girl friends who ran off and left her and she was held down by five men and twice assaulted It appears that she is free of venereal infection but the Z.A test has just come back positive

I gather from the lady who brought her that everybody connected with the case *i e* the police surgeon the doctor at her work the school doctor etc all feel that curettage should be allowed her and I understand that Dr —— and possibly some other psychiatrists of good standing would be prepared to sponsor therapeutic abortion I presume they must mean on grounds of prophylaxis because there does not appear to be any nervous disorder present All this of course gets us nowhere unless someone of your standing were prepared to risk a *cause celebre* and undertake the operation in hospital

Many people hold the view that the best way of correcting the present abortion laws is to let the medical profession gradually extend the grounds for therapeutic abortion in suitable cases until the laws become obsolete so far as practice goes I should imagine that public opinion would be immensely in favour of termination of pregnancy in a case of this sort

If there is any chance that given adequate professional backing you feel prepared to consider this I would take a lot of trouble to get people of high standing to see this girl and should of course feel that it was most valuable if the case was conducted publicly in hospital

I am told that a rather grim twist is added to this case by the fact that the girl's parents are so respectable that they do not know the address of any abortionist and are I gather having to set about to find one for they could not possibly let her go through with this She seems a normal healthy girl and on medical terms there is obviously nothing to be said

I hope you will forgive me for troubling you about this

With kind regards

Yours sincerely

JOAN MALLESON

PS—Unfortunately the matter is made a little more difficult by the fact that the girl was admitted to St Thomas's Hospital under Mr —— who I think from the report of his attitude must be Catholic He took the conventional standpoint that he would not interfere with life because the child may be the future Prime Minister of England and that anyhow girls always lead men on But she is not any longer under his care nor is it yet public that the Z.A test is positive

On May 27 Mr Bourne had replied

I am interested in the case of rape which you describe in your letter I shall be delighted to admit her to St Mary's and curette her I have done this before and have not the slightest hesitation in doing it again Therefore please let me have the girl's name and address and ask her parents to send her to see me I have said that the next time I have such an opportunity I would write to the Attorney General and invite him to take action

On May 31 the girl's mother had taken her to see Mr Bourne and on the same day the father had written to him saying that he gave his consent to the operation to be done for his daughter in St Mary's Hospital as arranged with his wife on condition that no publicity of any sort was given to the case On June 2 Mr Bourne wrote to Dr Malleson telling her of this request to keep the operation entirely secret and said that he must respect their wish and that the operation would be done next week To the father he wrote assuring him that no effort would be spared to keep the matter secret Sir Donald added that the matter had been brought to the attention of the police authorities but he did not suggest that this had been in any way due to any act by the defendant or that he had done anything inconsistent with the undertaking given in his letter The operation had been performed on June 14

In conclusion the Attorney General said that the jury would have to decide subject to the judge's ruling and on the facts whether there had been an unlawful use of an instrument to procure a miscarriage He also admitted that on the construction of the statute if it were necessary in order to save the life of a mother to use an instrument to procure a miscarriage he would not submit that that would be an offence under the section

Evidence for the Prosecution

Giving evidence for the prosecution the girl said that on April 27 she had been raped by a soldier and that at that time she had been 14 years and 9 months old The defendant had performed an operation on her Her father gave evidence of the correspondence with Mr Bourne and said in answer to Mr Oliver that he had given no one permission to publish the case

Dr Joan Graeme Malleson said in cross-examination that there was very great variation of opinion among obstetricians and medical people generally about what was lawful in regard to the procuring of abortion Some went so far as to say that it was not permissible in any case even to save life and others took the view that it was lawful in the interests of the health of the mother She shared that view and held that it was better to perform an abortion than that a woman should be physically mentally, or nervously broken down by having a child particularly conceived in such circumstances She believed that was also Mr Bourne's view Many doctors

thought that miscarriage should be permissible upon what might be called 'humanitarian grounds alone, but not many used that term actually for procuring an abortion She did not know any who thought that was legal She knew some doctors, however, who would produce a miscarriage when the child was likely definitely to inherit a bad trait She had heard of doctors who had taken pity on a woman who had been raped, and she thought that right In answer to the judge, she said she meant pity for a woman where there had been a prosecution for a rape in a court of justice, and not where the woman complained that she had not consented to sexual intercourse She agreed that danger to a woman's life was increased by the fact that she was only 14 and also that she had been injured in the process of a rape, that her mental condition would be such that she might be in grievous danger and that her nervous system stood a good chance or might stand a good chance of being shattered She considered that a proper case

Mr P C F Wingate said he had been resident at St Mary's Hospital until the end of June Before the girl was admitted Mr Bourne had told him he had been asked to see the girl, that she was pregnant as a result of rape and under the age of consent, and that he had been asked to admit her in order to terminate pregnancy and also asked to report his action to the appropriate authorities in the hope of making a test case of it He had understood Mr Bourne to say that the parents were objecting to the publicity that must follow such a case, but the defendant had not said whether he would report his action to the authorities A test for pregnancy had been made and the result was positive He had been there when Mr Bourne operated on June 14

Cross examined by Mr Oliver, he said that it was proper that before performing such an operation the girl should be kept under observation for a considerable time, and that it was quite proper for Mr Bourne to do so for eight days It was careful and proper treatment to repeat the tests for pregnancy and venereal disease which had been done before her admission, to verify both results If she had had venereal disease the operation would not have been performed because of the fear of infection He had been present when Mr Bourne had taken the swab for the venereal test This would not hurt her it would be uncomfortable She had been a little distressed and cried He had not heard Mr Bourne say anything that he could remember Her behaviour had not particularly impressed him, he had rather expected her to be distressed as the circumstances were very unpleasant for her He agreed that the girl was a proper subject for curettage

Chief Inspector Walter Bridger, examined by Mr Byrne said that he had called on Mr Bourne on June 14 The defendant asked whether it was about the girl and hearing that it was, he said I emptied the uterus this morning, I want you to arrest me' The witness cautioned him and said the facts would be reported to the proper authorities The defendant said that the girl had been brought by her mother to his house, admitted to St Mary's Hospital and placed in his ward under his care and since she had been in she had been waiting for a pregnancy test, which was positive and tests for gonorrhoea which so far had been negative As an obstetric surgeon in his opinion it might be dangerous for a girl of her age to bear a full-grown child

Cross examined, witness said he wrote down Mr Bourne's statement in his book as the defendant dictated it He had wished to warn Mr Bourne that in no circumstances could an operation be consented to but as it had already taken place his visit was useless

Mr Oliver Was he rather nettled at that and did he say that he had his duty as a surgeon and his responsibility and could not be dictated to by you on a matter of that sort'—No but I will accept it if he says it

I rather that you will accept anything he says'—I would, Sir

This closed the prosecution's case

Counsel's Submission on the Law

Mr Roland Oliver said that as much of the case would turn on the form of the learned judge's direction to the jury and the law of the case was what his Lordship declared it to be, he invited the judge to direct the jury on the law at that stage He could not he said address the jury and put forward a view of the law unless he knew what the judge held that law to be he must not put before the jury a different view of the law from that of the judge The case was not covered by any authority at all It turned on what the judge decided was the meaning of the word "unlawfully' whether it meant, as the Attorney General said, that nothing was lawful except for the purpose of saving the life of the mother—he did not know where his learned friend had got that definition from!—or whether as he himself contended anything was sufficient justification for an abortion which, in the view of a responsible and skilled surgeon, was for the benefit of the mother's health in the sense that her health would probably be seriously impaired if it was not done Anything he continued, which would induce a competent surgeon to remove a limb or an eye for the sake of the patient's health should be sufficient justification for abortion, the same standards should apply It was fantastic to suggest that a major operation was only justified for the purpose of saving life In other sections of the Act the words "unlawfully and maliciously occurred it was a felony punishable like abortion with penal servitude for life to give an anaesthetic or to cause grievous bodily harm 'unlawfully or maliciously It could not be said that an anaesthetic could only be used in a case of life and death Surgeons who took off arms and legs would be committing the criminal offence of mayhem or maim if they were not justified by the benefit to the patient's health The test should be the same through all sections of the Act He submitted that a doctor was entitled to induce a miscarriage where, if he did not there was a danger to the girl's health—using that word in the broadest sense The jury should be asked "When Dr Bourne used the instrument on June 14, was he acting in the honest and reasonable belief, based on adequate knowledge and experience that it was in the best interests of the girl's health that her pregnancy should be terminated?' Russell on *Crimes* said that the word "unlawfully' excluded from the section acts done in the course of proper treatment in the interest of the life or health of the mother That statement had stood unchallenged since 1909

The Judge's Direction

Mr Justice Macnaghten addressing the jury, said

This section contains the word "unlawfully Counsel are agreed, and it is my opinion that the word 'unlawfully is not a meaningless word in this section, and it necessarily follows that there may be a procurement of abortion which is lawful The procuring of abortion was an offence long before 1861 It was an offence by the Common Law of England before ever Parliament existed It was only in the reign of George III that it was made a statutory offence Apparently there was some question under the Common Law whether the procuring of abortion by the administration of poison was an offence and an Act was then passed making it clear that it was an offence This section was merely a re enactment of the previous statutory provisions

The section begins by making it unlawful for a woman to procure her own miscarriage That undoubtedly has been the law of England from the earliest times A woman is not entitled to procure her own miscarriage and the fact that she desires urgently to be relieved of her trouble does not justify the procurement of an abortion It is true that there is no authority on this matter so far as I am aware The issue that you will have to try is an issue that has never before been raised but it is obvious that where the act is done—anyhow in modern times—by a skilled person, without any risk to the

patient for purpose of saving her life it must be lawful We have not had any medical testimony so far—it may be that we are going to have some—but laymen know that there are cases where it is reasonably impossible for a woman to be delivered of her child and survive In such cases an operation for terminating pregnancy plainly becomes lawful I have no doubt that has always been the view of the judges of this country and of the great men who sat in Westminster Hall on the King's Bench

To-day the position is greatly simplified by an Act of Parliament passed in the year 1929 If after a child has been delivered and has an existence independent of its mother the mother or the accoucheur kills the unwanted baby that is murder and always has been murder by the law of England There arose a case in which it was thought that provision had to be made where an accoucheur while a woman was being delivered of a full term child—because the child was not wanted—killed it before it had an existence independent of its mother and yet in circumstances that did not amount to the procurement of abortion because the child was being delivered at full time in the ordinary course of nature Parliament thought right to provide for that case *Of course it is a case that would very rarely arise and even much more rarely ever be known of* A Bill was passed through the House of Lords in the year 1928 and sent down to the House of Commons bearing what might be thought the somewhat misleading title of the "Infant Destruction Bill"—a title which might give rise to the idea that it was a Bill for the *destruction of infants The House of Commons never gave* it a second reading under that title and in the following year it was introduced again and passed into law with the more illuminating title of the Infant Life Preservation Act 1929 It is of tremendous value in throwing light on the law of this subject Section 1 enacts

> Any person who with intent to destroy the life of a child capable of being born alive by any wilful act causes a child to die before it has an existence independent of its mother shall be guilty of felony to wit of child destruction and shall be liable on conviction thereof on indictment to penal servitude for life provided

And here are the words which require your close attention

> That no person shall be found guilty of an offence under this section unless it is proved that the act which caused the death of the child was not done in good faith for the purpose only of preserving the life of the mother

You will observe that by that proviso it is not for the accused to prove that it was done in good faith for the purpose of preserving the life of the mother it is for the Crown to prove that it was not done in good faith for that purpose *The burden of proof rests upon the Crown*

The direction which I propose to give you is this If you are satisfied by the evidence when we have heard it all that Mr Bourne did not terminate the pregnancy of this girl in good faith for the purpose of preserving the life of the girl if you are satisfied that the Crown have proved that negative you should find him Guilty If you think that the Crown have not proved the negative that the law requires them to prove then you should find him Not Guilty

What is the meaning of preserving the life of the mother? That is a matter which must depend on the circumstances of the case and on the evidence produced before you It must be obvious that it may be perfectly lawful to perform the operation if the doctor is of opinion that the continuance of the pregnancy is certainly going to result in the death of the mother Of course it may be—we may hear, we do not know—that if the operation has to be done the sooner it is done the better There are many considerations which influence the decision of the doctor on what should be done in the particular case If the Crown fail to satisfy the jury that it was not done for the purpose of preserving the life of the mother then my direction to you here is that your verdict should be a verdict of Not Guilty If on the other hand the Crown do satisfy you that they have discharged the burden placed upon them under the section then your verdict should be Guilty I give you that direction in law because of my view that the proviso to Section 1 of the Act of 1929 explicitly states what always has been implicitly in the section under which Mr Bourne is charged here

Mr Roland Oliver I cannot altogether separate the questions of what is necessary to preserve life and what is necessary to preserve health

Mr Justice Macnaghten I quite agree with you and it is for the jury on the facts to say if they think that the Crown have discharged the burden put upon them. It is a question of fact in each particular case and nobody can say without knowing the facts of the case whether the abortion was lawful or unlawful

Case for the Defence

Mr Roland Oliver then addressed the jury He said that probably never before had a man stood in the dock in that court because he had acted from a motive of purest charity and could say that he had believed that he was carrying out his duty under the law which was to look after his patient to the best of his ability to guard her health and protect her from mental or nervous breakdown Mr Bourne was at the head of his profession and altogether above the suggestion that he wanted advertisement There was probably no one in court who would not at least give him praise for his courage he had done that which he believed to be right

For various reasons women would always demand abortion merely because they did not wish to bear children and professional abortionists would always be forthcoming Those of course were persons against whom Section 58 was directed There was no wonder that the gravest misgivings had always been and horrified *medical men in dealing with the question of what cases* were legitimate and proper for this operation Their views ranged from persons who thought that it should never be performed at all to those who would do it merely because an unfortunate child had been raped As the law stood this was not a legitimate ground Between those two extremes came the views of a great body of *medical men and women* who said that the operation could not be limited to cases in which the mother's life was in immediate danger but that a reasonable view must be taken The operation must be done they said by a person of skill knowledge and experience and he must balance the ordinary risk of the operation against the danger to health in its widest sense if the operation were not performed

Mr Bourne had spent his life in that controversy, and had experience of cases in which the operation ought in his view to have been performed and had not been with disastrous results He had been prepared to make a *martyr of himself* for the purpose of having the law declared his view being that if the general interests of the patient's health were endangered by having a child it was the surgeon's duty to operate He had not courted publicity but had been willing when the proper case came along to have the matter dealt with That this had happened in the particular case had been none of his doing The wisdom of his attitude did not concern the Court It was a thoroughly gallant thing to do, and no one would *suggest that his motives had been anything* but the highest from beginning to end The whole thing was a work of the purest charity

Mr Bourne in the Witness-box

Mr Aleck Bourne then went into the box and was examined by Mr Roland Oliver

He said that he had devoted *much attention to the question* of when the termination of pregnancy was justified To him in common with all gynaecologists it was a constant problem The views of his professional brethren varied enormously In October 1935, he had been about to terminate pregnancy in a child of 15 and his house-surgeon had declined to assist him and on Mr Bourne's invitation had walked out of the operation theatre That doctor had only recently been qualified and had objected on religious

grounds This refusal had led Mr Bourne to think very hard and he had determined to obtain the ruling of the Court on the next occasion—that was why they were there He felt very deeply about the matter If there were adequate medical reasons in the widest sense on his interpretation of the law based on the everyday practice of reputable members of the profession he considered it justifiable to terminate pregnancy and he could not draw a line between danger to life and danger to health If a doctor waited for danger to life the woman was past assistance He regarded abortion as a major operation, speaking in terms of other branches of surgery He thought that 99 per cent of his colleagues would be agreeable to have abortion performed on such patients as those on whom he had done it He most emphatically included the preservation of mental health and the health of the nervous system among his indications He did not think that such physical injuries as the girl had received would have caused a direct difficulty in her delivery The circumstances of her conception were, however, such as to implant in her mind seeds of terror Those who had clinical insight knew that terror and fear were the most serious deterrents to the unfolding of the whole process whereby assistance might be needed which would in its turn do damage The fact that she a virgin had been raped and treated in that way was a very strong element to him in making up his mind Her age was another, the chief bones in the pelvis were not united Her temperament and nervous make up would be an important factor He had naturally felt that some process of observation should be carried out but frankly admitted a bias in the direction of relieving the child when he heard that she was connected with the crime

Believing that the operation would be essentially necessary he had first had to exclude at least three factors He had felt practically certain from the first that she was no mental defective, he would not have operated if she had been because she would not have suffered mental distress in the pregnancy, and the quality of the child was no concern of his If she had belonged to the prostitute type he would probably though not certainly have decided against operating for similar reasons Thirdly, if she had been infected with venereal disease, an operation might have spread the infection up the birth canal and caused really serious illness On the contrary he had decided that she was emphatically suitable to have her uterus emptied The ward sister had reported with surprise that the girl had not appeared to be worried at all and was unusually cheerful considering the circumstances This had at once made him suspicious that her cheerfulness was a façade of courage erected as a defence against her feelings He had not made any kind of examination before taking the swab for the infection test and had been as careful as possible not to cause pain then He had watched her demeanour when it had been first brought home to her by this procedure that she was really pregnant and the memory of the assault had come back to her Instead of her bearing the trifling discomfort with fortitude she had broken down and cried That had confirmed his decision and later in the day he had operated after seeing the pathologist himself about the swab The mischief he had feared for her if the pregnancy had proceeded included as its least important factor the possibility of physical injury which could to some extent have been repaired He had however learnt from the many young children of this kind he had seen that much more important was the mental and nervous injury for it was extremely difficult to cure It would have been a source of nervous psychoneurotic and other troubles and there would perhaps have been secondary physical illnesses all her life

In answer to cross examination by the Attorney General Mr Bourne said that he had never intended to operate on the girl before observing her and carefully considering whether she was a suitable case He had admitted her with a bias in favour of operation because in his experience a large number of similar cases required it His record of abortion would stand any examination He was ordinarily much stricter than many of his colleagues but when there was a case with definite indications he would not hesitate in terminating pregnancy Statistical experience showed that young children were subject to a much higher proportion of physical disorders and serious dangers than adult women

The Attorney General 'I suggest to you that there is a perfectly clear line of distinction between danger to life and danger to health'—"No I cannot agree to that without qualifying I cannot say just Yes or No I can say that there is a large group whose health would be damaged but whose life almost certainly would not be sacrificed There is another group at the other end whose life would be definitely in very great danger and there is a large body of material between those two extremes in which it is not really possible to say how far life would be in danger, but we find of course, that health is depressed to such an extent that their life is shortened as in cardiac cases Therefore you can say that life is in danger because death might occur within measurable distance of the time of their labour'

The operation said Mr Bourne, had certainly not been necessary to preserve her immediate life, but to say that her nervous system would probably be adversely affected would be a very mild term He could not recall personally any instances of nervous or mental damage, but he had had many brought to his knowledge by reading and by conversation in the general way of collecting experience by contact with medical men Such a point could be appreciated by one even with rudimentary knowledge of the elements of psychological medicine Asked whether it was not usual for a gynaecologist in such a case to take a second opinion he answered that he was usually appealed to himself and had considered himself in this case as a second opinion

Further Evidence for the Defence

The defence then called Dr Jacob Arthur Gorsky, divisional police surgeon who described how he had examined the girl on the night of the rape and had found her very distressed though giving a rational and coherent story He said that his examination had revealed a physical condition consistent with the story of violence and rape which she had told to him then and subsequently at the trial of the guardsmen

Dr J R Rees testified to Mr Bourne's professional reputation and said that things of the mind were bound up with physical well being He was from time to time consulted professionally as to the advisability of terminating pregnancy, and had often considered carefully the grounds on which he would advise such treatment The terror likely to be produced in this case and the age of the child, would strongly predispose him towards advising it He did not think that Mr Bourne was putting it too high when he said that these two facts alone would give him a strong bias in favour of operation they would have just the same effect on his own mind In this case he would certainly have advised the termination of pregnancy There would have been no question about it because he was sure there would have been trouble in the future Asked what the danger was he replied that from his angle which was the mental one the results to be expected were rather comparable with shell shock This girl had been in fact wounded, one might say that she had been blown up and he did not see why she should go on and be buried by having to continue pregnancy She was almost certain to get some form of mental breakdown He knew personally of two cases where intercourse had taken place under the age of consent one was by rape and the other by incestuous relationship with the father Both the patients had carried a child to term, and had been grown up when he first saw them Both had suffered from varying neurotic difficulties which had crippled them neither had made a successful marriage, both were terrified at all matters connected with sex and were anxious and unstable in every way Had the pregnancies been terminated he thought that without question the mental state would have been better His colleagues had related to him a number of similar cases in some of which there had been definite mental breakdown—schizophrenia—as well as all sorts of abnormalities He could not find any case in which the mother had remained mentally normal though in two cases she had been physically normal

The Attorney General asked Dr Rees if it were not impossible to assign specific portions of the mental disturbance

to the original rape and the subsequent child bearing respectively Dr Rees replied that it was not entirely impossible A recent research on child assault had produced some evidence to show that the dramatic episode was not so important as the continued strain and the general emotional atmosphere For some years he had been collecting data about cases of rape in which conception had not occurred Symptoms certainly might appear in such cases but he definitely thought that the danger of mental disturbance was reduced if pregnancy was terminated when it occurred Preserving life to him meant preserving health it was not possible to let a person drift into a mental breakdown in the future and say one was preserving life The same symptoms might arise from other causes but he thought that the resentment the immense crushing sense of inferiority and the interference with instinctive life in the degree in which they were found in these cases constituted a syndrome which was in some sense unique

Mr William Gillatt declared that Mr Bourne in the view of those who knew him was a very competent obstetric surgeon well qualified to form an opinion on the desirability of operation After hearing Dr Rees's views he would himself undoubtedly have terminated pregnancy in this case He described to the Court the additional risks run by young girls in childbirth both from the toxaemias of pregnancy and from the incomplete ossification of the pelvis The maternal mortality of the 15–20 age group was one per thousand higher than the average He had collected from the reports of two maternity hospitals three cases of delivery between 13 and 14 four cases between 14 and 15 and 35 cases between 15 and 16 this girl would have been 15½ at the time of delivery The percentage of abnormality in labour in these children was 45–50 and the figure was borne out by a German paper on the same subject The principal difficulty which arose was ineffective action of the uterus and delay so that interference was necessary and sepsis was likely to result This did not pass off if infection occurred in childbirth it remained for life

Lord Horder examined by Mr Roland Oliver said he was not infrequently consulted in cases where severe mental or nervous breakdown seemed likely to occur if pregnancy were not terminated and that he considered the operation was justifiable in such cases The facts of the child's age and the rape would have led him to the same conclusion as Mr Bourne had come to so far as he could judge without seeing the patient It was not his opinion that the operation should *only be performed to save life from immediate danger*

Concluding Addresses by Counsel

Mr Oliver in his final address to the jury, said that Mr Bourne's attitude was that what he had done was lawful, right, and honest and he had committed no offence The statute of 1929 which dealt with the killing of a child at the point of birth, dealt with a case in which obviously immediate danger to life would excuse the destruction of the child Applying it to the present case one could speak properly of the preservation of the life of the mother in speaking of preservation of her health for her life ultimately depended on her health A wide and liberal view should be taken of the words to preserve the life of the mother The proposition that a doctor could only terminate pregnancy if the girl would otherwise die was a very extravagant one and to say that he must not operate even if he were faced with the practical certainty that she would have a complete nervous and mental breakdown revolted one's sense of justice and every other sense Mr Bourne was not responsible for the views of Dr Malleson The prosecution had called no medical evidence and there was no evidence to throw doubt on the honesty and competence of the defendant or upon the proposition that the mental health of the girl for the rest of her life was likely to be greatly prejudiced If you say he concluded, that the defendant had committed a felony one will be left *reflecting gloomily on the sense and reasonableness of one* branch of English law

The Attorney General in his concluding address for the Crown, said that the prime reason why abortion was a grave offence under the law and perhaps always had been was that the law was based on the sacredness of human life The destruction of an unborn child was the *destruction of a potential human life He suggested that* there was a fundamental difference between preserving life and preserving health In any given set of circumstances a doctor or surgeon would be able to say "I did this to preserve the life of my patient He would then mean something different from when he said I did this to preserve the health of my patient Mr Bourne's letters showed that he took a very wide view of the cases in which the operation was proper to be performed The evidence showed that the Crown had succeeded in proving that the operation had not been done for the purpose only of preserving life Sir Donald Somervell did not minimize he said the possible mental effects of which Mr Bourne and the other doctors spoke The question was whether those mental effects grave as they were justified the termination of the pregnancy

The Judge's Summing up

Mr Justice Macnaghten in summing up the case to the jury said that the offence was regarded by the law as a grave one The punishment might be penal servitude for life and the charge was only triable by a judge of the High Court As a rule a case would only come before the Courts when something had gone wrong because the crime was committed secretly but judging by the cases that came before the Courts the crime was by no means uncommon This was the second case at the present sessions in which a charge had been preferred for an offence against this section He only mentioned the other case to show how different the present case was from those of the usual type A woman without any medical skill or qualification had done what was alleged against Mr Bourne she had unlawfully used an instrument for the purpose of procuring the miscarriage of a pregnant girl She had done it for money £2 5s had been her fee She had come from a distance to a place in London to do it and a pound had been paid her on making the appointment She had used her instrument and within an interval of time measured not by minutes but by seconds the victim of her malpractice had been dead on the floor She had been paid the rest of *her fee and had gone away That was the class of case* which usually came before the courts

Mr Bourne's case was very different A man of the highest skill had openly at one of our great hospitals performed the operation—whether it was legal or illegal the jury would have to determine—as an act of charity without fee or reward unquestionably believing that he was doing the right thing and that he ought in the performance of his duty as a medical man devoted to the alleviation of human suffering to do it That was the case which the jury had to try

The matter had never, so far as he knew arisen before for a jury to determine in circumstances such as these Even among learned counsel there had obviously been some doubt as to the proper expression of the law Certainly one of the medical witnesses Dr Malleson, had shown uncertainty as to the law It appeared from her letter that her views about the law were erroneous and it was only fair to her to say that her last statement in the witness box had been that she was a doctor and not a lawyer On the previous day in response to a request by Mr Oliver, he had indicated to the jury his view of the law The jury would take the law from him if he erred and they found the accused guilty the Court of Criminal Appeal would put the matter right He saw no reason to modify his earlier directions The question the jury had to determine was, 'Has the Crown proved to your satisfaction, beyond reasonable doubt that the act which Mr Bourne admittedly did was not done in good faith for the purpose only of preserving the life of the girl?' If the Crown had failed to satisfy them of that Mr Bourne was entitled to a verdict of acquittal On the

other hand if they were satisfied beyond all real doubt that Mr Bourne had not done the operation in good faith for the purpose only of preserving the life of the girl the verdict should be "Guilty"

I fully agree, said his Lordship 'with the criticism of Mr Oliver that the Infant Life Preservation Act, 1929 is dealing with the case where the child is killed while it is being delivered from the body of the mother But the proviso in that Act—that no one is to be found Guilty unless it is proved that the act was not done in good faith for the purpose only of preserving the life of the mother—expressed what has in my view always been the law with regard to the procurement of abortion Although that proviso was not expressed in the Act of 1861 the use of the word unlawful' implies the same thing that no person ought to be convicted under section 58 of the Act of 1861 unless the jury are satisfied that the act was not done in good faith for the purpose only of preserving the life of the mother

This is a case of great importance to the public and more especially to the medical profession It has nothing to do with the ordinary cases of procuring abortion which I have had before me here Those cases concern persons with no skill and no medical qualifications with no pretence of being able to say that they were acting for the preservation of the mother's life Cases of that sort are in no way affected by consideration of the question that is put before you It has always been the law that the Crown have to prove the offence beyond reasonable doubt to prove that the act was not done in good faith for the purpose only of preserving the life of the mother In the ordinary case no question can arise it is obvious that that defence could not be available to the professional abortionist

We have had a great deal of discussion about the difference between danger to life and danger to health It may be that you are more fortunate than I am I confess I have a great difficulty in understanding what the discussion really meant Life depends on health and it may be that health is so gravely impaired that death results The Attorney General suggested to Mr Bourne that there was a clear line of distinction between danger to health and danger to life [his Lordship read the Attorney General's question] and he assumes that it is so But is it? Of course there are things that are obviously a danger to health without being a danger to life Rheumatism I suppose is not a danger to life but it is certainly a danger to health Cancer is plainly a danger to life according to experience as it exists to day maybe a time will come when cancer will not be a danger to life There are maladies that are a danger to life and maladies that are a danger to health but is there a clear dividing line a perfectly clear line of distinction? I should have thought not I should have thought that impairment of health might reach a stage where it was a danger to life [His Lordship read Mr Bourne's answer stating that there was a large body of patients between the two extremes of whom it was not possible to say how far life would be endangered but whose health was depressed to such an extent that life was shortened and death might occur within measurable distance of labour] The learned judge continued

If that is the view that commends itself to you that you cannot say that there is this division into two separate classes with a dividing line between them then it may be that you will agree with the view that Mr Oliver put forward when he invited you in construing those words for the purpose only of preserving the life of the mother,' to take a wide and liberal view of their meaning I myself prefer the word 'reasonable to the words wide and liberal I do not think it is contended that those words mean merely for the preservation of the life of the mother from instant death There are cases as I expect you know from your own experience, where it is reasonably certain that a woman will not be able to deliver the child of which she is pregnant In such a case where the doctor anticipates basing his opinion on the experience and knowledge of the profession that the child cannot be delivered without the death of the mother in those circumstances he is entitled—and indeed it is his duty—to perform this operation with a view to saving the life of the mother If knowledge and experience teach that that is going to be the result obviously the sooner the operation is performed the better It is not necessary that the doctor should wait until the unfortunate woman is in peril of immediate death, and then at the last moment if he is successful, snatch her from the jaws of death He is not only entitled but it is his duty to perform the operation with a view to saving her life

"You have heard of the wide variations of opinion which exist within the medical profession Some there may be who hold the view that the fact that the woman desires an operation to be performed is sufficient justification for it That is not the law On the other hand there are others who for what are said to be religious reasons, object to the operation being performed at all in any circumstances That is not the law On the contrary a person who holds such in opinion ought not to be a doctor—practising anyhow in that branch of medicine Indeed in a case where the life of a woman could be saved by performing the operation if a doctor refused to perform it on the ground of some religious opinion and the woman died, he would be in grave peril if he were brought before this court on a charge of manslaughter by negligence He would have no better defence than a person who again for some religious reason refuses to call in a doctor to attend to his child Where, if a doctor had been called in the life of the child would have been saved and a person for a religious reason—a so called religious reason—refuses to call in a doctor he is also answerable to the criminal law for the death of his child I mention those two extreme cases merely to show that the law which is a reasonable law lies between those two It does not permit of the termination of pregnancy except for the purpose of preserving the life of the mother But I think myself that those words ought to be construed in a reasonable sense if the doctor is of opinion on reasonable grounds on adequate knowledge, that the probable consequences of the continuance of pregnancy would indeed make the woman a physical wreck or a mental wreck, then he operates, in that honest belief 'for the purpose only of preserving the life of the mother

'These general considerations have to be applied to the particular facts of this case Everything that has been said here tends to confirm the view that each case must depend upon its particular facts and the circumstances of each case must vary infinitely It is very undesirable that a young girl should be delivered of a child Parliament has recently raised the age of marriage of a girl to 16, the opinion of Parliament is that it is very undesirable that a girl below 16 should marry and have a child The medical evidence here establishes that view that it is undesirable that a young girl should go through the stage of pregnancy and finally of labour Then regarding the effect of rape upon a child under the age of 16 Dr Rees has said that from his experience and his knowledge the mental effect produced by pregnancy brought about by rape has a most prejudicial effect upon the mind of the girl It is the merest common sense that if a girl is feeble minded or belongs to the class that is described as the prostitute type for her it is a different matter But for an ordinary decent girl brought up in an ordinary decent way, by parents without any knowledge—as Dr Malleson observed—of where they could look for a professional abortionist you may think that Dr Rees was not understating the probable effects on her life of having to bear this child

'All this of course, depends upon your opinion As far as danger to life is concerned of course you cannot be certain that there is danger to life unless you wait until a person is dead Nobody asserts that the operation only becomes legal when the patient is dead It is all a matter of opinion The example of acute appendicitis was mentioned It is a matter of common knowledge that the surgeon prefers to operate when the appendicitis is not active Take this case A child is suffering from symptoms which a doctor diagnoses as appendicitis The symptoms subside and the doctor says The symptoms have subsided and she will probably get quite well again, but at the same time it may be merely a temporary lull and to morrow the condition may be much worse If you let me prepare the patient and operate to day

I can guarantee the life of your child and the operation will be performed in perfect safety If as probably happens when there is appendicitis the child gets worse the appendicitis becomes acute and the doctor has to operate as he may have to in such circumstances that he cannot guarantee the life of the child the child may die Suppose that choice is put to the parents Will you have the operation to-day or will you wait until to-morrow to see whether the disease becomes acute? —what answer is there to that question but to say Do it now do it while you are still safe do not wait to see whether she is near death The operation may be performed and it may be found that the appendix was quite all right but is the surgeon blamed for performing the operation? He used his best judgment The surgeon can only base his opinion on knowledge and experience and if he in good faith thinks that it is necessary for preserving the life of the child in the real sense of the words not only is he entitled to perform the operation but it is his duty to perform it

In regard to any other operation on the human body obviously no difficulty arises The only difficulty that arises in the case of abortion is that the law of this land has always held human life to be sacred and the protection that the law gives to human life extends to the unborn child in the womb The unborn child must not be destroyed except for the purpose of preserving the yet more precious life of the mother

In conclusion the judge repeated the question on which the jury had to return their verdict He added that so far as the members of the medical profession themselves were concerned they alone were the persons who could properly perform such an operation It was to be hoped and expected that none of them would ever lend himself to the malpractices of the professional abortionist No doubt they would act only in consultation with some other member of the profession of high standing so as to confirm the view that the circumstances were such that an operation had to be performed and was legal

The jury were absent for forty minutes and returned a verdict of Not Guilty

Mr Aleck Bourne's defence was conducted by Messrs Le Brasseur and Oakley solicitors to the London and Counties Medical Protection Society

AN ACTION WITHDRAWN

At Leeds Assizes on July 12 an action brought by a patient against a hospital house-surgeon was withdrawn The plaintiff was John Neville Newmarch a Hull rivet heater and he sought to recover damages for alleged negligence from Dr Martin Fleischer house surgeon at Hull Royal Infirmary who performed an operation on him in October 1936 Mr H Hylton Foster counsel for Newmarch said On behalf of the plaintiff I unreservedly and in the most unqualified manner withdraw every allegation of negligence made against the defendant in this case and I ask for an order for the payment out of court of the sum paid into court to the defendant's solicitor Mr Justice Goddard made an order that all proceedings should be stayed on terms endorsed on counsel's briefs and added that there would be a judge's order if necessary

Universities and Colleges

UNIVERSITY OF OXFORD

In Convocation on July 16 the Vice Chancellor Mr A D Lindsay presiding the honorary degree of D Sc was conferred on Dr Harvey Cushing C B Emeritus Professor of Surgery at Harvard University

The Public Orator Mr Cyril Bailey presented Professor Cushing as an illustrious surgeon who had performed more than 2 000 successful operations on the brain He was descended from a long line of doctors and obtained his medical degree at Yale After studying in Europe he returned home and maintained in his writings and proved by his actions the value of the very difficult operation on the brain which he himself once called The North West Passage of Surgery The fine services he had rendered during the great war were well known to all For nearly thirty years he was Professor first at Yale University and then at Harvard and many of his pupils were to-day famous An expert with the pen as well as with the scalpel he had written many technical treatises on the nerves the structure of the brain and the pituitary gland and for the layman the great life of Sir William Osler

The following medical degrees were conferred in Congregation presided over by the Vice Chancellor

D M —A D C Bell R R Bomford

B M —T R Savage J M Teasdale W E Young J B Atkins R H Mole E B G Reeve M A Slee A Shannon R A Shawyer J C Hewetson O I Green C W M Whitty J S Astbury W M Gibson D R Cargill C Exell C P B Welford J G Jamieson T E Ooi Celia K Westropp

UNIVERSITY OF LONDON

Brown Animal Sanatory Institution Committee

The Senate has received the report of the Brown Institution Committee for 1937 which records that the superintendent has continued his research on viruses and Dr Nathan Raw has continued his research in human and bovine tuberculosis Five lectures on A Comparative Study of Filter Passing Bacteria and Viruses were delivered as required under the will of the late Mr Brown At the hospital during the year 1 298 cases were treated as out patient thirty two as in patients and the number of operations performed was 311

Graham Legacy Committee

Dr A M H Gray has been elected chairman of the Graham Legacy Committee for the year 1937–8 The Senate has received the annual report of the Committee for the year ending August 1938 which states that the general purpose for which the Graham Fund was founded was to aid research in the school of advanced medical studies connected with University College Hospital The Graham Scholar is Mr C H Gray and Drs C Bolton G R Cameron M Maizels and F H Teale have received grants in aid of research from the Graham Fund Professor C R Harington F R S was reappointed Director of Research under the Charles Graham Medical Research Scheme for a period of one year from October 1

Regulations relating to exemption from the internal intermediate examinations in arts science engineering economics and commerce and from the first examination for medical degrees through the higher school examination of other universities (*Red Book* 1937–8 pp 89 345 489, 556 575 269) have been approved

In and after 1939 the examination for the academic post graduate diploma in bacteriology (*Red Book* 1937–8 p 610) will begin on the Thursday following the third Monday in June instead of the first Tuesday in July

Mr Philip H Mitchiner has been appointed a Governor of the West London Hospital Medical School for 1938–9

The syllabuses in inorganic chemistry physics and general biology for the first examination for medical degrees for internal and external students (*Red Book* 1937–8 pp 264–7 *Blue Book* September 1937 pp 809–12) have been amended and copies can be obtained from the Academic and External Registrars

Geoffrey E Duveen Travelling Studentship

Applications are invited for the Geoffrey E Duveen Travelling Studentship of the value of £450 for research in any aspect of oto rhino laryngology The studentship is normally tenable in the first instance for one year part of which shall be spent in study abroad in accordance with a scheme to be approved by the Studentship Board but it may be extended for six months or for one or two years and during the extended period the student may be allowed to undertake research at the Royal Ear Hospital or some other laboratory approved for the purpose Full particulars can be obtained from the Academic Registrar University of London W C 1 and prescribed forms of application must reach him not later than December 31

William Julius Mickle Fellowship

Applications for the William Julius Mickle Fellowship are invited and must be sent in by October 1 The Fellowship is of the value of at least £200 and is awarded annually by the Senate to the man or woman who being resident in London and a graduate of the University has in its opinion done most to advance medical art or science within the preceding five years and has therein shown conspicuous merit Further particulars can be obtained on application to the Academic Registrar

No 27

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended July 9 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 13 principal towns in Eire (e) The 10 principal towns (9 in 1937) in Northern Ireland

A dash — denotes no cases a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929-37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	18	3	8		1	28	3	6		1		
Deaths		1	2				—	1				
Diphtheria	1,001	127	151	49	21	927	127	137	39	19	892	171
Deaths	22	2	4	2	—	28	3	4	1	—		
Dysentery	51	23	40		—	18	3	9		—		
Deaths				—	—				—	—		
Encephalitis lethargica acute	4	—	4	1	—	8	—	1		—		
Deaths		1					1					
Enteric (typhoid and paratyphoid) fever	13	2	6	5	4	32	1	6	7	3	50	—
Deaths	—	—	—	—	—	—	—	—	—	—		
Erysipelas			59	2	5			57	3	5		
Deaths		2					2					
Infective enteritis or diarrhoea under 2 years												
Deaths	64	19	10	10	2	44	14	11	6	2		
Measles			91		7			87		2		
Deaths	7	3	1	—	1	15	—	—	2	—		
Ophthalmia neonatorum	113	9	26		—	105	8	30		—		
Deaths												
Pneumonia influenzal†	500	42	5	1	16	532	26	3	4	2	546	42
Deaths (from influenza)	11	2	2	—	—	7	1	3	1	1		
Pneumonia primary			139	8				133	9			
Deaths		15		8	6		13		6	4		
Polio encephalitis acute	1	—				1	—					
Deaths		—					—					
Poliomyelitis acute	6	—	4		—	9	2	2		1		
Deaths		—					1					
Puerperal fever	5*	5	17	3	—	35	3	17	3	—		
Deaths		—					—					
Puerperal pyrexia	164	17	23		—	141	16	20		—		
Deaths												
Relapsing fever	—	—			—	—	—			—		
Deaths												
Scarlet fever	1,751	157	295	73	71	1,687	191	343	80	39	1,656	244
Deaths	2	—	2	—	—	3	2	1	—	—		
Small pox	—	—	—		—	—	—	—		—		
Deaths	—	—		—	—	—	—		—	—		
Typhus fever	—	—		—	—	—	—	—	—	—		
Deaths				—	—				—	—		
Whooping cough			29		8			49		5		
Deaths	3	1	5	2	1	14	3	5	2	—		
Deaths (0-1 year)	294	63	64	27	19	283	54	73	23	16		
Infant mortality rate (per 1 000 live births)	49	52				48	45					
Deaths (excluding stillbirths)	3,851	701	595	175	136	3 796	748	584	157	145		
Annual death rate (per 1 000 persons living)	9 5	8 9	12 1	11 8	12 1	9 4	9 4	11 9	10 7	13 9		
Live births	6 761	1 234	923	338	252	6,800	1 225	919	415	266		
Annual rate per 1 000 persons living	16 6	15 7	18 8	22 9	22 3	16 8	15 4	18 8	28 3	25 5		
Stillbirths	326	51				269	47					
Rate per 1 000 total births (including stillborn)	46	39				38	37					

* After October 1 1937 puerperal fever was made notifiable only in the administrative county of London

† Includes primary form in figures for England and Wales London (administrative county) and Northern Ireland

EPIDEMIOLOGICAL NOTES*

Enteric Fever

During the week under review 13 cases of enteric fever were notified in England and Wales as compared with 26 in the previous week Of these 2 (5) were in London—1 each in Camberwell and Paddington In Scotland 4 cases of typhoid fever were recorded—1 each in Lanark County Glasgow Edinburgh and Roxburgh County—and 2 cases of paratyphoid fever both in Ross and Cromarty County There were 5 cases of enteric fever reported in Eire during the week under review the same number as last week and 4 (0) cases in Northern Ireland

Diphtheria and Scarlet Fever

Notifications of diphtheria in England and Wales during the week under review rose from 943 to 1 001 but in London they fell from 140 to 127 There was a marked decrease in the notifications for Scotland—151 as against 176—but in Eire there was an increase of 5 over 44 recorded last week while in Northern Ireland the figure remained at 21 Deaths from diphtheria in the 126 Great Towns of England and Wales remained at 22 and in London at 2 Of the 22 deaths recorded in the 126 Great Towns 3 each occurred in Leeds (0) and St Helens (0) There were 4 deaths from diphtheria in the 16 principal towns of Scotland during the week under review—1 each in Glasgow (2) Edinburgh (0) Dundee (1) and Clydebank (0) There was an increase in the number of notifications of scarlet fever in England and Wales during the week—1 751 as against 1 641—and in London—157 as against 152 in the previous week In England and Wales the figures were in excess of the median value for the last nine years but in London they were appreciably less There were 2 deaths from scarlet fever in the 126 Great Towns of England and Wales during the week under review the same as last week no deaths from scarlet fever were recorded for London Notifications for Scotland fell from 361 to 295 with 2 deaths while in Eire and Northern Ireland they fell from 88 to 73 and from 78 to 71 respectively

Primary and Influenzal Pneumonia

The seasonal fall in the notifications of primary and influenzal pneumonia continues the figures for England and Wales dropping during the week from 622 to 500 this figure is well below the median value for the last nine years In London the fall in the number of notifications is very slight the number notified being the same as the median value

Measles and Whooping-cough

During the last few weeks the deaths from measles in the 126 Great Towns of England and Wales have fallen from about 12 to 8 of the 7 deaths registered during the week under review 3 were in London The number of cases reported in the L C C elementary schools has fallen rapidly the figures for the last four weeks being 680 422 348 and 250 (week under review) while the average daily admissions to the L C C fever hospitals fell by one third compared with the previous week Notifications dropped in three of the metropolitan boroughs in which measles is notifiable remained the same in two and rose in six—Battersea 23 (18) Finsbury 10 (8) Hampstead 10 (6) Lambeth 31 (17) St Pancras 18 (15) Stepney 6 (5) In Scotland measles is also on the wane 91 cases being notified compared with 113 in the previous week Dunfermline Kirkcaldy and Falkirk were the chief towns involved

Whooping-cough in Scotland has replaced measles as the principal killing infectious disease compared with 1 death (in Glasgow) from measles there were 5 deaths from whooping cough—2 in Glasgow and 1 each in Greenock Hamilton and Paisley In Eire 2 deaths from whooping cough were recorded both in Dublin and in Northern Ireland 1 death was reported in Lurgan

Notice was given in the *London Gazette* of Friday July 15 of regulations making measles and whooping cough compulsorily notifiable in the County of London These regulations which are made under the Public Health Act, 19 6 come into effect on October 1 Notification is restricted to the first case occurring in the same house or institution within a period of two months in this way the occurrence of the e di ea es is brought to the notice of borough medical officers of health who will be able to supervise contacts and have the earliest warning of the development of further cases Current practice in London and the expected effect of general compulsory notification were dealt with in the *Journal* of April 9 (p 807) A possible development the scope of which cannot be determined at present is that active immunization of contacts by means of specific vaccines may be carried out by the co operation of medical practitioners with borough medical officers of health

Cholera

The epidemic of cholera in Hong Kong continues although the number of cases reported for the week ended July 9—225—was 76 less than in the previous week In Hong Kong in the same week there were 45 cases with 32 deaths Cholera first made its appearance in Hankow during the week ended June 25 and although no details are available as to its incidence since the outbreak is likely to spread on account of the large number of refugees in that city and of the military operations proceeding on the Yangtse River In French Indo China and in British India generally a downward trend of the disease has been noted in recent weeks except in the Central Provinces and in Berar where a fresh wave occurred during the week ended July 9 after a period of decline lasting three weeks

Typhus

The incidence of typhus in Morocco has been falling in recent weeks 66 cases with 10 deaths were reported in the week ended July 2 compared with 71 in the previous week In Tunisia 55 cases were notified compared with 76 in the previous week and in Egypt there were 42 cases in the provinces 1 in Cairo and 1 case with 1 death in Alexandria

* Except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

Medical News

Lieutenant Colonel W L Harnett C I E M D F R C S I M S (ret) former professor of surgery Medical College of Calcutta and recently reader in surgery at the British Postgraduate Medical School has been appointed medical secretary to the Clinical Cancer Research Committee of the British Empire Cancer Campaign The scheme of clinical cancer research which has already started will embrace approximately 17 000 fresh cases of cancer annually occurring in the teaching hospitals and the specialized hospitals of the London area and the hospitals of the London County Council and the Middlesex County Council

We are asked to announce for the information of general practitioners that the out patient department of the Chelsea Hospital for Women is closed now for new patients until the first week in September

Mr A N Dixon has been appointed to the position until recently held by Mr P N Adamthwaite as agent (manager) of the Medical Insurance Agency Mr Dixon will take up duty on September 5

The American Association for the Study of Goiter will hold its annual meeting for the year of 19 8 in conjunction with the third International Goiter Conference in Washington D C on September *12 13* and *14* The programme for the first day will consist of the presentation of papers concerning endemic goitre the second day will be devoted to a study of the thyroid in relation to endocrinology and metabolism and the third day will be given up to hyperthyroidism These subjects will be discussed by workers from several different countries

The *fifth European Congress* of Mental Hygiene organized by the committee of mental hygiene of the Association of German Neurologists and Psychiatrists will be held at Munich from August 22 to 25 Further information can be obtained from 80 Rue de Levourne Brussels

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone, unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary, B M A House, Tavistock Square W C 1, on receipt of proofs Authors overseas should indicate on MSS if reprints are required as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary B M A House, Tavistock Square W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are

EDITOR OF THE *BRITISH MEDICAL JOURNAL* *Attiology Westcent London*

SECRETARY *Mediocra Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Irish Free State Medical Union (I M A and B M A) 18 Kildare Street, Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Case for Diagnosis

Dr T STACEY WILSON (Birmingham) writes in reply to Fag (*Journal* July 9 p 105) With regard to the patient mentioned by Fag the history of the case makes it quite probable that the colic is a referred pain due to fibrositic thickening irritating an intercostal nerve which is in relationship to the skin area in which the pain is felt If this be so destruction of the fibrositic tissue by forcible massage will free the patient from pain If forcible massage over one of the ribs induces pain next day over the area where the pain is usually felt destruction of the fibrositic tissue is certain to cure the condition This subject is dealt with in an article of mine in the *Journal* of February 15 1936 (p 298)

Income Tax

Army Pay While Abroad

Captain R A M C was living abroad up to June 17 when he returned to this country Between April 6 and June 17 he remitted £100 to the United Kingdom, his wife was here but he maintained no residence here Is he liable to United Kingdom income tax as well as Indian income tax on the £100?

*** Yes He is a British resident for the financial year commencing April 6 1938 and is liable on pay received in or remitted to this country He is however entitled to Dominion Income Tax Relief in respect of the tax paid in India on income assessable also in the United Kingdom The working of that relief is somewhat complicated, but it will probably recoup him for at least one half of the relative Indian tax

LETTERS, NOTES, ETC

Lunatics as Pets

This is the bizarre title of an article by Dr Claude Lillingston in the July number of *Blackwood's Magazine* Behind the story of a plucky old lady who preferred a lunatic to the conventional pet—asthmatic dog mangy cat or twittery canary—is a plea for home rather than hospital treatment for certain cases of mental disorder The heroine of the story taken from life was a lone widow who had just settled into a cotton wool with hot bottle nest of her own when she received an S O S from an old friend whose relations had deposited him in a mental institution She proceeded forthwith to dig him out of it and install him as the guest of honour in her own home His joy was boundless And might he have a razor? Razors had of course been taboo in the asylum Without a moment's hesitation his hostess supplied him not with one but with all the seven razors her husband had owned—one for every day of the week To the warning that her guest might cut his throat she retorted with charming elliptical logic that she had never heard of any lunatic being so deft that he could slit his throat with seven razors The guest was allowed to come and go as he pleased, and the neighbours were free to make their own comments when her guest was shepherded home by some policeman making good the lunatic's temporary loss of memory This story of what may have been a case of early senile dementia is a timely reminder of the inability of some people whether they are sane or insane to appreciate institutional life however perfectly organized—people to whose angular individualism the very perfection of a well organized community may be anathema After confessing that he does not know how this story ended because he had not kept in touch with the lady and her pet, the author asks if the keeping of lunatics as pets may not be a far more common practice than most of us realize he even goes so far as to suggest that the world is full of such combinations and that in some cases there may be doubts as to who is the pet and who is the keeper thereof

Bed-bug in the Human Ear

Dr C E ELLIOTT (London S W 7) writes I have read with interest the note by my colleague, Dr N Vere Hodge (*Journal* June 25 p 1406), regarding a bed bug which he dislodged from the ear of a patient Let me assure him that his experience is not unique I well remember two of these creatures reminiscent of the man eaters of Tsavo who conducted nightly forages from the same diurnal retreat—one in each ear It was some weeks before we could locate them Bed-bugs sometimes choose curious hiding places In his recent autobiography Noel Coward records a nest of these creatures, which was finally traced to an embroidered picture

Qualifications for Caretaking

"C B H" writes Practitioners of physical medicine have frequently been accused of various forms of ju-ju but the following extract from a reply to an advertisement for a man and wife to act as doorman and looker after 'of my instruments may perhaps only be personal to myself—and not significant of an inside knowledge of the subject I was also employed as post mortem attendant during which time I have prepared as many as five bodies in a day (removing all viscera etc) for the demonstrating pathologist so I am sure that you would find me suitable for the position of caretaker, etc, and handyman'

Holidays and the Milk Supply

Dr C O Hawthorne, chairman of council and Miss Olga Nethersole, founder and organizer, of the People's League of Health have sent the following letter to the Press May we as in the past, give a word of advice to holiday makers? Holidays means change in surroundings habits, occupation and food At home the food supply is under the control of the housewife, who has learned by experience to know where reliable foods can be obtained The holiday changes this position, and the family supplies are under a new supervision Quite likely this supervision is in general satisfactory None the less it is well to be on the safe side for a holiday which leads to illness is an unhappy experience The milk supply in this respect is particularly important At a well-known holiday resort some eighteen months ago there was an outbreak of typhoid fever which caused fifty one deaths including those of a number of summer visitors All the primary cases were traced to an infected milk supply, and of great significance is the official announcement that when the milk was pasteurized the epidemic ceased The lesson is obvious To avoid risk drink only pasteurized milk or if this cannot be obtained protect yourself and your family by heating the milk to boiling point Everyone recognizes the food value of milk especially for children Yet raw milk means some degree of risk Pasteurization or boiling on the other hand means safe milk and milk of full food value There is an old adage Prevention is better than cure Here is a chance to apply it

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Bulletin of the Johns Hopkins Hospital

Baltimore vol 63 April 1938

Symposium on Johns Shaw Billings by E L Heume A M Chesney S V Larkey and H M Lyderberg
Regional Ileitis and Ulcerative Colitis—I S Stafford
Action of Insulin on Convoluted Renal Tubules—E J Boyce
Low grade Partial Obstruction of Small Intestine—L Martin and H F Wright
Studies on Immunizing Substance in Pneumococcus (VI)—L D Felton and G K Huffman
Congenital Universal Insensitiveness to Pain—F R Ford and L Wilkins

Regional Ileitis and Ulcerative Colitis—Ten cases of regional ileitis and three of ulcerative colitis in association with lymphogranuloma are discussed. The similarity of the clinical features is noted. The possibility is considered that the virus of lymphogranulomata may cause the ulcerative lesions in the colon and that the lesions of regional ileitis may also be due to a virus.

Insensitiveness to Pain—Three cases are reported of children *in whom there was a congenital indifference to painful stimuli* leading in one case to severe burns, multiple fractures and other serious injuries. There was no other evidence of defect of the nervous system. It is thought that these cases represent a defective development of the sensory system involving selectively the pain mechanism and comparable to congenital colour blindness and similar conditions.

Deutsche Medizinische Wochenschrift

Berlin vol 64 May 13 1938

Activated Charcoal Tablets for Emaciation Cures—B Rajewsky A Janitzky and A Krebs
Lymphatic Leukaemia and Heredity—W Mohr
Clinical Picture and Treatment of Graves's Disease—O Schildknecht
Polyneuromyositis after Treatment of Severe Gonorrhoea with Ultron—L Barrer
Effective Economic Treatment of Leucorrhoea and Discharging Wounds—E. Bergmann
Natural Support of Feet. Contribution to Shoe Reform—K W Fischer
Asthma in Old Age—P Farago
Malign Sclerosis—O G Oeda
High Court Medico-legal Judgments in 1937—Paech and Trembur
Hemicrown Tea Species—C Mayer

Asthma—An account is given of the experiences of a hospital in Budapest with regard to asthma in old age the clinical picture being described and the differential diagnosis discussed.

Malign Sclerosis—This study which comes from Santiago *de Chile and was undertaken at the State University* Medical Hospital deals with twelve cases of malign sclerosis in ten of which the patient's age was under 50 with 100 cases of benign nephrosclerosis and forty cases of malign nephrosclerosis. The three chief manifestations of malign sclerosis are high arterial pressure a poor general condition and albuminuric retinitis.

Journal of the American Medical Association

Chicago vol 110 May 14 1938

Treatment of Gonococcal Vaginitis with Oestrogenic Hormone—R W Te Linde
Studies in Nodular Goitre—M J Schlicting S L Gargill and J H Save
Rhinosporidiosis in the U S A—G T Caldwell and J D Roberts
Vascular Birthmarks—H W Kaessler
Rupture of Aortic Aneurysm into Pulmonary Artery—M H Delp and R Maxwell
Meralgia Paraesthetica—A D Ecker and H W Weltman
Venereal Lymphogranuloma—W Frei
Phenolphthalein Studies—B Fantus and J M Dyniewicz
Nature of Bleeding in Jaundice—A J Quick
Vitamins in Relation to Prevention and Treatment of Pellagra—W H Sebrell

Vascular Birthmarks—Cavernous haemangiomata and other vascular naevi occurring in infants and young children are often left alone because the usual methods of treatment are unpractical expensive or require special facilities. Kaessler recommends the injection of sclerosing solutions superficially into the vascular mass. Contiguous areas of blanching are produced by 0·1 to 0·2 c.cm. of solution. Sloughing occasionally occurs but heals with little scarring. Several treatments may be required if the area is large.

Klinische Wochenschrift

Berlin vol 17 May 14 1938

Function of Hypophysis—A Jores
Animal Experiments on Effect of Testicular Hormones I—W Schoeller and M Gehrke
Does Physical Exertion Predispose to Anterior Poliomyelitis—B de Rudder and G A Peterson
Influence of Ultraviolet Irradiation on Artificial Anaphylactic Reaction of Skin (Cutaneous Reaction)—G Albus and F Feldermann
Intravenous Glucose in Therapeutic Malarial Infection—W de Pay
Determination of Lipoid phosphorus in Small Quantities of Blood—H G Kraimick
Compilation Statistics of Successful Results—K Freudenberg
Simple Method for Demonstrating Antibodies in Man—E A Voss
Luetolysine Toxic?—F Widerbauer and H E Wedemeyer

Physical Exertion and Poliomyelitis—Observations on a number of pupils of a boarding school during a recent epidemic of poliomyelitis have definitely proved that the paralysis due to this condition is more severe in children who have been indulging in physical exertion and violent sports.

Lancet

London vol 234 May 14 1938

Clinical Features of Central Pain—G Riddoch
Histology of Diabetes Induced in Dogs by Injection of Anterior Pituitary Extracts—K C Richardson and F G Young
Glioma Tumours—A W Kendall and S Thomson
Subcutaneous Emphysema and Pneumothorax in Bronchial Asthma—R W Elliott
Radiographic Detection of Myelocele of Unborn Foetus—J F Brailsford
Cutaneous Application of Follicular Hormone—B Zondek
Vitamin A and Carotinoids in Blood. Deficiencies in Children Suffering from Xerophthalmia—J H de Haas and O Meulemans

Cutaneous Application of Follicular Hormone—Experimentally this may produce a pituitary tumour in the rat. The clinical use in gynaecological practice of percutaneous applications of oestrone in 96 per cent. alcohol is described. It is sometimes successful combined with intramuscular injections of progesterone in inducing uterine bleeding in cases of primary or secondary amenorrhoea.

Medical Journal of Australia

Sydney vol 1 April 30 1938

Maternal Welfare—A J Gibson
Experiences in Excretion Urography—B L W Clarke
Extended Schwartze Operation—E Gutteridge
Traumatic Lesions of Sacro-iliac and Lumbo-sacral Joint—C W B Littlejohn
Treatment of Trigeminal Neuralgia—F J Clark
Schizophrenic Patients treated by Induced Convulsions—R S Ellery and D C Lear

Medizinische Klinik

Berlin vol 34 May 13 1938

Estimation of Blood Alcohol—A Forster
Normal and Pathological Anatomy of Old Age (II)—L Asshoff
Diagnostic Value of Cardiazol Test in Epilepsy—F Stoeffler and F Lanteste rer
Frequent Occurrence of Catarrhal Jaundice in Diabetics—W Stechmann and G Wenzel
Treatment of Chronic Enterocolitis with Enteroviroform and Carbarsen—L Pethacher
Reinfusion of Blood from Peritoneal Cavity after Rupture of Liver or Spleen—C Springer
Genuine Separation of Epiphysis of Neck of Femur in Adolescents—C Gutig and A Herzog
Rectangular Abduction Splint for Fractures of Humerus. Its Usefulness in War Surgery—W Bark
Review of Literature on Tuberculosis—G Aptz.

Cardiazol Test in Epilepsy—The intravenous injection of 2·0 to 2·5 c.cm. of a 10 per cent. solution of cardiazol releases an attack only in patients suffering from epilepsy. In some cases of epilepsy it was necessary to increase the dose in order to release an epileptic attack. On the other hand doses of 3 c.cm. may release convulsive attacks in schizophrenia, mental deficiency, and in the hebephrenic psychopathies. In neuro- and psychopathic individuals the test except in a few complex cases remained negative.

Medizinische Welt

Berlin vol. 12 May 14 1938

Ketone Metabolism in Experimental and Clinical Hypoadrenalism—W. Kuhn
Practical Importance of Diathermy Loop in Dermatology—P. W. Schmidt
Possibilities of Planned Continued Fresh-air Treatment—L. Rickmann
Cause of Errors in Diagnosis—R. Paschke
Estimation of Maternal Ovulation Cycle and Sex of Child by Date of its Birth—O. Schoner
Treatment of Insomnia with Dormovit—C. Pietz
Diaphoresis by Bee-venom Ions—K. Wolff

Munchener Medizinische Wochenschrift

Munich vol. 85 May 13 1938

Treatment of Insomnia—L. R. Muller
*Blood Alcohol Estimation—O. Huber
Tuberculous Infection in Hospital—W. Muller
Diet of Athletes—W. Heupke and A. Metzner
Pettenkofer's Birthplace as Laboratory for Social Hygiene—K. Kisskalt
Epidemiology and Diagnosis of Human Psittacosis—L. Stehr
Diagnosis of Pathological Changes in the Hilum—W. Naumann
Traumatic Functional Disturbances of Iliopsoas Muscle—K. Herzog
Mode of Action and Clinical Importance of New Group of Central Analeptics—H. Eitel
New Fermentation Apparatus for Examination of Faeces—A. v. Hatasz

Blood Alcohol—Huber's thesis is that a clinical diagnosis of drunkenness by an examination of the reflexes, gait, speech, memory, concentration, and general attitude is fallible. A chemical examination of the blood is more scientific and exact. The presence of one to three parts of alcohol per 1,000 parts of blood gives rise to varying manifestations depending on the tolerance of the patient to alcohol.

Nature

London vol. 141 May 14 1938

Intermediary Reactions of Fermentation—O. Meyerhof
Cytochrome *a* and Cytochrome Oxidase—D. Keilin and E. F. Hartree
Developmental Forms of Virus of Lymphogranuloma Inguinale (Climatic Bubo)—G. M. Findlay, R. D. Mackenzie, and F. O. MacCallum
Disintegration of Cell-wall Substances in Gastro-intestinal Tract of Herbivora—F. Baker and R. Martin
Scientific Tests of Telepathy—C. M. Beadnell

New England Journal of Medicine

Boston vol. 218 May 12 1938

Effect of Irritants and Drugs affecting Autonomic Nervous System upon Mucosa of Normal Rectum and Recto-sigmoid with Special Reference to Mucous Colitis—B. V. White and C. M. Jones
Treatment of Hay Fever by Injections of Pollen Extract Emulsified in Lanoline and Olive Oil—H. L. Naterman
Adreno-genital Syndrome and Adreno-cortical Tumours—G. F. Cahill

Nordisk Medicinsk Tidskrift

Stockholm vol. 15 May 14 1938

Renal Insufficiency in Arteritis—R. Opsahl
Mortality and Late Results of Operations on Gall-bladder—J. Hellstrom

Gall-bladder Operations—This study from Stockholm deals with 1,372 patients operated on for gall-stones or cholecystitis in the period 1914 to 1934. The total mortality was 7·4 per cent., that for males being 16·6 per cent. and that for females 5·3 per cent. Under the age of 30 the mortality was only 0·6 per cent. whereas over the age of 70 it was 29·2 per cent. Under the age of 50 it was 4·2 per cent. and over this age it was 13·2 per cent.

208 R

Policlinico

Rome vol. 45 May 9 1938 (Sez. Prat.)

*Experiments with Precipitating Bacterial Extracts of Krumwiede and Nobel—A. Alessandrini
*Treatment of Malarial Splenomegaly by Maurizio Ascoli's Method—S. Liverato
Leptomeningeal Haemorrhage in Young Female—G. Dalla Torre

Precipitating Bacterial Extracts—Alessandrini recalls the method of bacterial extraction used by Krumwiede and Nobel for typing pneumococci in sputum. He has found that such extractions of organisms of the typhoid and *B. coli* groups give specific precipitation reactions with commercial antisera or the sera of convalescents. The method cannot be applied to the detection of acid-resistant bacilli or in brucellosis. The extracts are stable.

Malarial Splenomegaly—Liverato describes (1) his own and numerous similar recorded successes in the treatment of the splenomegaly of chronic malaria, and (2) successes obtained by others in acute malarial recurrences and in kala-azar by Ascoli's treatment. This consists in a protracted series of intravenous injections of adrenal extract in extremely small doses (derisory according to Ascoli). The treatment was found to be innocuous and to lead to an increase of weight and a very notable improvement in the anaemia.

Presse Medicale

Paris vol. 46 May 11 1938

Splanchnic Ganglionectomy and Diabetes—H. Chabanier, J. Bréhant, and R. Donaso
*Asthma and Menstruation—F. Claude and R. A. Vall

Asthma and Menstruation—The authors give brief accounts of thirty-six cases in which asthmatic attacks appear to have been definitely related to the patient's menstrual history. Many of these patients were improved by the administration of follicular hormone and corpus luteum extracts. They conclude that these pre-menstrual or menstrual attacks of asthma are probably the result of a disturbance of the already unstable vago-sympathetic system due to vitiation of the secretions of the ovaries or other endocrine glands.

Paris vol. 46 May 14 1938

Morphine and Respiration—Leon Binet and M. V. Strumza
Injection of Stellate Ganglion under X Rays in Treatment of Tinnitus—A. Malherbe
Treatment of Post-otitic Meningitis with Sulphanilamide—Camille Hubert
Hypertrophic Pyloric Stenosis—Louis Pouyanne
Attempt at Specific Immunization against Experimental Cancer—L. Gross

Schweizerische Medizinische Wochenschrift

Basle vol. 68 May 14 1938

Tasks and Objects of Geomedicine—J. Eugster
*Experiences with Protamine-zinc-insulin—G. R. Constam
Treatment by Sulphoamido-substances—A. Alder and N. Markoff
Types of Diphtheria Bacilli—E. Wissler

Protamine-zinc-insulin—Hypoglycaemic symptoms are less frequent under treatment with protamine-zinc-insulin than with ordinary insulin, but harder to recognize and of greater severity. The error of using protamine-zinc-insulin in large doses in ambulant treatment is pointed out together with the necessity for giving instructions for reduced dosage before engaging in games or protracted muscular exertion. The scope of the treatment is discussed and pronounced to be decidedly limited. The use of protamine-zinc-insulin in patients long accustomed to ordinary insulin is not deemed advisable.

Science

New York vol. 87 May 13 1938

Studies in Potassium Metabolism of Animal Body by Means of an Artificial Radio-active Isotope—D. M. Greenberg, M. Joseph, W. E. Cohn, and E. V. Tufts
Treatment of "Snuffles" in Rat with Sulphanilamide—N. R. F. Maier

Effect of Oxygen Light and Lactoflavine on Oxidation of Vitamin C in Milk —D B Hand I S Guthrie and P F Sharp
Mode of Action of Sulphanilamide and Prontosil —R Finkelstein and J M Birkeland
Increase in Vitamin A Activity of Corn caused by Doubling Number of Chromosomes —L F Randolph and D B Hand

Ugeskrift for Laeger

Copenhagen vol 100 May 1 1938

Relationship between Male and Female Gonorrhœa in Denmark in the 1906 —V Halberg
Influence of Complications on Effectiveness of Mandelic Acid in Treatment of Pyuria —P Hum
Determination of Sulphanilamide in Blood and Urine Account of a Micromethod —E Lundsteen E Vermehren and M Vermehren
Form-determination Test of Rorschach Its Employment in Practice —V Bratt

Male and Female Gonorrhœa.—Throughout Denmark between 1906 and 1936 the incidence of gonorrhœa between the ages of 15 and 65 shows a remarkable change in the relative numerical importance of the disease in the two sexes In the male population its incidence per 1 000 has fallen by 16 per cent whereas in the female population it has risen by 41 per cent The author discusses the various causes apparent and real of this phenomenon He attaches considerable importance to the change in the attitude of women towards promiscuous sex relationships

Sulphanilamide in Blood and Urine.—The rapid absorption of sulphanilamide when given by the mouth suggests the desirability of giving it frequently and in small doses if its concentration in the blood is to be maintained at a fairly constant level An initial large dose of say 2·4 grammes might be followed by small doses of 0·6 gramme given five times in the twenty four hours When the functional capacity of the kidneys is under suspicion it is well to control the excretion of sulphanilamide in the urine in the hope of avoiding sulphanilamide poisoning

Wiener Klinische Wochenschrift

Vienna vol 51 May 13 1938

Errors in Diagnosis and Estimation of Papilloedema —F Fischer
Hyperglycæmic Symptom Complex —R Boller
Indications for Operative Treatment of Congenital Cystic Kidney —H Hermanner
New Method in Non-specific Therapy of Gonorrhœa —V Foderl
Superfluous Application of Compress Bandage at End of Abdominal Puncture —M Dobreff
Symptoms and Treatment of High Blood Pressure —O v Zimmermann
Insulin in Diabetic Gangrene —K Hitzenberger

Non specific Therapy of Gonorrhœa.—Foderl advocates strongly the injection of autogenous blood which has been irradiated with ultra violet rays in patients who have resisted other forms of anti gonococcal treatment A course of therapy consists of ten to fifteen injections two of which are of 5 c.cm of blood the remainder being of 10 c.cm Irradiation for half a minute is sufficient for the first injection and the period of irradiation is increased by thirty seconds for each successive injection till finally the irradiation is for three minutes

Wiener Medizinische Wochenschrift

Vienna vol 88 May 14 1938

Address to Medical Students on First Lecture in the New Germany —J Meller
Significance of Various Types of Vaginal Haemorrhage —L Kraul
Haematuria —E Lauda
Epidemic Serous Meningitis Its Relation to Virus Diseases of Central Nervous System —H Schneider

SPECIAL JOURNALS

American Journal of Surgery

New York vol 11 April 1938

Importance of Gastroscopy in Surgical Diagnosis —E B Benedict
Nutritional Disturbances associated with Diseases of Stomach and Duodenum —W G Maddock
Value of Roentgen Rays in Diagnosis of Peptic Ulcers —B R Kirklin
Choice of Anaesthesia for Surgery of Upper Abdomen —L F Sise
Cancer of Stomach —J S Horsley
Total Gastrectomy for Carcinoma of Stomach —A W Allen
Malignancy in Chronic Gastric Ulcers —W J Mayo Scott and G B Mixter
Multiple Gastric Polyposis —H Brunn and F Pearl
Surgical Management of Bleeding Peptic Ulcer —D B Pfeiffer and A G Martin
Chronic Gastric Ulcer —W Walters
Acute Perforated Ulcer —H K Shawan
Gastro-ejuno-colic Fistula —C S Rife
Primary Carcinoma of Duodenum —C I Allen
Surgeon's Problem in Duodenal Ulcer —R R Graham
Gastroduodenostomy —J M T Finney
Surgery in Treatment of Duodenal Ulcer —G Crile
Diverticula of Proximal Intestine —D Guthrie and M J Brown
Chronic Obstruction of Duodenum —J L McGehee
Practical Value of Cholecystography —F J Hodges
Cholecystography and Liver Function Determination —C H McIntyre
Gall bladder Shadows in Cholecystography —W G Scott and S Moore
Formation of Gall-stones —J E Sweet
Observations on Normal and Pathological Liver Function —I S Ravdin
Treatment of Diseases of Gall bladder —F H Kruse
Surgical Treatment of Acute Cholecystitis —F Glenn
Treatment of Acute Cholecystitis —M K Smith
Acute Gangrenous Cholecystitis —W L Estes jun
Indications for Operation in Gall-bladder Disease —H L Foss
Common and Hepatic Duct Stones —F H Lahey
Injuries to Extrahepatic Bile Ducts —H K Gray
Cholangiography —C O Mixter and L Herrmann
Surgery of Biliary Tracts in Children —G C Penberthy and C D Benson
Preparation of Jaundiced Patient for Operation —R W McNealy
Acute Pancreatitis —W H Cole
Surgical Treatment of Carcinoma of Head of Pancreas —A O Whipple
Carcinoma of Pancreas and Extrahepatic Ducts —Henry K Ransom
Complications of Gall bladder and Stomach Surgery —H M Clute and H Albright
Pyogenic Abscess of Liver —A. Ochsner *et al*

Liver Function.—This is an evaluation of the biochemical tests available for the estimation of liver function The glucose and laevulose tolerance tests are shown to be of *relatively little value* Attention is drawn to the value of the estimation of hippuric acid in the urine following the administration of benzoic acid by mouth

Acute Gangrenous Cholecystitis.—The author reviews in some detail the end results and the fate of the remaining portion of the gall bladder following partial cholecystectomies

Acute Pancreatitis.—This is a comprehensive discussion of the diagnosis of this condition with especial reference to the value of the blood amylase test

Carcinoma of Head of Pancreas and Extrahepatic Ducts.—The author reviews here 109 cases, contrasting the symptoms and the results of treatment

Annales d'Hygiene publique, Industrielle et Sociale

Paris vol 16 May 1938

Organization of Hygiene Offices in Department of Seine —E. Malespine.
Soiling of Towns by Dogs —M Clerc
Social Scourges of the Navy —D Vauche
Antibiotic Strength of Lactate of Mercury —C Digaud
Carcinogenic Hydrocarbons Study of Methylcholanthrene —M M Cattet
Organization of Sanitary Services in Larger Towns of Rumania —A Radu
Aphthous Fever among Wild and Captive Animals —A Urbain P Bullier and J Nouvel
Retrospective Test for Exanthematous Fevers —P Giroud

Naval Scourges.—A review of the part played by the social diseases —tuberculosis venery and alcohol—in the French Navy followed by a discussion of administrative and practical methods of prevention control and after care

Annales de l'Institut Pasteur

Paris vol 60 April 1938

Studies of Microbiology of Soil and Water IX Morphology and Oecology of Azotobacter—S Winogradsky
*Morphology of Herpes Virus in Tissues of Experimentally Infected Animals Formation of Inclusion Bodies so Produced—S Nicolau and L Kopciowska
Contribution to Study of Tuberculin Allergy in Children—R Chaussinand
Histopathological Changes in Nervous System of Rabbits in Experimental Infection with Virus of Equine Encephalomyelitis—J Jabotinski

Herpes Virus Inclusion Bodies—In experimental herpetic lesions in the rabbit appropriate staining methods show large numbers of minute rod shaped bodies scattered diffusely or aggregated within cells either in the cytoplasm or within the nucleus These are believed to be particles of the virus They have been found in both nerve cells and glial cells in experimental encephalitis in the cornea and skin after inoculation in these situations in the skin lesions of herpes zoster in man and spreading in peripheral nerves when the nerve itself is inoculated The inclusion bodies characteristic of this infection appear to be formed by the agglutination and fusion of these colonies of the virus

Tuberculin Allergy—This is a record of the early effects of prophylactic treatment with B C G in children in French Indo China Sensitivity to tuberculin develops regularly within two months when B C G is given subcutaneously, but more slowly and sometimes not at all when the oral route is used In either case it is transitory diminishing and finally disappearing within two to five years Children so treated and exposed to household infection usually remain persistently and strongly tuberculin-positive, but in some such cases the reaction remains negative The author believes that in these cases the inevitable infection with virulent bacilli has assumed a modified form harmless in its consequences and unaccompanied by allergy

Annals of Surgery

Philadelphia vol 107 April 1938

Post-anæsthetic Encephalopathy following Cyclopropane—P W Gebauer and I I Coleman
Degeneration of Brain following Nitrous Oxide Anaesthesia—J D O'Brien and A F Steegman
Brain Abscess of Undetermined Aetiology—J C Yaskin F C Grant and R A Groff
*Treatment of Haemorrhage and Traumatic Shock by Intravenous Lyophile Serum—D D Bond and D G Wright
Acute Appendicitis in Complete Transposition of Viscera—F B Block and M A Michael
Bacterial Flora of Acute Appendicitis with Peritonitis—W A Altemeier
Acute Appendicitis from External Trauma—R H Fowler
Surgical Consideration of Solitary Polyps of Colon—C W Mayo and W L Butsch
Conservative Treatment of Acute Cholecystitis—G P Pennoyer
Spontaneous Post-operative Rupture of Bile Ducts—B Newburger
Dermoid Cyst of Mesentery—G C Penberthy and K K Brownson
Direct Inguinal Hernia—L S Fallis
Communicating Veins of Lower Leg and Operative Technique of Ligation—R R Linton

Intravenous Lyophile Serum—The authors describe an experimental study of the use of serum preserved by freezing and desiccation and redissolved in water is required for the restoration of blood pressure The possible clinical application is discussed

Appendicitis in Transposition of Viscera—A rare case of appendicitis in a patient with complete transposition of the viscera is reported and in view of the right sided signs in this patient the mechanism of referred visceral pain is discussed

Archiv fur Ohren-, Nasen-, und Kehlkopfheilkunde

Berlin vol 144 May 13 1938

Osteomyelitis of Cranial Bones arising from Nose—O Apffelstaedt
Extended Laryngofissure for Carcinoma of Vocal Cord—A Meyer zum Gottesberge
Researches on Movements of Vocal Cord with an Improved Photo-cell Method—W Hartmann and H Wullstein

208 D

*Injury to Middle Ear by Vomiting of Caustic Poisons—F Zöllner
Aetiology and Treatment of Otosclerosis—L B Seiferth
Diagnostic Significance of Audiograms with Increased Volume of Sound—W Weinand
Examination of Vestibular Function with Precisely Measurable Caloric Stimuli—J Scheideler
Nystagmus Postrotatorius II as Clinical Method of Examination—R Mittermaier
Anatomy and Function of Labyrinth in *Meerbrassen* (*Sparidae*)—A Denker
*Origin of Primary Carcinoma of Middle Ear—J Berendes

Osteomyelitis of Nasal Origin—The author describes seven cases of osteomyelitis of nasal origin, six of which were cured after extensive operations The clinical features surgical treatment and pathology of this rare condition are fully discussed Apffelstaedt stresses the importance of radiography in diagnosis

Movements of Vocal Cords—These were studied in freshly killed calves, and a few observations were also made on human specimens The authors used a photographic method in which a strong light was placed below the glottis and the light transmitted through the glottis was photographed on a moving plate, thus making records in the form of curves The vocal cord movements were produced by bellows attached to the tracheal end of each larynx studied

Middle-Ear Injury by Caustics—The author describes two rare cases where caustic poisons which had been swallowed reached the middle ear by way of the Eustachian tube during the act of vomiting The physiology of the muscles of the Eustachian tube and soft palate is discussed

Primary Carcinoma of Middle Ear—These malignant tumours are always of the squamous celled carcinoma type although the lining of the middle ear is of columnar epithelium The explanation usually given is that malignant disease in this region is always preceded by chronic middle ear suppuration, there is an ingrowth of the stratified epithelium of the meatus into the middle ear, or a metaplasia of the epithelial lining of the tympanic cavity The author describes one case in which the new growth was not preceded by chronic suppuration, yet it was a 'squamous epithelioma' He concludes that carcinoma of the middle ear must be looked upon as arising from the epithelium of the external auditory meatus

Archives of Surgery

Chicago vol 36 April 1938

Acute Iliac Adenitis—F Glenn Irwin
*Non-specific Mesenteric Adenitis—W Klein
Distribution and Excretion of Water and Chlorides after Massive Saline Infusions—R A Cutting A M Lands and P S Larson
Fat Embolism—C S Scuderi
Normal Anatomy and Variations of Peripheral Nerves of Leg and Foot—M Thomas Horowitz
Calcification and Ossification in Tuberculoma of Brain—H S Evans and C B Cordtsille
*Calcification about Flexor Carpi Ulnaris Tendon—H Milch and H H Green
*Changes in Mammary Gland of Rat produced by Glandular Preparation—E B Astwood and C F Geschickter
Inguinal Herniaplasty with Fascial Transplant—B L Fleming
Sixty-fifth Report of Progress in Orthopaedic Surgery

Non-specific Mesenteric Adenitis—A report of 140 cases with reference to aetiology and diagnosis Three clinical types are described and a useful sign of shifting tenderness—dependent upon the mobility of the mesentery—is depicted

Calcification in Flexor Carpi Ulnaris Tendon—This paper draws attention to a syndrome at present little recognized but possibly common It is characterized by pain over the pisiform with limitation of movement of the wrist and characteristic x-ray appearances Certain points of similarity with calcification of the supraspinatus tendon are considered

Changes in Mammary Glands—This is a study of mammary abnormalities resulting from the administration of oestrogens testosterone progesterone and anterior pituitary substance Certain points of similarity with benign cystic mastitis have been reproduced

Bruns Beitrage zur Klinischen Chirurgie

Berlin vol 167 April 1 1938

Treatment of Varicose Symptom Complex—F v N valk and Z v Tabl
Investigations of Development and Changes in Semilunar Cartilage of Knee-joint Clinical Significance of Degenerative Changes—F Razea
Investigations of Lumbar Sympathectomy—D Schneider
Endemic Goitre in Remscheid Jeh l (Mecklenburg)—Sumio Ikeya
Fracture of Neck of Femur in Childhood—W Jehn
Results of Operations on Semilunar Cartilage—S Dengler
Surgery of Spinal Cord—E Brandach
Immunological Investigations on Brown Pearce Rabbit Tumour by Previous Inoculation with Tumour Extracts—H Malluche
Personal Experiences with Pulmonary Resection based on 54 Operated Cases—J Racic

Clinical Science

London vol 3 April 28 1938

Insulin Resistance and Arteriovenous Blood Sugar Difference—W J Griffiths
Effect of Different Diets on Insulin Sensitivity of Diabetics—W J Carr
Blood Circulation in Human Limb Observations on Differences between Proximal and Distal Part and Remarks on Regulation of Body Temperature—R T Grant and R S B Pearson
Effects of Asphyxia and Pressure on Sensory Nerves of Man—T Lewis and E E Pochin
Observations on Blood Circulation in Voluntary Muscle in Man—R T Grant
Observations on Referred Pain arising from Muscle—J H Kellgren
Delay of Pain Perception in Tabes Dorsalis—E E Pochin
Unilateral Retraction of Upper Lid in Graves's Disease—E E Pochin
Some Observations on Renin a Pressor Substance contained in Normal Kidney together with a Method for its Biological Assay—G W Pickering and M Prinzmetal
Further Observations on Familial Periodic Paralysis—E N Allott and B M Ardle
Effect of Adrenaline on Serum Potassium Level in Man—L J M Castleden

Effects of Asphyxia on Sensation—Touch cold sense warm sense and fast conducted pain all begin to fail at approximately the same time when the limb is asphyxiated Slow conducted pain fails later and is preceded by hyperalgesia Nerve fibres do not fail in order of their conduction rates Injury to a digital nerve produced hypoaesthesia and hyperalgesia which were accentuated by warming and diminished by cooling the site of injury

Renin—Extracts of renal cortex when injected intravenously into unanæsthetized rabbits produce a prolonged rise of blood pressure Two methods of preparation of such extracts are described and an account is given of some chemical and physical properties of the active principle renin Assay of renin is accomplished by comparing the pressor effect of a given extract with that of a standard extract

Familial Periodic Paralysis—The observation that attacks of familial periodic paralysis are associated with a fall in blood potassium and that such attacks are relieved by the administration of potassium is confirmed The level of blood potassium at which attacks appeared varied in different cases low values in normal subjects were not associated with any muscular weakness It is suggested that the cause of the attacks is some muscular mechanism which is abnormal either quantitatively or qualitatively and which involves hexose phosphate

Endocrinology

Boston vol 22 April 1938

Syndrome Characterized by Osteitis Fibrosa Disseminata Areas of Pigmentation and Gonadal Dysfunction—F Albright B Scoville and H W Sulkowitch
Clinical Results of Anterior Pituitary Therapy in Children—M Mohteh and S Poliakoff
Prolactin Its Effect on Secretion of Woman's Milk—J R Ross
Biological Effects of Thymus Implantation in Thymectomized Rats—N H Einborn
Negative Effects of Endocrine Extracts on Thymus of White Rat—R N Low
Study of Natural Growth and Ossification in Hereditary Dwarf Mice—E Boettiger and C M Osborn
Autotransplantation and Regeneration of Adrenal Gland—D J Ingle and G M Higgins
Work Performance of Untreated Hypophysectomized Rats—D J Ingle
Some Effects of Adrenalectomy in Fowls—E H Herrick and O Terasaki
Free and Total Cholesterol Content of Whole Blood and Plasma as related to Experimental Variations in Thyroid Activity—L H Schmidt and H B Hughes
Purification of Anterior Pituitary Growth Hormone by Fractionation with Ammonium Sulphate—H M Evans N Lyon Q P Bartz and M E Simpson
Hyperglycæmia without Glycosuria—C F Davidson
Technique of Adrenalectomy in Dogs—J Freed I E Lykken and I L Waterman

Fukuoka Acta Medica

Tokio vol 31 April 1938

Incubation Experiments with Pathogenic Mutules in Animals—K Higuchi
Experimental Studies in Therapy of Acute Purulent Meningitis in Rabbits—Y Mori
Some Diseases Cured by Sulphur Injections—M Matsuoka T Kashima and S Hirata
Experimental Contribution to Pathogenesis of Icterus in Phosphorus Poisoning—T Yamada
Histopathology of Brain in Rabbit—M Yamasita

Icterus in Phosphorus Poisoning—In phosphorus poisoning first the liver cells are damaged and in some cases later the walls of the bile ducts are also affected The icterus is caused by first retention and later resorption The destruction of the erythrocytes and the increased formation of bilirubin are of only secondary importance in pathogenesis

Journal of Biological Chemistry

New Haven vol 123 April 1938

Formation of Glucose-1-phosphoric Acid in Extracts of Mammalian Tissues and of Yeast—G T Cori S P Colowick and C F Cori
Action of Nucleotides in Dismutase Phosphorylation of Glycogen—G T Cori S P Colowick and C F Cori
Electrokinetic Aspects of Surface Chemistry V Electric Mobility and Titration Curves of Proteins and their Relationship to the Calculation of Radius and Molecular Weight—L S Meyer and H A Abramson
Quantitative Precipitation of Citric Acid—A C Kuyper
Buffer Action of Undenatured Urine Constituents—A C Kuyper
Utilization of Carnosine by Diphtheria Bacillus—J H Mueller
Euschscholtzxanthin A New Xanthophyll from Petals of California Poppy (*Eschscholtzia californica*)—H H Strain
Surface Denaturation of Egg Albumen—H Wu and C F Wang
Carbohydrate Metabolism of Brain VI Isolation of Glycogen—S E Kerr
Mechanism of Cytochrome Action—T B Coolidge
The pH Stability of Papilloma Virus Protein—J W Beard and R W G Wyckoff
Biological Assay of Carbohydrate Metabolism Hormones of Anterior Pituitary—A J Bertram and C W Turner
Influence of Heavy Water on Amylase Formation in Barley—M L Caldwell and S E Doebbeling
Differential Migration of Pressor and Oxytocic Hormones in Electrophoretic Studies of Untreated Pressor Juice of Posterior Lobe of Pituitary—G W Irving jun and V du Vigneaud
Formation of Coproporphyrin I and Haemoglobin during Embryonic Life—F Schoenheyder
Interaction of Vitamin B in Enzyme Reactions—H Tauber
Stream Double Refraction of Virus Proteins—M A Lauffer and W M Stanley
Intermediate Forms of Oxidation-reduction of Flavines—L Michaelis and G Schwarzenbach
Properties of Haemoglobin and Peptone in Solutions of Urea and Other Amides—J Steinhardt
Lipoids of Laying and Non-laying Bird—F W Lorenz I L Chaikoff and C Entenman
Radio-active Phosphorus as an Indicator of Phospholipoid Metabolism II Role of Stomach Small Intestine and Large Intestine in Phospholipoid Metabolism in Presence and Absence of Ingested Fat—B A Fries S Ruben I Perlman and I L Chaikoff
Periodic Acid Oxidation of Starches and Dextrins as a means of Determining Molecular Size—C G Caldwell and R M Hixon
Synthesis of 5-phospho-d-arabinose—P A Levene and C C Christman

Carbohydrate Metabolism Hormone—The hormone prepared by alcoholic extraction of acetone-dried anterior lobes of sheep or ox pituitaries when injected into healthy thriving guinea pigs caused marked increases in their blood sugar content the maximum effect occurring eight hours after the injection The minimum amount of extract injected intraperitoneally into well nourished male guinea pigs of 180 to 220 grammes in weight which will cause after eight hours an increase of 50 per cent (to about 165 mg. of sugar per 100 c.cm.) in the blood sugar of each of five or more animals is proposed as the guinea pig unit of the hormone

Journal of Experimental Medicine

Baltimore vol 67 April 1 1938

Some Effects of Formaldehyde on Horse Anti pneumococcus Serum and Diphtheria Antitoxin and their Significance for the Theory of Antigen Antibody Aggregation —H Eagle
Degree of Compensatory Renal Hypertrophy following Unilateral Nephrectomy II Influence of Protein Intake —L L Mackay T Addis and E M Mackay
Observations on Pathological Changes following Experimental Hypertension produced by Constriction of Renal Artery —C G Child
*Evidence of Active Immunity to Experimental Poliomyelitis obtained by the Intranasal Route in *Macacus rhesus* —S D Kramer L H Grossman and G C Parker
Chemical Studies on Bacterial Agglutination IV Quantitative Data on Pneumococcus R (Dawson S)-anti R (S) Systems —M Heidelberger and E A Kabat
Course of Virus induced Rabbit Papillomas as determined by Virus Cells and Host —J G Kidd
Study of Macrophage Reaction in Pulmonary Lesions of Dogs with Experimental Pneumococcus Lobar Pneumonia —O H Robertson and C G Loosli
Local Recovery in Experimental Pneumococcus Lobar Pneumonia in the Dog — O H Robertson and L T Coggeshall
*Japanese B Encephalitis Virus Its Differentiation from St Louis Encephalitis Virus and Relationship to Louping ill Virus —L T Webster
Influence of Inflammation on Absorption of Substances of Varied Diffusibility — R G Miller
*A Stable Haemolysin leucocidin and its Crystalline Derivative Isolated from Beta haemolytic Streptococci —E J Czarnetzky I M Morgan and S Mudd

Active Immunity to Experimental Poliomyelitis —Intranasal instillation of poliomyelitis virus in the monkey, if it fails to produce an attack of the disease, gives rise to no immunity If the virus is introduced after the previous instillation of pituitrin and a mixture of adrenaline and ephedrine sulphate infection of the central nervous system does not follow and immunity sometimes results, being indicated by resistance to subsequent inoculation either intranasal or intracerebral, and by the demonstration of protective antibody in the monkey's blood The instillation of the drugs used caused no demonstrable change in the nasal mucosa other than a slight inflammatory reaction in which eosinophils were prominent

Japanese B Encephalitis Virus —The authors studies of the pathogenicity of Japanese B encephalitis virus for various animals confirm the observations of others that it is distinct from the St Louis encephalitis virus Its behaviour in animals is similar to that of louping ill virus but these two can be distinguished serologically Although the nasal mucosa is usually assumed to be the portal of entry of these infections, contact spread does not occur among animals

Stable Haemolysin leucocidin from Beta haemolytic Streptococci —From strains of *Streptococcus pyogenes* belonging to four of Lancefield's groups but in no case from several other bacteria a chemically pure substance has been extracted having the properties of a haemolysin and a leucocidin Its sodium salt has been obtained in crystalline form This substance retained its activity for a year when kept under sterile conditions resisted boiling and was unaffected by moderate degrees of acidity or alkalinity It haemolysed up to a dilution of 1 in 128,000 and this effect was not prevented by immune serum serologically the substance behaved as a haptene It was highly toxic for animals Its molecular weight has been determined (2260) and its structure ascertained sufficiently to assign it a tentative formula ($C_{11}H_{11}O_{11}N$ P)

Journal of Nutrition

Philadelphia vol 15 April 10 1938

Measurement of Efficiency of Diets New Apparatus and Procedures —E B Forbes R W Swift and A Black
Further Studies on Unsaturated Fatty Acids Essential in Nutrition —O Turpeinen
Influence of Hydrogenation and of Yeast in Counteracting Cod liver Oil Injury in Herbivora and Influence of Salmon Oil on Milk Fat Excretion —C M McCay H Paul and L A Maynard
Effect of Melting Point of Fat on its Utilization by Guinea pigs —C M McCay and H Paul
Relation of Cellulose and Lignin Content to Nutritive Value of Animal Feeds — I W Crampton and L A Maynard
208 1
Effect of Feeding High Levels of Copper to Albino Rats —R Boyden V R Potter and C A Elvehjem
Studies on Vitamin B_1 Requirements of Growing Chicks —A Arnold and C A Elvehjem

Unsaturated Fatty Acids in Nutrition —Of a series of unsaturated fatty acids and related substances tested by feeding to female rats showing the fat deficiency syndrome linoleic acid, linolenyl alcohol linolenic acid and arachidonic acid gave curative effects Approximately 100 mg of linoleic ester a day were necessary for maximum growth response whereas arachidonic ester was effective in doses of 33 mg a day The number of unsaturated linkages and their position in the fatty acid molecule appear to be related to curative power The carboxyl group is not necessary although linolenyl alcohol was less effective than linoleic acid

Journal of Physiology

London vol 92 April 14 1938

Spectrophotometer Investigation into Differences between Foetal and Maternal Haemoglobin in Man —J Jonxbloed
Isotonic Extension and Shortening of Anterior Retractor of Byssus of *Mytilus edulis* —I Singh
Effect of Adaptation to Electrical and Chemical Stimulation on Excitability of Anterior Retractor of Byssus of *Mytilus edulis* —I Singh
Some Conditions of Foetal Respiration in the Cow —J Roos and C Romijn
Electrocardiogram of the Guinea pig —C L G Pratt
Antibodies Organ specific against Anterior Body of Pituitary Gland —Q Kestner
Interpretation of Potential Changes in Spinal Cord —D H Barron and B H C Matthews
Action of Narcotics on Brain Respiration —M Jowett
Buffering of Muscle in Rigor Protein Phosphate and Carnosine —E C Bate Smith
Blood Histamine and Cardiac Activity —C F Code C L Evans and R A Gregory
Osmotic Pressure of Aqueous Humour in Normal and Glaucomatous Eye — G H Benham W S Duke Elder and T H Hodgson

Medicine

Baltimore vol 17 February 1938

Meniere's Disease Study based on Examinations Before and After Intracranial Division of Vestibular Nerve —S J Crowe
Clinical and Experimental Results with Thorotrast —D L Reeves and R M Stuck
*Pathological Physiology of Chronic Cardiac Decompensation —M D Altschul

Chronic Cardiac Decompensation —This review is divided into two parts In the first the physiological mechanisms involved in cardiac decompensation are considered, and the validity of the available data concerning these mechanisms is discussed In the second part the cardinal signs and symptoms of congestive cardiac failure are interpreted in the light of this physiological knowledge A convincing case is made out for the view that each of the cardinal signs depends not on one but on several physiological mechanisms being deranged The author does not sponsor any particular theory of cardiac failure but presents a judicial consideration of the best of the evidence available on this subject

Le Nourrisson

Paris vol 26 March 1938

*Researches on Contagiousness of Pulmonary Tuberculosis in Young Children — E Lesné G Dreyfus Sée and A Saenz
Sugar free Milk Concentrates —P Lassablière

Contagiousness of Pulmonary Tuberculosis —The authors emphasize the possibility of contagion from infants and young children who harbour a primary tuberculous lesion The stomach washings from children who showed clinical or radiological evidence of tuberculosis were examined and a high proportion contained tubercle bacilli The possibility of infection from these children is evident and such children should be segregated from healthy ones The authors however consider that contagion is likely only in young children of low resistance

Public Health

London vol 51 April 1938

Present Practice in Regard to Quarantine and Disinfection—Hugh Paul
Study of Health Relationships in Group of Supervised Pregnancies and Resulting Infants—Agnes Neill
Scarlet Fever and Diphtheria Immunization in Urban District of Waterlooville with Seaforth—W J Cover

Quarantine and Disinfection—The balance of probability of infection of children at home and in school is discussed. Routine exclusion of contacts from school is deprecated and experience in Smethwick is described. Terminal disinfection gives a false sense of security and should be replaced by supervised soap and water cleansing.

Supervised Pregnancies and Infants—A study based on the records of 428 mothers and their infants attending the Willesden ante-natal clinic and welfare centre. A summary of the factors that influence the type of infant (health and behaviour) is given.

Scarlet Fever and Diphtheria Immunization—A statistical account of the practice of immunization in an urban district with an ingenious profit and loss statement of the saving of the rates effected by the prevention of probable cases.

Public Health Reports of the U.S.A.

Washington vol 53 April 29 1938

Serums Antitoxins and Drugs in Treatment of Meningococcal Meningitis—Sara E Branham
Studies on Trichinosis V Incidence as indicated by Postmortem Examination of 1,000 Diaphragms—M O Nolan and J Ben Price
Deaths during week ended April 9 1938 (a) In Group of Large Cities in United States (b) Death Claims reported by Insurance Companies
Prevalence of Disease in United States
Current Weekly State Reports for weeks ended April 16 1938 and April 17 1937
Summary of Monthly Reports from States
Cases of Venereal Disease reported for February 1938
City Reports for week ended April 9 1938
Foreign and Insular
Cuba Habana for four weeks ended April 9 1938
Czechoslovakia January 1938
Irish Free State Vital Statistics fourth quarter ended December 31 1937 and year 1937
Virgin Islands Notifiable Diseases January March 1938
Cholera Plague Smallpox Typhus and Yellow Fever

Meningococcal Meningitis—This is a review of the serum therapy of this disease since Jochmann's experiments in 1906 followed by a criticism of methods and technique in the preparation and application of sera. A comparison with the results of drug treatment (the sulphanilamides) is made and also some suggestive and promising reports of the results of combined treatment. An extensive bibliography (22 references) is appended.

Trichinosis—This is a detailed description of the methods and apparatus used. By a combined method (microscopy and digestion) agreement was secured in only one third of the cases. Classified results of the 174 positive cases are given.

Washington vol 53 May 6 1938

Trend of Mortality and Morbidity during 1937 and Recent Preceding Years
Trends in Shellfish Sanitation—H S Old
Planning Organization and Conduct of Stream Pollution Surveys—J K Hoskins
Care during Recovery Period in Paralytic Poliomyelitis
Deaths during week ended April 16 1938 (a) In Group of Large Cities in United States (b) Death Claims reported by Insurance Companies
Prevalence of Disease in United States
Current Weekly State Reports for weeks ended April 23 1938 and April 24 1937
Summary of Monthly Reports from States
Weekly Report from Cities for week ended April 16 1938
Foreign and Insular
Great Britain—England and Wales—Infectious Diseases for Thirteen weeks ended January 1 1938
Vital Statistics fourth quarter 1937
Italy Communicable Diseases four weeks ended February 27 1938
Jamaica Communicable Diseases four weeks ended April 16 1938
Yugoslavia Communicable Diseases four weeks ended March 27 1938
Cholera Plague Smallpox Typhus Fever and Yellow Fever

Washington vol 53 May 13 1938

Prevalence of Communicable Diseases in United States—March 27–April 23 1938
Studies on Dental Caries I Dental Status and Dental Needs of Elementary School Children—H Klein C E Palmer and J W Knutson
Experimental Vanadium Poisoning in White Rats—E P Dailey and R D Lillie
Influence of Nonbreeding and Foster Nursing upon Occurrence of Spontaneous Breast Tumours in Strain C H Mice—H B Andervont and W J Meloney
Deaths during week ended April 23 1938 (a) In Group of Large Cities in United States (b) Death Claims reported by Insurance Companies
Prevalence of Disease in United States
Current Weekly State Reports for weeks ended April 30 1938 and May 1 1937
Summary of Monthly Reports from States
Plague Infection in Ground-squirrels in Santa Cruz County California
Weekly Reports from Cities for week ended April 23 1938
Foreign and Insular
Canada—Provinces—Communicable Diseases for weeks ended March 26 1938
Egypt Vital Statistics 1936
Sweden Notifiable Diseases March 1938
Cholera Plague Smallpox Typhus Fever and Yellow Fever

Washington vol 53 May 20 1938

Prophylactic Value of Single Dose of Precipitated Pertussis Vaccine—W T Harrison J P Franklin and J A Bell
Incubation Period in Cases of Unclassified Fever—A V Hardy S Friedman and M M Krell
Dalmatization Activities in Ports and on Ships in American Countries during 1937 from Information Prepared by Office International d'Hygiene Publique with Comments—C L Williams and B J Lloyd
Cancer Mortality in United States for 1937 and Recent Preceding Years
Deaths during week ended April 30 1938 (a) In Large Cities in United States (b) Death Claims reported by Insurance Companies
Prevalence of Disease in United States
Current Weekly State Report for weeks ended May 7 1938 and May 8 1937
Summary of Monthly Reports from States
Plague Infection found in Ground-squirrels and Fleas from Washington and Nevada
Plague Infection found in Ground-squirrels and Fleas from Grand Coulee in Oregon
Weekly Reports from Cities for week ended April 30 1938
Foreign and Insular
Cuba—Provinces—Notifiable Diseases for four weeks ended April 1938
Panama Canal Zone Notifiable Diseases January–March 1938
Cholera Plague Smallpox Typhus Fever and Yellow Fever

Precipitated Pertussis Vaccine—A commercially prepared pertussis vaccine was precipitated with alum and the precipitate resuspended in saline solution to the original volume. One dose of 1 c.cm. was given to each of eighty-two children who were observed against a corresponding group of unvaccinated children for one year. Injection reactions were negligible. In the control group 19 per cent. developed clinical pertussis and in the vaccinated group 12 per cent. with a preponderance of mild cases. The observed differences are regarded as inconclusive but sufficient to justify a large-scale investigation which is being undertaken.

Surgery

St Louis vol 3 April 1938

Some Accomplishment of Thoracic Surgery and its Present Problems—E A Graham
Muscle Flaps in Closure of Chronic Empyema Cavities—B N Carter
End-results of High Ligation of Varicose Veins—H Fenton and D W Barrow
Varicose Veins with Special Reference to Treatment by Ligation Stripping and Injection—E Horgan
Experimental Observations on Visceral Pain—R W Moore
Carcinoma of Jejunum—H M Kern
Meckel's Diverticulum—J Pemberton and L Stalker
Importance of Haematemesis accompanied by Pyloric Obstruction—A Bassler
Psoas Abscess of Appendix—H McCorkle and J Stevenson
Right Retromesocolic Hernia—B Halpert
Repair of Direct Inguinal Hernia by Osteoperiosteal Graft to Pyramidal Line of the Pubis—J Veal and D Baker
Experimental Study of Effect of Irradiation on Acute Pyogenic Infection of Skin and Subcutaneous Tissues—J Soto A Brunschwig and F Schlutz

Chronic Empyema Cavities—In this article Carter emphasizes the fact that adequate drainage by the resection of long segments of several ribs and wide exteriorization of the empyema cavity is the most important step in the treatment of chronic empyema. Attention is drawn to the advantage of using pedicled muscle flaps in the closure of the chronic empyema cavity that remains after drainage has been carried out.

Meckel's Diverticulum—The difficulty of making a positive diagnosis of a diseased Meckel's diverticulum is pointed out. The lesion is described as a developmental anomaly of the intestinal tract which affects about 2 per cent. of the population although only about one fourth of all cases show definite symptoms. A review of twenty consecutive cases is given and two are fully described. Cases are divided into three classes according to their symptoms and treatment depends on the group to which each case belongs. There are those cases in which no symptoms or signs are present, those with symptoms or signs of intestinal obstruction, and a third group in which symptoms and signs of intestinal bleeding are present.

Surgery, Gynecology and Obstetrics

Chicago vol. 66 May 1938

Influence of Serum Protein on Mobility of Small Intestine.—I. Barden, W. Thompson, I. Ravdin and I. Frank.
Non-invasive Potential Carcinoma of Cervix.—C. Stevenson and E. Scipiades.
Acute Putrid Abscess of Lung. II. Analysis of Forty-five Consecutive Operative Cases.—H. Neuhof and A. Touroff.
Study of Hyperemesis Gravidarum with Special Reference to Blood Chemistry.—O. Grossman.
Obstetrical Shoulder Trauma.—O. Seaghetti.
Bacterial Species found in Non-sterile Catgut Sutures.—K. Clock.
*Endocholedochal Sphincterotomy.—R. Colp and H. Doubilet.
Hallux Valgus.—H. Stein.
Value of Divided Single Pedicle Skin Flap in Plastic Repair of Scalp.—W. Davis.
Carcinoma of Bronchus. Clinical and Pathological Study of 164 Cases.—J. Stein and H. Jolin.
Skeletal Distraction of Tibia.—D. Bosworth.
Operability in Cancer of Rectum.—T. Jones.
Transvesical Diathermy in Treatment of Carcinoma of Bladder.—V. Randall and C. Uhle.

Endocholedochal Sphincterotomy.—Attention is drawn in this article to the relationship between disorders of the biliary tract, the pancreas and the gall-bladder and physiological disturbances of the sphincter of Oddi. The different methods of relieving spasm of this sphincter are described and their relative values discussed. A case is fully reported in which periodic attacks of sphincter spasm were relieved by endocholedochal sphincterotomy.

Zeitschrift für Geburtshulfe und Gynakologie

Stuttgart vol. 117 April 29, 1938

Thirteen Cases of Malignant Chorion Epithelioma.—H. Heuck and R. Hauser.
Connexion between Growth of Carcinoma and Endocrine.—Hans Burtz.
Results of Operative Treatment of Prolapse.—Kurt Hollstein.
*Interstitial Tubal Pregnancy.—Herbert Huber.
Oedema of Newborn.—H. Volz.
Ascorbic Acid Content of Human Milk in Summer and Winter.—H. Winkler and A. Heim.

Interstitial Tubal Pregnancy.—Seven cases of interstitial tubal pregnancy are described. The condition is uncommon but is of interest with regard to aetiology. The author found that contrary to general experience with pregnancy occurring in other parts of the Fallopian tube there was no evidence of nodose salpingitis but that uterine decidua was present in the tubal capillaries.

Zeitschrift für die Gesamte Neurologie und Psychiatrie

Berlin vol. 162 April 22, 1938

Contribution to Psychology of Swabian People.—H. J. Weinbrecht.
Cerebral End-arteries.—L. Schairer.
Hereditary Hypoplastic Pituitary Infantilism.—W. Dzierzynski.
Colocynth Polyneuritis.—F. W. Kroll.
Contribution to Study of Neurofibromatosis (von Recklinghausen's Disease).—L. Beck.
Sensation and Image in Seeing and Hearing.—O. Goebel.
Psychopathology of Dream in Schizophrenic and Organic Psychoses.—M. Bos.
Problem of Solar Influence on Psyche.—B. and T. Dull.

Colocynth Polyneuritis.—Kroll reports a case of polyneuritis affecting both legs in a woman who had taken colocynth for over a year as a purgative. The illness ran a favourable course.

Problem of Solar Influence on the Psyche.—B. and T. Dull have attempted to test the effect of solar eruptions on the psyche by examining the frequency of suicide in a number of large European cities day by day and correlating it with observed solar phenomena. Their findings are in support of a belief in such an effect though statistically not beyond the bounds of what might be interpreted as a chance effect.

Zeitschrift für Infektionskrankheiten, Parasitare Krankheiten und Hygiene der Haustiere

Berlin vol. 53 May 1938

On a Stomach-worm Disease in Ducks occasioned by *Tropisurus fissispinus* (Diesing).—H. Lange.
Nematoda Spiruridae. Scolex and Digestion.—K. Wolffhügel.
Effect of Acid and Alkaline Feeding on Abortus Bang Infection and on Agglutinin Formation.—E. Luhrs.
Cattle-stalls and Spread of Tuberculosis. Contagious Abortion and Yellow Gait among the Cattle of a Saxon Village.—H. Haupt.
Effect of Superinfection with Swine Fever Virus on Course of Reaction of Simultaneous Vaccination against Swine Fever.—V. Zoficzky.
Enzootic Encephalitis in Young Silver Foxes as Result of Paratyphus Infection.—K. Potel.
Dysentery in Ducks.—H. Horstmann.
*Bacteriological Meat Inspection.—G. Pohl.
Experimental Feeding Tuberculosis in Swine.—A. Hemmert-Halswick and E. Hennicke.
Course of Active and Active-passive Immunity in Tetanus.—K. L. Wolters and H. Dehmel.
Value of Experimentally Infected Guinea-pig for Recognition of Infectious Anaemia in Hoofed Animals.—H. Wittfogel.

Bacteriology of Meat.—Cultures were made of various organs from 16,331 carcasses of animals which had either been 'emergency-slaughtered' or were otherwise suspect; bacteria of the Salmonella group were recovered from 269. The sites from which positive cultures were most often obtained varied somewhat in different animals but the liver, gall-bladder, lymph nodes at the hilum of the liver, and sometimes the spleen were generally speaking the most often infected. Enrichment in tetrathionate broth sometimes gave positive cultures when other methods failed.

Zeitschrift für Orthopädie und ihre Grenzgebiete

Berlin vol. 67 April 12, 1938

Dyschondroplasia. Multiple Enchondromatosis. Ollier's Growth Disturbance.—E. Gade.
Congenital Web Formation and its Conservative Treatment.—W. Marquardt.
*Ten Cases of Spontaneous Cure of so-called Congenital Dislocation of Hip.—Nagura Shigeo and Shirahama Yoshihisa.
Form and Function of Feet of Mountain Nomads of Anatolia.—Ismak Sadi.
Eumycosis in Orthopaedic Surgery.—F. Holldack.

Spontaneous Cure of Congenital Dislocation of Hip.—In a series of 128 cases of congenital dislocation of the hip spontaneous cure was found to have occurred in ten (twelve joints). This surprisingly high proportion (8 per cent.) makes it likely that such cases occur more frequently, at least in Japan, than has hitherto been assumed. The cases are described.

Zeitschrift für Tuberkulose

Leipzig vol. 79 May 1938

Hans Dekker (obituary).—F. Redeker.
Biological Hereditary Research in Tuberculosis.—W. Seiffert.
*Influence of Extracts of Organ on Evolution of Experimental Tuberculosis.—A. S. Jeans.

Organ Extracts and Tuberculosis.—This is a long and well-illustrated paper. The experimental findings lead the author to offer the tentative conclusion that in those suffering from tuberculosis associated with anaemia liver extracts should be administered with caution and never in large doses.

In the treatment of MACROCYTIC ANAEMIAS

This palatable liquid extract of hog s stomach contains Hæmopoietin in stable solution The stomachs are treated immediately after killing to extract the *Antianæmic Factor in active condition* producing a bland liquid of pleasant flavour to which the name **HOGASTRIN** has been given

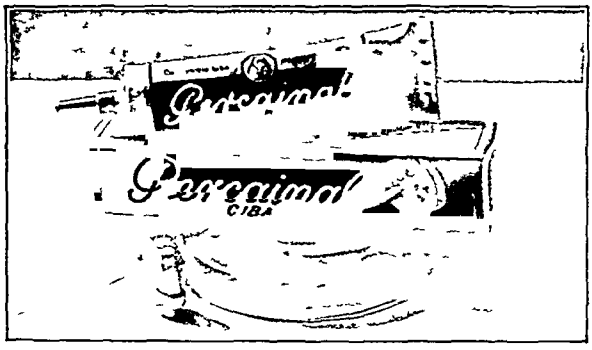
A dose of two teaspoonfuls in a little water three times a day for a fortnight then reduced to one teaspoonful will invariably give good results in the treatment of all *Macrocytic Anæmias*

Packed in 4 oz 8 oz and 16 oz bottles

For inspection sample and literature apply to the manufacturers

GILES SCHACHT AND CO
CLIFTON, BRISTOL, 8
Manufacturing chemists for over a century

HOGASTRIN



Eczema, macerations of the skin, bed sores herpes zoster, chaps, cracked nipples ulcera cruris, ulcers due to X-rays intertrigo, pruritus ani et vulvæ, anal fissures, hæmorrhoids burns etc

Collapsible tubes containing 40 grm

PERCAINAL OINTMENT "CIBA"

Analgesic, Antipruritic, Antiphlogistic & Astringent

For the treatment of all painful conditions of the skin and mucous membranes

CIBA LIMITED
40 Southwark Street, LONDON, S E 1
Telephone Hop 1041 Telegrams Cibadrugs Boroh London

DR DEIMEL UNDERWEAR is ideal for wear next the skin, being soft and porous in texture and non-irritating to the most sensitive skin It is a quick absorber and eliminator of moisture, creating a dry atmosphere around the body and providing its wearers with the best protection against climatic changes

Can be washed in boiling water for sterilization without injury

Dr Deimel
DEIMELIN
Underwear
BRITISH MADE

Dr Deimel Underwear is made in a complete range of sizes and styles for Men, Women and Children

Please write for full particulars

DEIMEL FABRIC COMPANY, 99, NEW BOND ST, LONDON, W1

QUEEN *non-irritant* Toilet Preparations
specially for prescription in Allergic cases

A COMPLETE range of toilet preparations entirely free from Orris in any of its forms or other irritants (B M J Medical World etc) A safe alternative to suspected cosmetics Through any Chemist or direct from —

BOUTALLS LTD., 150, Southampton Row, London W C 1

ALUZYME®
NON-AUTOLYSED YEAST

Professional samples descriptive matter and prices on request

ALUZYME PRODUCTS,
PARK ROYAL ROAD LONDON N W 10

TOTAL VITAMIN B ACTION

Aluzyme supplies *all* the members of the Vitamin B Complex in a fully active state The B Vitamins form a synergy, the separate factors of which accentuate or facilitate the action of the others (*Med Research Council's Special Report* 167) In all B deficiency conditions, the best results may be anticipated from administration of the entire Complex which Aluzyme provides B_1 potency 1140 International Units per ounce Active response to tests for nicotinic acid flavin and glutathione

FREQUENT MICTURITION

"BWET" ABSORBENT BAGS
Male day pattern 35/
New Model Female day pattern 42/
"DUPLEX" BAGS
Male or Female day and night 70/
"SANITUBE"
For helpless bedridden patients 70/

Our bags catch all leakage easing mind and body Invisible under clothing and easily emptied Now worn world wide Special patterns for motorists and aviators

Diagrams etc, on request from
HILLIARD 123 Douglas Street Glasgow C 2

NAMEPLATES Brass Bronze Stainless Steel
REDUCED PRICES
Send for List 1B to the Actual Maker
F OSBORNE & Co, Ltd Tel Euston 4824
117 Gower Street London W C 1

NAME PLATES in Bronze and Enamel
Stainless Steel Brass or Chromium
Actual Makers Quick Delivery Low Price
The WHITE BRONZE Co 190 London Rd CROYDON

NAMEPLATES of character in Brass & Bronze
Send for Illustrated Brochure and Price List
F B HALL & CO 445 New Cross Rd S E 14 *TIDeway* 3818

NAME PLATES
in BRONZE and ENAMEL or BRASS
Send details for sketch or leaflet
S J & A HIRD Tel Clerkenwell 2441
30 CLERKENWELL ROAD E C 1

Tel and Telegrams Haynes Brentwood 45
HUTTON HALL, BRENTWOOD ESSEX
Large grounds 400 ft above sea HOME for ladies Mentally afflicted Voluntary Boarders Staff Resident Physician Brentwood and Shenfield 1 mile Liverpool St 17 miles Apply Dr HAYNES

Within 10 miles of London yet in lovely and secluded surroundings

Home for the Treatment of
WORRY & NERVE STRAIN
(Under Medical Supervision)

Large airy rooms—Studied dietary—Expert cooking Pleasant garden with tennis court—Friendly and cheery atmosphere—New emphasis on Happiness in the Home

Terms from £5 5 0 per week

Apply to—D H C GIVEN M D D P H D T M & H Surgeon Captain R N retd
(*late Resident Medical Superintendent Norwood Sanatorium Beckenham*)
"GLENROY,"
16 Sundridge Avenue, Bromley, Kent
Telephone RAVensbourne 4410

CHISWICK HOUSE,
PINNER, MIDDLESEX
Telephone PINNER 234

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes

A modern country house, 12 miles from Marble Arch, in beautiful secluded grounds

Fees from 10 guineas per week inclusive Cases under Certificate Voluntary and Temporary patients received for treatment

Douglas Macaulay M D D P M

SPRINGFIELD HOUSE
Near BEDFORD ('Phone 3417)
For Mental Disorders with or without Certificates
Resident Physician CEDRIC W BOWER
Ordinary Terms Five Guineas per week
(Including Separate Bedrooms where suitable)
Interviews in London by Appointment

ALCOHOLISM,
OTHER DRUG HABITS,
FUNCTIONAL NERVOUS
DISORDERS, INSOMNIA

Old Hill House Chislehurst (25 mins from London) is charmingly situated in quiet secluded grounds Billiards and outdoor recreations Under new management with added accommodation ladies and gentlemen are admitted for treatment Fees 6 to 8 guineas Special terms for long periods For illustrated prospectus write to the Medical Superintendent or Matron Phone Chislehurst 451

OLD HILL HOUSE
CHISLEHURST - KENT

"ECCLESFIELD," Staplehurst, Kent
(Removed from Ashford Middlesex)

PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large mansion beautifully situated in 100 acres of parkland Extensive views Home farm R C Chapel Under the management of the Sisters of the Good Shepherd Apply Rev Mother Tel Staplehurst 61

THE GROVE HOUSE,
CHURCH STRETTON SHROPSHIRE
A private Home for the care of and treatment of a limited number of Ladies mentally afflicted Voluntary and Temporary Patients received under the new Mental Treatment Act 1930
Medical Superintendent Dr McCLINTOCK

BISHOPSTONE HOUSE, BEDFORD
A select Private Mental Home for Ladies Certified and Voluntary with separate House and Gardens for Voluntary Boarders Under personal supervision of a Resident Mental Specialist and Psychiatrist — Medical Supt Dr J LANGHAM MACAULAY Tel Bedford 2705

STRETTON HOUSE,

Church Stretton Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit. All types of early Mental and Nervous cases are received with or without certificates as Voluntary Patients under the provisions of the Mental Treatment Act 1930. Bracing hill country. See Medical Directory p. 31. Apply Resident Physician. Telephone Church Stretton 10 P.O. Telephone Tulse Hill 2181.

TENSTANTON,

CHRISTCHURCH ROAD

Streatham Hill S.W.2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders. Certified Voluntary and Temporary Patients received. Large Mansion with 1½ acres of grounds. (See Medical Directory p. 31.) Apply Resident Physician. Telephone Tulse Hill 2181.

BAILBROOK HOUSE, BATH

For sufferers from Nervous and Mental Disorders with or without certificates.

The house is delightfully situated in wooded grounds of 10 acres with magnificent views of the City and the Avon Valley. (See Medical Directory page 23.)

For terms apply A. Cunningham M.A. D.M. B.Ch. D.P.M. Resident Physician.

Telephone Bathea ton 2159.

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded grounds. For Ladies and Gentlemen suffering from Nervous or Mental Illness. Voluntary Patients Temporary Patients and Patients under Certificate are admitted for treatment. Fees from 4 guineas a week upward according to requirements. A few vacancies exist for Ladies and Gentlemen at reduced fees on the recommendation of the Patient's own Physician. Apply to Dr. J. A. Small. Telephone 50 Norwich. Telegrams Small 50 Norwich.

TYKEFORD ABBEY,

NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest standing in 15 acres of garden and grounds and is situated 14 miles from Northampton and 12 miles from Bedford on the main London to Northampton Road fifty miles from London. Both sexes are accommodated. Psycho-therapeutic Treatment is used exten ively in suitable cases. Radiant Heat X-ray and Ultra Violet Light Diathermy and Foam Baths. Billiards Tennis etc.

Apply Dr. D. E. M. DOUGLAS-MORRIS. Telephone Newport Pagnell 121.

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS

(20 miles from London.)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on modern lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital. Convalescent or mild cases can be treated in a delightful country mansion with extensive grounds known as

HIGHFIELD HALL

situate about a mile away from the Hospital. FEES TWO TO THREE GUINEAS PER WEEK. For further particulars apply to the Medical Supt. W. J. T. KIMBER L.R.C.P. D.P.M.

ST ALBANS HERTS

BARNWOOD HOUSE

GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS. Within two miles of the G.W. Railway and L.M. & S. Railway Stations at Gloucester the Hospital is easily accessible by rail from London and all parts of the United Kingdom. It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres. Voluntary Patients of both sexes are also received for treatment. Special accommodation for Lady Voluntary Patients is also provided at the MANOR HOUSE which has its own private grounds and is entirely separate from the Main Hospital. For particulars as to terms etc. apply to G. W. T. H. FLEMING M.R.C.S. L.R.C.P. D.P.M. Medical Supt.

Telephone No. 6 07 Barnwood.

ST ANDREW'S HOSPITAL

FOR MENTAL DISORDERS

NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

Patron THE MOST HON. THE MARQUESS OF EXETER C.M.G. A.D.C.

Medical Superintendent DENIS LEIGHTON M.D. M.R.C.P. D.P.H. D.P.M.

This Registered Hospital is situated in 100 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or wish to prevent recurrent attacks of mental trouble, temporary patients and certified patients of both sexes are received for treatment. Careful clinical and bacteriological and pathological examinations. Private rooms with special nurses male or female in the Hospital or in one of the numerous villas in the grounds if the symptoms so advise.

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with separate entrance through which patients can be admitted. It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders. It contains special departments for hydrotherapy by various methods including Turkish and Russian baths the prolonged immersion bath Vichy Douche Scotch Douche Electrical bath Light and Sun ray treatment etc. There is an Operating Theatre a Dental Surgery an X-ray room and Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment. It contains Laboratories for Bacteriological and pathological research.

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 640 acres. Milk meat fruit and vegetables are supplied to the Hospital from the farm gardens and orchards of Moulton Park. Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves in farming gardening and fruit growing.

BRYN-Y-NEUADD HALL

The Private house of St. Andrew's Hospital is beautifully situated in a park of 30 acres Llanfairfechan amongst the finest scenery in North Wales. On the North West side of the Estate a mile of sea coast forms the boundary. Patients may visit this Branch for a short seaside change or for longer periods. The Hospital has its own private bathing house on the beach. There is trout-fishing in the park.

At all the branches of the Hospital there are cricket grounds football and hockey grounds lawn tennis courts (grass and hard courts) croquet grounds golf courses and bowling greens. Ladies recreation hall their own gardens and facilities are provided for handicrafts such as carpentry etc.

For terms and further particulars apply to the Medical Superintendent (Telephone No. 6 and 7 Northampton) who can be seen in London by appointment.

NORTHUMBERLAND HOUSE,

GREEN LANES FINSBURY PARK N.4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses. Conveniently situated and easy of access from all parts. Six acres of ground highly situated facing Finsbury Park. Voluntary and Temporary Patients received without certification. Occupational Therapy. Psychotherapy and other modern forms of treatment.

Telephone STAMFORD HILL 6 5. *Telegrams* SUBSIDIARY LONDON.

Convalescent Home KEARSNEY COURT DOVER. For further particulars apply to the Medical Sup.

COURT HALL, KENTON, near EXETER,

for the treatment of eight Ladies voluntary temporary, or certified patients. Large gardens and own dairy.

CLIFFDEN TEIGNMOUTH for early and convalescent cases. A well appointed house with spacious balconies and extensive views of the South Devon coast. Sub tropical gardens own dairy in 25 acres. Private road to beach.

		Telephones
Resident Physicians	BERTHA M. MULES M.D. B.S.	Starcross 29
	ANNE S. MULES M.R.C.S. L.R.C.P.	Teignmouth 289

THE COPPICE, NOTTINGHAM

HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment. It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted. Occupational Therapy. Voluntary and Temporary Patients received.

Tel. 6-11. *For terms etc., apply to the Medical Superintendent.*

HAYDOCK LODGE

NEWTON-LE-WILLOWS LANCASHIRE

Telegrams Street Asylum Makerfield. *Phone* Ashton-in-Makerfield 2311.

For the treatment and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntary temporarily or under Certificate. Patients are classified in separate buildings according to the mental condition.

Situated in park and grounds of 140 acres. Self supported by its own farm and gardens in which patients are encouraged to occupy themselves. Every facility for indoor and outdoor recreation. For terms prospectus etc. apply MEDICAL SUPERINTENDENT.

THE CLINIC

20 Devonshire Place
London, W.1

Tel Welbeck 4444 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES



Fees 10 gns to 18 gns per week (Average—14 gns) 150 State Registered Nurses
8 Operating Theatres 2 Resident Medical Officers (for emergencies)
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary

NEW LODGE CLINIC, WINDSOR FOREST

This Clinic was founded in 1921 in order to provide for the scientific investigation and treatment of disease by a team of physicians and specialists
All forms of non infectious medical cases are admitted, special attention being paid to disorders of digestion and metabolism arthritis anaemias asthma heart and kidney disease and functional and organic nervous disorders
Particulars can be obtained on application to the Secretary, New Lodge Clinic, Windsor Forest, Berks
Telephone 181 and 182 Winkfield Row

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date Lovely house and grounds (18 acres) Certified and uncertified cases taken Facilities for going to the seaside

ESTABLISHED OVER 200 YEARS

Apply to Med Supt for illustrated brochure Tel SALISBURY 2612

CHEADLE ROYAL HOSPITAL

CHEADLE, CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay N Wales is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES
The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary
In addition to the Main Building there are separate villas Extensive grounds Hard and grass tennis courts cricket and croquet grounds and a court for badminton There are also wireless installations Golf may be had within easy distance Occupational therapy
VOLUNTARY TEMPORARY AND CERTIFIED PATIENTS received
The Hospital is nine miles from Manchester 50 minutes by rail from Liverpool and 3½ hours from London
For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT
Telephone GATLEY 2231 (3 lines)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds Detached Villas Chapel Garden and dairy produce from own farm Terms very moderate

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds with tennis courts etc which Voluntary Temporary or Certified Patients may visit by arrangement for long or short periods

Illustrated Brochure on application to the Medical Superintendent, The Old Manor, Salisbury 'Phone Salisbury 2201

CALDECOTE HALL

NUNEATON
WARWICKSHIRE
(Phone Nuneaton 241)

Residential treatment of FUNCTIONAL NERVOUS DISORDERS
Including Alcoholism and other Addictions
(Certifiable Cases are not received)

This beautiful mansion situated in the heart of the country (less than two hours from London by L M S R) and surrounded by charming pleasure grounds in which games and outdoor occupational therapy are available is devoted to the treatment of Functional Nervous Disorders by psychotherapeutic and ancillary methods

Illustrated brochure and particulars obtainable from T E CARVER M D D P M Resident Medical Superintendent

CAMBERWELL HOUSE, 33, Peckham Road, London, S.E.5.

Telegrams PSYCHOLITH LONDON
FOR THE TREATMENT OF MENTAL DISORDERS
Telephone RODNEY 4247 (7 lines)

Also completely detached villas for mild cases with private suites if desired Voluntary patients received Twenty acres of grounds Hard and Grass Tennis Courts Putting Greens Bowls Croquet Squash Rackets Recreation Hall with Badminton Court and all indoor amusements including Wireless and other Concerts Occupational Therapy Callisthenics and Dancing Classes, X ray and Actino therapy Prolonged Immersion Baths Operating Theatre Pathological Laboratory, Dental Surgery and Ophthalmic Dept Chapel Senior Physician Dr HUBERT JAMES NORMAN assisted by three Medical Officers also resident and visiting Consultants
An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary
The Convalescent Branch is HOVE VILLA, BRIGHTON and is 200 feet above sea level

PECKHAM HOUSE, 112, Peckham Road, London, S.E. 15.

Telegrams "Alleviated, London" Telephones Rodney 2611 2612

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders Certified voluntary and temporary patients are received Separate houses for treatment and accommodation of special cases adjoin the Institution Occupational therapy physical drill and other forms of modern treatment There is a seaside branch, Kearsney Court near Dover to which patients may be sent for treatment or on holiday Motor drives are arranged when required Tennis courts Entertainments dances and indoor amusements held throughout the year Terms from £3 3s per week Illustrated prospectus and further particulars can be obtained from the Medical Superintendent

ALDENHAM HOUSE, ELSTREE

RESIDENTIAL HEALTH RESORT

A large country house situated in 00 acres of parkland and yet only 12½ miles from Marble Arch

Specially equipped for the residential treatment of patients during convalescence and also those requiring rest and relaxation treatments by diet or physiotherapy (including Hydrotherapy Radiotherapy Electrotherapy Massage Manipulations)

All treatments are administered by qualified masseurs and masseuses under the supervision of a consulting Physician who specialises in physical medicine

Patients who wish to remain under the supervision of their own medical adviser are welcomed

Recreations include tennis croquet golf on private 9 hole course swimming riding fishing billiards etc

Fruit flower vegetables and dairy produce from garden and home farm

There is accommodation for 40 residents and most bedrooms have their own bathrooms

Illustrated brochure available to members of the Medical Profession on application to Secretary

Terms with full residence and treatment from 12 guineas per week

CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above condition and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy Cases of all types mild and grave admitted The Physiotherapy Department has separate unit equipped for X-ray work heliotherapy short-wave therapy electro-therapy and hydrotherapy with massage baths prolonged baths Schnee and Vichy douches Pulsating electric and Turkish bath cabinets etc There is a fully equipped gymnasium under qualified instructors Facilities are provided under special recreational therapists for all indoor and outdoor games including golf course cricket football and hockey ground Lawn tennis and quash courts croquet and bowling green

The Hospital has its own Cinema Library and Hairdressing Saloon Terms include regular motor drives

Private rooms suites or villas are available and special nurses can be provided

The Hospital grounds extending to nearly 100 acres are situated in delightful country and include an extensive farm (T.T. herd) gardens and orchards

As the Hospital is well endowed terms are exceptionally moderate Free First Department 3 to 6 guineas per week Second Department 2 and 21 guineas per week Voluntary and certified patients are received Medical Certificates given anywhere in the British Isles are valid for admission of patients For prospectus necessary forms and further information apply to

Physician Superintendent P. K. McCOWAN J.P. M.D. F.R.C.P. D.P.M. Barrister at Law.

July 1st Tel. Dumfries 1119



HOME FOR EPILEPTICS

MAGHULL (near LIVERPOOL)

FARMING and OPEN AIR OCCUPATION for PATIENTS

A few vacancies in Private and Class Houses FEES 1st Class (men only) from £3 p.w. upwards 2nd Class (men and women) 3/- p.w.

For further particulars apply

C. EDGAR GRISEWOOD A.C.A.,

Secretary 20 Exchange Street East Liverpool 2

Smedley's

Great Britain's Greatest Hydro

Matlock

Full range of Hydrotherapeutic Treatments including Turkish Russian Electric Vapour Douches Massage Treatments Electrotherapeutic Light Treatments Medical Gymnastics Diathermy Infra-Red Ray Treatments Radiant Heat Treatments Deep Therapy Violet Ray Treatments Sea Water Baths Open-air Heated Swimming Pool Special Dietary Cuisine Orchestra Dancing Tennis Golf Billiards Squash Rackets Garage Motor Meets Motor Excursions

Terms 13/ to 18 6 per day inclusive board

Illustrated Brochure M.J. on request.

Resident Physicians

G. C. R. HARBINSON M.B. B.Ch. B.A.O. (R.U.I.) R. MacLELLAND M.D. C.M.

Phone No. 1 *Grams* Smedleys Matlock

TORQUAY

GRESHAM COURT HOTEL

RECENTLY OPENED Luxurious comfort combined with an earnest desire to please

The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure M TEL 3658

SHAFTESBURY HOUSE, FORMBY BY THE SEA

Specially built and licensed for the care and treatment of a limited number of Ladies and Gentlemen suffering from Nervous and Mental breakdown Voluntary and certified patients received Ladies also admitted as Temporary Patients without Certification Terms moderate

Apply RESIDENT PHYSICIAN who may be seen at 31 Rodney Street Liverpool by appointment Tel. No. 8 Formby

HALLIFORD HOUSE, UPPER HALLIFORD SHEPPERTON *Established in 1841*

This handsome secluded residence standing in a park of 36 acres situated 16 miles from London is licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections

Voluntary or certified cases received Terms moderate Patients are under the constant personal care of the Resident Medical Superintendent, Dr. R. A. Stewart from whom full particulars can be obtained Tel. Sunbury-on-Thames 70

ASHWOOD HOUSE,

KINGSWINFORD STAFFORDSHIRE

An old-established PRIVATE HOME for the care and treatment of Ladies and Gentlemen mentally afflicted Probationary cases and non-certified patients are received as well as those regularly certified

The home is beautifully situated in its own grounds of 40 acres

Full particulars as to reception terms etc may be obtained from the Resident Medical Officer

WYE HOUSE BUXTON AND CLINIC

for the PREVENTION and TREATMENT of NERVOUS and MENTAL DISORDERS in both sexes Large country House beautifully situated in its own grounds Croquet lawns hard tennis court billiards wireless installation throughout Every facility for specialised modern treatment including psychotherapy occupational therapy ultra violet light diathermy Private rooms with special nurses if required Voluntary Temporary and Certified patients received—For terms apply to the Medical Superintendent HELEN S. E. MURRAY M.D. Nat. Tel. 130

CITY OF LONDON MENTAL HOSPITAL, DARTFORD KENT

Ladies and Gentlemen received for treatment under certificates, and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upwards

THE GRANGE,

near ROTHERHAM.

A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental disorders Both certified and voluntary patients received Approved for temporary Patients This is a large country house with beautiful grounds and park 8 miles from Sheffield Tel. No. 40030 Ecclesfield Res. Phys. GILBERT E. MOULD L.R.C.P. M.R.C.S. *Station* Grange Lane L. & N.E. Rly

RUSSELLS

HEMEL HEMPSTEAD RD., WATFORD

Telephone WATFORD 5317

A convalescent home for the care and treatment of mild and recoverable nervous conditions in both sexes The house situated high up in 40 acres of grounds 2 miles from London at the termination of the Watford by pass One Medical Officer is in residence and two others are in daily attendance. Fees from ten guineas a week inclusive

Apply RESIDENT MEDICAL OFFICER

ADVICE ON THE CHOICE OF SUITABLE SCHOOLS AND TUTORS

for BOYS and GIRLS with prospectuses of recommended establishments will be given free of charge to parents stating age of pupil district preferred range of fees and type of school required

J. & J. PATON

143 Cannon Street London E.C.4

Publishers of

Paton's List of Schools & Tutors Post free 5/6

HARROGATE

for health....

Health in the spa waters, which are specially suitable for treatment of Disorders of the Liver — congestion, cirrhosis, jaundice, cholecystitis, cholelithiasis, and tropical liver Diseases of the Skin — eczema, psoriasis, the coccal infections of the skin, etc the Chronic Rheumatic Diseases—Arthritis, Fibrositis, Neuritis, Gout, Hyperpiesis, Mucous Colitis, Functional Disorders of the Heart, Pelvic Disorders of Women, Convalescence from acute illness

. . and holiday

A wide range of Sulphur waters, strong and mild, and of Iron waters, both saline and pure chalybeate, is available for dealing with the large group of disorders amenable to Spa treatment Prescribed diets obtainable at hotels and boarding houses, without extra charge Complimentary and reduced price facilities for the Cure, Accommodation and Amusements are available for Members of the Medical Profession

Full descriptive Booklet of cure and holiday facilities from Spa Manager, Information Bureau, Harrogate, 1, or any L N E R Office or Agency

"IT S QUICKER BY RAIL"
Cheap monthly return tickets to Harrogate from all stations Any train, any day

TOR-NA-DEE SANATORIUM

MURTLE DEESIDE ABERDEENSHIRE

FOR THE DIAGNOSIS AND TREATMENT OF ALL FORMS OF TUBERCULOSIS

Managing Director DAVID LAWSON, M D, F R S E

Southern aspect Low rainfall Pure bracing air Sheltered grounds Beautiful surroundings All modern equipment for diagnosis and treatment including operating theatre **No extra charge for X Rays, Artificial Pneumothorax, Ultra-Violet Light, or other special treatment**

Day and Night Nursing Staff All bedrooms have central heating electric light hot and cold running water, and wireless (headphones) Comfortable and airy public rooms

Medical Superintendent J M JOHNSTON M B M R C S, D P H For terms and prospectus apply to the Secretary Telephone CULTS 107

PENDYFFRYN HALL SANATORIUM

PENMAENMAWR, NORTH WALES.

All Modern Methods of Treatment Available

Ideally situated for the treatment of Tuberculosis Sheltered from E and N E winds Climate mild and bracing Low rainfall high average of sunshine The Sanatorium is situated in its own park There are miles of graduated walks through pine gorse and heather rising to 1 000 ft and commanding extensive sea and mountain views Central heating electric light X ray installation Wireless in all rooms Full day and night nursing staff Special milk supply from a tuberculin tested herd Easily accessible from LONDON (4½ hours) MANCHESTER LIVERPOOL BIRMINGHAM and the North

Resident Physicians **Dennison Pickering M D J W Pugh M B B Ch**

For particulars apply to the Secretary Pendyffryn Hall Penmaenmawr North Wales Phone

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S S W sheltered from North and East elevation 800 feet Pure bracing air **Special Treatment by Artificial Pneumothorax (X-ray controlled) Tuberculins and Ultra-Violet Rays** are available when necessary without extra charge **X-ray plant** Fully equipped Dental Department Electric light Radiators hot and cold basins and Wireless in all rooms Up to date main drainage

Terms £3 3s. to £4 4s. a week inclusive

Visiting Consultant Surgeon C COLLETT S HOLLMAN F R C S M B T C Dub *Asst Phys* MARGARET A HARRISON M B B S Lond *Pathologist* EDGAR S DAVEY B Sc M B Ch B Cantab *Consulting Physician* CASSIDY D W C I B B F R C S Edin *Consulting Dental Surg* GEORGE V SAUNDERS L D S R C S Eng *Matron* Miss STACEY *Resident Medical Superintendent* The Cotswold Sanatorium Cranham Gloucester *Tel* St Cranham 58 *Grams* HOLLMAN BIRDLIP

Choose a Spa in

Czechoslovakia

The Spas and Health Resorts of Czechoslovakia with their centuries old tradition of healing reinforced by the experience and researches of local specialists invite your serious consideration

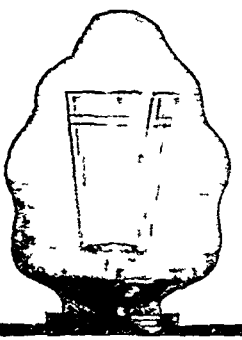
In addition to places of world wide repute such as

PISTANY (Piestany) **CARLSBAD** (Karlovy Vary) **MARIENBAD** (Marianske Lazne) **FRANZENSBAD** (Frantiskovy Lázne)

ST JOACHIMSTHAL (Jáchymov) **TEPLICE-SANOV** (Teplitz Schönau) **LUHACOVICE** **SLIAC** **TRENCIANSKE-TEPLICE**

with their medicinal springs and mud baths there are numerous smaller spas and health resorts admirably equipped for the treatment of many diseases including those in the following groups

Anaemia and Chlorosis Basedow's Disease Bronchial Catarrh Constitutional Diseases Scrofula Rickets Digestive Diseases Diseases of the Bladder and Urinary Organs Diseases of the Kidneys Diseases of the Nose and Throat Diseases of Women Disorders of Bones Muscles and Joints Disorders of the Heart Disorders of Metabolism and Gout Gallstones Leucaemia Nervous Diseases and Post Hemiplegic Conditions Tuberculosis of the Lungs



The arrangements in the bath establishments are up to date in every way the cleanliness and neatness proverbial the service attentive and courteous

It is accepted that a spa cure to be fully beneficial should provide a complete change of surroundings and a break with the patient's normal everyday life

The Czechoslovak Spa fulfil this purpose admirably comfortable hotels first class orchestras and dance bands every facility for sport—tennis golf swimming riding fishing etc

There are also numerous fully up to date homes for convalescence and rest cures

Further information from any office of

THOS COOK & SON, LTD,

and other leading Tourist Agencies

and at

CZECHOSLOVAK TOURIST INFORMATION OFFICES

—in London 21 Regent Street S W 1—

DOCTORS OWN SPA for RHEUMATISM

Sunny Pistany

VOLCANIC-SULPHURIC MUD SPRINGS in delightful surroundings

21 DAYS INCLUSIVE CURE

Special facilities for doctors and their wives

Second Class Fare with Sleeper £12 15 0 return

Mud from Pistany in packs ready for home use Simplest safest and most economical treatment may be entrusted to any patient Cost 20s or 20 treatments Literature on request

Particulars from

PISTANY AGENCY LTD 310 Regent Street London W1 Tel LANgham 4214 or PISTANY SPA BUREAU 25 Cockspur Street S W 1 Tel WHitehall 2494

THE HOSPITAL FOR DISEASES OF THE SKIN

(Established 1841)

71 BLACKFRIARS ROAD LONDON S.E.1

Telephone WATerloo 6001

New patients can be seen at 2 o'clock from Monday to Friday both inclusive also from 5.30 to 6.30 on Tuesday and Friday evenings Necessitous cases admitted free others on payment of a small contribution

LIGHT THERAPY TREATMENT X RAY DEPARTMENT

Classes held twice a year for post graduates by arrangement with the Fellowship of Medicine

All enquiries should be addressed to The Secretary

A SPA UNDER ONE ROOF

In Rockside are combined all the amenities of a modern spa, including treatment rest and entertainment

SHELTERED SITUATION SPACIOUS GROUNDS HIGHLY QUALIFIED STAFF

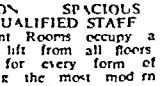
The Baths and Treatment Rooms occupy a special wing accessible by lift from all floors and are fully equipped for every form of physical treatment including the most modern hydrological and electrical methods massage and remedial exercises dietetic and occupational therapy Terms £4 4s 0d to £6 6s 0d

Inclusive terms for consultation fees treatment board residence and attendance from £6 6s

Write for Tariff to the Secretary

Consulting Physician

C R L ESTRANGE ORME M B B Ch (Camb) M R C P (Lond)



ROCKSIDE PHYSIOTHERAPEUTIC ESTABLISHMENT

MATLOCK

HOSPITAL FOR CONSUMPTION

AND DISEASES OF THE CHEST BROMPTON and FRIMLEY SANATORIUM

PAYING PATIENTS RECEIVED

BOTH MEDICAL and SURGICAL CASES

5 to 8 guineas per week at the Hospital 3 to 4 guineas per week at the Sanatorium

APPLY TO THE SECRETARY —BROMPTON HOSPITAL S W 3

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)

CITY ROAD E.C.1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Dental Clinics and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Residential) Nearly 2 000 patients annually

RALPH B CANNINGS Secretary

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17 RED LION SQ, LONDON WC1

FOUNDED IN 1882
by E S WEYMOUTH M A (Lond)

POSTAL OR ORAL PREPARATIONS FOR ALL MEDICAL EXAMINATIONS

M.R.C.P. LONDON

October examination

SPECIAL CLASSES

commencing

Aug 2nd Medicine
Aug. 10th Microscope Demonstrations
Aug. 11th Physiology
Sept. 5th Museum Demonstrations

Special attention is paid to recent work

Further particulars can be obtained from the Principal

MEDICAL PROSPECTUS (47 pp)

CONTENTS The method and the cost of entering the Medical Profession *Particulars of all Medical Examinations* Postal Courses and Oral Classes Suggestions for the Higher Medical Examinations Suggestions for the Higher Surgical Examinations Suggestions for the Special Diploma Examinations Refresher Courses Openings for Women Hints for writing theses

Medical Prospectus gratis along with list of Tutors etc on application to the Principal 17 Red Lion Sq London W C 1 (Telephone Holborn 6313)

LONDON HOSPITAL MEDICAL COLLEGE

PRIMARY FELLOWSHIP EXAMINATION

A SPECIAL COURSE OF INSTRUCTION for the above Examination will begin on Monday September 12th

The fee for the Course is 15 guineas

Further particulars may be obtained from — DR A E CLARK KENNEDY M D F R C P Dean Turner Street London E 1

LONDON HOSPITAL MEDICAL COLLEGE

F.R.C.S

A Course of Instruction for the FINAL FELLOWSHIP EXAMINATION will begin on Thursday September 1st 1938 Fees (exclusive of Operative Surgery) 25 guineas Operative Surgery 10 guineas

Further particulars may be obtained from — DR A E CLARK KENNEDY M D F R C P Dean London Hospital Medical College Turner Street London E 1

NORTH EAST LONDON POST GRADUATE COLLEGE
PRINCE OF WALES'S GENERAL HOSPITAL N 15

The Practice of the Hospital is limited to [illegible] Practitioners Particulars from J [illegible] M D Dean

MEDICAL CORRESPONDENCE COLLEGE,

19, Welbeck Street, London, W 1

M.B.B.S. LONDON

Candidates entering for Part I in November 1938, or for Parts II and III in May, 1939 under the New Regulations should write for full details of new courses of postal preparation conforming to the new requirements of the syllabus

Highly qualified Tutors with accurate knowledge of the special features of these examinations

Write at once for booklet The Problem of the Final M B B S London Sent free on application

Address The Secretary,
MEDICAL CORRESPONDENCE COLLEGE,
19 Welbeck Street London W 1

ST MARY'S HOSPITAL MEDICAL SCHOOL, W 2
(UNIVERSITY OF LONDON)

PRIMARY F R C S COURSE

A Course of Instruction for the November EXAMINATION will begin on Monday September 19th 1938 Fee for the Course £16 16s or £9 9s for either section separately

For further particulars apply to the School Secretary

MASTERY OF MIDWIFERY M.C.O.G D C O.G

Short Intensive Postal and Oral Revision Courses in preparation for these Diplomas

Apply SECRETARY Medical Corresponden e College 19 Welbeck Street W 1

STAMMERING, SPEECH DEFECTS
BEHNKE METHOD Estab 1880 Cures non resident treated at 39 Earl's Court Sq S W 5 and in residence in the Summer holidays at Miss BEHNKE's house on the Chilterns
Pre-eminent success in education and treatment of stammering and other speech defect — Times
Thoroughly physiological principle — Lancet
The method scientifically correct and perfectly effective — Guy's Hospital Gazette
Stammering, Cleft Palate Speech, Lisping
3 to 5 of Miss BEHNKE 39 Earl's Court Sq S W 5

F.R.C.S (Edin)

EDINBURGH POSTAL COURSES

Full details of above and Oral Classes — H C ORRIN F R C S Surgeon's Hall Edinburgh

COACHING
By M D M R C P F R C S in Surgery and Pathology for Conjoint M B or Fellowship Classes or individually Address No 7530 B M A House Tavistock Square W C 1 or Phone (mornings) KEN 2450

CITY OF BIRMINGHAM
PUBLIC HEALTH DEPARTMENT
LITTLE BROMWICH HOSPITAL FOR INFECTIOUS DISEASES

JUNIOR RESIDENT MEDICAL OFFICERS

Two Junior Resident Medical Officers (one male and one female) required Candidates must be unmarried and must have held previous resident posts in general or children's hospitals

Salary at the rate of £300 per annum together with board etc valued at £150 per annum These appointments are limited to twelve months

The officers appointed will be required to pay to the Council all fees allowances and emoluments (other than the foregoing) received by them They will be required to take up duty at the end of September

It is not feasible to attend classes for the D P H in conjunction with these appointments

Forms of application may be obtained from the Medical Superintendent Dr J McGARRITY Little Bromwich Hospital Birmingham 9 and should be returned to him on or before July 28th

The Council House Birmingham — F H C WILTSHIRE Town Clerk

AMENDED ADVERTISEMENT

CITY OF COVENTRY

ASSISTANT SCHOOL MEDICAL OFFICER AND ASSISTANT MEDICAL OFFICER OF HEALTH (MALE)

The Coventry City Council invite applications for the above post from registered male medical practitioners under 40 years of age Applicants should possess a Diploma in Public Health and previous experience is desirable The duties are in connection with the medical inspection etc of school children and there are also opportunities for experience in general public health work

The commencing salary will be £600 rising by annual increments of £25 to a maximum of £700 per annum

The post is designated under the Local Government and Other Officers Superannuation Act 1937 *as amended in regard to annuities to widows* by the Coventry Corporation Act 1936 and the successful applicant will be required to pass a medical examination as to fitness and to contribute to the superannuation fund and to the Coventry Staff Widows and Orphans Pension Fund

Applications stating age qualifications and experience together with copies of three recent testimonials should reach the undersigned on or before July 27th 1938

The Council House Coventry July 11th 1938 — FREDERICK SMITH Town Clerk

COUNTY COUNCIL OF THE COUNTY OF RENFREW

The County Council invite applications for the appointment of COUNTY MEDICAL OFFICER The applicant must be a Registered Medical Practitioner and hold a Diploma in Public Health The person appointed as County Medical Officer will be required to act as Chief Tuberculosis Officer Chief School Medical Officer Medical Officer of Health for the Small Burghs in the County Chief Medical Officer for *Maternity* Service and Child Welfare and Inspector of Midwives and to devote his whole time to the duties of these offices as the same may from time to time be defined by the County Council Initial salary £1 200 per annum with actual necessary outlays incurred in the discharge of the duties

The appointment is a designated post under the County Council's Superannuation Scheme and the applicant will require to pass a medical examination before appointment

Applications stating qualifications and age which must not exceed 45 years except in the case of any applicant already *in the service* of the County Council accompanied by testimonials to be forwarded to the undersigned on or before August 15th Canvassing direct or indirect will be a disqualification

County Buildings Paisley July 18th 1938 — J C FRASER County Clerk

CITY OF SALFORD

INFECTIOUS DISEASES HOSPITAL
(300 Beds)

Applications are invited for the post of JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER (male) Salary £200 per annum plus board residence and laundry The appointment will be for one year

Form of application may be obtained from the Medical Officer of Health 143 Regent Road Salford 5 to whom it must be returned not later than August 6th 1938

Junior Assistant Resident Medical Officer

H H TOMSON Town Clerk

ROYAL NAVAL MEDICAL SERVICE.

Vacancies exist for Medical Officers in the Royal Navy, and applications are invited for entry in September, 1938

Candidates below the age of 28 years are preferred and they must be registered under the Medical Acts No examination in professional subjects will be held, but candidates will be required to attend for interview by a Selection Board

Selected candidates will be entered for Service for a period of three years, which if desired is usually extended to five years at the discretion of the Admiralty

At the end of three years' service, officers may retire with a gratuity of £400, but those who serve for five years will receive £1 000.

At the end of five years' Short Service permanent commissions will be given to selected officers who wish to make the Naval Medical Service their permanent career Officers transferred to the permanent list will receive a gratuity of £1 000 (less Income Tax)

Full opportunities exist for transfer to the permanent list and periods of unemployed or half pay are very rare The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Opportunities are available for officers on the permanent list for post graduate study, to specialise, to take higher examinations and to obtain further qualifications

Naval Medical Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers

Copies of the regulations for entry and conditions of service including rates of pay, allowances and retired pay may be obtained from the Medical Director General of the Navy, Admiralty, S W 1, and from the Deans of all Medical Schools

Applications for entry from intending candidates must be received not later than 31st August, 1938

ROYAL NAVAL DENTAL SERVICE

Applications are invited for appointment to commissions as DENTAL OFFICERS in the ROYAL NAVY

Candidates who must be British subjects below the age of 8 years must hold the degree or diploma of a British University or College of Surgeons and be registered under the Dentists Acts or Medical Acts Unmarried candidates are preferred No examination in professional subject will be held but candidates will be required to attend at the Admiralty for interview and for physical examination as to their fitness for service in any part of the world

Successful candidates will be appointed to short service commissions as Surgeon Lieutenants (D) and will receive a grant of £50 towards the cost of providing the necessary uniform on entry Vacancies in the permanent list will be filled by selection from among officers holding short service commissions who desire to make the Royal Naval Dental Service their permanent career Officers not transferred to the Permanent List will on the termination of their short service engagement after six years service receive a gratuity of £1 000

Opportunities are available for officers on the permanent list for post graduate study The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Naval Dental Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers

Application Forms and copies of the regulations for entry and conditions of service rates of pay and allowances etc may be obtained from the Medical Director General of the Navy Admiralty S W 1 and from the Deans of Dental Schools

CITY AND COUNTY OF NEWCASTLE UPON TYNE.

NEWCASTLE GENERAL HOSPITAL (800 Beds)

ASSISTANT RADIOLOGIST

Applications are invited from duly qualified and registered Medical Practitioners for the post of Assistant Radiologist in charge of the Deep Therapy Department at the above-mentioned hospital

Salary £500 rising by two annual increments of £50 to £600

Applications which should give full details of training and experience together with copies of two testimonials should be submitted to the Medical Officer of Health Health Department Town Hall Newcastle upon-Tyne 1 not later than Wednesday July 27th 1938

MEDICAL STAFF PRISON SERVICE (ENGLAND AND WALES)

Applications are invited for the post of Temporary MEDICAL OFFICER CLASS II in the above Service Commencing salary £525 per annum rising by annual increments to £600 per annum with unfurnished house (free of rates) or an allowance in lieu The post is pensionable.

Candidates must be fully qualified and registered Preference will be given to those who have held House appointments have had experience in mental diseases and psychological methods and are between the ages of 25 and 35 years The commencing salary for those holding the Diploma of Psychological Medicine will be £575 per annum

Of the whole-time Prison Medical Officers 16 are Class II and 12 are Class I Promotion from Class II to the rank of Medical Officer Class I on a salary scale of £600 per annum rising to £1 000 per annum with unfurnished house (free of rates) or an allowance in lieu are made as vacancies occur Three of the senior Medical Officers receive an additional allowance of £50 per annum and at certain Prisons Medical Officers receive fees for giving evidence in the Criminal Courts

Forms of application can be obtained from the Secretary (Staff Branch) Prison Commission Home Office, London S W 1

STAFFORDSHIRE WOLVERHAMPTON AND DUDLEY JOINT BOARD FOR TUBERCULOSIS

PRESTWOOD SANATORIUM (60 Beds)

Applications are invited for the post of JUNIOR ASSISTANT MEDICAL OFFICER (male) at the above named Sanatorium which is approximately nine miles from Wolverhampton The successful candidate will have opportunities of obtaining experience in the work of a Dispensary He will be required to take up duty during the third week in September The appointment will be for six months in the first instance renewable for a further maximum period of six months.

Salary at the rate of £200 per annum with board residence and laundry

Form of application may be obtained from the undersigned and should be returned by first post on July 18th 1938 together with copies of not more than three recent testimonials

Count Buildings H L UNDERWOOD
Stafford Clerk of the Joint Board
July 13th 1938

ROYAL N.Z. SOCIETY FOR THE HEALTH OF WOMEN AND CHILDREN (INC.) (PLUNKET SOCIETY)

APPOINTMENT OF MEDICAL ADVISER TO THE DOMINION COUNCIL OF THE SOCIETY

The Dominion Council of the Royal N Z Society for the Health of Women and Children (Inc.) (Plunket Society) invites applications from members of the British Medical Association for the appointment of a Medical Adviser to the Society

The successful applicant will require to reside at Dunedin New Zealand and to enter into a contract for a period of five years and to devote his whole time to the work

Salary £1 000 per annum New Zealand currency

Further particulars may be obtained from Dr R C Jewesbury M D F R C P 5 Wimpole Street Cavendish Square London W or from the High Commissioner for New Zealand New Zealand House 415 Strand London W C.

The successful applicant will be required to take up duty early in 1939

Applications giving full particulars as to age experience and qualifications together with copies of recent testimonials will be received not later than September 30th 1938 and should be addressed to the Dominion President Plunket Society Queens Buildings Princes Street Dunedin New Zealand

COUNTY BOROUGH OF BURNLEY

MUNICIPAL GENERAL HOSPITAL

JUNIOR RESIDENT MEDICAL OFFICER (Male)

Applications are invited from fully qualified medical men for the position of Junior Resident Medical Officer at the Municipal General Hospital Burnley to take up duties on or about August 1st 1938 The appointment will be for a period of twelve months

Salary at the rate of £180 per annum for the first six months £200 per annum for the second six months plus full residential emoluments

Applications together with copies of testimonials should be forwarded as early as possible to the Medical Officer of Health St James Street Burnley

Town Hall HARRY PLOWMAN
Burnley Town Clerk
July 6th 1938

UNIVERSITY OF BRISTOL

DEPARTMENT OF PREVENTIVE MEDICINE

AMENDED

Applications are invited for a SENIOR BACTERIOLOGIST Salary £700 to £800 per annum according to qualifications and experience Appointment to date from October 1st 1938 Candidates must be fully qualified and registered and have had considerable experience in a recognized Pathology department

Applications should reach the undersigned from whom further particulars may be obtained on or before August 0th 1938

WINIFRED SHAPLAND
Secretary and Registrar

BOROUGH OF BEXLEY

ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from fully qualified medical men and women not exceeding 45 years of age for the post of whole time Assistant Medical Officer of Health

Applicants must have had not less than three years' postgraduate experience with special experience in the management and dietetics of infancy children's diseases and practical midwifery

The possession of a Diploma in Public Health and or postgraduate diploma in midwifery will be considered an advantage

The person appointed will be required to reside in the Borough and to work under the direction and control of the Medical Officer of Health principally in connexion with the administration of the Maternity and the Welfare Services and of the Council's Maternity Home

The salary will be at the rate of £550 per annum rising by annual increments of £25 to a maximum of £700 subject to a deduction of 5 per cent under the Local Government and Other Officers Superannuation Act 1922

The successful candidate will be required to pass a medical examination

Women applicants must be single and if appointed will be required to resign on marriage

The appointment will be subject to termination by three months notice on either side

Forms of application may be obtained from the Medical Officer of Health 14 Brampton Road Bexleyheath Kent to whom on completion they should be returned together with copies of not more than three recent testimonials in sealed envelopes endorsed Assistant Medical Officer of Health by August 5th 1938 at the latest

Candidates must disclose in their applications whether to their knowledge they are related to any member of or the holder of any senior office under the Council Failure to do so or canvassing directly or indirectly will be deemed a disqualification

Council Offices W WOODWARD
Bexleyheath Town Clerk

BOROUGH OF STALYBRIDGE

MEDICAL OFFICER OF HEALTH

Applications are invited for the position of Medical Officer of Health School Medical Officer and Maternity and Child Welfare Medical Officer (male) for the Borough

The salary will be at the rate of £800 per annum payable monthly

Candidates must be duly qualified Medical Practitioners not exceeding 45 years of age possess a recognized Diploma in Public Health and the requisite qualifications required by the Sanitary Officers Order and the regulations of the Minister of Health to whose approval the appointment will be subject

The appointment will be subject to the provisions of the Local Government and other Officers Superannuation Act 1922 and may be determined by three months notice in writing

Particulars of duties conditions of appointment and forms of application may be had on application to the undersigned

Applications marked Medical Officer of Health accompanied by copies of not more than three recent testimonials must be sent to the undersigned not later than July 30th 1938

Canvassing in any form oral or written direct or indirect will disqualify

Dated July 11th 1938

L O BOTTOMLEY
Town Clerk

Town Clerk's Office Stalybridge

KING'S COLLEGE HOSPITAL
London SE5

BIOCHEMIST (male) required to commence on October 1st Salary £500 per annum with opportunities for Private Practice Candidates must be medically qualified and have had special experience in Chemistry

Applications should be sent by September 1st to the House Governor King's College Hospital Denmark Hill SE5 from whom full particulars of the post may be obtained

SURREY COUNTY COUNCIL
PUBLIC HEALTH DEPARTMENT

SURREY COUNTY SANATORIUM
Milford (300 Beds)

JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER

Applications are invited from registered Medical Practitioners (either sex) for the appointment of Junior Assistant Medical Officer at County Sanatorium Milford near Godalming Resident experience in general hospital essential Appointment is for six months renewable for further period of six months Salary £250 per annum together with full residential emoluments Appointment is subject to the Staffing Regulations of the County Council

Applications stating age qualifications and experience and enclosing copies of not more than three recent testimonials should be sent to the Medical Superintendent Surrey County Sanatorium Milford Surrey to reach him not later than Wednesday July 27th 1938

County Hall DUDLEY AUKLAND
Kingston upon Thames Clerk of the Council
July 18th 1938

CITY OF PORTSMOUTH

SAINT MARY'S MUNICIPAL HOSPITAL
(1 050 Beds)

Applications are invited for the appointment of a JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER Applicants must be single gentlemen duly qualified and registered not exceeding 30 years and must have had at least one year's experience of hospital work Experience in anæsthetics will be an additional qualification The appointment is limited to a term of one year and the salary will be £250 per annum with residential emoluments valued at £125 per annum The appointment includes service at any institution belonging to the City Council and will be subject to termination by one month's notice on either side A resident Medical Superintendent is in attendance

Application forms may be obtained from and must be returned to the Medical Officer of Health The Guildhall Portsmouth not later than Thursday August 11th 1938

Canvassing either directly or indirectly will be deemed a disqualification

The Guildhall F J SPARKS
Portsmouth Town Clerk
July 18th 1938

COUNTY BOROUGH OF READING

BATTLE HOSPITAL

APPOINTMENT OF RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the appointment of Resident Assistant Medical Officer (male) at the above Hospital at a salary of £300 per annum with board residence etc Candidates must be single and should not be more than 30 years of age The selected candidate will be required to work under the direction of the Medical Superintendent

The appointment (which will be determinable by one month's notice on either side) will be for a period of one year and preference will be given to candidates who are reading for higher qualifications

Forms of application may be obtained from and must be returned duly completed to the undersigned with copies of three recent testimonials not later than Thursday 4th proximo Canvassing either directly or indirectly will disqualify

Town Hall C S JOHNSON
Reading Town Clerk
July 22nd 1938

COUNTY BOROUGH OF ROCHDALE

PUBLIC HEALTH DEPARTMENT

The Health Committee invite applications from fully qualified registered Medical Practitioners (unmarried) for the appointment of JUNIOR RESIDENT MEDICAL OFFICER (male) at the Birch Hill Hospital (475 Beds—Medical Surgical Children and Maternity)

The appointment includes certain services at the adjoining Public Assistance Institution and will be for a period of six months in the first instance and for a further period of six months at the option of the Town Council but will not be renewable thereafter

Salary at the rate of £225 per annum together with board residence and laundry

Applications must be made on the prescribed form which may be obtained on application to the Medical Officer of Health and returned addressed to him at the Public Health Offices Baillie Street Rochdale not later than Tuesday August 9th 1938

Town Hall HARRY BANN
Rochdale Town Clerk
July 15th 1938

CITY OF MANCHESTER EDUCATION COMMITTEE

ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from fully qualified medical practitioners for the post of Assistant School Medical Officer

Applicants must have been qualified for three years and will be required to devote their whole time to the duties of the office Preference will be given to those who have had special experience in refraction work

The salary is £600 per annum rising by annual increments of £25 to a maximum of £750 There is a yearly allowance of £10 for travelling expenses

Forms of application and conditions of appointment may be obtained from the undersigned and applications should be returned not later than Monday August 22nd 1938

W O LESTER SMITH
Director of Education

Education Offices
Deansgate
Manchester 3
July 8th 1938

COUNTY BOROUGH OF ROTHERHAM

MEDICAL SERVICES COMMITTEE

ASSISTANT MEDICAL OFFICER

Applications are invited from duly qualified Medical Practitioners (male) for the post of Assistant Medical Officer Candidates must be under 35 years of age unmarried and of British nationality They must have held a resident hospital appointment (general) or have engaged in private practice

The main duties are at Oakwood Hall Sanatorium (100 Beds) with other work as required in connexion with the Fever Hospital and Maternity and Child Welfare Clinics The post offers excellent opportunities for experience not only in all modern methods of diagnosis and treatment of tuberculosis but in other aspects of public health work

The salary is £300 per annum with board residence and laundry

The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and is for one year being terminable at any time by two months notice on either side

Forms of application and addressed envelope may be obtained from the Medical Officer of Health Town Hall Rotherham and must be returned to the undersigned endorsed Assistant Medical Officer not later than noon on August 4th 1938

Canvassing will be deemed a disqualification

CHAS L des FORGES
Town Clerk

Municipal Offices Rotherham

CITY OF MANCHESTER

CRUMPSALL HOSPITAL (1 543 Beds)

The Public Health Committee invites applications from registered medical practitioners for the post of RESIDENT SURGICAL OFFICER at the above named hospital

The salary for the appointment is £400 per annum rising by £25 annually to a maximum of £450 per annum with board residence and laundry in addition subject to the Manchester Corporation conditions of service

Applicants must hold a higher qualification in surgery and must have had previous experience in residential hospital posts

Full information and forms of application may be obtained from the Medical Officer of Health Town Hall Manchester 2 and applications for the post must be received by him not later than August 10th 1938

Town Hall F E WARBRECK HOWELL
Manchester 2 Town Clerk
July 20th 1938

CAITHNESS COUNTY COUNCIL

PARISH MEDICAL OFFICER WANTED

Medical Officer wanted for the Parish of Canisbay including the Island of Stroma to take up duties on September 30th next The salary payable by the County Council for services as Parish Medical Officer is £96 per annum and the successful applicant will be required to enter into an agreement with the Local Medical Association who pays £150 or thereby per annum and provides a free house with hot and cold installation and all modern conveniences A grant from the Highland and Islands (Medical Service Fund) is made by the Department of Health and there is a midwifery practice

Applications with six copies of testimonials should be lodged with the Subscriber on or before August 15th next

County Offices JAMES ROBERTSON
Wick County Clerk
July 18th 1938

COUNTY COUNCIL OF DURHAM

EDUCATION DEPARTMENT

ASSISTANT SCHOOL MEDICAL OFFICER

The County Education Committee invite application for the post of Assistant School Medical Officer (woman) to act under the School Medical Officer in connexion with the inspection of school children and such other duties as may be required by the Education Committee

Commencing salary £500 per annum (provided the candidate has had not less than three years' postgraduate experience) rising by annual increments of £25 to £700 per annum together with travelling expenses according to the County Scale The successful candidate will be required to devote her whole time to the duties of the office and reside in or near the district to which he will be attached at a place to be approved by the Education Committee The appointment will be subject to three calendar months notice on either side expiring on the last day of any calendar month Applicants must have had experience in the work of school medical inspection and preference will be given to candidates who

(a) Have had experience in the work of School Clinics

(b) Have been accustomed to make special reports on Mentally Defective Physically Defective, Epileptic and other Defective Children

The possession of a Diploma in Public Health is desirable though not essential

Canvassing directly or indirectly is prohibited and will disqualify

A deduction of 5 per cent will be made from the salary in accordance with the Local Government and Other Officers Superannuation Act 1937 and the appointment will be subject to the candidate passing the medical examination in connexion therewith

Forms of application to be returned not later than Saturday August 13th 1938 may be obtained from the Director of Education Shire Hall Durham on receipt of a stamped addressed foolscap envelope

SHIRE HALL THOS B TILLEY
DURHAM Director of Education
July 11th 1938

COUNTY COUNCIL OF DURHAM

EDUCATION DEPARTMENT

SCHOOL DENTIST

The County Education Committee invite applications from fully qualified and experienced Dentists for appointment as a School Dentist to act under the School Medical Officer in connexion with the treatment of dental defects of children attending schools in the County area, and to undertake such other duties as may from time to time be required by the Education Committee

Commencing salary £500 per annum rising by annual increments of £25 to a maximum of £600 per annum together with travelling expenses in accordance with the County Scale The successful candidate will be required to devote his (her) whole time to the duties of the office and to reside in or near the district in which he (she) may be attached at a place to be approved by the Education Committee The appointment will be subject to three calendar months notice on either side such notice to date from the last day of any calendar month

Canvassing directly or indirectly is prohibited and will disqualify

A deduction of 5 per cent will be made from the salary in accordance with the Local Government and Other Officers Superannuation Act 1922 and the appointment will be subject to the candidate passing the medical examination in connexion therewith

Forms of application to be returned not later than Saturday August 13th 1938 may be obtained from the Director of Education Shire Hall Durham on receipt of a stamped addressed foolscap envelope

THOS B TILLEY
Director of Education
SHIRE HALL DURHAM
July 11th 1938

THE GENERAL INFIRMARY AT LEEDS
(673 Beds.)

Applications are invited for the post of a full time DIRECTOR of the new X-ray Diagnostic Department

The commencing salary will be at the rate of £1,000 per annum

Candidates must be duly Registered Medical Practitioners with special experience in Radiological work and must hold the D.M.R.E. qualification

Applications accompanied by copies of recent testimonials stating age qualifications etc should be sent to the undersigned not later than August 4th 1938

S CLAYTON FRYERS
House Governor and Secretary

COUNTY OF HUNTINGDON

ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH AND MEDICAL OFFICER OF HEALTH

Applications are invited for the full-time whole-time appointment of an Assistant County Medical Officer of Health for the Administrative County of Huntingdon and Medical Officer of Health for the Borough of Godmanchester the Urban District of Old Hilton and Ramsey and the Rural District of Norman Cross in the said County at a salary of £500 per annum with a travelling allowance of £100 per annum The estimated total population of the Sanitary Districts named is 40,000

Applicants who should not be over 40 years of age must be duly qualified medical practitioners with whole-time experience in Public Health duties and must hold the Diploma in Public Health or its equivalent The officer appointed will be required to reside at such place in the northern part of the County as shall be approved As regards the duties of an Assistant County Medical Officer of Health the officer will act under the control of the County Medical Officer of Health and will be required to perform such duties as may be from time to time prescribed As regards his duties as District Medical Officer of Health the officer will be the officer of the Local Sanitary Authorities

The joint appointment is subject to the approval of the Minister of Health and the Board of Education and also so far as the office of District Medical Officer of Health is concerned to the provisions of the Sanitary Officers (Outside London) Regulations 1935 The joint appointment will be one under the Local Government Superannuation Act 1937 and the selected candidate will be required to pass a medical examination

The joint appointment will be determinable by *three months written notice on either side* subject so far as the office of the District Medical Officer of Health is concerned to the consent of the Minister of Health

Forms of application together with a list of duties may be obtained from the undersigned and accompanied by copies of not more than three recent testimonials should be returned to him not later than August 5th 1938

J B KELLY
Clerk of the County Council
County Offices Huntingdon
July 19th 1938

DERBYSHIRE COUNTY COUNCIL

APPOINTMENT OF COUNTY BACTERIOLOGIST AND PATHOLOGIST

Applications are invited from registered medical practitioners for the appointment of County Bacteriologist and Pathologist at a commencing salary of £450 per annum rising by biennial increments of £40 to £530 per annum

Applicants must have had special experience in the bacteriology of water and milk and experience in a Pathological Laboratory

The officer appointed will be required to devote the whole of his time to the duties of the office and will be in charge of the work of the Bacteriological Laboratory under the administrative control of the County Medical Officer

The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1937 and the successful candidate will be required to pass a medical examination

Applications accompanied by copies of no more than three recent testimonials must reach the undersigned not later than Monday August 8th 1938

W M ASH
County Offices County Medical Officer
St Mary's Gate Derby
July 20th 1938

CITY OF LEICESTER

RESIDENT MEDICAL OFFICER

The Health Committee of the City of Leicester invite applications for the position of Resident Medical Officer (male) at their CITY GENERAL HOSPITAL for a period of six months renewable if satisfactory for a further six months The successful candidate will be required to commence as soon as possible *Preference will be given to* those with or reading for higher qualifications

The Hospital is a modern building with 400 beds four Resident Medical Officers and one Deputy Medical Superintendent The work that will be required of the Resident Medical Officer will be chiefly medical there may however be some general Surgical work Salary £200 per annum together with full residential emoluments

Further particulars of the appointment may be obtained from the undersigned and applications (on forms supplied) accompanied by copies of three recent testimonials must be received not later than August 4th endorsed "R M O" addressed to the undersigned

E K MACDONALD
Medical Officer of Health
Health Department
Grey Friars Leicester
July 22nd 1938.

COUNTY BOROUGH OF WEST BROMWICH

ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from duly qualified registered medical gentlemen for the above appointment Applicants must possess a Diploma in Public Health and have had three years' experience since qualification with special experience in Diseases of Infants and Children and in Infectious Diseases Knowledge of Tuberculosis Mental Defiency or Ophthalmic work would be deemed additional qualifications Age not to exceed 35 years

The officer will be subject to the direction of the Medical Officer of Health

The person appointed will be required to devote the whole of his time to the duties assigned to him by the Council to be within the Borough and not to engage in private practice

Commencing salary £500 per annum rising by annual increments of £25 to £600 per annum

The engagement will be terminable by three months' notice on either side

The appointment is designated under the Local Government and Other Officers' Superannuation Act 1937 and the successful candidate will be required to pass a medical examination

Applications stating age qualifications present appointments and experience if any with copies of three recent testimonials should be forwarded to the undersigned not later than the first post on Wednesday August 10th 1938 and should be endorsed "Assistant Medical Officer of Health"

There are no special application forms

TOWN HALL G F DARLOW
West Bromwich Town Clerk
July 19th 1938

CITY OF CARDIFF

ISOLATION HOSPITAL

APPOINTMENT OF ASSISTANT RESIDENT MEDICAL OFFICER (Male)

Applications are invited from duly qualified medical practitioners for the appointment of ASSISTANT RESIDENT MEDICAL OFFICER at the City Isolation Hospital Cardiff

The appointment will be for one year only and the salary will be £200 per annum with full board residence and laundry

The candidate appointed may be required when necessary to undertake general duties in the Public Health Department

Forms of application may be obtained from the *Medical Officer of Health City Hall Cardiff* by whom applications accompanied by copies of three recent testimonials and endorsed Resident Medical Officer must be received not later than August 6th 1938

CITY HALL D KENVYN REES
CARDIFF Town Clerk
July 19th 1938

LONDON COUNTY COUNCIL

Medical Practitioners required with appropriate qualifications for appointment as ASSISTANT PATHOLOGIST at Central Histological Laboratory Archway Hospital Archway Road N 19 Salary £600 by £25 to £700 Experience in morbid histology and post-mortem work essential

Forms of application and further particulars (stamped addressed foolscap envelope necessary) from Medical Officer of Health (Staff Division 2a) County Hall Westminster Bridge S.E.1 returnable by August 31st

Canvassing disqualifies

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(Also Provincial Medical Beds)

HOUSE SURGEON to Ophthalmic and Ear Nose and Throat Departments

Applications are invited from fully qualified men for the above post

The appointment is for six months

Salary at the rate of £120 per annum

Applications in own handwriting together with copies of three recent testimonials should be sent to the undersigned not later than

M H POONE
Superintendent and Secretary

July 19th 1938

MANCHESTER EAR HOSPITAL
Grosvenor Square All Saints

The Board invite applications for the following posts —

RESIDENT HOUSE SURGEON Salary at the rate of £100 per annum

NON-RESIDENT HOUSE SURGEON Salary at the rate of £100 per annum and partial board

Appointments six months Thirty-one bed

Candidates must be duly qualified and registered

Applications with four copies of recent testimonials to be forwarded to Mr Reginald S Milford (Hon Secretary Manchester Ear Hospital) c/o Mr W J Elam 7 Brazenose Street Manchester 2

CARDIFF ROYAL INFIRMARY
(Associated with the Welsh National School of Medicine)

Applications are invited for the post of RESIDENT MEDICAL OFFICER

Duties will include case record keeping and teaching and Medical work under the direction of the Honorary Staff

Candidates must be Doctors of Medicine of a University of the United Kingdom or Fellows of one of the Royal Colleges of Physicians in the United Kingdom and must have previously held a Resident Hospital post

The salary will be at the rate of £200 per annum with board residence and laundry The appointment is for one year and the holder will be eligible to apply for reappointment and may retain office for three consecutive years

Further particulars may be obtained from the Medical Superintendent to whom applications (endorsed R M O) with not more than three testimonials (copies) must be sent by noon on Wednesday August 31st 1938

By Order of the Council
R ARMSTRONG
Medical Superintendent

MANCHESTER ROYAL INFIRMARY

The Board of Management of the Manchester Royal Infirmary invite applications for the post of RESIDENT MEDICAL OFFICER of the PRIVATE PATIENTS HOME

Applicants must be registered and hold a Medical and Surgical qualification and must have had at least one year's resident experience in a *general hospital*

The appointment is for twelve months renewable for a further period

Salary £250 per annum with board residence and laundry allowance

Full information is obtainable from the undersigned to whom applicants must send twelve copies of their application and testimonials on or before 9 a m on Thursday July 28th 1938

By Order
F J CABLE
General Superintendent and Secretary

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL

Applications are invited from duly registered candidates (male and unmarried) for

a HOUSE SURGEON salary £150 per annum from August 1st

a HOUSE PHYSICIAN salary £125 per annum from July 1st

The appointments are for six months and include apartments board and laundry The House Surgeon must be an experienced anaesthetist

All applications stating age etc with copies of testimonials to be sent to me at once

FRANK H TOONE
9 Leicester Road Secretary
Loughborough

KETTERING AND DISTRICT GENERAL HOSPITAL (108 Beds)

Applications are invited for the post of HOUSE PHYSICIAN

Salary £150 per annum with board residence and laundry Candidates must be fully qualified and registered and be free to commence duties on September 1st 1938

Applications stating age nationality and qualifications together with copies of three testimonials to be sent to the undersigned before August 2nd 1938

G W JACKSON
Secretary Superintendent

BUTE HOSPITAL LUTON

HOUSE SURGEON (male) wanted to commence duties as soon as possible Salary £150 per annum with board residence and laundry

Applications stating age nationality and experience together with copies of not more than three recent testimonials should be sent immediately to the Secretary of the Medical Advisory Committee at the Hospital

R E LINGARD
Secretary Bute Hospital

MIDLAND HOSPITAL
Essy Row Birmingham (50 Beds)

Applications are invited for the post of HOUSE SURGEON Duties to commence August 1st Salary £ 00 per annum with board residence and laundry

Applications stating when at liberty age qualifications together with copies of recent testimonials to be *addressed to the undersigned*
OLIVE TURNEAUX Secretary

MANCHESTER ROYAL EYE HOSPITAL

JUNIOR HOUSE SURGEON required Salary £ per annum with residence board etc Applications (with copies of testimonials) required H se Surgeon to be addressed to the Secretary not

H P NORTH
Secretary and

ROYAL CORNWALL INFIRMARY
Truro

APPOINTMENT OF HONORARY PHYSICIAN

Applications are invited for the post of Hon Physician Candidates should be Graduates in Medicine of a University of Great Britain or Ireland and must be Fellows or Members of the Royal College of Physicians of London

The selected candidate will be responsible for the care of Medical In and Out Patients and will be required to contract to engage in private practice as a Consulting Physician only

Applications together with copies of recent testimonials should be received by the undersigned not later than July 26th

W E GRENFELL
July 9th 1938 Hon Secretary

ROYAL EYE HOSPITAL
Pevensey Road Eastbourne

NON RESIDENT HOUSE SURGEON required to commence duty in August The appointment will be for six months in the first instance

Salary £100 per annum and allowance in lieu of board residence £175 per annum

Applications stating age qualifications and ophthalmic experience together with recent testimonials should reach the undersigned as soon as possible

Before engagement candidates have to be interviewed by the Hon Surgeon from whom further particulars could be obtained in person

H BYGRAVE Hon Secretary

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (187 Beds 5 Resident Officers)
Hospital recognized by the Royal College of Surgeons England

HOUSE SURGEON

Applications are invited from fully qualified men for the above post to take up duties as soon as possible Six months appointment Salary £100 per annum with board residence and laundry

Candidates who must be of British nationality to make application to the undersigned enclosing copies of three testimonials

HERBERT MASLEN
July 15th 1938 Secretary

WEST KENT GENERAL HOSPITAL
(Incorporated) Maidstone
(135 Beds)

Applications are invited for the post of HOUSE SURGEON who must be a male of British nationality

Salary at the rate of £175 per annum with board apartments and laundry

Candidates must possess registered qualifications

Applications stating qualifications and experience together with copies of testimonials should be sent to the undersigned immediately

EDWARD J GREGG
House Governor and Secretary

NORTH LONSDALE HOSPITAL
Barrow in Furness (164 Beds)

Vacancy July 1st 1938 RESIDENT CASUALTY OFFICER (male)

Applications are invited for the above position from fully qualified Practitioners experienced in the administration of Anæsthetics Salary £150 per annum with board residence and laundry

Applications stating age qualifications experience and nationality and accompanied by copies only of three recent testimonials should be sent to the Secretary immediately

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (152 Beds)

Application are invited for the post of RESIDENT SURGICAL OFFICER (male)

Salary at the rate of £150 per annum with board residence and laundry

Applications stating age and qualifications together with copies of three recent testimonials should be sent to the undersigned

T W UPTON
Secretary

NORTH ORMESBY HOSPITAL
Middlesbrough (192 Beds)

HOUSE PHYSICIAN (male and unmarried) required Salary £150 per annum with board residence and laundry

Applications stating age qualifications experience (if any) with copies of three recent testimonials should be sent to the undersigned

GEORGE WATTS
Secretary Superintendent

ROTHERHAM HOSPITAL

Wanted CASUALTY HOUSE SURGEON (male) qualified Salary £150 per annum with board residence and laundry To have charge of Out patients (130 beds)

Applications with copies of recent testimonials to be sent to *the Secretary G W Roberts* 8 Moorgate Street Rotherham

ROYAL MATERNITY HOSPITAL BELFAST

The Committee of Management invites applications for the following posts which will become vacant on September 1st 1938

RESIDENT MEDICAL OFFICER

This appointment will be for six months from September 1st at a salary at the rate of £ per annum Candidates must be members of a recognized organization for medical protection or defence

RESIDENT MEDICAL OFFICER IN CHARGE REA BLOCK (Isolation)

This appointment will be for six months from September 1st at a salary at the rate of £100 per annum It offers special facilities for those seeking to qualify for the M C O G Previous hospital experience is essential Candidates must be members of a recognized organization for medical protection or defence

Applications for both posts with copies of not more than three testimonials must reach the Superintendent from whom further particulars may be obtained not later than August 6th 1938

Canvassing forbidden (by order)

J V FORREST
Hon Secretary

STOCKPORT INFIRMARY
(140 Beds)

Applications are invited for the post of HOUSE PHYSICIAN

Applicants must be male and unmarried Salary £150 per annum with board residence and laundry

The Resident Staff consist of a Resident Surgical Officer two House Surgeons and a Hon Physician

Applications with copies of three recent testimonials stating age nationality and qualifications to be sent to the undersigned not later than the morning of July 27th Duties to commence August 22nd

H G PRICE
Secretary Superintendent

THE SOUTHAMPTON CHILDRENS HOSPITAL AND DISPENSARY FOR WOMEN

The Board of Management invite applications for the post of RESIDENT MEDICAL OFFICER (Lady) Six months appointment Salary at the rate of £150 per annum with board residence and laundry

Applications stating age and accompanied by copies of testimonials to be sent to the undersigned not later than August 5th The selected candidate will be required to take up her duties on September 1st

ELLA K MATTHEWS
Secretary

WARNEFORD GENERAL HOSPITAL
Leamington Spa (164 Beds)

RESIDENT CASUALTY OFFICER and HOUSE SURGEON to one of the Hon Surgeon required by September 5th 1938 Six months appointment Salary £150 per annum with board and laundry

Applications from qualified registered medical practitioners should be sent together with three recent testimonials to the undersigned by July 26th 1938

EDWARD L WIRGMAN
House Governor and Secretary

ROYAL INFIRMARY BRADFORD
(Regional Radium Centre)

HOUSE PHYSICIAN to the Radium and Skin Departments (Male) wanted Six or twelve months appointment Salary £175 per annum with board residence and washing

Applications stating age qualifications and previous experience (not necessarily in Radiotherapy) with copies of recent testimonials should be sent to the undersigned as soon as possible

H TRUSSON
July 9th 1938 House Governor and Secretary

NEW SUSSEX HOSPITAL FOR WOMEN AND CHILDREN
Brighton (Incorporated)

Applications are invited from suitably qualified Medical Women for the post of HONORARY OPHTHALMIC SURGEON Duties to commence in September next

Applications with copies of testimonials to be sent to the undersigned on or before July 30th

Board Room PERCY F SPOONER
Windlesham Road Secretary
Brighton

THE HOSPITAL FOR SICK CHILDREN
Newcastle upon Tyne

Applications are invited for the post of HOUSE PHYSICIAN and HOUSE SURGEON (male or female) for six months as from August 1st 1938 Salary at the rate of £100 per annum together with board residence and laundry

Applications stating age and qualifications together with copies of testimonials to be sent to *the Secretary* Mr Neil Brodie 18 City Road Newcastle upon Tyne 1

ROYAL VICTORIA INFIRMARY
Newcastle-upon-Tyne (285 Beds)

WHOLE TIME JUNIOR SURGICAL REGISTRAR

Applications are invited for the post of whole time Junior Surgical Registrar

These appointments are intended for Graduates who desire to gain surgical experience and who have already held a post as House Surgeon The post offers opportunity for post graduate study

The appointment which will commence on August 8th 1938 will in no case extend beyond three years and will be for one year in the first instance renewable for two further periods

The rate of remuneration is £150 per annum

Applications with copies of not more than three recent testimonials must be received on or before Friday July 29th 1938 by the undersigned from whom further particulars may be obtained

S DUNSTAN
House Governor and Secretary

July 15th 1938

SALFORD ROYAL HOSPITAL
(286 Beds)

Applications are invited from duly qualified practitioners for the post of RADIOLOGIST (non resident) for attendance each morning (Sundays excepted) and at such times as may be required Salary £400 per annum Twelve months appointment renewable The successful candidate will be required to work under the supervision of the Honorary Radiologist

Applications stating age and qualifications together with copies of testimonials and certificate of registration should be addressed at once to the undersigned from whom all particulars may be obtained

By Order of the Board
H B SHELSWELL
General Superintendent and Secretary

July 22nd 1938

THE ROYAL INFIRMARY SHEFFIELD
(700 Beds)

Applications are invited for the post of CLINICAL ASSISTANT to the Ophthalmic Department (male or female) The Ophthalmic Department contains 68 Beds and an Out Patient Department which is open daily

Salary £300 per annum

The appointment will be for one year subject to two months notice and the officer elected will be eligible for reappointment Letters stating age and giving full qualifications previous hospital experience etc to be forwarded to the General Superintendent and Secretary immediately

June 15th 1938

ROYAL SUSSEX COUNTY HOSPITAL
Brighton (270 Beds)

HOUSE SURGEON (male) required end of August 1938 Charge of beds Salary £150 per annum with board residence and laundry

Candidates must hold medical and surgical qualifications of the British Empire and be duly registered under the Medical Acts

They must be unmarried and when elected under thirty years of age

Applications with copies of testimonials should be sent to the undersigned as soon as possible

L L W LANCASTER-GAYE
Secretary Superintendent

THE WINGFIELD-MORRIS ORTHOPAEDIC HOSPITAL HEADINGTON OXFORD

THE LORD NUFFIELD SCHOLARSHIP IN ORTHOPAEDIC SURGERY

MALE RESIDENT £200 per annum for two years followed by three months travel (£100) Residence to commence about November 15th Some Orthopaedic experience essential

Information can be obtained from and application before October 1st should be made to Professor G R Girdlestone

ROYAL CORNWALL INFIRMARY TRURO
(84 Beds)

HOUSE SURGEON (male) required with experience of Anaesthetics to commence duties on August 1st next Salary £150 per annum rooms board and washing

Apply with copies of three recent testimonials to the Secretary of whom further particulars may be obtained

Truro W E GRENFELL
July 4th 1938 Hon Secretary

ROYAL LANCASTER INFIRMARY
Lancaster (140 Beds—4 Residents)

Applications are invited for the post of HOUSE SURGEON Salary £130 per annum with board residence and laundry The appointment is for six months

Applications stating age qualifications experience and nationality together with copies of three recent testimonials to be sent to the undersigned

FRANK A MILNES
Superintendent Secretary

LEICESTER ROYAL INFIRMARY
(500 Beds)
Staff 4 HS 3 HP 2 CO 3 Res Anaesth 1 Res Rad

VACANCIES FOR OCTOBER 1st 1938
HOUSE SURGEON

Salary £125 per annum Applicants must have held a Resident Hospital post or had similar experience of Hospital work

Unmarried candidates will be considered for Senior Casualty Officership if they so intimate

CASUALTY OFFICERS

Senior Casualty Officer Fellowship standard Salary £125 per annum

Junior Casualty Officer Salary £100 per annum

HOUSE PHYSICIANCIES (2)

Salary £125 per annum Applicant must have held a Resident Hospital post or had similar experience of Hospital work

RESIDENT ANAESTHETIST

Salary at the rate of £110 per annum for first six months £90 per annum for second six months £75 for third six months £60 fourth six months

Applications with copies of three recent testimonials to be forwarded to the House Governor and Secretary not later than August 13th

Appointments for six months will be made on August 4th

July 15th 1938

OXFORD COUNTY AND CITY MENTAL HOSPITAL

SECOND ASSISTANT MEDICAL OFFICER (MALE)

Applications are invited for the above-mentioned position Applicant should be under 40 years of age has had some previous Mental Hospital experience and possess the Diploma in Psychological Medicine

The Officer appointed must be prepared to assist at the Clinics for the Out patient treatment of mental illness in the City of Oxford

Commencing Salary £550 per annum (including £50 for D P M) rising by four annual increments of £25 to £650 per annum to other with house light fuel and garden produce valued for superannuation purposes at £100 per annum

The appointment is subject to the provisions of the Asylums Officers Superannuation Act The successful candidate will be required to pass a medical examination

Applications accompanied by copies of not more than two recent testimonials should be sent to the Medical Superintendent Littlemore Hospital near Oxford before August 6th 1938

ANCOATS HOSPITAL MANCHESTER 4

HOUSE SURGEONS (Two) required (Lady or Gentleman) to commence duty on September 1st One for the Orthopaedic Department and one for the combined post of House Surgeon to the Ear Nose and Throat Department and House Physician to one of the Honorary Physicians Salary at the rate of £100 per annum with board residence laundry etc Appointment for six months

Applications stating age qualifications experience if any and full particulars to be forwarded to the undersigned on or before Wednesday August 3rd with copies of three recent testimonial

By Order of the Board
HERBERT J DAFFORNE
Gen Supt and Secretary

BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY

RESIDENT SURGICAL OFFICER (Male) required Salary £250 per annum with board residence and laundry

Preference will be given to applicants holding the F R C S Diploma

Applications stating nationality qualifications and experience together with copies of recent testimonials to be sent to the undersigned

Royal Infirmary T DEWHURST
Blackburn General Supt and Secretary

STROUD GENERAL HOSPITAL
Stroud Glos

RESIDENT MEDICAL OFFICER required Candidates must be fully qualified and registered Six months appointment duties to commence as soon as possible Salary £200 per annum with board and laundry

Applications stating age nationality etc together with copies of three recent testimonial to be sent to the undersigned from whom further particulars may be obtained

C CORD SPENCER Secretary

BURTON ON TRENT GENERAL INFIRMARY

Applications are invited for the position of CASUALTY OFFICER AND HOUSE PHYSICIAN Salary at the rate of £150 per annum with board residence and laundry

Applications giving age qualifications and nationality together with copies of testimonials to be sent to E W THORNLEY Secretary

THE GUEST HOSPITAL DUDLEY
(General Hospital—130 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons

Applications are invited from registered Medical Practitioners for the post of RESIDENT SURGICAL OFFICER (male) Duties to commence August 15th 1938 Salary at the rate of £150-£170 per annum according to experience with furnished apartments board and laundry Candidates must have had experience in emergency and preference will be given to those holding the qualification of F R C S or M S

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned

H RAYMOND HURST
House Governor and Secretary

July 11th 1938

THE GUEST HOSPITAL DUDLEY
(General Hospital—190 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons

TWO HOUSE SURGEONS (male) required One to enter upon his duties immediately and the other to commence on August 15th 1938 Salary at the rate of £100-£110 according to experience with furnished apartments board and laundry Candidates must be fully qualified and registered

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned

H RAYMOND HURST
House Governor and Secretary

July 11th 1938

TORBAY HOSPITAL TORQUAY
(165 Beds)

HOUSE PHYSICIAN and HOUSE SURGEON (male) required for August 15th and September 15th respectively Salaries £150 per annum with board residence and laundry Candidates must be fully qualified registered and unmarried

Applications stating age nationality qualification and experience, with copies of not more than three recent testimonial to be received by the undersigned not later than August 6th

E L GRIST
Secretary

MANCHESTER NORTHERN HOSPITAL
Cheetham Hill Road Manchester 8
(General Hospital—115 Beds)

Applications are invited for the post of RESIDENT SURGICAL OFFICER commencing salary £100 per annum with board and residence The appointment is for twelve months from mid August 1938

Applications stating age qualifications and nationality with copies of not less than three recent testimonial to be sent to the Secretary Mr JAMES C DANIELS 8 Barton Arcade Manchester as soon as possible

WESTMORLAND COUNTY HOSPITAL
Kendal (— Beds)

HOUSE SURGEON (female) required September 1st Appointment for six months renewable for a further six months

Salary £200 per annum with board residence and laundry

Applications stating age nationality and qualification with copies of three recent testimonial to be addressed to the Hon Sec I M Somervell not later than August 10th

THE HAPTLEPOOLS HOSPITAL
(95 Beds)

Applications are invited for the position of HOUSE SURGEON at a salary of £100 per annum board residence, and laundry

Appointment for six months subject to renewal and duties to commence immediately

Applications to be made to the undermentioned

NORMAN O DEANS
Secretary

NEW SUSSEX HOSPITAL FOR WOMEN
Windlesham Road Brighton

Applications are invited from fully qualified Medical Women for the post of HOUSE SURGEON for six months Duties to commence immediately Salary at the rate of £100 per annum

Applications with copies of three recent testimonial to be sent to the Secretary New Sussex Hospital Windlesham Road Brighton

July 16th 1938

WEST CORNWALL MINERS' AND WOMEN'S HOSPITAL REDRUTH

Wanted HOUSE SURGEON Lady September 1st or October 1st 90 Beds £100 per annum with board and laundry

Applications with testimonial to E POPE
Hon Secretary

MANCHESTER ROYAL INFIRMARY

CHIEF ASSISTANT TO MEDICAL NEUROLOGICAL UNIT (Non resident)

The Board of Management invite applications for the above appointment

Applicants must be registered Medical Practitioners Higher qualifications desirable

The candidate will be required to attend on seven half sessions per week of which at least four will be morning sessions Duties will include work in the In patient and Out patient Departments and participation in teaching The candidate will be expected to engage in Research work for which facilities will be provided

Salary £300 per annum The appointment will be for one year in the first instance but may be renewed for two further periods of one year subject to the provisions of the By laws as to notice etc

Candidates should forward Fifteen Copies of their applications giving particulars of age experience etc together with copies of recent testimonials not later than 9 a m on Thursday August 4th 1938 to the undersigned from whom further information may be obtained

By Order
F J CABLE
General Supt and Secretary

July 18 1938

MANCHESTER ROYAL INFIRMARY

JUNIOR ASSISTANT MEDICAL OFFICER IN RADIOLOGICAL DEPARTMENT

The Board of Management invite applications for the above whole time appointment Applicants must be registered and hold a Medical and Surgical qualification and the D M R E or equivalent

The appointment (non resident) is for twelve months renewable for a further period of twelve months subject to the provisions of the By laws as to notice Salary is at the rate of £350 per annum Applicants must state age and send Fifteen Copies of their application and testimonials to the undersigned by Thursday August 4th 1938

By Order
F J CABLE
General Supt and Secretary

July 18 1938

CUMBERLAND INFIRMARY CARLISLE
(200 Beds)

Applications are invited from men only for the following posts —

HOUSE PHYSICIAN
HOUSE SURGEON

Appointments are for six months from October 1st and holder will be eligible for a further term Salary in each case at the rate of £160 per annum with board residence and laundry

The post of HOUSE SURGEON is recognised by the Royal College of Surgeons of England under the regulations for the Final Fellowship examination

Applications on forms obtainable from the undersigned together with copies of not more than three testimonials to be received not later than August 15th

F S RIPPIER
Secretary Superintendent

July 15th 1938

EAST SURREY HOSPITAL
Redhill Surrey

JUNIOR HOUSE SURGEON (male or female) required on August 15th next Salary at the rate of £100 per annum with board residence and laundry Candidates must be fully qualified and registered Appointment for six months and further six months as Senior at salary £150 per annum

Applications stating full particulars and copies of recent testimonials to be sent to the undersigned before July 25th 1938

E C AYLING
Secretary

METROPOLITAN HOSPITAL
Kingsland Road London E 8

Applications are invited for the post of CASUALTY OFFICER AND RESIDENT ANAESTHETIST (male) Salary at the rate of £100 p a with board residence and laundry Duties to commence September 1st Candidates must possess a registered medical and surgical qualification of the United Kingdom

Applications should be obtained and returned to the undersigned not later than July 28th

FRANK JENNINGS
House Governor and Secretary

ESSEX COUNTY HOSPITAL COLCHESTER
(174 Beds)

Wanted end of July an ASSISTANT HOUSE SURGEON (male) Salary £1 0 per annum with board washing and residence Medical and Surgical qualifications required

Applications with three recent testimonials to be sent by Wednesday July 27th to

ERNEST R HANCHET
Secretary

ST MARYS HOSPITAL W 2

CASUALTY PHYSICIAN

Applications are invited from duly qualified candidates for the post of Casualty Physician

Candidates must have been House Physicians for a full period of office at the Hospital or at some other General Hospital approved by the Board

The salary is £150 per annum with board The appointment is for six months and the holder is eligible for reappointment for a second period

Applications should reach the undersigned (from whom particulars of the office may be obtained) on or before July 28th 1938

W PARKES
House Governor

THE QUEEN'S HOSPITAL FOR CHILDREN
Hackney Road London E 2
(160 Beds)

HOUSE SURGEON required September 1st 1938

TWO CASUALTY OFFICERS required September 1st 1938

Six months appointments Salary at the rate of £100 per year with board lodging and laundry in each case

Applications must be made on forms to be obtained from the undersigned and be sent in with copies of not more than three testimonials on or before August 12th 1938

CHARLES H BESSELL
Secretary

July 19th 1938

THE MANOR HOUSE HOSPITAL
Golders Green London N W 11
(140 Beds)

Applications are invited for the post of JUNIOR MEDICAL OFFICER

Salary at the rate of £200 per annum with board residence Candidates male and unmarried must be fully qualified and registered The successful candidate will be required to take up his duties on Monday July 25th 1938 Applications stating full particulars and accompanied by copies of not more than three recent testimonials should be forwarded to the undersigned forthwith

JAMES W LINKHORN F C C S
Secretary

THE LONDON CHEST HOSPITAL
Victoria Park E 2
(Bus Tram and Rail Cambridge Heath L and N E Railway)

A vacancy for a HOUSE PHYSICIAN (male) will occur on September 1st Six months appointment Salary at the rate of £100 per annum Board residence and laundry provided

Applications with copies of three testimonials should be sent to the undersigned on or before Wednesday August 3rd

THOMAS BROWN
Secretary

WEST LONDON HOSPITAL
Hammersmith W 6

APPOINTMENT OF HONORARY PHYSICIAN FOR PSYCHOLOGICAL MEDICINE

With reference to the advertisements in the last two issues will intending applicants for the above post please note that it has now been decided to postpone the appointment until October Details as to intended dates will be advertised in September

H A MADGE
Secretary

CHARING CROSS HOSPITAL

Applications are invited for the post of CLINICAL ASSISTANT in the X ray and Electro therapeutics Department Candidates should have by preference the qualification of D M R E

Applications together with copies of three recent testimonials should be sent to the undersigned not later than August 3rd 1938 Honorarium £50 per annum

Charing Cross Hospital GEORGE J JONES
London W C 2 Secretary

THE RADIUM INSTITUTE AND MOUNT VERNON HOSPITAL
1 Riding House Street London W 1

There will shortly be a vacancy for a HOUSE SURGEON at the Mount Vernon Hospital North end The appointment will be made for six months at a salary at the rate of £150 per annum with board and residence

Application should be sent to the Secretary at the above address

ST JOHN'S HOSPITAL LEWISHAM S E 13

Applications are invited for the resident appointment of CASUALTY OFFICER (male) tenable for six month from September 1st 1938 at a remuneration of £100 p a

Applications with copies of testimonials should reach the undersigned by August 20th 1938

J C GILBERT
Secretary Superintendent

THE LADY CHICHESTER HOSPITAL
Hove Brighton
For Functional Nervous Diseases
(60 Beds)

SENIOR HOUSE PHYSICIAN (woman) required Six months appointment £100 per annum all found Valuable experience for Diploma in Psychological Medicine

Also JUNIOR HOUSE PHYSICIAN (woman) required Six months appointment at £75 per annum all found Valuable experience for Diploma in Psychological Medicine Duties to commence middle of July

Applications with testimonials to be sent to the Secretary Mr P F Spooner 31 West Street Brighton

July 9th 1938

ROYAL BUCKINGHAMSHIRE HOSPITAL, Aylesbury (115 Beds)

Applications are invited from qualified and registered candidates for the post of

JUNIOR RESIDENT MEDICAL OFFICER
(Male)

Salary £150 per annum with quarters in newly built flat board and laundry provided

The post will be for a period of five months commencing August 1st 1938 after which it will be permissible to apply for the senior post

Applications stating age qualifications and experience with copies of three testimonials should be sent to the undersigned by July 27th 1938

I G DAWES
Secretary

WIMBLEDON HOSPITAL
Thurstan Road S W 19

Applications are invited for the post of RESIDENT MEDICAL OFFICER male unmarried Duties to commence on October 1st The appointment is for a period of six months The salary offered is at the rate of £150 per annum with board residence and laundry

Applications accompanied by copies of three recent testimonials should be sent to the Hon Secretary

A B WARD
Acting Hon Secretary

KING EDWARD MEMORIAL HOSPITAL
Ealing (145 Beds)

CASUALTY OFFICER AND DEPUTY RESIDENT MEDICAL OFFICER (male) required Six months appointment with possibility of re election for a further period Salary £225 per annum with usual residential emoluments

Applications stating age experience and qualifications together with copies of two recent testimonials should be sent to the undersigned immediately

R A MICKELWRIGHT
House Governor

VICTORIA HOSPITAL DEAL
(50 Beds)

Applications are invited for the post of RESIDENT MEDICAL OFFICER (male) British nationality unmarried The appointment to commence immediately for six months Salary £150 p a with board lodging and laundry Special knowledge of anaesthetics is desirable

Applications stating age and qualifications together with copies of three recent testimonials to be sent to the Secretary Medical Board Victoria Hospital Deal Kent

THE BUCHANAN HOSPITAL
St Leonards on Sea (103 Beds)

JUNIOR HOUSE SURGEON (female) required to commence duties September 1st 1938 Salary from £125 per annum according to experience

Candidates must be duly registered Medical Practitioners and applications which should include three copies of recent testimonials should be sent to the undersigned immediately

FRANK HART
Secretary

PRINCESS ALICE HOSPITAL EASTBOURNE
(Voluntary General Hospital 120 Beds
Two House Surgeons)

RESIDENT HOUSE SURGEON required on July 30th Salary £150 per annum

Applications should be sent to the undersigned with copies of three recent testimonials by July 27th

W RUSSELL RUDALL
Secretary

July 5th 1938

NEW ZEALAND

Applications are invited for the position of SURGEON to the Public Hospital Greymouth Salary £800 rising to £1 000 Cabled applications will be received by the Grey Hospital Board High Street Greymouth New Zealand up to 29 including August 5th 1938

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association B M A House Tavistock Square W C 1 (in the case of Scottish appointments, with the Scottish Secretary 7 Drumsheugh Gardens, Edinburgh)

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—*(cont.)*	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY *(Medical Officer)*	MID RHONDDA MEDICAL AID SOCIETY *(Assistant Medical Officer)*	COUNTY OF ROXBURGH *(Assistant Medical Officer of Health)*
BLAENAVON MEDICAL SOCIETY *(Chief Medical Officer)*	NEATH AND DISTRICT *(Medical Aid Association)*	**DISPENSARY APPOINTMENTS**
GILFACH GOCH GLAMORGAN *(Womens Medical Scheme)*	OGMORE VALLEY GLAMORGAN *(Llandilam Clinic) Medical Aid Society (Womens Medical Scheme)*	LIMERICK CITY *(Whole-time Dispensary Medical Officers)*
LLWYNYPIA CLYDACH VALE PENYGRAIG GLAMORGAN *(Womens Medical Scheme)*	OAKDALE MO *(Medical Officer of Medical Aid Association)*	

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association B M A House Tavistock Square, W C 1

Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch
NEW SOUTH WALES *(All Friendly Societies Appointments)*	The Medical Secretary New South Wales Branch 135 Macquarie Street Sydney N S W	**VICTORIA** *(All Institutes or Medical Dispensaries)*	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria	**WESTERN AUSTRALIA** *(Country and Lodge Practices)*	The Hon Sec Western Australian Branch British Medical Association Shell House 205 St Georges Terrace Perth Western Australia
QUEENSLAND *(Brisbane Associate Friendly Societies Institute)*	The Hon Sec Queensland Branch British Medical Association B M A House 5 Wickham Terrace Brisbane B 1				

July 20 1938 By Order of the Council G C ANDERSON *Secretary*

BURY INFIRMARY (LANCS)
(143 Beds)

APPOINTMENT OF TWO HOUSE SURGEONS

Vacancies as above arise on the Resident Medical Staff and applications are invited for the posts

The Resident Staff consists of an R S O a House Physician and two House Surgeons

The appointments are for a term of six months and salaries payable are at the rate of £150 per annum with board residence and laundry the salary being increased to £175 per annum in the event of reappointment to the same or some other office for a period of six months

The services of both House Surgeons will be required on or about August 8th

Applications stating age qualifications and nationality to either with copies of three recent testimonials are to be forwarded to the undersigned as soon as possible endorsed "House Surgeon"

Full particulars of duties may be had on application

H WILKINSON
Superintendent

COSSHAM MEMORIAL HOSPITAL
Kingswood Bristol

A vacancy will appear at the end of July for a JUNIOR RESIDENT MEDICAL OFFICER Salary £1 0 per annum with board and laundry to remain for six months in the first instance Applicants (male) should be British nationality fully qualified and registered

Applications with copies of recent testimonials to be sent to the Secretary

---

COSSHAM MEMORIAL HOSPITAL
Kingswood Bristol

Wanted an additional HONORARY SURGEON for general surgical work

Apply with full particulars to the Secretary

COUNTY ANTRIM MENTAL HOSPITAL
Ulster

The Committee of Management of County Antrim Mental Hospital invite applications for the post of SENIOR ASSISTANT MEDICAL OFFICER

Applicants must be male single under 35 years of age duly qualified in Medicine and Surgery and have had special experience in Bacteriology

Commencing salary £400 rising by £25 annually to £600 together with furnished apartments board laundry and attendance valued at £100 per annum

The person appointed will require to hold or to obtain within three years from date of appointment a Diploma in Psychological Medicine

The appointment is subject to the provision of the Asylums Officers Superannuation Act 1909 and to the sanction of the Ministry of Home Affairs Northern Ireland

Form of application which may be obtained from the Resident Medical Superintendent must be returned to him not later than Monday August 1st 1938

July 6th 1938 BY ORDER

THE ROYAL PORTSMOUTH HOSPITAL
Portsmouth
(Six Resident Medical Officers)

Applications are invited for the posts of HOUSE PHYSICIAN (male) qualified Salary at the rate of £130 per annum with board etc *To commence August 3rd 1938*

CASUALTY OFFICER (male) qualified Salary at the rate of £130 per annum with board etc To commence September 1st 1938

Six months appointments Eligible on completion of term for appointment to other resident posts

Applications stating age nationality etc and copies of three recent testimonials to be sent to the undersigned on or before August 4th 1938 from whom all particulars can be obtained

B WAGSTAFF
Secretary

HOSPITAL OF ST CROSS RUGBY
(110 Beds)

Application are invited for the post of ONE MALE RESIDENT MEDICAL OFFICER (Three R M O s)

Salary to commence at the rate of £100 per annum for the first three months £125 per annum for record three months and at the rate of £150 per annum for subsequent months. Full board washing etc provided

Six months appointment and eligible on completion of service for further extension of six month

Candidates must be prepared to commence duties as early as possible

The practice of the Hospital offers excellent opportunities for wide experience

Certificates and other fees shared by R M O s

Applications stating age nationality and full details with copies of three recent testimonials to be sent to the undersigned

(Signed) W COCKBURN
Superintendent and Secretary

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St Quintin Avenue North Kensington W 10
(Ladbroke 0133)

The Board of Management invite applications for the combined post of HONORARY ASSISTANT PHYSICIAN with bed and PHYSICIAN IN-CHARGE of the Child Guidance Clinic

Applicants must be graduates of a University and must hold the M R C P (London) and the D P M and must have had practical experience in a Child Guidance Clinic

Application accompanied by copies of three testimonials should be sent to the undersigned at the Hospital from whom any further information can be obtained and should reach him not later than July 30th 1938

H J ELEY
Secretary

(Appointments continued on p 43)

CHARGES for ADVERTISEMENTS

CIRCULATION OF THIS ISSUE—41,000 COPIES

CLASSIFIED The *Minimum* charge is 9s., which covers up to 30 words Extra words are charged 1/6 for 5 or less

Example 33 words would be charged as for 35 Name and address should be included when counting words for cost

If *Box Number* is used, it should be reckoned as 5 words in the total

Replies should be addressed separately to each Box No care of this office

Advertisements, accompanied by remittance, should reach this office not later than NOON—TUESDAY, TO ENSURE INSERTION IN CURRENT ISSUE Please write CLEARLY

DISPLAYED Whole page £24, and pro rata to one-eighth page Special positions, dates and rates on application

Every effort is made to ensure the accuracy of advertisements appearing in the Journal No recommendation is implied by acceptance and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement

ADVERTISEMENT MANAGER, BRITISH MEDICAL JOURNAL, B M A HOUSE, TAVISTOCK SQUARE, W C 1

EUSton 2111

NOT CLASSIFIED

CIGARS (ENDGUT) ALL HAVANA

TOBACCO GOOD SMOKES at a low price quality guaranteed Box of 50 for 25/ post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"BIZIM" CIGARETTES

THESE luxurious deliciously satisfying smokes 50's & 100 at 6 3 per 100 58/6 per 1 000 post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"SOLACI CIRCLES" TOBACCO

THE finest combination ever discovered of Choice Natural Tobaccos Every pipeful an indescribable pleasure 12/6 per ½ lb un post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

FOR ALL INCOME TAX COMPLICATIONS or difficulties consult or communicate with Mr C G C KILNER (late H M Inspector of Taxes) 7 St James Street Piccadilly London S W 1 Telephone Whitehall 9278 for appointment

OFFERED IN JERSEY TO DOCTOR OR other professional man needing several months restful change HOSPITALITY by Specialist temporarily alone Large modern flat facing sea All amenities 3 guineas Golfer preferred —Address No 7507 B M A House Tavistock Square W C 1

TAILORING—CUSTOMERS VISITED AT their surgery or private address anywhere within a radius of 50 miles of London by a late West End tailor Suits from 4 guineas to 8½ guineas Every garment made in the West End Large selection of Worsted Saxones Flannel etc Ladies Costumes at the same prices Credit Terms if desired—Bro & Co 79 Gainsborough Road N 1 Hillside 2250

TYPEWRITING DUPLICATING TRANSLATIONS—Experts in Medical work TESTIMONIALS THESES etc accurately copied in the comfort of a private home—WOMEN'S BUREAU Dacre House Dacre Street Off Victoria Embankment S W 1 (Next B M A House) ELEphant 4325

TYPEWRITING—SPECIALISTS IN TYPING Medical and scientific papers lectures theses and books Shorthand typists always available Proof reading indexing —MARGARET WATSON LTD 16 Palace Chambers Bridge Street S W 1 WHitehall 3838

ASSISTANCIES

WANTED IMMEDIATELY MARRIED ASSISTANT (British) for South Wales colliery practice with early view 30 35 Salary £450 and car allowance or car provided with free unfurnished house —Apply with photograph Address No 7315 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY MALE ASSISTANT preferably English and unmarried Panel and private practice in Cumberland adjoining Lakes Dispensing Live in Salary £300 plus car allowance —Address No 7521 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY INDOOR AND Outdoor ASSISTANTS for Town and Country Practices with and without view to Partnership Good salaries offered State full particulars —BRITISH MEDICAL BUREAU 33 Cross Street Manchester 2

WANTED END OF AUGUST YOUNG male indoor ASSISTANT English or Scotch preferred for mixed practice in North London Time for reading Car provided Salary £300 —Address No 7307 B M A House Tavistock Square W C 1

WANTED ASSISTANT EXPERIENCED G P married Free unfurnished house £500 p a including car allowance English or Scotch Catholic preferred but not essential early view Large mixed practice Cheshire —Address No 7526 B M A House Tavistock Square W C 1

WANTED ASSISTANT IN LEEDS MIXED practice Salary £350 all found Application to REYNOLDS AND BRANSON LTD 13 Briggate Leed

WANTED MALE ASSISTANT FOR PANEL and private practice in outlying London suburb Excellent opportunity for recently qualified man —Address No 7516 B M A House Tavistock Square W C 1

WANTED LADY ASSISTANT COUNTRY practice South West England Live in all found Salary £250 rising to £300 in six months Must drive car —Address No 7517 B M A House Tavistock Square W C 1

WANTED MALE ASSISTANT WITH VIEW to partnership Protestant and total abstainer Able to drive Salary to commence £300 per annum all found car provided —Address No 7522 B M A House Tavistock Square W C 1

WANTED PART TIME ASSISTANT (MALE) Suit retired practitioner wishing to augment income Pleasant small town North East —Address No 7551 B M A House Tavistock Square W C 1

WANTED EXPERIENCED ASSISTANT with a view to partnership in good-class suburban practice with good surgical opportunities in Cheshire To reside in and develop growing area Preference given to well-qualified Scot Good salary and car allowance until both are satisfied with partnership prospects —Address No 7309 B M A House Tavistock Square W C 1

WANTED OUTDOOR ASSISTANT PANEL and private practice near Manchester State married or single nationality Salary £500 p a and furnished rooms Car required Prospects —Address No 7334 B M A House Tavistock Square W C 1

WANTED OUTDOOR MALE ASSISTANT for panel and private practice by Scottish doctor in the Midlands Salary £400 per annum Usual bond —Address No 7552 B M A House Tavistock Square W C 1

WANTED OUTDOOR MALE ASSISTANT commencing October 1st Panel and Private Practice Scotland Scottish Graduate (Protestant) with hospital experience —Address No 7501 B M A House Tavistock Square W C 1

WANTED POST GRADUATE STUDENT TO do morning and evening WORK in practice situated 20 minutes from Charing Cross Must be willing to live in area Four guineas weekly —Address No 7525 B M A House Tavistock Square W C 1

WANTED MALE INDOOR ASSISTANT preferably Jewish panel and private practice in Sunderland must be capable driver Salary £325 per annum all found —Address No 7337 B M A House Tavistock Square W C 1

WANTED—OUTDOOR ASSISTANT MALE married preferred for Practice near Birmingham Some experience in G I essential Good house rent and rates free Salary £450 p a and car allowance Apply with full particulars and testimonials to—Address No 7446 B M A House Tavistock Square W C 1

WANTED MALE ASSISTANT INDOOR for Durham County practice Salary £300 per annum plus car allowance —Address No 7 24 B M A House Tavistock Square W C 1

WANTED IN COUNTRY TOWN IN MIDlands male Outdoor ASSISTANT Salary £400 to £450 according to experience Car provided Ample time for reading —Address No 7171 B M A House Tavistock Square W C 1

ASSISTANT REQUIRED SCOTTISH OR English unmarried young some experience general practice preferred Rooms at Branch Kent border £350 per annum with garage £50 car allowance —Address No 7564 B M A House Tavistock Square W C 1

EVENING SURGERIES OR PART TIME WORK required by woman doctor living London —Address No 7556 B M A House Tavistock Square W C 1

LONDON S E—UNMARRIED ASSISTANT wanted for C P October 1st Suit man reading for higher degrees £300 a year and all found Usual bond —Address No 7509 B M A House Tavistock Square W C 1

PERMANENT ASSISTANT FOR OCTOBER Suitable for married man House provided State experience and all essential particulars Address No 6160 B M A House Tavistock Square W C 1

QUALIFIED LADY MEDICAL REQUIRED to give HELP in small practice (country) £150 all confinement fees board and lodging Sixth usual bond—Address No 7313 B M A House Tavistock Square W C 1

LOCUMS

WANTED LOCUM MALE BRITISH AND experienced September and October 11th inclusive. Work light and unopposed; 5 guineas per week and diner. North London practice. Apply with references—Address No. 6[illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED LOCUM MONTH AUGUST FOR large panel and whole-time practice SE. London. Experience essential—Address No. [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED HOSPITALITY LOCUM (SEPT.) male or female; work light; near Hammersmith Post Graduate School—Address No. [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED LOCUM LADY SEPTEMBER 3rd to 17th. Small Shropshire town. Private and panel. Work light. Must have car. Seven guineas per week—Address No. [illegible] B.M.A. House, Tavistock Square, W.C.1.

ELDERLY OXFORD MAN WILL BE HAPPY to let INSTITUTIONAL LOCUMS (Mental, General, Fevers, Maternity) during August or September—Write BM/BCGN, W.C.1.

EXPERIENCED DOCTOR REQUIRES LIGHT LOCUM WORK; moderate fees; hospital term for really easy practice. Own car. Country or seaside preferred—Address No. [illegible] B.M.A. House, Tavistock Square, W.C.1.

EXPERIENCED G.P. (BRITISH) WANTS LOCUM ENGAGEMENTS; used to panel and 3d. charge. Own car and references if required. Usual fees—Address No. [illegible]54 B.M.A. House, Tavistock Square, W.C.1.

EXPERIENCED C.P. WANTS LOCUM; HOSpitality and expenses only for self and wife. Late August and September. West Country preferred. Work light—Address No. [illegible]563 B.M.A. House, Tavistock Square, W.C.1.

EXPERIENCED LOCUM USED TO PANEL and general practice; engaged after August 2nd; high-class references—LOCUM, Byron House, Redfield, Bristol.

EXPERIENCED PRACTITIONER AGED 40, own car, desires LOCUM ENGAGEMENTS August 14th inclusive, also last three weeks September. Hospitality for wife and child desirable—Address No. [illegible]51, B.M.A. House, Tavistock Square, W.C.1.

EXPERIENCED PRACTITIONER WANTS LOCUM ENGAGEMENT from August 5th for about 3 to 4 weeks. Country or Coast preferred. Moderate fee. Own car—Address No. [illegible]70, B.M.A. House, Tavistock Square, W.C.1.

HOLIDAY LOCUMS AND ASSISTANTS.—Experienced ladies and gentlemen shall be immediately or near future are invited to communicate with—THE MEDICAL AGENCY, LTD., [illegible] Southampton Street, Strand, W.C.2.

HOSPITALITY LOCUM OFFERED (WITH family). August 6th 3 or 4 weeks. Delightful house and country; car accessible. Very little work; car necessary. Reasonable remuneration offered—Address No. [illegible]564, B.M.A. House, Tavistock Square, W.C.1.

HOSPITALITY LOCUM—DOCTOR WILLING to give his services as a locum in return for loan of house in a pleasant seaside place. Second half of August, first two or three weeks of September. Period up to a month. Will provide car and all other expenses. English Fee-owl accustomed to first class practice. Competent operator—Address No. [illegible]565, B.M.A. House, Tavistock Square, W.C.1.

LOCUM TENENS WORK WANTED BY experienced G.P. (Englishman); accustomed to good-class private practice, panel, etc. Excellent testimonials; abstainer; now disengaged; own car—Address No. [illegible]562, B.M.A. House, Tavistock Square, W.C.1.

LOCUM AUGUST NEAR NOTTINGHAM. Seven guineas plus one guinea train part allowance—Address No. [illegible]4, B.M.A. House, Tavistock Square, W.C.1.

LOCUM URGENTLY REQUIRED FOR THREE weeks from July 29th. Must drive car. Kent.—Address No. [illegible]566, B.M.A. House, Tavistock Square, W.C.1.

MEDICAL POSTS, DISPENSERS

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request; qualified and with practical experience in private practice and dispensary work; also trained in Bacteriological Laboratories of the LONDON COLLEGE OF PHARMACY FOR WOMEN. Preparations for Examinations.—Write, wire or phone (Bayswater 0969), Secretary, 7 Westbourne Park Road, W.2.

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY and Secretary. Dispensers can be supplied to Doctors. Sessions January, April and September.—Apply Principal, Shell (Pharmacy) Division, House, Green Street, W.C.1. Phone, Euston 5[illegible]0.

DISPENSING CAREER FOR YOUNG LADIES. FULL TRAINING for Apothecaries Hall Certificate. Enrolments every three months.—Apply The Principal, Central School of Pharmacy, 31, Mecklenburgh Street, London, W.C.1. Telephone, Victoria 1641.

DISPENSER HALL QUALIFICATION SEEKS full time post Hospital, Surgeon or Pharmacy. Quick, neat and accurate dispenser with good references. General doctor's work.—Address No. [illegible]03, B.M.A. House, Tavistock Square, W.C.1.

DISPENSER (HALL) AGED 35 SEEKS POST with Doctor or Hospital. Will make himself generally useful; collect doctor's bill; keep books. Highest references; character guaranteed by firm of solicitors.—Address No. [illegible]0, B.M.A. House, Tavistock Square, W.C.1.

DOCTORS REQUIRING QUALIFIED Dispensers, Nurse-Dispensers, Secretary-Dispensers or Chauffeur-Dispensers are invited to write, wire or phone Terrace Bar [illegible]. THE DISPENSERS BUREAU, Lindsay House, 171, Shaftesbury Avenue, London, W.C.2.

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed.

Applications should be separately enclosed and clearly addressed

Address No.
B.M.A. House
Tavistock Square, W.C.1

All communications are forwarded to advertisers under plain cover.

DOCTOR'S DAUGHTER, STATE REGISTered nurse, London trained, B.A. degree, shorthand typing, good secretarial experience, requires part time WORK. Free September.—Address No. [illegible]564, B.M.A. House, Tavistock Square, W.C.1.

LADY OFFERS SERVICES SECRETARIAL and furnished rooms to Medical or Dental Surgeon, Liverpool or Wirral preferred; but will travel. References exchanged.—Box F 14, LEE AND NIGHTINGALE, Liverpool.

LADY SEEKS SITUATION AS SECRETARY; no previous secretarial knowledge but fully qualified nurse; shorthand, writer and typist; excellent references.—MISS BURT, 15, Fellows Road, Swiss Cottage, N.W.

MRCP (LOND.) DESIRES MORNING WORK; free from 9.0 a.m. to 1 p.m.—Address No. [illegible]59, B.M.A. House, Tavistock Square, W.C.1.

SINGLE MAN (AGED) EX ROYAL MARINE desires POST first since leaving Service. Qualified dispenser (Society of Apothecaries); trained sick berth attendant, R.N.; can drive and maintain car; willing to be generally useful. Any locality.—Address No. [illegible]60, B.M.A. House, Tavistock Square, W.C.1.

STATE REGISTERED NURSE AND SCM requires POST as CHAUFFEUSE and ASSISTANT to a doctor.—D.C., 9, Madeira Avenue, Worthing.

THE BRITISH RED CROSS SOCIETY desires the services of a qualified MEDICAL WOMAN for their Hospital Camp at Tudeley Hale, near Tonbridge, from September 5th for about two weeks. Board, lodging, laundry, camp life and an honorarium are offered in exchange for very light services.—Apply BRITISH RED CROSS SOCIETY, 9, Chesham Street, S.W.1.

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION, 58, Eccleston Square, S.W.1. (Telephone, Victoria [illegible]) supplies qualified Dispensers, Bookkeepers, Laboratory Assistants, Sanitary Assistants, Male Nurses, Masseurs and Special Treatment Orderlies, Dispenser Clerk Orderlies, Porters, Caretakers, etc., at short notice to prospective employers.

YOUNG LADY TRAINED SECRETARY, nursing, medical, social and clerical experience, educated English public school, desires position as private secretary with professional gentleman or lady.—Address No. [illegible]49, B.M.A. House, Tavistock Square, W.C.1.

PARTNERSHIPS

JUNIOR PARTNER MALE PROTESTANT wanted for Partnership in good suburb of Glasgow; good share; early [illegible]; Apply with full particulars of experience, etc., to Crawford, Herron and Cameron, 5, Stirling's Road, West George Street, Glasgow.

MB, ChB DESIRES PARTNERSHIP OR PRACTICE as soon as possible. Has held recognised posts in teaching hospitals. Private practice essential. Income must be adequate.—Address No. [illegible]3, B.M.A. House, Tavistock Square, W.C.1.

PARTNER WANTED NOW IN WOMAN'S growing practice near London. Ample scope for further expansion. Experience desirable.—Send particulars to Address No. [illegible], B.M.A. House, Tavistock Square, W.C.1.

PARTNER WANTED IN CORNISH TOWN. Well-qualified physician, married, experienced G.P., £1,000 at 3 years, but has promise later. Good house, garden, garage. Motor-car if desired.—Address No. [illegible]2L, B.M.A. House, Tavistock Square, W.C.1.

PARTNER YOUNG AND WELL QUALIFIED wanted for Consulting Surgical Practice. Hospital appointment.—Write full details to Address No. [illegible]16, B.M.A. House, Tavistock Square, W.C.1.

PARTNERSHIP OFFERED YIELDING £1,500. Two years, purchase with increase later after short assistantship. Mixed general practice. South Coast. Applicant must be experienced. Begin October 1st.—Address No. [illegible]11, B.M.A. House, Tavistock Square, W.C.1.

THIRD PARTNER REQUIRED AFTER A preliminary assistantship in very old-established practice within 40 miles London. Must have University degree in medicine (preferably Oxford or Cambridge) and experience in pathology, radiology or holding in addition higher medical qualifications. Modern hospital, choice of house, etc.—Address No. [illegible]01, B.M.A. House, Tavistock Square, W.C.1.

WEST LANCS COUNTRY TOWN. PARTNERSHIP in firm of three. Senior retiring. Mixed private panel (1,600). Present receipts £9,000. Well-qualified physician required. Possible staff appointment in time. Fifth quarter half two years' purchase and new drugs bought. Central urban apartments, private residence.—Address No. [illegible], B.M.A. House, Tavistock Square, W.C.1.

PRACTICES

WANTED IMMEDIATELY SOUTH Western Counties country or town PRACTICE £1,000. Private residential. House rent or mortgage. Strictly confidential. No agents.—Address No. [illegible], B.M.A. House, Tavistock Square, W.C.1.

WANTED GENERAL PRACTICE IN WEST Riding. Yorkshire. Income £1,000 or over. Good house and garden essential. Suitable educational facilities. Strictly confidential.—Address No. [illegible]06, B.M.A. House, Tavistock Square, W.C.1.

BIRMINGHAM.—MEDICAL WOMAN'S PRACTICE for sale; established over twenty years. Panel 800. Gross income now £1,400.—Apply Medico, [illegible], Edmund Street, Birmingham.

DEVON COAST.—PRACTICE IN POPULAR town. Panel 900. Receipts over £1,000. Old-established 30 years. Purchase House, Goodwill or rent.—THE WESTERN MEDICAL AGENCY, 22, Clare Street, Bristol 1 (Bristol [illegible]) and 1, Berners Street, Strand, W.C.2 (Temple Bar [illegible]).

DOMS (MALE) DESIRES OPHTHALMIC PRACTICE or PARTNERSHIP preferably in south or East Coast; capital available.—Address No. [illegible], B.M.A. House, Tavistock Square, W.C.1.

FOR SALE NORTHUMBERLAND OLDestablished country PRACTICE. Average income £1,100. Panel nearly 700. Premium 1 year. Commodious house with ground and fishing rights. Sell or let with ultimate purchase.—Particulars—GARFORTH, DRURY AND KNIGHTS, Solicitors, Newcastle-upon-Tyne 1.

LONDON S W 18—DEATH VACANCY OLD established Panel 1 800 together with private PRACTICE and appointments House on lease renewable rent £60 p a Rates approximately £25 p a Premium 2 years purchase Full details on application—Address No 7561 B M A House Tavistock Square W C 1

LONDON W C—PRACTICE DOING £1 000 p a Panel 1 104 increasing Premium £2 000 House rent—THE WESTERN MEDICAL AGENCY 15 Bedford Street Strand W C 2 (Temple Bar 2 3) and 22 Clare Street Bristol 1 (Bristol 27689)

MEDICAL PRACTICE FOR SALE IN residential district near Manchester Fine house with garden and tennis court Panel 1 480 Income over £2 500 Premium for house and practice £5 375—Address No 7520 B M A House Tavistock Square W C 1

MIDDLE AND WORKING CLASS PRACTICE wanted in Birmingham or vicinity yielding about £1 700 with fairly substantial panel Capital available Nice house essential—Address No 7519 B M A House Tavistock Square W C 1

NEAR LORD'S—OLD ESTABLISHED private PRACTICE non panel non dispensing Gross £2 000 Fees 10s 6d £1 1s Time for specializing partnership introduction 21 years purchase—Address No 7528 B M A House Tavistock Square W C 1

NE COAST—BETTER CLASS EASILY worked opportunity for keen man Average £1 100 Commodious house best residential district Excellent professional suite garden garage (2 cars) Reasonable offer considered—Address No 7513 B M A House Tavistock Square W C 1

OLD ESTABLISHED PRACTICE NORTH Manchester averaging £1 300 Panel 1 450 Considerable increase possible by branch in adjoining suburb Good location available Good house four bedrooms two reception attic garage excellent professional rooms with separate entrance Vendor accepting full time appointment House and Practice priced low Sale urgent—Address No 7104 B M A House Tavistock Square W C 1

OLD ESTABLISHED COUNTRY PRACTICE for sale £700 p a good appointments and panel nice roomy house £70 and garden rates £15—Address No 7559 B M A House Tavistock Square W C 1

OLD ESTABLISHED PRACTICE NEAR Cardiff receipts over £800 per annum easily doubled by energetic man Modern house separate surgery garage (2 cars) Practice 13 years purchase House £800—Address No 7518 B M A House Tavistock Square W C 1

WOMAN'S PRACTICE LONDON GOOD scope for increase Panel 600 About £500 p a Premium 1½ years purchase or near offer—THE WESTERN MEDICAL AGENCY 15 Bedford Street Strand W C (Temple Bar 2532) and 22 Clare Street Bristol 1 (Bristol 27689)

HOUSES CONSULTING ROOMS

40, RUTLAND GATE
KNIGHTSBRIDGE

IN THIS IDEAL POSITION NEWLY DECORATED AND CHARMINGLY FURNISHED SERVICE FLATLETS (SOME WITH PRIVATE BATHROOMS AND/OR KITCHENETTES) CHW BASINS CENTRAL HEATING TELEPHONE ALL ROOMS AN EXCELLENT STAFF SUPPLY MEALS AS REQUIRED

PRICES FROM 30/- TO 6 GNS VIEW AT ONCE YOU WILL BE DELIGHTED

40, RUTLAND GATE

A FIRST CLASS MODERN DETACHED RESIDENCE 3 reception breakfast room kitchen 4 bedrooms bathroom Pretty gardens garage Very attractive property magnificent condition in every way Main road position amidst extensive new estate Ipswich Freehold realizable £1 150—MOWLEM'S AGENCY Silent Street Ipswich

CONSULTING ROOMS WITH USE OF fully equipped x ray room electrical treatment rooms sold exclusive Mayfair position rent only £80—Address No 7510 B M A House Tavistock Square W C 1

DEVONSHIRE ST W 1—AN EXCELLENT CONSULTING ROOM in one of the finest buildings in the district available five sessions per week at £5 5s p a in advance—Address No 7511 B M A House Tavistock Square W C 1

HARLEY STREET AND MEDICAL DISTRICT

For all types of available accommodation

BERTRAM & CO, Surveyors and Estate Agents
59 Connaught Street, W 2 Paddington 1642 3

DOCTOR'S HOUSE FOR SALE IN RESIdential part of Lancaster Separate entrance to waiting room and surgery Spacious garage Possession by arrangement—Apply to owner Mrs GIBSON 12 Rose Bank Lancaster

DOCTOR'S WEEK-END HOUSE AT Worthing for sale six well furnished rooms garden and garage £200 and transfer of lease Owner unable to occupy—Address No 7533 B M A House Tavistock Square W C 1

DOCTOR'S WELL DETACHED HOUSE good garage excellent position lovely garden new London suburb minute golf £1 275 freehold Write DR R 57A Dean Street W 1

HARLEY STREET—EXCEPTIONALLY LARGE consulting room in one of the finest houses in the street rent £250 p a Another on second floor (lift) at £150 p a To view and for all particulars—Address No 7110 B M A House Tavistock Square W C 1

FOR SALE ONE OF THE FINEST HOUSES in the Harley Street district Income from lettings of consulting rooms over £1 000 p a Excellent residential and consulting room accommodation available for purchaser Long lease for sale at low price—Address No 7109 B M A House Tavistock Square W C 1

HARLEY STREET AND DISTRICT—A NUMber of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application—ELGOOD AND CO 10 Henrietta Place Cavendish Square W 1 Lang 2601

NUCLEUS AND ATTRACTIVE DETACHED HOUSE N London close to new Tube railway station Well situated six bed and three reception rooms separate surgery entrance brick garage matured garden and all modern improvements including fitted basins rent on long lease £175 per annum with well-established nucleus of £350 per annum including panel of 270 Private advertiser with other interest unable to accept midwifery or any night work Ample scope Suitable for family man or one desiring to take resident patients Open to any investigation Premium £600—Address No 7510 B M A House Tavistock Square W C 1

QUEEN ANNE STREET—ONLY £40 P A secures exceptionally fine CONSULTING ROOM for use when required with attendance and all services Residential accommodation available—Address No 6355 B M A House Tavistock Square W C 1

RADIOLOGIST OFFERS PART TIME USE OF CONSULTING ROOM with diagnostic X ray and deep Therapy apparatus London—Address No 7557 B M A House Tavistock Square W C 1

STALYBRIDGE CHESHIRE 7 MILES FROM Manchester Substantially built large detached HOUSE right in the midst of dwelling house but not on a noisy main road Contains 2 large entertaining rooms 4 bedrooms Has been in the past medical practitioner's residence and surgery and is eminently suited for a maternity or nursing home Adjoining is a cottage which would be a suitable residence for nurses Large garden at side Owing to the owners having gone into permanent residence abroad the whole is offered subject to a chief rent of £11 14s 10d for the very low sum of £350 For details and permission to view apply to SMITH AND KNIGHT F A L P A Highfield Estate Office Gorton Manchester

SUITABLE FOR PROFESSION AND OCCUPAtion imposing CORNER PREMISES ground floor to let off main road 20 yards bus stop Willesden Green has been doctor's surgery for 25 years Accommodation Entrance Hall 2 Bed rooms Reception Room Dining Room Kitchen usual offices large garden garage available Rental £120 per annum inc View by appointment 44 Tachbrook Street S W 1 Victoria 7030

ESTABLISHED 1845

ELLIOTT, SON & BOYTON
(H C ROWE F S I)

VEREST, CAVENDISH SQUARE, W 1

Estate Agents Auctioneers and Surveyors

are the BEST LOCAL AGENTS for HOUSES and CONSULTING ROOMS in the Harley Wimpole Queen Anne and other streets in the Cavendish Square district Valuations for all purposes

Telephone 3404 MAYFAIR.

ESTABLISHED 1860

BEDFORD & CO.
Surveyors Auctioneers and Estate Agents
10 WIGMORE STREET
CAVENDISH SQUARE W 1

Specialists in Professional Houses, Flats, and Consulting Rooms
in Harley Street and leading Medical Positions
Telephone Langham 3927 and 3928

SUITABLE FOR PROFESSION AND OCCUPAtion imposing CORNER PREMISES ground floor to let off main road 20 yards bus stop Willesden Green has been doctor's surgery for 25 years Accommodation Entrance Hall 2 Bed rooms Reception Room Dining Room Kitchen usual offices large garden garage available Rental £120 per annum inc View by appointment 44 Tachbrook Street S W 1 Victoria 7030

WIMPOLE STREET — HIGH STANDARD CONSULTING ROOMS RESIDENTIAL SUITE and S/C MAISONETTE available Low rentals including full service and attendance Lease for disposal—George Carlton Esq Park West W 2 Paddington 6250

WEST END MAIN DOOR FLAT AT bargain price—In best part of West-end at 18 Glencairn Crescent Edinburgh contains 2 public rooms 3 bedrooms and maid's room 2 bathrooms kitchen pantry Being now reconstructed in modern manner and will be finished to purchaser's own taste—Address No 7508 B M A House Tavistock Square W C 1

MISCELLANEOUS SALES, etc.

IMPORTANT
to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE Specially Cut Fitted and Moulded to each individual figure made from Finest Quality Materials and in the Best Possible Style cost no more than mass production ready made clothes

The invaluable Practical Experience and Advice of our 14 Expert West End Cutters and Fitters is always at your disposal

ALL HALLZONE Productions are HAND FINISHED IN EVERY ESSENTIAL DETAIL

SPECIAL OFFER

JACKET & VEST (in black or grey)	£1 4s
Lined best quality Art Satin Art Silk or Alpaca	
SOLID FANCY WORSTED TROUSERS	£2 -s
The Ideal Suit for Professional or Business wear	
LOUNGE SUITS to measure from	£6 6s
OVERCOATS "	£5 5s
DINNER SUITS	£8 8s
DRESS SUITS from	£10 10s
PLUS FOUR SUITS from	£6 6s
THE IDEAL Suit for Country and Sporting Wear	
COLD MEDAL RIDING BREECHES from	£2 2s
RIDING HABITS "	£8 8s
RIDING BOOTS	£3 3s
COSTUMES & LONG COATS	£6 6s

UNSOLICITED APPRECIATION

I strongly advise all medical men who wish to have satisfaction to patronize Harry Hall Ltd as all the clothes I have had from them during 35 years have been perfect in Fit Cut and Finish
(Signed) S J A MA MB FRCPS

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self measurement Form or Pattern Garments
Visitors to London can order and fit same day Special Patterns would then be cut and Perfect Fitting Clothes supplied after without trying on

HARRY HALL, LTD.
Governing Director Harry Hall
THE Coat Breeches Habit and Costume Specialists
181 OXFORD ST & 1 119 CHEAPSIDE, E C 2
Telephones
GERrard 4905 4906 and 4907 NATional 1667
Makers of Finest Quality Bespoke Civil Service and Hunting Clothes for Ladies and Gentlemen
Highest Awards 12 Gold Medals
Est over 10 years

INCOME TAX
YOUR burden REDUCED to the Minimum
Tax Specialists to the Medical Profession
HARDY & HARDY
19 CHANCERY LANE LONDON W C 2
Telephone Holborn 7651
Write for free copy of Advice on Income Tax

COVERS FOR BINDING

Vols I and II of the BRITISH MEDICAL JOURNAL for 1937 and previous years can be had price 2s 6d by parcel post 2s 10d each

Orders with appropriate remittance should be addressed to—

THE SECRETARY
BRITISH MEDICAL JOURNAL
B.M.A. HOUSE TAVISTOCK SQ
LONDON W.C.1

APPOINTMENTS—Contd

ST JOHN'S HOSPITAL LEWISHAM S.E.1

Applications are invited from registered medical practitioners to fill the office of CLINICAL ASSISTANT to the Medical Officer in Charge of the Electrical and Massage Department. The successful applicant will be required to attend the hospital on three half-days a week and honorarium of 8 guineas per annum.

Applications should be received by the undersigned who will be pleased to give further particulars.

J. C. GILBERT
Secretary Superintendent

GENERAL LYING IN HOSPITAL
York Road Lambeth S.E.1

Applications are invited for the post of REGISTRAR. Preference will be given to those candidates who possess the qualifications of F.R.C.S. (Eng.).

Applications with copies of three testimonials to be sent not later than July 29th 1938 to the Secretary.

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St Quintin Avenue North Kensington W.10
(Ladbroke 0133)

The Board of Management invite application for the post of HONORARY ASSISTANT PHYSICIAN with beds.

Applicant must be graduates of a University and must hold the M.R.C.P. (London) and the successful candidate will be required to see Out Patients.

Applications accompanied by copies of three testimonials should be sent to the undersigned at the Hospital from whom any further information can be obtained and should reach him not later than July 30th 1938.

H. J. ELEY
Secretary

ROYAL LONDON OPHTHALMIC HOSPITAL (MOORFIELDS EYE HOSPITAL)
City Road E.C.1

Applications are invited for the post of OUT PATIENT OFFICER to attend on Tuesdays and Fridays (morning) each week.

Candidates must be registered Medical Practitioners.

Salary at the rate of £110 per annum. The Out patient Officer will be appointed for a period of one year and will be eligible for reappointment.

Copies of regulations can be obtained on application.

Applications with testimonials stating age and if married with photograph only must be received by the undersigned not later than August 3rd 1938.

A. J. M. TARRANT
Secretary

MILDMAY MISSION HOSPITAL
Mildmay Street Bethnal Green E.2

Applications are invited for the post of ASSISTANT CASUALTY OFFICER (female) which becomes vacant on September 1st 1938. The appointment is non-resident and for six months. Salary £125 per annum. Dinner tea and supper when on duty.

Candidates must be registered under the Medical Act and the Mildmay Council must be satisfied that they should be fully in sympathy with the religious work of the Hospital.

Application with copies of recent testimonials should be sent to the Medical Superintendent as soon as possible.

THE DOCTOR IN PRACTICE OR ABOUT TO ENTER THE PEIN SHOULD BE ADEQUATELY PROTECTED BY INSURANCE IN RESPECT OF

HIS LIFE
HIS HEALTH
HIS HOME
HIS PRACTICE
AND
HIS CAR

FOR ALL THESE CONSULT

The
Medical Insurance Agency
(Limited by Guarantee)
BRITISH MEDICAL ASSOCIATION HOUSE
TAVISTOCK SQUARE W.C.1

WE CAN ALSO ARRANGE ADDITIONAL CAPITAL FOR THE PURCHASE OF A PRACTICE OR PARTNERSHIP

State age next birthday when writing

SMALL ADVERTISEMENT FOR INSERTION IN BRITISH MEDICAL JOURNAL

The MINIMUM charge is 9s which covers up to 30 words. Extra words are charged 1s 6d for 5 or less. Example 35 words would be charged as for 35. Name and address should be included when counting words for cost.
If BOX NUMBER is used it should be reckoned as 3 words in the total.

PLEASE WRITE CLEARLY—ONE WORD IN EACH SPACE

1						
2						
4						
5						
6					(30 words)	9
7						10 6
8						12
9						13 6
10						15

To the Advertisement Manager BRITISH MEDICAL JOURNAL B.M.A. House Tavistock Square London W.C.1

Please insert my advertisement in ..... issues Name .....

dated ..... Address .....

I enclose remittance value £ ..... Date .....

ARCHIVES OF DISEASE IN CHILDHOOD

JUNE 1938

CONTENTS

Intracranial Haemorrhage in the New-born By W S Craig, M D , F R C P Ed.

Vitamin C Excretion in Children, with Particular Reference to Rheumatic Fever By J D Keith, M D , and Evelyn M Hickmans, Ph D , M Sc

Otitis Media and Mastoiditis in Infancy By Grace McConkey, M B , B Ch , B A O , D C H , and Edward C Ross Couper, M B., Ch B , F R F P S

Radiology in the Diagnosis of Hypertrophic Pyloric Stenosis By Leonard Findlay, D Sc , M D , F R C P

The Blood Phosphorus in Egyptian Infants By I A Sabri, M R C P , D T M and H , and M A Abboud, M R C P , D C H

Osteopetrosis By A M Nussey, M D , M R C P

The Cooley Syndrome in an English Child By E G L Bywaters, M B , B S , M R C P

Case Report A Case of Diabetes Mellitus in a Young Infant By John Devine, M B , Ch B

PUBLISHED QUARTERLY

Yearly subscription (4 numbers), 25/- To members, 20/-
Single Number, 7/6

Issued by the British Medical Association, Tavistock Square, London, W C 1

This cookery book is based on the latest scientific standards. Medical practitioners can particularly recommend it to those of their patients who have to get a full pennyworth of food value from every penny of their outlay

THE DOCTORS' COOKERY BOOK

21 Menus and 82 Recipes for Family Meals

21 PAGES OF PHOTOGRAPHS

PUBLISHED BY THE BRITISH MEDICAL ASSOCIATION

Obtainable from all booksellers, news agents, Smith's bookstalls and Co-operative Societies

All inquiries to B M A Tavistock Square, London W C 1

PRICE 4D

PERCIVAL TURNER LTD
MEDICAL AGENCY
ESTABLISHED 60 YEARS

23 MAIDEN LANE, STRAND W C 2
(Corner of Bedford Street)
Telegrams "Impromptu London"
Phone Temple Bar 9011 (3 lines)
After office hours Walton-on-Thames 1785

Assistants and Locums Provided with no fee to Principals — Practices investigated — Book-keeping — Debt Collecting etc

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY OR SALE OF PRACTICE OR SHARE EXCLUSIVE OF HOUSE PROPERTY £50 FULL TERMS ON REQUEST

FOR DISPOSAL

SURREY SUBURB—PARTNERSHIP Half Share of £3 000 p.a. Old-established increasing modern house garden and garage to let Premium £3 000—1

DERBYSHIRE—COUNTRY PRACTICE, about £700 p.a. good class select panel increasing and scope choice of house Premium 1½ years purchase—2

MIDDLESEX SUBURB — PARTNERSHIP under 12 miles from London share producing £450 p.a. to commence in fast increasing Practice choice of house Premium 3 yrs purchase—3

NORTHANTS — COUNTRY PRACTICE old-established Vendor retiring About £1 600 p.a. and panel worth £910 p.a. 4 Apptmts Nice house for sale Premium 1½ years purchase—4

HYDE PARK NEAR — PHYSICO-THERAPY PRACTICE about £1 600 p.a. Well established good class Ample accommodation on rental Premium £1,...00—5

LANCSTOWN—OLD EST INCREASING £1 100 p.a. Select panel of 1 000 Nice house ample accommodation Premium £1,5 0 incl drugs and surgery furniture—6

KENT SUBURB—GOOD MIDDLE CLASS about £700 p.a. increasing select panel Fees 6 up surgery 5/- Nice Tudor house for sale might let Premium 1½ years purchase—7

SOUTH COAST—OLD EST NEARLY £1 400 p.a. increasing Fair panel mixed middle and better class Nice detached house ample accommodation garden and garage for sale or might let. Premium £2...00—8

COUNTY TOWN WITHIN 100 MILES OF LONDON—PARTNERSHIP with early succession in E N T Practice about £1 350 p.a. and appointments £8 0 p.a. 2 years purchase Purchaser should have F R C S Choice of house—9

DEVON — UNOPPOSED COUNTRY over £1 100 p.a. increasing panel worth £300 p.a. Appointments £60 p.a. Premium £1 850 Excellent freehold house ample accommodation garden and garage for sale £...500 Mortgage arranged Premium £1 8 0—10

BIRMINGHAM NEAR—WELL ESTABLISHED nearly £800 p.a. increasing good scope panel nearly 800 developing area Compact house garden and garage for sale at £850 or let at £...6d p.w. Premium £1...00—11

HANTS — OLD EST AVERAGE £1 000 p.a. Panel 1 000 Appointments about £150 p.a. Good family house nice garden and garage to be sold substantial mortgage arranged Premium 1½ years purchase—12

YORKSHIRE DALES—BEAUTIFUL country old-established average £1 000 p.a. Large house and grounds rental only £60 p.a. Suit resident patients Smaller house available Panel worth £340 p.a. Premium £1,500—13

NEAR VICTORIA S W 1—LOCK UP about £500 p.a. increasing panel 3 0 good scope Ample professional accommodation on rental at £70 p.a. Resident housekeeper Premium 1½ years purchase—14

MIDDLESEX SUBURB—PARTNERSHIP Half Share of increasing Practice producing about £2 000 p.a. Panel 600 developing area Choice of house Premium 2 years purchase—15

MIDLANDS—OLD EST NEAR IMPORTANT town scope Vendor retiring About £6 0 p.a. Panel 730 2 appointments £101 p.a. Premium ... years purchase House 3 reception 6 bedrooms separate surgery entrance good garden garage and outbuildings for sale or might let—16

GUILDFORD—NEARLY £700 P.A. fast developing good scope increasing panel of 30 Compact house in good position on rental at £70 p.a.—17

SOUTH WALES — PARTNERSHIP half share seaside town receipts £3 704 Panel ... 00 Appointments Senior partner retiring Nice house facing sea 3 reception 5 bedroom usual offices 2 acres of garden tennis court garage etc for sale or rental Premium for half share ... years purchase—23

NO CHARGE TO PURCHASERS
FINANCIAL ASSISTANCE ARRANGED

ASSISTANTS — VACANCIES IN Town and Country Indoor and Outdoor List on application

THE MEDICAL AGENCY, Ltd
DUDLEY HOUSE 36-38 SOUTHAMPTON ST., STRAND W.C.2
Telegrams—Temple Bar 1034 10 4 Established 1893 by J. A. Percival

LONDON W.—PARTNERSHIP Suburban G.P. practice House to rent Receipts nearly £6 000 Panel approx 4 500 One fifth share ... years purchase with view to one third share

MIDDLESEX (W.)—G.P. growing residential locality Excellent house with large pleasant garden Receipts approx £3...00 Panel 1 00 Fees 3/6 up Prem ... years purchase Freehold house and furniture £3 000

WEST COUNTRY (Seaside)—PARTNERSHIP House to rent on lease Receipts £3 000 Panel 1 00 Fees 3 6 up One third share 14 years purchase

LONDON (Residential suburb)—PARTNERSHIP Good middle-class non-pens G.P. Receipts approx £ 500 Panel (select) over 00 Fees 6 up ... share ... yrs purchase or near offer

LONDON W.1—Old-estab G.P. main road Suit house available Receipts approx £800 Select panel 900 Prem 2 years purchase.

Scope for full time

LONDON W.—Growing PRACT new house on Estate Small house to rent Receipts £...0 Panel 600—scope Fees ... 6 up Prem £...0 or near offer

LONDON S.W.1.—Old-established middle-class G.P. Residential locality Large house offered garden Receipts approx £1,500 Select panel nearly 4 0 Fees 3 6 up Premium 1½ years purchase, or rent offer

HERTS (Border)—Middle-class PRACTICE Residential locality Corner house garden rare Receipts nearly £1 00 Panel over 300 Fees 6 up Premium ... years purchase or near offer

SURREY.—Mixed G.P. Residential locality Small house to rent Receipts approx £...0 Panel over 400 Premium £1 500

LONDON N.E.—Middle-class G.P. Receipts approx £...500 Panel 1 00 Premium ... years purchase or near offer

MANY OTHERS FOR SALE DETAILS ON REQUEST

ESTABLISHED 1877

LEE & MARTIN, LTD,
The Birmingham Medical Agency,
71 TEMPLE ROW BIRMINGHAM
Telegrams Locum Birmingham *Telephone* 5963 Midland Bham

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED
MAXIMUM FEE £.0 if exclusively entrusted to us.

ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED
RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORT NOTICE also ASSISTANTS.

WANTED TO PURCHASE

1 BIRMINGHAM (or within 50 miles thereof)—Good Mixed PRACTICE with a panel of 1...00 or over and receipts of from £1 00-£ 000 URGENTLY REQUIRED CAPITAL AVAILABLE

REQUIRED—Good English Scottish and Irish LOCUMS Immediate post to offer also ASSISTANTS required good posts to offer with or without view to Partner hip

FOR DISPOSAL

1—GLOUCESTERSHIRE — Well estab hed middle and working-class PRACTICE. Receipts av £1 50 p.a. Panel 1 ...00 Scope to increase and good house

STAFFS—Rapidly increasing mixed Private and Panel PRACTICE Receipts last year £1 0 0 Panel 1 30 Excellent house with all services Pleasant locality

3 MIDLANDS—PARTNERSHIP with early succession in well-established Ear Nose and Throat PRACTICE. Receipts av £1 0 p.a. plus Appointments £8 0 p.a. In omer should have F.R.C.S. and Specialist experience Excellent house to rent

4 SOUTH WALES—Old-established middle- and working-class PRACTICE Receipts last year £2..00 Panel ...100 Good house

5 MIDLANDS — Old-established industrial and middle-class PRACTICE. Receipts average £1 065 p.a. Panel 96 Good house

6 MIDLANDS—Country PRACTICE in growing district. Receipts £7 0 small panel and good house

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partnerships on very reasonable terms. Full particulars on application

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE.

Telephone Welbeck 27 8
Telegrams ASSISTIA LONDON

NURSES
MALE OR FEMALE

TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES

Nurses reside on the premises and are available for urgent calls Day and Night

THE NURSES ASSOCIATION
(In conjunction with the MALE NURSES' ASSOCIATION)
29 York St., Baker St., London W.1
Mrs MILLICENT HICKS *Supt*
W. J. HICKS *Secretary*

ESTABLISHED 1868

PEACOCK & HADLEY, Ltd,
MEDICAL TRANSFER AGENCY,
67-68, Chandos St Bedford St Strand W.C.2
Telegrams Herbana Lesquare, London.
Telephone Temple Bar 5564

LOCUM TENENS and ASSISTANTS supplied free of charge to principals.

FOR DISPOSAL

1 NEAR PUTNEY S.W.—DEATH VACANCY Old-established PRACTICE Receipts about £2 000 p.a. including panel about £800 Nice surgery premises on rental Offers

2 NEAR HOLBORN W.C.—Well-established PRACTICE Receipts average £1 000 p.a. panel 1 104 Splendid surgery accommodation only Long introduction Premium £...000

3 NEAR MARBLE ARCH W.—SHARE third or half of a good-class PRACTICE. Receipts about nearly £3 000 p.a. Premium according to valuation Well established

4 A number of small PRACTICES at low premium Excellent opportunities for practitioners wishing to get a Practice with scope.

5 GLAMORGAN COAST—HALF SHARE of old-established PRACTICE Receipts average over £3 000 p.a. Large panel Very fine house with good ground for sale Premium for share two years purchase payable part by instalments

6 NEAR FULHAM S.W. — Well-established PRACTICE. Receipts last year over 500 panel nearly 500 increasing Nice house on rental Premium £1...0

7 SCOTLAND — Old-established PRACTICE. Vendor retiring Receipts £1 000 p.a. good panel Good introduction £500 accepted for immediate sale

8 LARGE MIDLAND TOWN (Suburb)—PRACTICE held 16 years by Vendor Receipts average nearly £800 p.a. good panel Attractive house on rental Premium about £1...00

9 WANTED IN LONDON OR PROVINCES PRACTICES with incomes £700 to £...000 p.a. Many purchasers waiting and quick transactions for immediate cash

No charge made to purchasers or for enquiries

THE WESTERN MEDICAL AGENCY

Dr K. H. BENNETT and Dr W. J. PARAMORE, who give personal attention to every client.

22, CLARE STREET BRISTOL, 1
Teleg Medgen Bristol *Tel* Bristol 2...9

15 BEDFORD ST., STRAND W.C.2
Tel Temple Bar 2532.

THE NEW MENTAL NURSES CO-OPERATION

66, Queen Gardens, Lancaster Gate W.2
(Late of 139 Edgware Road W.2)

Specially trained Nurses for Mental and Nerve cases (All Nurses are insured under the Employers Liability Act 1906) Apply the Supt.

Telegrams Psyconurse, Padd, Lond" *Telephone* No 6105 Padd

British Medical Bureau

(The SCHOLASTIC, CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1880)

Tele Address
Triform, Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1

Telephone Euston {1614 1615

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical, Scholastic and Accountancy business and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult The Manager in all transactions requiring the services of a Medical Agent
Members of the British Medical Association may take advantage of a reduced scale of charges applicable to them

REDUCTION IN FEES

In cases where the Bureau are sole Agents the commission in respect of any sale of goodwill book debts, furniture drugs, fittings and other effects (excluding sales of any freehold or leasehold property or of practices, effects etc outside Great Britain) is limited to a maximum fee of Fifty Pounds

FULL TERMS ON APPLICATION

Practices and Partnerships for Disposal — **Full Particulars sent free**

1 SURREY—PARTNERSHIP in Practice of about £3 000 p a in residential district Panel 630 Modern house (4 bedrooms) garage garden To rent One half share £3 000

2 E ANGLIA—PARTNERSHIP in country Practice of about £2 200 p a within easy distance of coast Panel 1 300 Well built house to rent One third share two years purchase with succession in five years

3 N E COAST—PRACTICE of £1 400 p a in small seaside resort Panel 300 Double fronted house (3 bedrooms etc) for sale Premium 14 years purchase

4 LONDON E C—PARTNERSHIP (with good scope for private practice in a specialty) in Practice mostly derived from valuable appointments Share of £800 to £1 000 at first at two years purchase Partner must possess the M D or M R C P or I R C S and preferably have City connections

5 S WALES COUNTY TOWN—PARTNERSHIP in Practice £2 800 p a Panel over 1 000 Visits 5/- to £1 1s medicine extra One half share on reasonable terms Partner must hold F R C S Eng Hospital and excellent opportunity for surgical scope and appointment on staff Preliminary Assistantship

6 W OF ENGLAND—PARTNERSHIP in Practice about £4 500 p a in small town Panel 1 750 Choice of two houses One third share at two years purchase Partner aged about 30 who has held hospital appointments Preliminary Assistantship

7 ESSEX (Borders of Epping Forest)—PARTNERSHIP in steadily increasing Practice over £3 600 p a in growing residential district Panel 1 700 House obtainable One fourth share at two years purchase Cottage hospital Scope for anaesthetics

8 KENT—Upper middle class PRACTICE in growing residential district Receipts 1937 £652 Small panel Modern well planned double fronted Tudor house for sale or rent Scope Premium one and a half years purchase

9 S E COAST—PARTNERSHIP in non dispensing Practice about £4 500 p a Panel 1 400 One fifth or one fourth share at two years purchase Preliminary Assistantship Scotsman preferred

10 LONDON N 12—Middle class increasing PRACTICE in growing district Receipts past year £420 Panel 163 Modern labour saving house for sale or rent Premium £630

11 S WALES—Contract and small private panel PRACTICE over £1 900 p a in industrial district Panel over 2 100 House with surgery premises to rent Prospect of appointment Premium £3 500

12 S COAST HEALTH RESORT—OPHTHALMIC PRACTICE Receipts 1938 £1 600 House to rent Unlimited scope Premium one years purchase

13 LONDON S W—ELECTRO-THERAPEUTICAL PRACTICE Receipts 1937 £1 727 Large consulting room and treatment room to rent Premium £1 600, plus apparatus valued about £750

14 LONDON N—LOCK-UP PRACTICE £390 p a run by medical woman Panel 327 Rent at surgery 25/- weekly Good scope Premium 11 years purchase

15 S COAST HEALTH RESORT—Non dispensing PRACTICE £1 250 p a No panel but ample scope Commodious House for sale Premium £2 500

16 DEATH VACANCY—ESSEX SUBURB—Receipts average £989 p a Panel 733 Well situated house for sale Scope

17 N WALES—Popular seaside resort Good class chiefly non dispensing PRACTICE, averaging £870 p a No panel Excellently situated detached residence for sale Good scope Premium two years purchase

18 LONDON E—Cash and panel PRACTICE, averaging £2,800 p a Panel 4 300 House (5 bedrooms) Rent £156 p a Scope Premium two and a half years purchase, to include drugs etc

19 W MIDLANDS—PARTNERSHIP in Practice averaging £6,000 p a, in market town Panel 3 500 One sixth share at first at two years purchase Incoming partner should be aged 28/30, and able to do general surgery and minor E N and T work Hospital Preliminary Assistantship

20 N MIDLANDS—PRACTICE in residential district near progressive town Receipts 1937 £770 Panel about 100 Choice of two houses for sale Good scope Premium £800

21 S OF ENGLAND—Well-established SANATORIUM for the open air treatment Receipts at present at rate of about £3,000 p a Premium £1,000 to include furniture etc

22 LONDON, S E—PRACTICE, averaging £800 p a, in populous suburb Panel 800 Detached double fronted house Price of leasehold £1 250 Scope Premium £1 750

23 FRENCH RIVIERA—Old established PRACTICE M D essential Vendor at present in England

24 S W ENGLAND—Country PRACTICE, over £1 400 in beautiful part Panel about 1 100 Exceptionally nice modern house standing in own grounds for sale Hunting and shooting Scope Premium two years purchase

25 CENTRAL LONDON PRACTICE—Better class part at comfortable West End family flat Larger lock up branch 10 minutes distant Both increasing Panel 1 650 Receipts past year £1 698 (average £1 460) 2 years purchase

26 S E COAST—PARTNERSHIP in Practice averaging £4 100 p a in growing resort Panel 1,350 Good house (4 bedrooms) to rent One fifth share at first at two years purchase

27 Consulting Ear Nose and Throat PRACTICE in industrial city Receipts average £1 350 p a (in addition appointments worth about £850 p a) Centrally situated house to rent Purchaser should hold F R C S and have specialist experience Premium two years purchase

28 KENT—PRACTICE in developing district 12 miles from London Receipts past year over £500 Panel about 465 House (3 bedrooms) to rent Ample scope Premium £750 to include drugs etc

29 BIRMINGHAM—Medical Woman's PRACTICE averaging £1 269 p a Panel nearly 900 Good house with garage and garden Price £500 leasehold Scope Premium one and three quarter years purchase

30 S AFRICA—PARTNERSHIP in lucrative Practice in Natal Share worth about £1 800 p a at first at one year's purchase Applicant should be competent surgeon and preferably in F R C S

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)
(Founded 1880)

Tele Address
Triform Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE W C 1

Telephone Euston 1644 1645

Practices and Partnerships for Disposal (continued)

31 WEST END near Lord's Cricket Ground—PRACTICE averaging about £1 900 p a in ideal residential part Panel about 1 00 with prospects of good increase Well built detached double fronted house with garage and nicely sized garden Good introduction Premium £ 25

32 W MIDLANDS—PARTNERSHIP in non-dispensing Practice about £3 750 p a in county town House to rent One fourth share at two years purchase Aged about 30 with F R C S preferred Preliminary Assistantship

33 MIDDLESEX—PARTNERSHIP in steadily increasing town Practice about £2 000 p a Panel 1 800 House to rent Premium one half share two years purchase Applicant should be English or Scottish

34 SURREY—Medical Woman's PRACTICE over £300 p a in outlying suburban district Panel 130 House for sale or rent Scope Premium £100

35 S AFRICA—Medical Woman holding D O M S required in Ophthalmic Practice Experienced in operative work and not over 40 preferred SHARE about £1 000 offered after ASSISTANTSHIP

36 SUSSEX—PARTNERSHIP in good-class Practice nearly £3 000 in favourite market town Panel about 1 200 House to rent Share of £1 000 at two years purchase Preliminary Assistantship

37 S COAST—PARTNERSHIP in Practice over £3 000 p a in seaside resort Panel about 2 000 Semi detached house (5 bedrooms) for sale or rent Premium one half share £3 000 Excellent hospital and scope for surgery

38 MIDLANDS—Country PRACTICE over £1 300 p a in hunting district Panel 546 Good house (5 bedrooms) garage and good garden Main water and electricity Price £1 400 freehold Premium two years purchase

39 N E ENGLAND—PARTNERSHIP in non panel Practice doing about £6 000 in one of the chief towns House available One sixth share at two years purchase Partner should be surgically inclined

40 S COAST HEALTH RESORT—PARTNERSHIP in Practice about £1 500 p a Panel over 1 100 House to rent Premium two-fifths share £1 250 to include drugs etc

41 N OF ENGLAND INLAND SPA—PARTNERSHIP in Practice about £1 900 p a Panel 1 200 Excellent house for sale Premium one half share £1 800

42 S COAST—PARTNERSHIP in non dispensing Practice over £5 600 p a in health resort Panel about 600 Share worth about £900 at two years purchase

43 S OF ENGLAND—Easily worked PRACTICE about £1 000 p a in Cathedral city (clubs worth about £160 and panel 1 065) House (6 bed and dressing room) for sale or rent Premium one and a half years purchase

44 WEST END OF LONDON—Good class non dispensing PRACTICE about £1 150 No panel Large house to rent Premium lease and practice £3 000

45 BUCKS—PRACTICE in growing town Receipts last year £894 Panel about 790 House for sale Well equipped hospital Premium £1 500

46 LONDON W 6—Non dispensing PRACTICE £1 000 p a Pleasant suburb No panel House (5 bedrooms) garage and garden Premium house and practice £2 500

47 ESSEX—Country PRACTICE about £700 p a Panel about 450 Very good house (5 bedrooms) garage and garden Rent £65 p a Premium £800

48 LONDON S W—Medical Woman's PRACTICE about £960 p a in outlying suburb No panel Suitable accommodation available Premium £950

49 SURREY—Medical Woman's PRACTICE about £500 in developing district No panel Rent of house £100 p a Scope Premium £500

50 SMALL RADIOLOGICAL PRACTICE in provincial town Good opportunity for young able man Premium £1 600 to include modern plant (value about £1 100)

51 PARTNERSHIP in increasing Ear Nose and Throat Practice in provincial town Partner must hold F R C S

52 MIDDLESEX—FOURTH PARTNER required in Practice over £7 600 p a in residential district on the Thames Panel 1 600 House (5 bedrooms) to rent Scope Premium 6/30ths share £3 100

53 LONDON N W—PARTNERSHIP in Practice averaging about £5 200 p a Panel about 6 000 Maisonette (2 bedrooms etc) to rent One fifth share at first at two years purchase

54 N E COAST—Middle and better working-class PRACTICE over £1 150 p a in seaport town No panel Private residence for sale Premium £750 to include furnishings etc of consulting rooms or near offer

55 LONDON W 9—PRACTICE doing between £900 £950 p a in residential district Panel about 60 but plenty of scope Rent of maisonette (4 bedrooms) £200 p a Premium £1 000 or offer

56 LONDON N W 4—Middle class PRACTICE about £800 p a in developing part Panel 00 House (3 bedrooms) for sale or rent Scope Premium £1 250

57 HOME COUNTY—FOURTH PARTNER required in Practice in growing town Panel 3 000 Incoming partner must be energetic aged about 30 (married preferred) with a leaning towards medicine Initial share about £1 250 p a Premium £ 000 Preliminary Assistantship

COLONIES—Number of Colonial PRACTICES Incomes range from about £750 p a upwards

Purchasers can raise additional capital for the purchase of approved practices or shares
Particulars will be forwarded on application

All communications to be addressed to The Manager

Manager W M Scott — SCOTTISH BRANCH, 21, Alva Street, Edinburgh 2 — Telephone Edinburgh —

FOR DISPOSAL

A S OF SCOTLAND—Country PRACTICE Receipts approximately £1 600 Suitable house

B SCOTLAND—Old established City PRACTICE Receipts approximately £2 400 Panel 2 500 House price £900 Premium two years purchase or near offer

C YORKSHIRE—Country PRACTICE Receipts £1 200 Panel 500 Excellent house with garage Price £1 200 freehold Premium one and three quarter years purchase

D EDINBURGH—DEATH VACANCY—PRACTICE averaging £635 Ample scope for private and panel Excellent house for sale Any reasonable offer

E E OF SCOTLAND—Country town Receipts last year £685 (appointments £112 panel 565) Excellent house with garage and garden Price £1 450 Premium £1 000

F N OF SCOTLAND—Country PRACTICE Long established Receipts approximately £1 000 Panel 275

G WALES—PARTNERSHIP in country town Receipts £1 200 Panel over 1 000 Suitable house Price £800 One half share at one year's purchase

H EDINBURGH—PRACTICE doing £450 House must be bought Premium present and house £1 650

I EDINBURGH—PRACTICE averaging £1 022 Panel 505 Price of house £1 00 might let on lease Premium one and three quarter years purchase or near offer

K EDINBURGH—PRACTICE about £400 Suitable house to rent Reasonable offer considered

For further details apply The Manager 21 Alva Street, Edinburgh

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager to whom all communications should be addressed

RELIABLE LOCUMS and ASSISTANTS are URGENTLY REQUIRED by ALL OFFICES of the BUREAU

INDEX TO ADVERTISEMENTS

PUBLISHERS
Bale John Medical Publications 2
British Medical Assn 8 44
Cassell & Co Ltd 4
Churchill J & A Ltd 6
Kimpton Henry 5
Lewis H K & Co Ltd 4
Saunders W B & Co Ltd 3
Wright John & Sons Ltd 4

ASSURANCE & INSURANCE
London & Counties Med Prot Soc Ltd Supp i
Medical Insurance Agency 43
Medical Sickness etc Society Ltd 9

BANKS & FINANCE
British Medical Finance Ltd 8
Westminster Bank Ltd 6

CHEMISTS
Allen & Hanburys Ltd 14 24
Aluzyme Products 26
Belzema Products 10
British Drug Houses Ltd 10 13 17
Boutills Ltd 26
Burroughs Wellcome & Co 23
Ciba Ltd 25
Duncan Flockhart & Co Supp iii
Eli Lilly & Co Ltd 12
Fellows Med Mfg Co Ltd Supp iii
Giles Schacht & Co 25
Glaxo Laboratories Ltd 12
Hewlett C J & Son Ltd 14
Maw S Son & Sons Ltd 13
Milton Proprietary Ltd Supp ii
Reckitt & Sons 16
Riddell Francis Ltd 11
Robinson & Sons Ltd 15
S P Charges Co 8
Saccharin Corpn Ltd 15
Scott & Turner Ltd 19
Wander A Ltd 16

FOODS, BEVERAGES
Brand & Co Ltd 22
Cadbury Bros 18
Genatosan Ltd 20
Marmite Food Extract Co Ltd 11
Ramlosa Table Water 8
Valentine's Meat Juice Co Cover iii

NAME PLATES, etc
Hill F B & Co 26
Herd S J & A 26
Osborne F & Co Ltd 26
White Bronze Co 26

PRINTING, TYPEWRITERS, etc
Taylor's Typewriters 6

SURGICAL APPARATUS
Davidson F & Co Cover iv
Hilliard 26
Millikin & Lawley 6
Salmon Ody Ltd 6
Salt & Son Ltd Supp iv
Smith & Nephew T J Ltd Cover ii

TAILORING & CLOTHING, etc
Dormel Fabric Co 26

TOBACCO & CIGARETTES
Carreras Ltd Supp ii
Player's Navy Cut 7

VACCINES, SERA, etc
Evans Sons Lescher & Webb Ltd 21

WINES, SPIRITS, etc
Anderson Dobson & Co Ltd 6

X-RAYS & ELECTRO-MEDICAL
Bell John & Crowden 9

HOMES & INSTITUTIONS
Pages 26 27 28 29

HOUSE AGENTS
Page 42

HOSPITALS & CLINICS
Aldenham House 29
London Clinic 28
New Lodge Clinic 28

SANATORIA
Cotswold Sanatorium 30
Hospital for Consumption 31
Pendyffryn Hall Sanatorium 30
Tor na Dee Sanatorium 30

SPAS, HEALTH RESORTS, & HYDROS
Czechoslovakia 31
Harrogate 30
Pistany Spa 31
Rockside Hydro 31
Smedley's Hydro 29

MEDICAL SCHOOLS, TUTORS, & LECTURERS
Pages 29 [illegible]

NURSING, etc
Page 45

TRANSFER AGENTS
Bovril Medical Agency Ltd 43
British Medical Bureau 46 47 48
Lee & Martin Ltd 43
Medical Agency Ltd 43
Peacock & Hadley Ltd 43
Turner Percival Ltd 43
Western Medical Agency 45

CONTRACT PRACTICE
Page 39

HOSPITAL VACANCIES, etc
Pages 32 33 34 35 36 37 38 39 43 44

CLASSIFIED ADVERTISEMENTS— (Wanted & Vacant)
Pages 40 41

GENERAL
British Taxpayers Association 53
Franklands E J & Co Ltd 6
National Ophthalmic Treatment Board Supp i
Norwich & E of Eng Med Prot Socy 6

INCOME TAX
IN 12 EQUAL MONTHLY PAYMENTS
STRICTLY CONFIDENTIAL

This practical convenience is praised by medical men

DOUBTFUL DEBTS
CAN BE TURNED INTO
CASH

A specialised department is maintained for collection of medical accounts

WRITE BRITISH TAXPAYERS ASSN. LTD., GRAND BUILDINGS, LONDON, W.C.2.

Published by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Eyre and Spottiswoode Ltd at Ely's Harding St Fleet St London E C 4 Printed in Great Britain Entered as Second Class at New York U S A Post Office

Valentine's Meat-Juice

In Typhoid Fever, Diarrhoea and Cholera Infantum, when it is Essential to Sustain the patient without irritating the Digestive Organs, the Ease of Assimilation and Power of Valentine's Meat-Juice to Restore and Strengthen has been demonstrated in Hospital and Private Practice.

THE quickness and power with which VALENTINE'S MEAT-JUICE acts, the manner in which it adapts itself to and quiets the irritable stomach, its agreeable taste, ease of administration and entire assimilation recommend it to physician and patient



Physicians are invited to send for brochures containing clinical reports

For sale by European and American Chemists and Druggists

VALENTINE'S MEAT-JUICE COMPANY,
RICHMOND, VIRGINIA, U S A

WB 0.

A FEW SPECIALITIES OF F. DAVIDSON & CO.

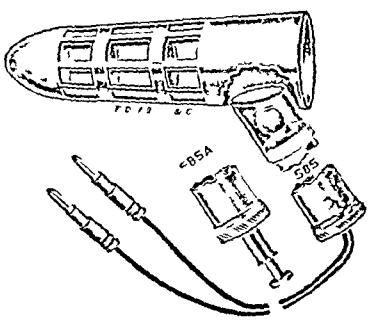
Makers of Optical and Electro-Medical Appliances (Estd 1890.)

143-149, GREAT PORTLAND STREET, LONDON, W.1

THE "DAVON" (REG TR MK) IMPROVED RECTOSCOPE

Suggested by Philip H Dalgleish Esq MP Chelsea who writes in the B M J

Having been dissatisfied for some time by all the various types of proctoscope on the market I have devised a model for use in the injection of haemorrhoids The advantages of this new model are that the whole operative field is visible at the same time that the haemorrhoids do not project into the lumen of the instrument and that there is no obdurator to cause discomfort to the patient and to be a nuisance to the operator The instrument has been made for me by Messrs F Davidson & Co who are supplying it with illumination from a battery in the handle or from a separate battery



No 585 With Washable Rubber Flex £2 15 0

'Davon' Dry Battery 0 7 6

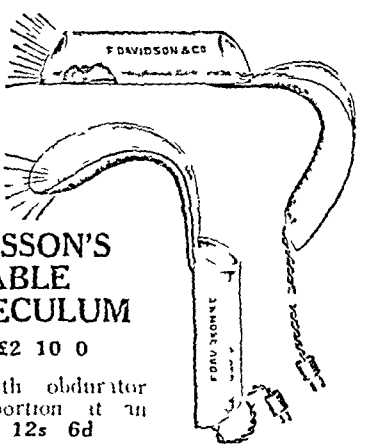
24/5/35 My last battery was dated Sept 1935 and is not yet quite finished — MRCS LRCP

No 585A With Torch Battery in Handle £2 15 0

Prices include spare bulb

The lamp is protected by a glass window so that the speculum can be cleaned when in position

The "DAVON" Self Illuminated SIM'S-FERGUSSON'S STERILIZABLE VAGINAL SPECULUM



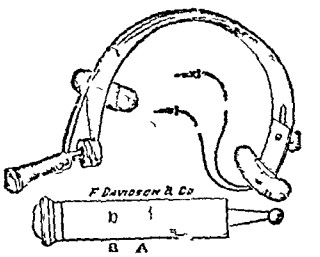
Price complete £2 10 0

Can be supplied with obdurator for the Fergusson portion at an additional cost of 12s 6d

I have found all your instruments most reliable and satisfactory — LRCP LRCS LM

Davon Dry Battery 7s 6d

"The present Davon Battery bears the date 3/38 and is only just giving up the ghost after much use" — MD



The "DAVON" AURAL HEAD LAMP

Price with extra bulb £3 3 0

'Davon' Dry Battery 7s 6d

A special condensing system and 4-volt gas filled lamp project a circle of light about 3in in diameter at a distance of 12in **without showing any image of the filament** The light being concentrated at the end of the speculum there is no confusing light outside The lamp can also be used with a laryngeal mirror By withdrawing small cap at 'B' a 1½in **circle** is obtainable for general purposes It is mounted on an adjustable duralumin head band with sorbo pads, and is very comfortable to wear

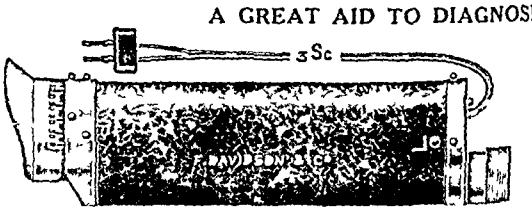
I am glad to say that the head lamps are giving good service and are more satisfactory than any I have previously used — LRCS

It is the finest head lamp that I have ever used and I always carry it as part of my kit to outlying farmhouses' — MRCS LRCP

'I am very pleased with it' — MD LRCS

"DAVON" DIRECT VISION OPHTHALMOSCOPE

A GREAT AID TO DIAGNOSIS



Gives a clear magnified image of the fundus *without* corneal reflex in bright light, without dilatation of the pupil and at an approximate distance of 7in from the patient Price complete in leather wallet and spare 4-volt bulb £5 0 0

I am delighted with your ophthalmoscope and stethoscope — MRCS LRCP

The "DAVON" ALL-METAL STETHOSCOPE

With Phonendoscope in Wallet with Zipp Fastener £1 6 0

With Bowles Chest Piece in Wallet with Zipp Fastener £1 8 6

With both Chest Pieces (interchangeable) in Wallet with Zipp Fastener £1 14 0

SKINNER'S CHEST PIECE CAN BE SUPPLIED IN PLACE OF PHONENDOSCOPE AT SAME COST

'It is easily the best stethoscope I have ever had' — MD

It is magnificent in trument and better than any I have hitherto handled — Med Superintendent

"THE PNEUMETTE" *(Patented and British)*

THE ONLY FOOT ARCH SUPPORT WITH AN AIR CUSHION

'I have prescribed Pneumettes for several of my patients with remarkably good result in every case — MD

PAMPHLET on FOOT TROUBLES with Article The Medical Aspects of Flat Foot by an eminent London Physician free

A CATALOGUE DESCRIBING FULL RANGE OF "DAVON" DIAGNOSTIC AND TREATMENT SPECIALITIES TRANSFORMERS ETC WOULD GLADLY BE FORWARDED, POST FREE, ON REQUEST

BRITISH MEDICAL JOURNAL

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION

SATURDAY JULY 30 1938

PRINCIPAL CONTENTS

Mental Factors in Medicine p 209

Radiology in the Elucidation of Haemoptysis 211

Play-therapy for "Problem" Children 213

Treatment of Gonorrhoea with Uleron 215

Pulmonary Tuberculosis in Diabetics 218

Leading Articles p 224

Scientific Sections at Plymouth 238

Correspondence 254

Surgery in General Practice
Injuries to Elbow joint—II 230

Reviews 221

Electrical Ignition of Anaesthetics 234

The Annual Representative Meeting (See Supplement)

WITH SUPPLEMENT AND EPITOME

LONDON

BRITISH MEDICAL ASSOCIATION

TAVISTOCK SQUARE

No 4047 WEEKLY, PRICE 1/3

Copyright

REGISTERED AS A NEWSPAPER

Felsol for

SPASM OF PLAIN MUSCLE

ASTHMA
ANGINA PECTORIS
DYSPNOEA OF PHTHISIS

Felsol relieves QUICKLY and CERTAINLY.
Felsol is ALWAYS READY FOR USE
Felsol contains NO NARCOTICS
Felsol consists of Powders for oral administration

Telephone
Clerkenwell 5862

Literature and supply for clinical test from
BRITISH FELSOL COMPANY LTD,
Wigton House, 206/212, St John Street,
Clerkenwell, E C 1.

Telegrams
Felsol Smith London

Valentine's Meat-Juice



IN cases of Extreme Exhaustion, at Critical Times, in Wasting Diseases, Low forms of Fever, Cholera Infantum, Diarrhoea, Dysentery, Influenza, Pneumonia and Phthisis, when other Food fails, Valentine's Meat-Juice demonstrates its Power to Sustain and Strengthen

Physicians are invited to send for Clinical Reports from Hospitals and General Practitioners in all parts of the world

For sale by European and American Chemists and Druggists

VALENTINE'S MEAT-JUICE COMPANY
RICHMOND, VIRGINIA, U S A

BRITISH MEDICAL JOURNAL

JULY 30 1938

TABLE OF CONTENTS

ADDRESSES AND PAPERS

Mental Factors in Medicine T A Ross MD FRCP 209
Value of Radiology in Elucidation of Haemoptysis Franklin G Wood MB 211
Play-Therapy for "Problem" Children Ethel Dukes LRCP & S 213
Treatment of Gonorrhoea with Uleron D F Walsh MB BCh 215
Post-Mortem Record of Pulmonary Tuberculosis in Diabetics S Roodhouse Glosse MD 218
Electrical Ignition of Anaesthetics H W Swann 234

SURGICAL SERIES

Injuries to the Elbow joint — II Fractures S L Higgs FRCS 230

CLINICAL MEMORANDA

Traumatic Rupture of External Iliac Artery Amputation Recovery H G Pinker FRCS 219
Two Compressed Foetuses and Living Baby as Cause of Hydramnios E D Blunt MB 220

REVIEWS

The Bacteriophage 221
X Rays in Dermatology 221
Medical Women in Past Ages 221
Fractures and Dislocations 222
Approach to Physiology 222
Statistical Methods in Medicine 222
Notes on Books 223

LETTERS AND ANSWERS

Epsom College 272
Artificial Respiration Apparatus 272
Sterilization of Syringes 272
Medical Golf 272

GENERAL ARTICLES AND NEWS

A Personal Experience of Tetanus 233
Nova et Vetera
Boerhaave Bicentenary 232
Benjamin Tarnowsky 232
Heinrich Meibom 232
Bart Memorial Trust 250
The Cancer Campaign 250
Fellowships in Clinical Science and Experimental Pathology 257
Medical Notes in Parliament 266
Universities and Colleges 264
Preparations and Appliances 227
Medical News 271

LEADING ARTICLES

The Plymouth Meeting 224
Therapeutic Abortion and the Law 225

ANNOTATIONS

Treatment of Malaria 227
Calcium and the Foetus 227
Movements in Collapsed Lungs 228
The Sign of the Clavicle 228
Ophthalmological Society of Australia (B M A) 229
Purpura from Sedormid 229
Medical Research Council 229

SUPPLEMENT

Annual Representative Meeting
Full Report of Proceedings of July 18 and 19

Annual Dinner Speeches
The Religious Services

Correspondence
Association Diary and Notices
Vacancies and Appointments

THE SECTIONS

Summary of Proceedings

Medicine 238
Surgery 239
Obstetrics and Gynaecology 240
Neurology and Psychology 241
Neurology with Orthopaedics 242
Radiology 243
Pharmacology 244
Physiology and Biochemistry 245
Pathology and Bacteriology 245
Tuberculosis 247
Oto-rhino-laryngology 247
Services 248
Diseases of Children 249

OBITUARY

Charles H H Harold OBE MD 263
Andrew W Thomson MB CM 264
David L Tate MB FRCSEd 264
W C Douglass MRCS LRCP 264

EPIDEMIOLOGY SECTION

Table of Infectious Diseases and Vital Statistics 270
Epidemiological Notes 271

CORRESPONDENCE

Bragg Paul Pulsator Sir William Bragg DSc PRS 254
Abortion and the Law Alec Bourne FRCS David T Maclay MB 254
The Unconscious Mind and Medical Practice E F Skinner MD 255
The Final M B B S Lond C A H Franklyn MD 255
X-ray Screening Stand for General Practice J V Sparks MRCS 256
Prophylaxis of Measles W L Forsyth FD 256
Eventration of the Diaphragm P Stanley Foster FRCS 256
Anaemia and the Gastro-intestinal Tract Benjamin Portnoy MD 256
National Food Policy J P McGowan MD 257
Antimony F G Cawston MD 258
Small-pox and Compulsory Vaccination A L Craddock MB 258
The Cancer Campaign A P Bertwistle FRCSEd 258
Subvesical Diathermy Prostatectomy Terence Millin FRCS 259
Incomplete Descent of Testicle A P Cawadias MD 259
Cancer of Pharynx and Larynx F Holt Diggle FRCS 259
Chemotherapy of Gonorrhoea Ripley Oddie MB 260
Sulphanilamide in Acute Maxillary Sinusitis J Shanks Laurie MB 260
Sulphonamide for Epilepsy J C Yeoman MB 261
Complications of Gold Therapy H Farncombe MB H Warren Crowe DM 261
Keratoplasty T H S Tizzard MB 262

LOCAL NEWS

England and Wales—
National Hospital New Wards and Research Department 251
Voluntary Hospitals of Sheffield 251
Convalescent Home in Kent 251
Notification of Measles and Whooping-cough in London 251
Board of Education Report 252
Preston Hall Maidstone 252
London Emergency Bed Service 252
The Case for Cremation 253
Scotland—
Edinburgh Graduation 253
The Veterinary College 253
Conference on Health Education 253

MEDICO-LEGAL

The Bourne Case A Legal Viewpoint 262

THE SERVICES

Deaths in the Services 263

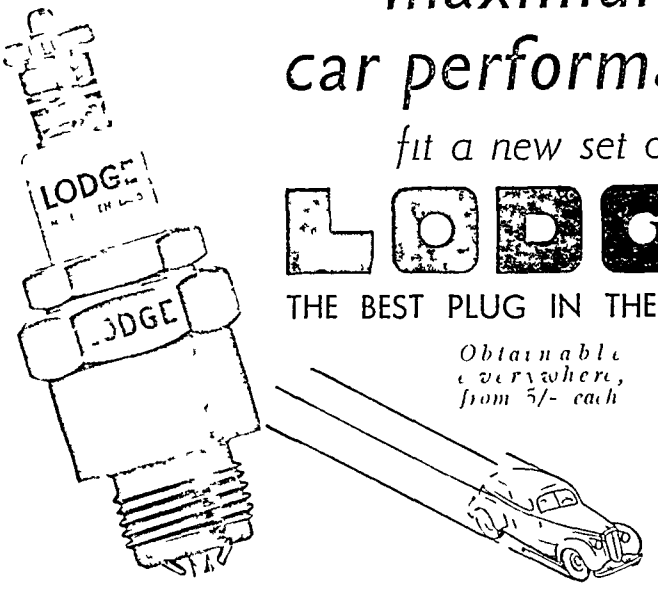
For maximum car performance

fit a new set of

LODGE

THE BEST PLUG IN THE WORLD

Obtainable everywhere, from 5/- each



WORLD'S LAND SPEED RECORD 312 miles per hour

Capt Eyston used Lodge plugs in "Thunderbolt"—Rolls-Royce engines

Made completely in England by Lodge Plugs Ltd, Rugby

BOOKS ON MEDICINE

DISEASES OF INFANCY AND CHILDHOOD
By WILFRID SHELDON MD FRCP
Vol (*2nd*) *Edition* 125 Text figures and 13 Plates 21s

MEDICINE—Essentials for Practitioners and Students
By G E BEAUMONT DM FRCP
3rd *Edition* 74 Illustrations 21

TAYLOR'S PRACTICE OF MEDICINE
10th *Edition* Revised and Edited by E P POULTON DM FRCP 41 Plates (16 Coloured) and 104 Text figures 28

RECENT ADVANCES IN ALLERGY
(Asthma Hay Fever Eczema Migraine etc)
By G W BRAY MB MRCP
3rd *Edition* 107 Illustrations 1

DISORDERS OF THE BLOOD
By L E H WHITBY *CVO MC* MD FRCP and C J C BRITTON MD
2nd *Edition* 12 Plates (8 Coloured) and 60 Text figures 21

J & A CHURCHILL LTD
104 Gloucester Place, London W1

OSTEOLOGY

ANATOMICAL MODELS

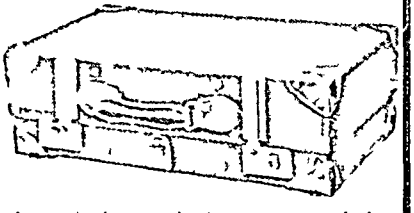
DIAGRAMS & CHARTS

FOR LECTURES

H K LEWIS & Co Ltd
136 GOWER ST LONDON WC1
EUSton 4282 (5 lines)

TRAVEL with LUXURY COMFORT and DIGNITY

At Trifling Cost



Superb Expanding Suitcases

Superb Expanding Suitcases

Superb Expanding Suitcases

JOURNAL OF NEUROLOGY AND PSYCHIATRY

JULY 1938

CONTENTS

Further Observations on Neurological Abnormalities in Mental Defectives R G Gordon and R M Norman

The Electro Encephalogram in Convulsions induced by Cardiazol L C Cook and W Grey Walter

The Relationship between the Blood Pressure and the Tonic Regulation of the Pial Arteries M Fog

Some Observations of the Depth and Nerve Cell Content of the Supragranular Cortex in Normal and Mentally Defective Persons R M Norman

The Relationship in Man of Cerebral Activity to Blood Flow and to Blood Constituents W G Lennox F A Gibbs and E L Gibbs

Observations on the Cerebrospinal Fluid Pressure on Simultaneous Ventricular and Lumbar Punctures G E Smyth and W R Henderson

Critical Review Twin Research in Psychiatry E T O Slater

Epitome of Current Journals Book Reviews

PUBLISHED QUARTERLY

Yearly subscription (4 numbers), 25/- To members, 20
Single Number 7/6

Issued by the British Medical Association Tavistock Square London. W C 1

JUST PUBLISHED

NUMBER FOUR With 5 Plates Pp xii — 160 Royal 8vo 10s 6d net postage 6d

CHRONIC RHEUMATIC DISEASES

Being the Fourth Annual Report of the British Committee on Chronic Rheumatic Diseases appointed by the Royal College of Physicians Edited by C W BUCKLEY, M D F R C P

NUMBER ONE with 8 Plates 12s 6d net postage 6d NUMBER TWO 10s 6d net postage 6d
NUMBER THREE 10s 6d net postage 6d

'all those interested will do well to study this work —BRITISH MEDICAL JOURNAL

IMPORTANT ANNOUNCEMENT
It has been decided for the future to issue these Reports twice a year as the official Journal of the Scientific Advisory Committee of the Empire Rheumatism Council
Further particulars will be announced later

NEW (SECOND) EDITION, WITH ADDITIONS AND REVISIONS

TREATMENT IN GENERAL PRACTICE

THE MANAGEMENT OF SOME MAJOR MEDICAL DISORDERS

ARTICLES REPUBLISHED FROM THE BRITISH MEDICAL JOURNAL

VOLUME ONE With Illustrations Demy 8vo 8s 6d net postage 6d
Diseases of the Respiratory Tract Acute Specific Fevers Cardio Vascular Diseases

VOLUME TWO With Illustrations Demy 8vo 10s 6d net postage 6d
Diseases of the Nervous System Diseases of the Digestive System Some Diseases of the Blood
Rheumatic Diseases Metabolic Diseases Diseases of the Kidney

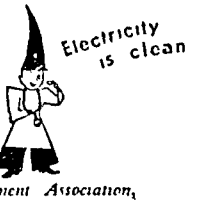
The two volumes form a useful vade mecum for the newly qualified as well as for the older practitioner of medicine —THE LANCET (*Extract from review of first edition*)

London H K LEWIS & Co Ltd, 136, Gower Street, W.C 1
Telephone EUSTON 4282 (5 line)

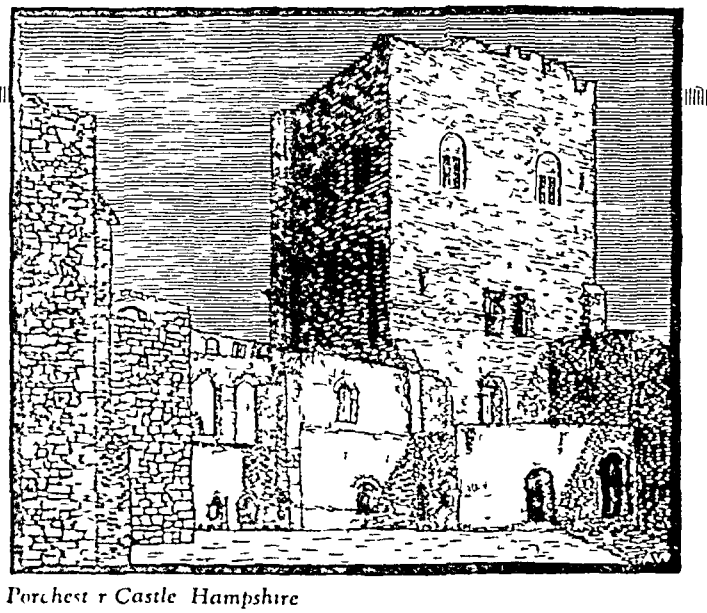
Every home should have—

ELECTRIC
HOT WATER

Most medical practitioners have, at some time or another, needed hot water in time of emergency in a patient's home and have had to wait for a kettle to boil in order to get it Today constant hot water by electricity is within the reach of patients both rich and poor A simple immersion heater in the existing water tank ensures instant hot water day and night An electric kettle or milk boiler is also valuable in times of illness and both may be used in the sick room as electric heat is absolutely free from fumes and dirt Far too many patients have still not realised what an efficient and inexpensive hot water service electricity offers them



For useful information, send for the special booklet to the British Electrical Development Association, 2 Savoy Hill, London W C 2 or consult your local Electricity Authority



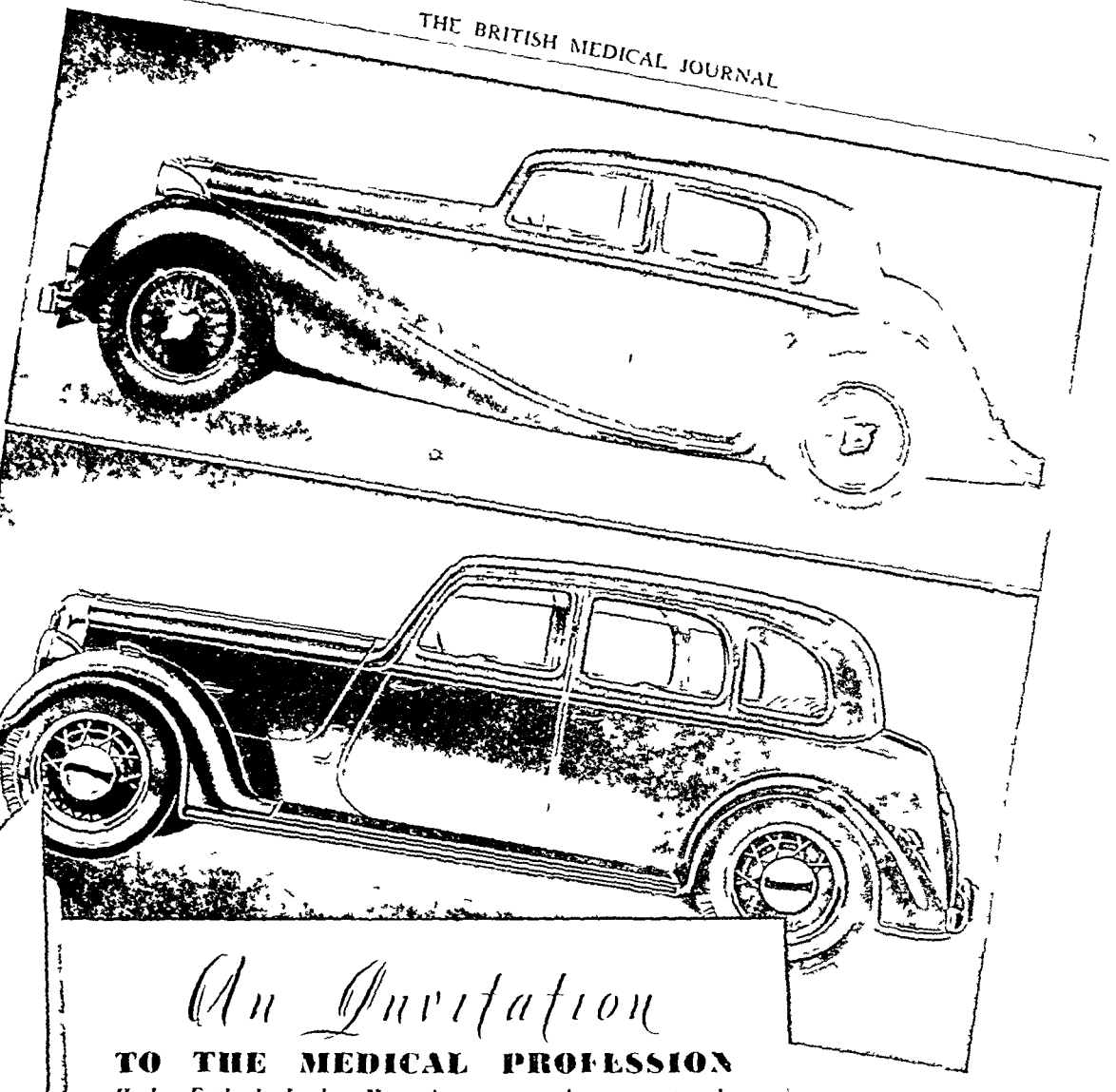
Porchester Castle Hampshire

"There's no sweeter Tobacco comes from Virginia and no better brand than the 'Three Castles.'"
W M Thackeray—'THE VIRGINIANS'

10 FOR 8D
20 FOR 1/4
30 FOR 2/-
50 FOR 3/3
Handmade
20 FOR 1/6
Also obtainable in other sizes and kinds

WILLS'S
THREE CASTLES
CIGARETTES

One expects to pay a little more for a cigarette of such excellent Quality



An Invitation

TO THE MEDICAL PROFESSION

Henlys England's Leading Motor Agents invite the investigation by medical men of the many outstanding advantages to be gained by going to Henlys for new or used cars.

If you prefer a new car Henlys are distributors for S.S. Jaguar Rover Alvis Austin and Studebaker and agents for other outstanding production including Morris Riley Daimler Humber Hillman Armstrong etc.

If your choice is a used car Henlys offer you the largest selection in the country—7 days free trial and a guarantee with every example £100 and over.

20 EQUAL MONTHLY PAYMENTS BUY ANY NEW CAR

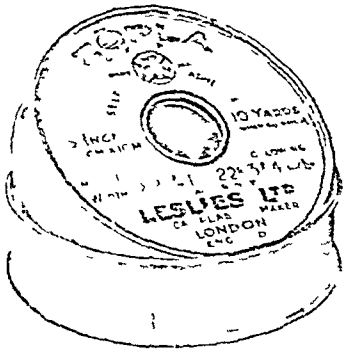
To the medical profession Henlys offer special car purchase terms. Any make of new car can be bought from Henlys and paid for by 20 equal monthly payments—the most favourable rate obtainable anywhere.

Any car will be taken in part exchange. Write phone or call now for further particulars.

THE LARGEST & FINEST SELECTION OF NEW & USED CARS IN ENGLAND

HENLYS

HENLY HOUSE 385 EUSTON ROAD N.W.1. PHONE EUSTON 4141 DEVONSHIRE HOUSE PICCADILLY W.1 AND AT MANCHESTER BRISTOL AND BOURNEMOUTH



LESLIES ZŌPLA STRAPPING

CLOTHS—ORDINARY AND ELASTIC

WHITE OF FLESH

A SURGEON'S PLASTER—ALWAYS GOOD

ZŌPLA-BAND (Elastic Plaster Bandage)
Ideal for varicose ulcers, etc

ZŌPLA ON WHITE FELT.
Becoming very popular among surgeons for padding and protection Makes long-lasting pads

SAMPLES ON REQUEST

Manufactured by
LESLIES, LTD, Higham Hill Road, Walthamstow, London, E 17

The Hearing Aid Par Excellence

BŌNOCHORD P.3



Vest Pocket Valve Amplifier

SMALL AS A MICROTELEPHONE YET WITH THE HIGHEST OUTPUT EVER OBTAINED FROM A POCKET VALVE DEAF AID

Since their introduction the main obstacle to the general use of valve amplified deaf aids has been their bulk and weight Attempts have been made to produce them in a form suitable for wear on the person without inconvenience but in every case performance has been sacrificed to size or the instrument has been ungainly for pocket use

The BONOCHORD P3 is a 3 valve amplifier with piezo electric microphone which will fit *easily* into a waistcoat pocket with separate batteries Special valves designed for us have made this possible together with the use of small components developed by our Research Department In spite of its small size the aid has the amazingly high maximum output of 60 decibels Let us send you full details of this new instrument which we believe will do much to establish the general use of valve aids

ALLEN & HANBURYS LTD, Acoustic Department 48 Wigmore Street, LONDON, W 1

and at

LIVERPOOL
ALEXANDER & FOWLER
Pembroke Place

MANCHESTER
J A PRISLEY
7 Brown Street St John Street

BIRMINGHAM
L C SNOW
9 Warwick Road Olton

NEWCASTLE ON TYNE
BRADY & MARTIN LTD
29 Mosley Street

EXETER
BROOM REID & HARRIS
3 Queen Street.

EDINBURGH
J D LUNAN B Sc M P S
11 Randolph Place

Specially recommended for Nursing Homes and Institutions

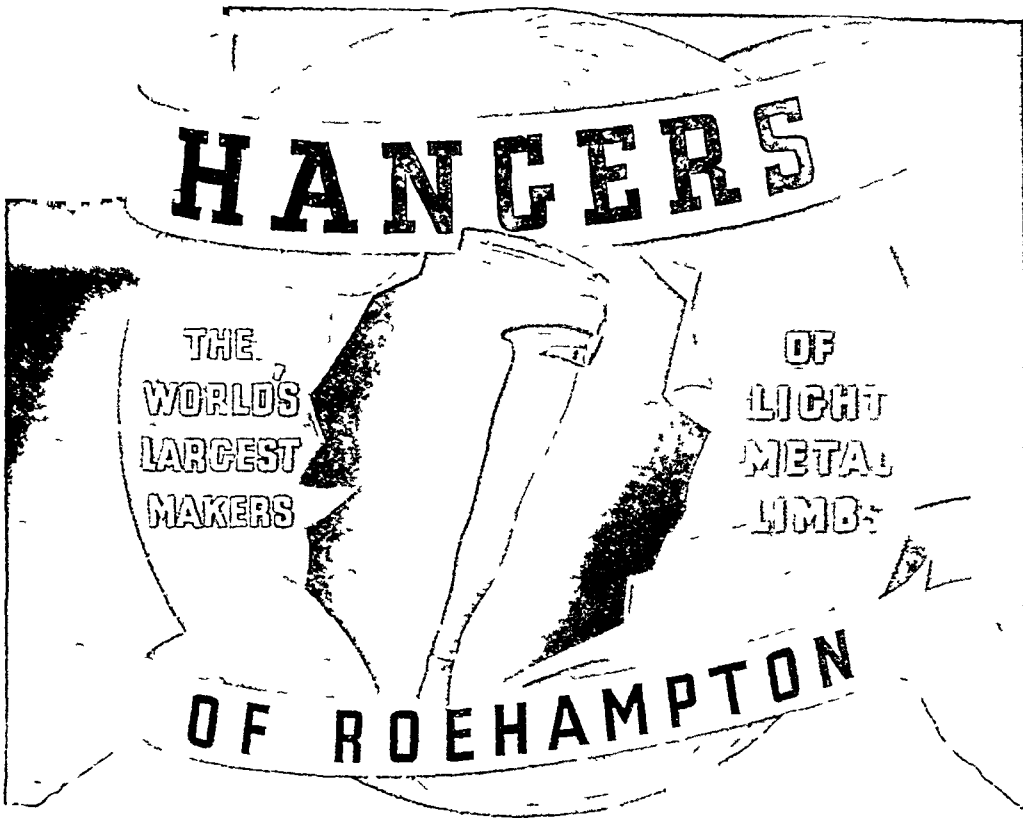
Borwick's Cold Water Lemon Barley is made in a few seconds needs no boiling nor the addition of anything except cold water Refreshing invigorating and is guaranteed absolutely pure

IT IS MADE FROM PURE NATURAL BARLEY AND LEMONS AND CONTAINS NO ARTIFICIAL ESSENCE WHATSOEVER (*Public Analyst's Report*)

BORWICK'S COLD WATER LEMON BARLEY POWDER

In 1/- 1/6 1/3 and 2/3 tins Larger sizes for Institutions Obtainable from leading Chemists and Stores

Sample will be gladly sent on application to
C. BORWICK & SONS LTD 1 Lunhill Row London E C 1 (Established nearly a Century)



RECENTLY ISSUED, Post Free to the Medical Profession on Application

"Solvitur Ambulando"

72 pages, 37 Coloured Plates, deals exhaustively with the problem of providing prostheses for the lower extremities for every type of amputation and congenital deformity Many distinguished Surgeons have written to us in terms of the highest appreciation of the usefulness of this book

J. E. HANGER & CO., LTD.

Queen Mary's (Roehampton) Hospital for the Limbless,
ROEHAMPTON LONDON S W 15

Branches at —Aberdeen Belfast Birmingham Bristol Cambridge Cardiff Cosham Dublin Edinburgh Exeter Glasgow Leeds, Liverpool Manchester, Newcastle-on Tyne and Nottingham

LOCAL TREATMENT OF PSORIASIS *

Not only does Psoriasis respond readily to local treatment with Sphagnol Peat Ointment but the relief is lasting Neither dangerous nor painful psoriasis is annoying and unsightly In cases where the correction of faults in clothing and diet brings no satisfactory response regular applications of Sphagnol Peat Ointment prove beneficial in a very short time Sphagnol contains the soothing healing distillates of peat It is a natural antiseptic whose consistent use generally produces lasting relief In case you have had no personal experience of Sphagnol we shall be pleased to send you a clinical size sample for testing if you will write to Peat Products (Sphagnol) Ltd Dept B M J 10 21 Bush Lane London E C 4

CONTAINS DISTILLATES OF PEAT

* Sphagnol

MEDICAL SOAPS OINTMENT SUPPOSITORIES, ETC

A good source of vitamins A. B and C.

If any of your patients require a change of fruit juice in their diet you can recommend Dole Pineapple Juice with confidence, for not only is it a good source of Vitamins A, B and C and natural fruit sugars, but it is also a delicious and tempting drink

A TYPICAL ANALYSIS WILL SHOW YOU WHAT DOLE PINEAPPLE JUICE IS COMPOSED OF —

Moisture	87·3 %
Ash	0·4 %
Fat (ether extract)	0·3 %
Protein (N × 6·25)	0·3
Crude Fibre	0·02
Invertible sugars (after inversion)	0·9
Reducing sugar as invert sugar	1·1
Carbohydrate other than sugar (by difference)	0·38

Determined by the refractometer method of Brice and Phillips (J. Ind. Eng. Chem. 1923, 15, 1251) and calculated to sucrose by the use of Herzfeld's Table.





Dole Pineapple Juice in the special tins reaches you field fresh from sunny Hawaii

Write us on your letterhead and we will send a sample tin

DOLE PINEAPPLE JUICE

Jo Ko [illegible], 10 EASTCHEAP, LONDON, E C 3

Modern Iron Therapy

Iron Jelloids are an elegant and reliable means of administering the protocarbonate of iron The preparation has none of the disadvantages of Pil Blaud The iron content remains fresh and unoxidized indefinitely and injury to teeth is avoided

The Jelloids are highly effective in the treatment of achlorhydric anaemia and indeed in all the simple anaemias in which massive iron therapy is indicated

Iron Jelloids

You are cordially invited to apply for samples for clinical test

The Iron Jelloid Company Ltd King George's Avenue Watford Herts

Prescribing with Confidence

The advantages of Rhinitol in the treatment of

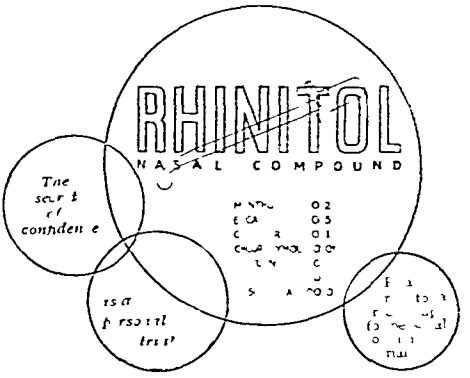
COLDS

NASAL CONGESTION and CATARRH

and all other affections of the upper respiratory tract are —

1 Its very low ephedrine content
2 Its property of emulsifying with body fluid owing to the vasogen vehicle
3 Its complete freedom from irritant or toxic effect
4 Its rapid yet prolonged action

E T PEARSON & CO LTD MITCHAM SURREY



'PEPSENCIA'

Is radically different from the ordinary fluid pepsin preparations because it contains the entire soluble constituents, organic and inorganic, of the stomach glands, all the various complex potent catalytic constituents It is not made by dissolving pepsin in a vehicle, it is an entire gastric juice extract

To prescribe Pepsencia is to give the patient the benefit of a standardised product of long maintained reputation and efficacy of established value in medical practice as a digestant, a vehicle, and as an aid to other treatment

Supplied in four sizes· 4-oz , 8-oz , 16-oz , and W Qts

Originated and manufactured by
Fairchild Bros & Foster (Inc N Y)
NEW YORK and 65 Holborn Viaduct LONDON E C 1

Agents
Burroughs Wellcome & Co ,
LONDON SYDNEY and CAPETOWN

ACIDOSIS

Osler and McCrae advise the employment of Sodium Calcium, Potassium and Magnesium Salts for the prevention of Acidosis

SALVITAE

SALVITAE promotes Elimination and Alkalescence by adequately supplying these salts thus maintaining the reaction of the blood at practically a fixed and constant point

Professional samples and literature gladly sent on request



COATES & COOPER LTD, 94, CLERKENWELL ROAD, LONDON EC1

LOCAL TREATMENT OF PSORIASIS *

Not only does Psoriasis respond readily to local treatment with Sphagnol Peat Ointment but the relief is lasting Neither dangerous nor painful psoriasis is annoying and unsightly In cases where the correction of faults in clothing and diet brings no satisfactory response regular applications of Sphagnol Peat Ointment prove beneficial in a very short time Sphagnol contains the soothing healing distillates of peat It is a natural antiseptic whose consistent use generally produces lasting relief In case you have had no personal experience of Sphagnol we shall be pleased to send you a clinical size sample for testing if you will write to Peat Products (Sphagnol) Ltd Dept B M J 10 21 Bush Lane London E C 4

CONTAINS DISTILLATES OF PEAT

* Sphagnol

MEDICAL SOAPS OINTMENT SUPPOSITORIES, ETC

A good source of vitamins A. B and C.

If any of your patients require a change of fruit juice in their diet you can recommend Dole Pineapple Juice with confidence, for not only is it a good source of Vitamins A, B and C and natural fruit sugars, but it is also a delicious and tempting drink

A TYPICAL ANALYSIS WILL SHOW YOU WHAT DOLE PINEAPPLE JUICE IS COMPOSED OF —

Moisture	87·3 %
Ash	0·1 %
Fat (ether extract)	0·3 %
Protein (N × 6·25)	0·3 %
Crude fibre	0·02
Total titratable acidity as citric acid	0·9
Reducing sugars as invert sugar	12·1 %
Cane sugar (by difference)	0·38 %

Dole pineapple juice is the unsweetened juice of ripened Hawaiian pineapple packed in the Dole Hawaiian Vacuum Pack

Write us on your letterhead and we will send a sample tin



Dole Pineapple Juice in the special tins reaches you field fresh from sunny Hawaii

DOLE PINEAPPLE JUICE

Jas. K. HUSBAND & CO. LTD. 10 EASTCHEAP, LONDON, E.C.3

Modern Iron Therapy

Iron Jelloids are an elegant and reliable means of administering the protocarbonate of iron The preparation has none of the disadvantages of Pil Blaud The iron content remains fresh and unoxidized indefinitely and injury to teeth is avoided

The Jelloids are highly effective in the treatment of achlorhydric anaemia and indeed in all the simple anaemias in which massive iron therapy is indicated

Iron Jelloids

You are cordially invited to apply for samples for clinical test

The Iron Jelloid Company Ltd King George's Avenue Watford Herts

Prescribing with Confidence

The advantages of Rhinitol in the treatment of

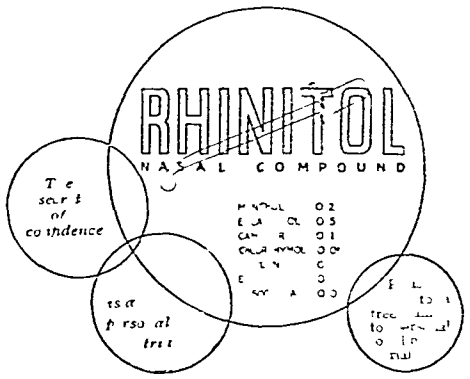
COLDS

NASAL CONGESTION and CATARRH

and all other affections of the upper respiratory tract are —

1 Its very low ephedrine content
2 Its property of emulsifying with body fluid owing to the vasogen vehicle
3 Its complete freedom from irritant or toxic effects
4 Its rapid yet prolonged action

E T PEARSON & CO LTD MITCHAM, SURREY



'PEPSENCIA'

Is radically different from the ordinary fluid pepsin preparations because it contains the entire soluble constituents, organic and inorganic, of the stomach glands, all the various complex potent catalytic constituents It is not made by dissolving pepsin in a vehicle, it is an entire gastric juice extract

To prescribe Pepsencia is to give the patient the benefit of a standardised product of long maintained reputation and efficacy of established value in medical practice as a digestant a vehicle and as an aid to other treatment

Supplied in four sizes 4-oz, 8-oz, 16-oz, and W. Qts

Originated and manufactured by
Fairchild Bros & Foster (Inc N Y)
NEW YORK and 62 Holborn Viaduct LONDON EC1

Agents
Burroughs Wellcome & Co,
LONDON SYDNEY and CAPETOWN

ACIDOSIS

Osler and McCrae advise the employment of Sodium Calcium, Potassium and Magnesium Salts for the prevention of Acidosis

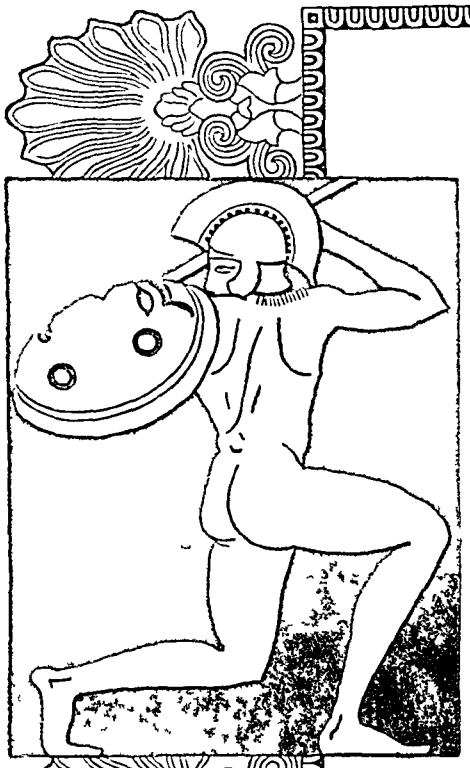
SALVITAE

SALVITAE promotes Elimination and Alkalescence by adequately supplying these salts thus maintaining the reaction of the blood at practically a fixed and constant point



Professional samples and literature gladly sent on request

COATES & COOPER LTD 94, CLERKENWELL ROAD, LONDON, EC1



Design from Greek Vase

A Warrior running directing his spear against a Persian who is not shown

The Constipation of Childhood

THE treatment of constipation in infancy and childhood calls for special care The young and often delicate organism cannot with impunity be subjected to the drastic effects of many depuratives Often too there is an associated defective assimilation which also requires the consideration of the physician

Cristolax" admirably meets the need for a gentle corrective It is perfectly harmless and free from the possibility of habit formation This efficient lubricant is composed of 'Wander' Dry Malt Extract with which is incorporated 50 per cent of pure medicinal liquid paraffin of correct viscosity

On account of its pleasant flavour easy administration, and its gentle yet efficient laxative action, "Cristolax" is the agent of choice for infants and children Its soothing effect on inflamed mucosa permits its use in infantile diarrhoea, colitis, and other irritated conditions of the bowel

'CRISTOLAX'
BRAND
MALT EXTRACT WITH PARAFFIN
Lubricant-Laxative-Nutrient-Digestive

A supply for Clinical trial sent free on request
Of all Pharmacists, in bottles at 3/6 and 2/- each
A WANDER LTD 184 QUEEN'S GATE LONDON, S.W.7

B.D.H. VACCINES

A course of treatment with B D H Vaccines comprises in many instances a series of four or more injections totalling approximately 3 c c It is a measure of economy, therefore, to employ the special B D H rubber-capped vials (containing approximately 3 3 c c) from which this series of doses can be withdrawn as required

The rubber-capped vial possesses a further advantage, the rubber-cap being itself protected by a metal dust cap the replacement of which after each dose has been withdrawn reduces the risk of contamination to a minimum

In cases in which ampoules of 1 c c are required these also are available B D H Vaccines are supplied also in the specially-designed rubber-capped vials of 10 c c and 25 c c respectively

A specimen 3 c c vial containing any one of the B D H Vaccines will be sent on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

VS/S/2-



ÆTHER PURISS. B.D.H.

Æther Puriss B D H is the purest form of ethyl ether available, it is entirely free from aldehydes and peroxides Every batch is subjected to an elaborate process of chemical purification and subsequently is submitted to the most delicate analytical tests for impurities, its absolute purity thus having been established, it is transferred to amber-coloured bottles, this transference being carried out in an inert atmosphere

The bottles are then sealed securely and, finally, they are wrapped in light-proof paper in order to eliminate all possibility of oxidation during storage

Sample on request

THE BRITISH DRUG HOUSES LTD
LONDON N 1

Telephon Clerkenwell 3000
Telegrams Tetradome Telex London

ÆI S 41

"GLANDUBOLIN" CLINICALLY & BIOLOGICALLY TESTED OVARIAN HORMONE IN AMPOULES OF 100 1 000 10 000 & 50 000 INTERNATIONAL UNITS ALSO IN TABLETS

"GLANDUANTIN" THE GONADOTROPIC FRACTION OF THE ANTERIOR PITUITARY HORMONE ISSUED IN AMPOULES

Richter's

NOTABLE PRODUCTS IN THE FIELD OF ORGANOTHERAPY WHICH CAN BE PRESCRIBED WITH CONFIDENCE

"CORTIGEN" HORMONE OF THE SUPRARENAL CORTEX IN AMPOULES OF 1 c c & PHIALS OF 10 c c EACH c c CONTAINING 4 CORTICO DYNAMIC UNITS

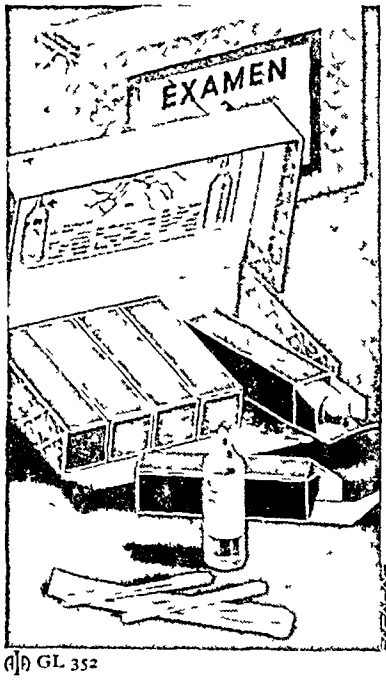
"PERHEPAR" LIVER EXTRACTS FOR ORAL & USE

Each batch is cl gally teste

GEDEON RICHTER LABORATORIES
LONDON 14 18 Weedington Rd N W 5
and at BUDAPEST X

Pernicious Anaemia ..

EXAMEN SETS A CLINICAL STANDARD



SMALL DOSES—WIDELY SPACED Examen Liver Extract provides, in each 2 cc ampoule, the specific anti-pernicious-anaemia principle derived from 100 grams of fresh liver This unique high potency—the activity of which is clinically verified in each individual batch—permits of small and relatively infrequent dosage

For treatment of pernicious anaemia 4 cc and then 2 cc each fortnight until blood count is normal *For maintenance* 2 cc each 3 to 5 weeks

PURITY & SAFETY The high potency of Examen is contained in an average of *only* 10-15 mgms of total solids in each 2 cc ampoule *These solids are protein-free* a technical triumph which contributes to safety of administration Examen is painless on injection and produces no allergic reactions

Prices 3 x 2 cc G L ampoules, 13/4, 6 x 2 cc ampoules, 25/-, 12 cc vials, 18/ Less usual professional discount

EXAMEN
Parenteral Liver Extract

GL

GLAXO LABORATORIES LTD GREENFORD MIDDX BYRon 3434

d]p GL 352

DINNEFORD'S

Pure Fluid **MAGNESIA**

has maintained, through its dependable efficacy, the esteem of the medical profession for well over a century

DINNEFORD & CO LTD CLIPSTONE STREET LONDON W

C.F.H.



OVALTINE

AN AID TO HEALTHY DEVELOPMENT

MODERN medical research makes it increasingly clear that abnormalities of form mental defects and even permanent constitutional weakness are often a direct result of failure to obtain in infancy a diet adequate to the physiological needs of the organism The basic necessity therefore in constructing the dietary of the infant and growing child is to ensure one that is complete in all the essential food elements

Ovaltine finds one of its most valuable applications in this direction Composed of the nutritive constituents of fresh full-cream milk eggs and malt in well balanced proportions it supplies calcium phosphorus vitamins and other accessory food factors and its regular addition to the ordinary diet of the child renders this safe and adequate

Ovaltine' is so delicious and easily digested that it can be prescribed with complete confidence for children of all ages Ovaltine is easily prepared and is most economical

A liberal supply for clinical trial sent free on request

A WANDER, Ltd 184, Queen's Gate S W 7
Laboratories and Works KING S LANGLEY HERTS



MANDECAL

(Compound Calcium Mandelate B.D H)

In B Coli Infections

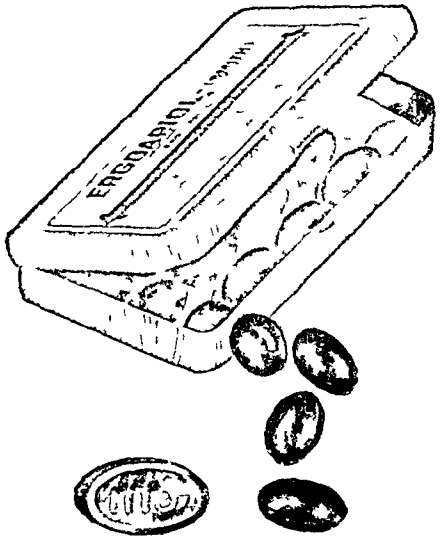
' I used one bottle of Mandecal in a case of B Coli infection no relapse occurred Before the Mandecal was administered the urine was examined bacteriologically and a heavy growth was reported of B Coli After the bottle was finished the urine was again examined and reported sterile I shall use it for all future cases of B Coli infections' — — — L R C S, L R C P

Sample and literature on request

THE BRITISH DRUG HOUSES LTD LONDON N 1
Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

Med S 11

ERGOAPIOL (SMITH)



AMENORRHEA - DYSMENORRHEA MENORRHAGIA - MENOPAUSE

Today, as for years, Ergoapiol (Smith) is the accepted medicament in combating those menstrual anomalies which may be traced to constitutional disturbances, atonicity of the reproductive organs, inflammatory conditions of the uterus or its appendages, mental emotion or exposure to the elements

The physician readily can ascertain whether his prescription for Ergoapiol (Smith) has been correctly filled by dividing the capsule at the seam, thus revealing the initials M H S embossed on the *inner* surface, as shown in photographic enlargement

Literature on request

MARTIN H SMITH CO - NEW YORK U S A
THOS CHRISTY & CO LTD - 4 OLD SWAN LANE LONDON EC 4

TRADE MARK **GASTOMAG** BRAND

MAGNESIUM TRISILICATE

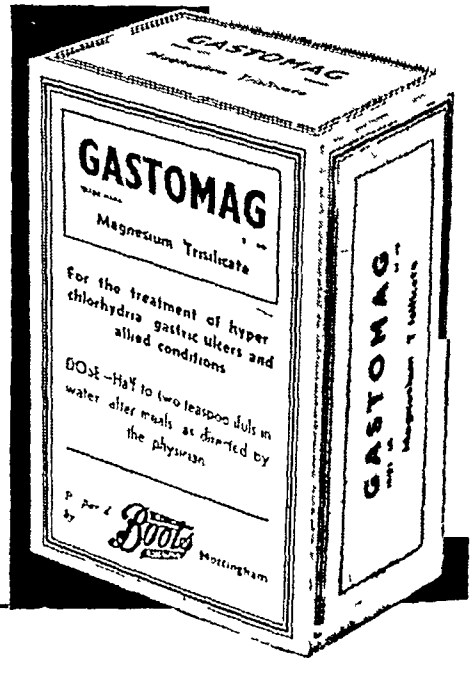
For the treatment of hyperchlorhydria, gastric ulcers, and allied complaints

GASTOMAG is an efficient antacid with a strong initial effect, followed by a prolonged action which lasts for several hours after administration Free from all risk of causing Alkalosis

GASTOMAG is unrivalled as a powerful adsorbent for removing toxic substances from the stomach and intestines

Per 2 oz. carton - - 1/-

Discount to the medical profession



Obtainable through any branch of

Boots The Chemists

OR FROM THE WHOLESALE AND EXPORT DEPARTMENT

BOOTS PURE DRUG CO. LTD.
NOTTINGHAM - ENGLAND



CASCARA Sagrada was introduced to the medical profession in 1877 by Parke, Davis & Co and Fluid Extract Cascara (P. D & Co) was brought to the attention of the British Medical Association at the meeting in Cork in 1879

Shortly afterwards a process for the preparation of a palatable extract of cascara was perfected in the Parke-Davis Research Laboratories Further experience resulted in the production of CASCARA EVACUANT which is to-day the most active, palatable preparation of cascara available

Cascara Evacuant represents the results of over sixty years' experience in the manufacture of cascara preparations by the firm which first offered cascara for clinical use

It is not fortified with other laxative agents, such as aloes, rhubarb, podophyllum or senna but presents the unique therapeutic advantages of cascara sagrada without its unpleasant bitter taste

PARKE, DAVIS & CO., 50, BEAK STREET, LONDON, W.1.

Laboratories Hounslow Middlesex Inc U S A Liability Ltd

COLLIRON

(COLLOIDAL IRON HYDROXIDE 10%)

For the effective treatment of

Secondary Anæmia, Debility and Fatigue

Colliron replaces with advantage all the older forms of pharmaceutical iron, as it is readily assimilated non constipating and does not aggravate the digestive troubles which frequently accompany the anæmias

The dosage of Colliron

Adults—20 minims three times daily after meals

Children—5 to 10 minims three times daily after meals

Colliron is issued in bottles

4-fld oz	- 3/-	16-fld oz	- 9/8
8-fld oz	- 5/4	40-fld oz	- 22/-
	80-fld oz - 40/-		



Evans Sons Lescher & Webb Ltd.
Liverpool and London

A PRODUCT OF
THE EVANS BIOLOGICAL INSTITUTE

COUNTERACT *Food Poisoning*



Summer heat drought flies contaminated food—and the result—Food Poisoning! Kaylene is the true antidote to Bacterial Toxins and Toxalbumins in contaminated food Its action is rapid and reliable

Kaylene brand of colloidal kaolin has been shown to adsorb the toxic principles of Shell-Fish poisoning Potato poisoning and Mushroom poisoning—*vide* B M J 1937 I 595

Price 10 oz 3/- 1 lbs 12/6

Samples on request

KAYLENE

(Brand of Colloidal Kaolin)

KAYLENE, LTD., *Sole Distributors* ADSORBENTS LTD WATERLOO ROAD, LONDON NW2

CRUNCHY FOODS AND THE DIGESTION

It is generally recognised by dieticians that hard foods are more easily digested than soft ones The explanation commonly advanced is that soft foods are often swallowed in insufficiently chewed masses, whereas hard foods cannot be swallowed until they are properly broken up by the teeth, and in consequence the digestive juices have a larger surface area to work upon and their action is more effective

Many physicians therefore recommend that the normal diet should contain a fair proportion of hard, dry food They find that Ryvita, eaten regularly with meals, supplies a valuable factor in which the modern diet is otherwise deficient Free samples of Ryvita for distribution to patients will gladly be supplied on request

THE RYVITA COMPANY LIMITED
96-98 SOUTHWARK ST LONDON SE1
Bakeries in Birmingham

INDICATIONS FOR 'SANATOGEN' No 7

ARTERIO-SCLEROSIS and HYPERTENSION

"Room for Scepticism"

There is room for scepticism as to the causative relation between the stress and rush of modern life and high blood-pressure

Examination of mummies has shown that arterio sclerosis was common even in ancient Egypt, and it was recently pointed out in a medical journal that " the active goat and the horse have little arterio-sclerosis, while the placid cow and the phlegmatic duck are especially susceptible'

That food-intake is important both in the prevention and in the treatment of hypertension is however, generally agreed Purins, toxins and excessive food residues in the colon are all to be suspected and avoided

In the dietetic treatment of high blood-pressure, 'Sanatogen', a carbohydrate free product of 95 per cent pure milk casein *with* 5 per cent sodium glycerophosphate, has been found of great service Its nutritive value is high

BLOOD PRESSURE

I have been very interested in the effects produced by Sanatogen in a case of high blood pressure The patient a young woman was put on a restricted diet for high blood pressure and used to find that in the middle of the morning and after putting her little boy to bed she had a feeling of extreme weakness and was often forced to sit or lie down for some time before she could do anything else She started taking Sanatogen twice a day and after a short period noticed that this feeling was not making its appearance and she has never had it again as she is still continuing with the Sanatogen She is also very much improved in health and seems to have much more reserve energy now The only alteration in diet has been the addition of Sanatogen

—*M B Ch.B*

NO TOXINS NO PURINS NO RESIDUE

NO ABNORMAL FERMENTATION

'SANATOGEN'

(Trade Mark)

A brand of Casein and Sodium Glycerophosphate

Sold by all chemists price 2/3 to 19/9

DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants 1 teaspoonful added to each bottle feed

The word SANATOGEN is the Trade Mark of GENATOSAN LTD and denotes their product of Casein and Sodium Glycerophosphate only obtainable from GENATOSAN Ltd Loughborough otherwise

Clinical samples and literature available on request to

GENATOSAN LTD, LOUGHBOROUGH, LEICESTERSHIRE

ELI LILLY AND COMPANY LIMITED

Pharmaceutical and Biological Products



'LEXTRON'

Liver Stomach Concentrate with Iron and Vitamin B Complex

IN "SECONDARY" ANAEMIAS

In anaemias of the microcytic type, the response to 'Lextron' brand liver-stomach concentrate with iron and Vitamin B complex is rapid When he prescribes 'Lextron' the physician is assured that his patient will receive all the materials essential to blood regeneration in anaemias of this class

'Lextron' brand liver-stomach concentrate with iron and Vitamin B complex is supplied in bottles of 42, 84, and 500 'Pulvules' brand filled capsules

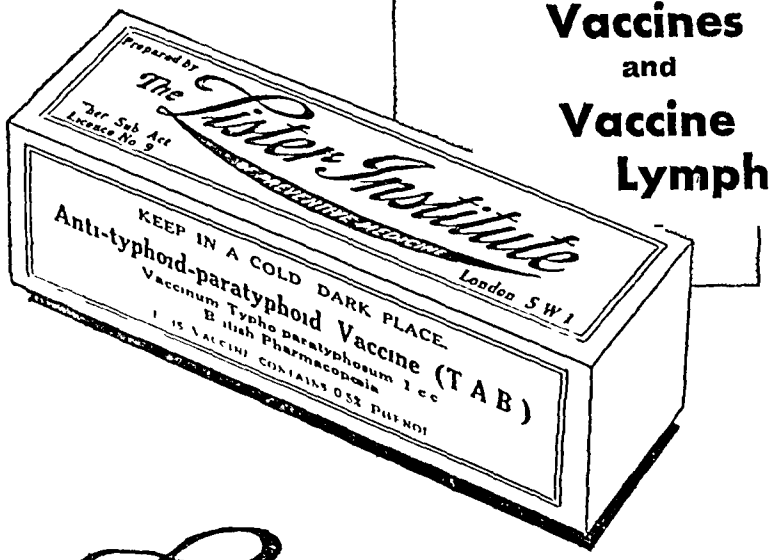
Prompt Attention Given to Professional Inquiries

2 3 AND 4 DEAN STREET LONDON W 1

Distributing Agent in Britain for

ELI LILLY AND COMPANY, INDIANAPOLIS, U S A

Therapeutic Sera, Vaccines and Vaccine Lymph



The Lister Institute OF PREVENTIVE MEDICINE

Therapeutic Substances Act, Licence No 9

Anti-typhoid-paratyphoid Vaccine (T.A.B.)

It is nowadays customary to combine in one vaccine the protective agents against typhoid and paratyphoid A and B fevers, which are all liable to occur in similar circumstances. T A B vaccine contains 1 000 million *B typhosus* and 500 million each of *B para typhosus* A and B per cubic centimetre. Inoculation with this vaccine is strongly recommended for nursing staffs in fever hospitals and persons proceeding to infected areas anywhere (*e g*, on holidays in many Continental countries), or to the tropics. Double inoculation (1 c c followed by 1 c c 7 to 10 days later) produces an immunity regarded as lasting about 12 months at the end of which a further dose of 1 c c is advisible to maintain the immunity.

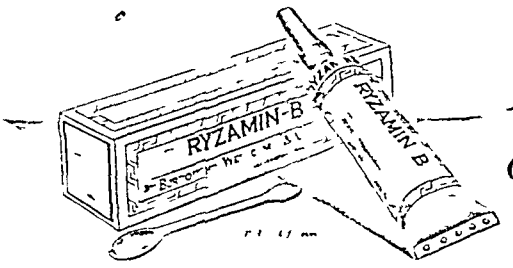
In ampoules of 0·5 c c	-	each 2/6
1 c c	-	2/6
In 10 c c rubber capped vials	-	, 15/-
In 25 c c ,	-	, 25/-

Sole Distributors for the Lister Institute

Allen & Hanburys Ltd.

London, E 2

RELIGIO MEDICAL SERIES No 153—CELTIC



A dietetic substance of first importance

TRADE MARK 'RYZAMIN-B' BRAND

RICE POLISHINGS CONCENTRATE

Stimulates appetite

Assists digestion Promotes growth and increased alertness in those children who lack weight and vigour Of unquestionable value in cases in which wholemeal bread is precluded from the diet

Presents 50 units of Vitamin B_1 in each gramme

Collaterals to —

15 *grammes* (½ *oz approx*) 1/10 *per tube*
100 *grammes* (3½ *oz approx*) 10/- *per tube*

Lord Percy to be Medical Director

BURROUGHS WELLCOME & CO. LONDON

Address for communications SNOW HILL BUILDINGS E C 1

Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W 1

Associated Houses
NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

O O O O O

VOTIVE OFFERING FROM THE REGION OF THE AEDUI IN GAUL PROVIDING EVIDENCE OF THE CELTS RESORT TO HEALING WATERS —The Romans on arriving in Gaul found the Celts devoted to the worship of waters Traces still remain of their bathing stations where in one case the water of a spring was so carefully captured that not a drop was lost The sockets to which images of the healing deities were fixed still exist Large numbers of votive offerings have survived left in supplication or gratitude These sometimes took the form of the diseased member The one here reproduced represents a swaddled infant with an expression of suffering which may be intentional or due to the lack of skill of the sculptor



DATE The votive offering A D c 100

COPYRIGHT

no psychology he is bound to seize on this and treat it, sometimes with success sometimes without Even if successful immediately he may have harmed the patient for the future by letting him think that an unimportant lesion like the one discovered could have caused so much ill-health with its devastating corollary that one cannot take too much care of very small departures from the normal On the other hand after exhaustive inquiries—exhaustive especially to the patient's purse—he may be able to assure himself that there is nothing wrong physically He will now hopefully and enthusiastically impart the glad news to the patient, but not add anything to this purely negative thing which really conveys nothing in the way of information and he is apt to be disappointed when the patient continues to be as ill as before as loud in his complaints His disappointment will probably deepen into annoyance when he hears some months later that this ingrate has been cured by an osteopath or a nature-curer or by any other of the unqualified people who take the opportunity once more to score over medical science not realizing the vitreous nature of the houses they themselves inhabit Our doctor may even become bitter enough to think that this irregular cure was spontaneous There are of course spontaneous cures, but the doctor is more apt to think it for these than he does for his own

It is fairly obvious why a purely negative diagnosis, a diagnosis that there is nothing wrong, is unlikely to help a patient He feels ill and to be told that these symptoms mean nothing is to infer that he is imagining them, and he knows that he is not He is therefore driven to suppose that the doctor has not understood the case If the doctor has been careless the patient can, of course, transfer to another but if the doctor has been careful it may be that the only change open to him is to change the system to go to someone who is not a doctor and who openly preaches that doctors know very little Such a one will not make the psychological error of saying that there is nothing wrong He will find poisoned blood, or pressure on nerves and circulation or faulty posture and by his certainty will inspire the patient with hope, for the time being at least That the immediate good results obtained by these people are genuine I have little doubt that their remote results can be good I have the gravest doubts I am certain that their good results are due to the psychological factors of faith and hope but faith and hope are not of themselves enough for lasting cure I am of opinion that one of the reasons why quacks flourish is that they are better psychologists than most doctors That is not the whole reason which would take too long to go into but it is an important one These patients have something wrong but it is not physical it is something of the nature of mental disharmony Most physicians will agree but they do not teach their students how to investigate this matter as they would teach them how to investigate a cardiac irregularity

There is however another and fundamental reason for the futility of regarding the neuroses negatively When we come to examine these patients from a mental aspect—that is to say when we take their histories—we find that their symptoms are the positive responses to anxieties conflicts and the like of exactly the same order as symptoms may be the positive responses to physical stimuli We have as a profession learned much of the action of physical irritants we must now turn our attention to symptoms produced by mental irritants We shall then find that there is nothing negative about the neuroses any more than there is in physically determined illnesses

In every case of illness there are three questions to be answered Are these symptoms due to physical irritants, to mental irritants or to both? No diagnosis is nearly complete till they have been answered

The "Fancy" Diagnosis

So much for the conscientious doctor who, when this sort of thing happens often enough may become less so One not very good at the beginning, finding nothing that he had been taught to look for, may make a fancy diagnosis on no particular kind of evidence—a weak heart or, more fashionably just now, a gastritis His treatment may be followed again by immediate success neither he nor his patient has the faintest inkling that this may be due to the mental healing factors of faith and hope Even if he succeeds in his treatment he has damaged both himself and his patient—himself because he has started on that downward path which leads to the belief that accuracy of diagnosis does not matter so long as the patient is told something definite it is good if the diagnosis is correct but not dreadfully bad if it is not He has damaged the patient, who has been told that some organ of his perfectly healthy body is not quite healthy and who must now believe that he ought to take care of it and whosoever starts taking care of a healthy body will soon have plenty of illness

There is another unpleasant thought about all this In all these ways doctors are regularly adding to the quantity of neurosis in the world instead of diminishing it They do so if they succeed in the way just mentioned They do so if they fail because the patient soon loses faith in his doctor, gets bewildered and is driven deeper into neurosis I have said that neurosis is common and I must add that it is lamentably common from this cause A patient has symptoms caused by anxiety The doctor says it is due to some physical lesion The patient becomes anxious about this The anxiety causes more symptoms and this helps to fix the belief in physical disease, and so on *ad infinitum*

So much for pure neurotics But in addition to them many sick people will add mentally determined symptoms on top of a physically determined one Anxiety from many sources is apt to complicate illness, especially chronic illness And in many instances of organic disease the only treatment we shall be able to give will be psychological

Teaching the Next Generation

I should like now to leave my young doctors and get back to the wards and try to plan how the next generation is to escape the mess that these poor young men are in At once the questions arise Where are these students to be taught by whom, and what are they to be taught?

The answer to the first two will probably be that that is arranged for already—namely, in the psychiatric department by the psychiatrist And my reply is that it is not good enough, for many reasons, some of which have been given The question of neurosis must be raised often all over the hospital The student must continually be made clinically aware of its possibilities as regards symptoms, and every teacher ought to be able to say something about the elements or principles of treatment Now what is to be taught?

A physician of my acquaintance told me that it was high time we psychological people put our house in order, and I would respectfully ask those of our medical friends who acknowledge that we have a case to help us to present it properly, as they have done with other

technicians like surgeons and bacteriologists They do not give these people a free hand with their patients but call them in consult with them and then use them or not as seems fit

There is an idea abroad that no psychological treatment except psychoanalysis is worth talking about I have spent my life in trying to show that this is not true I am saying nothing against psychoanalysis which is probably the best treatment for certain cases but there are a great number of patients who do not need it for whom something quite simple is all that is required I have no wish that medical students should learn analysis It would be impossible for them to do so even if it were desirable Time would make it so For the same reason even if psychoanalysis were the only psychotherapy mental treatment would be impossible for the majority of patients In my view there are and have been for a long time simpler and shorter methods of psychotherapy which are at least as old as Freud's system and of which the greatest exponent was Dejerine of Paris This depends on the fact that many symptoms are caused by conflicts and anxieties which are not necessarily unconscious in the Freudian sense but which are not being faced properly Taking a full history in the course of which the patient may be induced to speak of these worries be guided about them have many of them explained so that they no longer cause anxiety will in many instances bring about a great change for the better in the patient's mental outlook and in his health Many of these anxieties will be on intimate personal matters and talking about them will often give relief Many will be about disease and health It is incredible what extraordinary views people hold about health in general and their own in particular and here it is that doctors should be more careful than some of them are in telling patients that they may have frail or impaired organs when the real truth is that these doctors themselves are unable to make a diagnosis For the same reason students should be taught when there is physical disease not to put the gloomiest possible view before the patient a thing done often with the best intentions so as to bring a patient to take some care of himself but which may be followed by disaster

There is one essential—namely that the patient and the investigator *must be alone together for their talks* People will not speak of intimate things before a crowd Therefore it cannot be demonstrated to students how to do it but students could be told the procedure and be supervised while they were learning to practise on patients There will be cases which such a procedure will not cure these are for the specialist We expect a general practitioner to treat many dyspepsias kidney diseases headaches and catarrhs by himself *and not to run to a* specialist for every one But there will be dyspepsias headaches and catarrhs for which he will need a specialist and we expect him to learn which are those that he can treat himself and which are those where he should seek special skill The same thing applies to the neuroses

The Teachers

Who is going to teach the students? Time is needed There should be someone who can teach them as clinical tutors teach them physical signs These teachers may be under the psychiatrist, but whoever is at the head of this department should not be locked away in the department of psychiatry *but should be asked to come to the* wards and consult with the physicians and surgeons as to whether there is a large emotional element in this case or not The medical or surgical chief and the student will then not lose sight of the case as they will if the patient is dismissed to the psychiatric department because the general ward has got tired of him It I am told this is impracticable I answer that nothing is impracticable which has been done and is done Dejerine did it in his wards and said that he got better results than in private practice It is being done in America and an extremely vivid description of the psychiatrist being welcomed in the general wards and consulted frequently has been given by J Kasanin of Chicago (1937)

REFERENCES

Kasanin J (1937) *Lancet* 2 1518
Pearson Bruce (1938) Ibid 1 41

THE VALUE OF RADIOLOGY IN THE ELUCIDATION OF HAEMOPTYSIS*

BY

FRANKLIN G WOOD, M B, D M R E

Radiologist to the London Chest Hospital Victoria Park and to the German Hospital Dalston

Haemoptysis is an important symptom in diseases of the chest and was formerly considered to be a certain indication of pulmonary tuberculosis unless the contrary could be proved We know now that it may be a symptom of *any chronic or acute disease from simple bronchitis to* lobar pneumonia

Haemoptysis in Pulmonary Tuberculosis

If pulmonary tuberculosis has been responsible for a haemorrhage from the lungs a chest skiagram will nearly always supply evidence of this disease But it sometimes happens that although the history and symptoms are suggestive of pulmonary tuberculosis a skiagram fails to show any abnormality It appears probable that this may be explained by the presence of a small focus of disease which either proves abortive or goes on subsequently to the development of a more obvious lesion It is desirable however, that a very careful radiological examination should be carried out since a tuberculous focus or even a small cavity posterior to the lung root or heart or behind the domes of the diaphragm may be easily missed The investigation should include a screen examination and radiographs taken in the oblique and lateral positions The semi oblique position with the patient rotated so that the clavicle on the side to be examined is parallel with the cassette is of special importance in demonstrating lesions in the vicinity of the lung root Radiographs taken with the Potter Bucky diaphragm or a fixed grid of the Siemens or Lysholm type are also of value especially in stout patients

The invention of tomography has considerably enlarged the scope of the radiological examination of the chest and I think that in the future it will prove a method of considerable interest in the examination of cases of haemoptysis with no obvious lesion in the lungs As some of these patients subsequently develop a lesion which can be demonstrated radiologically it is important to carry out serial radiographs at intervals to exclude the presence of disease

There are many other conditions besides pulmonary tuberculosis which may cause haemoptysis the most

* Read in opening a discussion in the Section of Radiology at the Annual Meeting of the British Medical Association Plymouth 1938

important being bronchiectasis heart disease new growth, aneurysm and trauma A frank haemoptysis may also occur in early pneumonia An interesting paper was published in 1928 by Vinson describing work carried out at the Mayo Clinic on the relative frequency of haemoptysis in pulmonary tuberculosis, bronchiectasis, and mitral stenosis The history of 100 patients suffering from each of these diseases was contrasted, and it was found that forty nine of the 100 with bronchiectasis had haemoptysis as compared with twenty-nine in the pulmonary tuberculosis group and only eighteen among those suffering from mitral stenosis This suggests that while it is true that pulmonary tuberculosis usually is the cause of a pulmonary haemorrhage because of the greater frequency of the disease the relative incidence is much higher in bronchiectasis

Dry Haemorrhagic Bronchiectasis

The occurrence of haemoptysis in bronchiectasis has been known for a long time but it is only since the introduction of lipiodol as a method of outlining the bronchi that the presence of what is termed 'dry haemorrhagic bronchiectasis has been successfully demonstrated In this condition there are no obvious physical signs such as clubbing of the fingers or purulent sputum, which may reveal the presence of the disease on clinical examination The radiological investigation is therefore of considerable importance The preliminary radiographs may show evidence of fibrosis or the dilated bronchi may actually be visible as a series of spherical or cylindrical clear spaces, but in any case lipiodol will be required in order to show the extent of the disease The lesion may be found either in the upper part of the lung, where it closely simulates pulmonary tuberculosis in appearance, or, more commonly in the lower zone where it is less likely to be confused with other lesions When the condition is developmental in origin and probably due to failure in budding the dilatations are spherical in appearance, while in the acquired disease the dilatations are usually cylindrical

There are many methods of introducing the oil in common use the simplest of which is to drop it on the back of the tongue after abolishing the swallowing and cough reflexes by means of a 5 per cent cocaine spray and 10 per cent brush in each case a little adrenaline being added This gives good pictures when successful, and causes the patient a minimum of discomfort The use of a nasal catheter is a surer way which enables the oil to be injected into any part of the lung under screen control The lipiodol can also be introduced through the crico thyroid membrane

If the opaque medium is introduced through a bronchoscope the resulting films are never so good as those obtained by other methods The lipiodol tends to be concentrated in one part of the lung and the appearances are often deceptive owing to localized areas of alveolar filling which may closely resemble cavitation in the lung It is however often impossible to outline properly the cavity of an abscess of the lung by any other method

The radiographic technique will naturally vary with the apparatus at the disposal of the operator It is essential to take radiographs in the shortest possible time and to over expose the films It follows from this that a set of high output and the use of a rotating anode tube will give the best results The exposure time should if possible be one-tenth of a second or less

Haemoptysis in Heart Disease

The radiological examination of the heart is an important branch of chest radiology that has made very much progress in recent years The appearances of the heart and great vessels on screen examination and in the teleradiograph have been exhaustively studied, and more recently kymography has been introduced as a method of examination which is already proving of considerable use The apparatus consists of a moving grid with a series of horizontal slits at intervals of twelve millimetres which record the movements of the beating heart as a wavy line Respiratory movements of the ribs and diaphragm can also be registered In the examination of the heart the exposure is made with the breath held so as to avoid respiratory disturbance of the heart movements Each region of the heart has a characteristic curve The aortic arch also gives a wave form which distinguishes it from opacities due to neighbouring structures

It is necessary to exclude any lesion of the heart when examining a patient with haemoptysis, since many of these patients are in reality suffering from heart disease Haemoptysis is less common in heart lesions than in pulmonary tuberculosis or bronchiectasis, but it is an important symptom in mitral stenosis Paroxysmal attacks of haemorrhage may occur in this disease, due to congestion in the lungs or to infarction In an early case of mitral stenosis the first radiological sign in an anterior radiograph is a prominence of the pulmonary artery and pulmonary conus Some enlargement of the left auricle may probably be detected at this stage in an oblique film As the degree of stenosis increases there is a progressive enlargement of the left auricle, which can be seen bulging into the retrocardiac space both on screen examination and in radiographs taken in the first oblique and lateral positions with or without a barium swallow The accompanying congestion in the lung fields is a characteristic feature

Pulmonary Infarction

Pulmonary infarction is a possible cause of haemorrhage wherever there is vascular engorgement in the lungs Such engorgement may occur in mitral stenosis and also where there is left ventricular failure It also occurs as a post-operative phenomenon The radiological changes seen in pulmonary infarction were not well known before the advent of the portable radiograph As the patients are usually very ill the condition is rarely seen in the routine radiographs taken in the x-ray department Shirley Smith (1938) in a recent paper has described thirteen cases with radiographic control The changes are usually seen at the base of the right lung The appearances are variable and may consist of an area of clouding rather like the appearances seen in pneumonitis, or an irregular shadow may be present resembling that seen in lung abscess An accompanying pleural effusion may mask the area of consolidation in the lung It is worthy of note that in the absence of pleural effusion the heart is usually drawn slightly towards the side of the lesion

Bronchial Carcinoma

A frank haemoptysis is uncommon in bronchial carcinoma although it may be a leading symptom for instance in a malignant papilloma spreading from the bronchial wall The lumen of the bronchus at the site of growth may be filled with necrotic material, and blood is not present in sufficient quantities to be obvious in the sputum In the relatively rare benign bronchial growths, such as papilloma and endothelioma, haemorrhage is on the oth

hand common and may be profuse A bronchial carcinoma usually produces changes in the lungs that are easily seen in a film, but the small benign growth will not be detected unless it is large enough to block the lumen and cause atelectasis It follows therefore that the radiological examination may be entirely negative Examples of such cases were described by Morlock and Scott Pinchin (1935) McGibbon and Baker Bates (1937) and others The latter authors describe tracheal varix and non specific granuloma as causes of pulmonary haemorrhage The rare tracheal carcinoma may be the cause of haemoptysis and is sometimes visible in the skiagram after lipiodol If the radiological examination is negative and the attacks of haemoptysis continue a bronchoscopic examination must be considered

Aneurysm of the Aorta

In aneurysm of the aorta haemoptysis is only seen as a terminal event staining of the sputum being a warning sign of the imminence of a rupture The diagnosis of aneurysm is not always easy to the clinician especially if the posterior part of the arch or the descending thoracic aorta is involved Unfortunately it is not always simple for the radiologist, for any growth or tumour in the neighbourhood of the aorta will simulate an aneurysm especially if the growth is one in close contact with the aortic arch and involving the pericardium Mistakes often occur and the Wassermann reaction is not an infallible test Aneurysm may simulate a dermoid cyst if it is directed forwards and laterally in the superior mediastinum Kymography is of great assistance in such cases and I think that in the future it should lead to a correct diagnosis in most cases since it enables us to separate the outline of the aorta from the growth and usually gives a characteristic picture

Haemoptysis following Injury to Chest

Haemoptysis may follow injuries to the chest with or without rib fracture Where the injury is severe the presence of a fracture is very easily shown, but there are many cases where radiological demonstration of a fractured rib is difficult A general radiograph of the chest sometimes fails to reveal the injury A localized view may be of assistance This can be done by two methods The cassette is placed in contact with the site of greatest pain and compression applied so as to prevent movement of this part of the chest wall If the patient is then instructed to breathe lightly the part of the ribs in contact with the cassette will remain stationary and the outline of the remainder of the ribs will be blurred owing to the movement The second method is to diminish the focal skin distance so as to blur the overlying ribs and bring the part of the chest nearest the cassette into focus

Conclusion

This summary of the main conditions which may be the cause of a haemoptysis cannot be considered to be complete but I hope it will have served to show that a radiological examination is an essential part of the investigation of these cases and that it may be a deciding factor in the diagnosis It is well known that no examination of the chest is complete to day without a complementary radiological investigation

REFERENCES

McGibbon J E G and Baker Bates E T (1937) *British Medical Journal* 1 109
Pinchin A J Scott and Morlock H V (1935) Ibid 2 332
Smith K Shirley (1938) *Quart J Med* New Series 7 85
Vinson P P (1928) *Ann Otorhinol Laryngol* 37 675

PLAY-THERAPY FOR "PROBLEM" CHILDREN

BY

ETHEL DUKES, L R C P & S
Medical Director Institute of Child Psychology

The object of this paper is to show the immediate results of treatment and the present condition of the children who attended the Institute of Child Psychology for varying periods between the years 1930 and 1935 With the exception of four cases all the children included in the follow up were treated by the psychological method known as play therapy according to the technique devised by Dr Margaret Lowenfeld who started the institute as a small clinic for problem children in 1928

During the period under survey 247 children were accepted as patients Of these thirty two were consultation cases in which the children attended not more than three times and in which periodical advice as to management was all the treatment indicated and given Although we know that some of these cases are doing well they have not been included in the chart as they were not treated by play therapy Fourteen patients were discovered to be mentally defective and were rejected twenty three cases were immediately transferred to other institutions for various reasons and in twenty four cases the parents proved uncooperative soon after acceptance and the patients ceased to attend The remaining cases 154 in number received full treatment and are analysed in the chart below The eldest child was 17 and the youngest 2½ They are divided into four categories—namely neurosis anti social and behaviour problems physical complaints and educational difficulties

The majority of the children were recommended by school authorities social agencies police-court officials hospital doctors and private practitioners The remainder were brought by patients or friends

Neurosis (76 Cases)

Under this heading are included cases in which the chief causes for reference were the following anxiety night terrors sleep walking excessive or unwarranted fears and inhibitions nervousness and hypersensitiveness hysteria tics and habit spasms lack of concentration or self-confidence inability to play screaming fits anorexia nervosa insomnia and obsessions In addition to one or more of these symptoms seven suffered from enuresis nine from speech defect and fourteen were backward at school

TREATMENT

Twenty-seven were treated by play therapy alone In addition to play therapy forty two had some kind of medical surgical or dental treatment for physical disorders discovered on examination ranging from dental caries to undescended testicles nine had speech therapy and fourteen educational coaching in one or more subjects Some children needed two or three of these types of treatment

Anti-social and Behaviour Problems (38 Cases)

These children were referred to the institute on account of difficulties such as excessive disobedience temper tantrums unmanageableness truancy vagrancy lying pilfering stealing excessive bullying sexual offences destructiveness gangsterism etc In addition seven of

Table showing Analysis of Cases

Home	No. of Cases	Condition on Discharge					Present Condition Follow up									
		Well	Much Improved	Improved	Unadjusted	Uncooperative after some Treatment	Well	Much Improved	Improved	Unadjusted	Dead	Untraced	Transferred after Treatment to other Institutions	Average Age	Average No. of Attendances	Average Months of Treatment	Average Intelligent Quotient
Neurosis																	
Good	24	12	8	3		1	15	6		1	1	1		7·2	30·5	9	116·0
Unsatisfactory	36	12	15	6	2	1	22	3	3	3	1	2	2	8·1	33·7	9·6	104·0
Bad	16	3	7	3	3		6	4	1	1		2	2	9·5	23·0	8·5	95·6
Total	76	27	30	12	5	2	43	13	4	5	2	5	4				
Anti-social behaviour																	
Good	5		1	2	2				1			3	1	9·5	26·4	7·0	99·5
Unsatisfactory	13	4	5	2	1	1	6	3	1			2	1	11·0	21·3	6·8	97·0
Bad	20	4	6	2	1	7	7	2	1	5		3	2	9·0	22·0	6·1	95·5
Total	38	8	12	6	4	8	13	5	3	5		8	4				
Medical cases																	
Good	10	4	3	1	1	1	6	1		1		1	1	8·3	25·4	7·1	109·1
Unsatisfactory	15	5	8		2		8	4	1	1			1	7·0	43·0	12·1	94·0
Bad	9	1	3	5			4	3	1			1		8·0	40·2	14·0	84·0
Total	34	10	14	6	3	1	18	8	2	2		2	2				
Educational cases																	
Good	1	1					1							10	21	7	95
Unsatisfactory	2	1	1				2							11	12	4	105·5
Bad	3		3				1	1				1		9·7	50·0	13·0	91·5
Total	6	2	4				4	1				1					

the above suffered from enuresis and five were backward at school

TREATMENT

Eighteen were treated by play therapy alone In addition to play therapy eighteen had treatment for physical disorders and five had educational coaching

Physical Complaints (34 Cases)

These children were referred to the institute on account of some chronic medical disorder for which, in many cases previous treatment had been of no avail The complaints included asthma eczema, urticaria fits functional eye complaints functional paralysis muscular incoordination general debility pyknolepsy, colitis vomiting etc In some cases there was an underlying neurosis which manifested itself only in this manner or there was an accompanying neurosis which helped to form a vicious circle Eighteen had enuresis either as the only complaint or in addition to another

TREATMENT

Sixteen were treated by play-therapy alone In addition to play therapy seventeen had some kind of dental medical or surgical treatment and three had educational coaching

Home Circumstances

Comprehensive accounts of the home conditions of these children have been obtained, and are graded according to three evaluations good unsatisfactory, and bad

Good—In these homes the material conditions were good varying only according to the social position of the family So far as could be ascertained the emotional relations between the parents were normal Any psychological mistakes in the nurture of the children were such as spring from a too strong insistence on the ordinary taboos and inhibitions prescribed by convention and a sense of respectability and a too early or rigid training in cleanliness and social behaviour Symptoms of anxiety neurosis were noticeable in some of the mothers

Unsatisfactory—In these homes, though the income was usually sufficient for the needs of the family unless there was temporary unemployment, the psychological conditions were not good Parental psychoneurosis bad relations between the parents, broken homes bad management of the home adoption and illegitimacy, and gross mismanagement of the children were among the difficult factors in the family situation A few of these children were now living in homes and hostels having had bad earlier experiences

Bad—Here the conditions were bad in every sense Poverty, overcrowding slum conditions drunkenness sexual offences illegitimacy, feebleminddedness wife beating, and desertion were prevalent

The figures show that in the neurosis, the anti-social and the medical groups (the educational group is too small for comparison) there is a correlation between the type of home the complaint and the average intelligence quotient The average intelligence quotient was lower in the bad type of home in all three groups

In the anti-social group the numbers admitted for anti-social behaviour vary directly with the type of home being smallest in the 'good' type From the bad type of home came 52·6 per cent of the anti-social cases from the unsatisfactory type 34·2 per cent from the good type only 13·2 per cent

In the neurosis group the figures were 21 per cent from the bad type of home 47 3 per cent from the unsatisfactory type and 31 5 per cent from the good type Neustatter (1938) showed that poor social conditions did not necessarily produce neurosis in children unless there were symptoms of it in the parents The above figures seem to confirm his findings and to suggest that delinquency and crime are more likely to be the end results in the bad type of home It is interesting to note that the highest percentage of neurosis cases came from the more comfortable homes where psychological conditions were bad

The results of treatment the length of time taken and the number of attendances necessary do not seem to bear any relation to the type of home Just as good and enduring results seem to have come about in cases from bad homes as in those from the other two types This suggests that the direct method of play therapy can be successful in helping the child to overcome his difficulties without the necessary aid of environmental change

Immediate Results of Treatment

Many of those placed under much improved on discharge might have been labelled well —that is free from the symptoms for which they were referred with no development of other symptoms indicating that adjustment had not been reached But as we felt that consolidation was still necessary after they left they were designated in the case sheets much improved

Present Condition of Patients

It is satisfactory to report that many of the much improved cases can now be labelled well and as far as can be judged are completely normal Under the heading unadjusted are four anti social cases one of whom is in Borstal and two are in Home Office schools These cases were prematurely removed from the clinic by their parents who became uncooperative after the children had had a certain amount of treatment They all came from bad homes One case of neurosis from a bad home is now in Borstal The present condition of the 154 patients is as follows

Well	78
Improved and much improved	36
Unadjusted	12
Dead or not traced	18
Transferred to other institutions	10
	154

This is not a large number but the method of treatment was then new and experimental and fewer cases were taken than now At the Institute of Child Psychology attention is more intensively concentrated on the treatment of the patient and less on the alteration of environmental conditions and consequently the period of treatment is longer and the attendances more frequent than in other clinics treating similar cases by different methods The social worker does not visit the home more than once and the aim of the treatment is to help the child to overcome his own problems rather than to remove difficulties from his path On the other hand the constant attendance of the mothers at the centre and the influences exerted upon them both in the social workers department and in the parents department doubtless have an effect through the mother upon the home environment

The clinic is open twice weekly for sessions of two hours each and the majority of the children attend twice a week until improvement is well established when the intervals are extended until attendance ceases altogether except for reporting purposes Every child receives a medical examination on entrance and at periodic intervals Where necessary medical or surgical treatment is arranged for in consultation with the family physician if there is one in order to help the child to become as physically fit as possible Simple medical treatment is given at the institute itself if the parents are too poor to pay for private medical attendance In some cases convalescent holidays are arranged for varying periods In certain medical disorders however where a psychological origin is suspected no medical treatment at all is advised or given As an adjunct to play therapy and also in the interests of physical fitness the physical re education and rhythm department is of great help in treatment The formation of a parents department in charge of a medical psychotherapist though primarily for the purpose of helping the parents with their own difficulties is doubtless responsible for the fact that once the child's treatment is established a large percentage of the mothers remain co operative throughout however long it takes

Acknowledgments are due to Dr Elspeth Macleod tutor Institute of Child Psychology for the help she has given with some of the cases

REFERENCE

Neustatter W Lindesay (1938) *Lancet* 1 1436

TREATMENT OF GONORRHOEA WITH ULERON

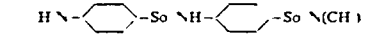
BY

D F WALSH, M B , B Ch

Surgeon Lieutenant Commander R N

The following is a record with observations of forty-three cases of gonorrhoea of which twenty one had received routine treatment for at least six weeks prior to having uleron

Uleron is one of the newer compounds evolved in the endeavour to obtain a drug possessing the lowest possible toxicity which would influence the largest number of bacterial diseases apart from streptococcal infections It has the formula



It is one of three closely allied compounds which only differ by substitutions in the final sulphonamide group and which have been found to exert a more favourable influence in gonococcal infections than any of the other thousand compounds investigated

Uleron is manufactured by Messrs Bayer who kindly put a supply at my disposal I was told quite frankly that they could make no definite claims for uleron which was still under trial that I might find it a complete failure and that neither its dosage nor its non toxicity was established It had been tried out in some clinics in Germany and a translation of the report by Grutz, New Foundations for the Treatment of Gonorrhoea an advance proof of Fischer's New Methods of Treatment of Gonorrhoea and Felke's On the Chemotherapy of Gonorrhoea constituted the available literature at that time These three workers were most enthusiastic about the therapeutic value of the new compounds They claimed their advent as the greatest advance ever made

in the treatment of gonorrhoea and were confident that the long awaited solution to the problem of a speedy cure for that disease had at length been found

Earlier Experiences with Uleron

Grutz had worked mostly with one of the other compounds of the uleron group, which he found superior to uleron though in his tables only two cases seem to have been treated by uleron alone In his series of thirty-six cases he obtained twenty four cures The total dosage varied between 6 grammes and 82 grammes Toxic effects were noted in eleven cases

Fischer treated forty cases one half with uleron, the other half with the allied compound used by Grutz He observed no distinction between their relative efficacy It was his impression that with the allied compound it was the clinical symptoms not the microscopical findings, that were more quickly affected He made careful observations of the blood pictures of his cases and noted an almost constant diminution of the polymorphs with a relative increase of the lymphocytes towards the end of a course Apart from this neither preparation gave rise to any evidence of toxicity He further stated that the urinary findings were in no way abnormal and that estimations of bilirubin xanthoprotein blood sugar, and blood calcium invariably showed figures within physiological limits He gave 3 grammes daily for three days and repeated the course in eight to ten days if necessary Later he obtained equally good results with 2 grammes daily for five days Toxic effects were completely absent He found that non-recent cases reacted better than acute ones and for the latter advocated either waiting ten to fourteen days before starting the treatment or stimulating the body defences by vaccines injections of blood olobinthin or colloidal sulphur irradiations etc In his finally published paper he had obtained cures in fifty-five cases out of fifty eight with only one relapse and one case of toxic rash and pyrexia

Felke reported on fifty cases He too stressed what he terms the preparedness of the body for cure and recommended that acute cases should have a short course of uleron to clear up the gross symptoms then an interval for Janet irrigations twice daily during which time the body defences were mobilized and only then a second course of uleron 2 to 2 5 grammes daily for five or six days To one case he had given 61 grammes in three weeks without causing side effects but considered such dosage excessive and to be avoided He hoped for still newer compounds requiring a smaller degree of co-operation on the part of the body Commenting on the mode of action of uleron he noted that even while taking large doses the blood of the patient had no inhibitory action on the growth of gonococcal cultures

Treatment of the Present Series

It was suggested to me that the results of treatment by smaller doses would be of interest A dosage of three tablets a day—1 5 grammes—was adopted and adhered to in all my cases In spite of the results already obtained elsewhere I began treatment cautiously my earlier patients receiving a three-day course which was only repeated after an indefinite interval of observation for relapse delayed cure or toxic manifestations As it became evident that such treatment was insufficient the interval between the courses was shortened Next the courses were lengthened and also the intervals the latter being again shortened as the almost complete absence of toxic symptoms became evident In addition to receiving uleron for the periods shown in the case records all patients were irrigated twice daily with potassium permanganate 1 in 10 000, and had prostatic massage once a week if the prostatic smears were pathological

The standard of cure was not exacting All treatment was stopped Daily examination was made for urethral discharge immediately on rising, as well as of the first morning urine by the two-glass test Other criteria were the anterior urethra normal on urethroscopy, the passage of a large sound, a prostatic smear showing absence of organisms and less than four pus cells per field The minimum observation period was eight days this was extended up to twenty-one days in many cases

Complications—None occurred in any patient after commencement of treatment with uleron

Toxic Effects—One possible case, No 37 gastro enteritis pyrexia, and giant urticarial rash on the eleventh day of treatment The temperature (101 4°) became normal in forty-eight hours, and the rash had gone within seventy-two The patient blamed some tinned salmon for this upset, volunteering the information that on the previous evening he had eaten some for the first time for nine years Nine years ago its ingestion had been followed by severe gastro-enteritis but no rash

Results of Treatment

21 cases had	a three day course	5 were cured
11	second course	2 (6 were cured after 7 to 15 days uleron)
12	four day course	1 was cured
8	second course	4 were cured
3	13 to 17 days treatment	No cures
4	five day course	1 was cured
2	second course	No cures (1 was cured after 11 days uleron)
2	six day course	No cures
4	seven day course	2 were cured
Cured 22 cases (2 acute 20 non acute)		
Failures 21 cases of which 15 were inadequately treated		6 were adequately treated

My results seem to compare unfavourably with those of the German clinics to which I referred earlier The obvious cause for this is under-treatment due to three things the number of cases (seven) transferred from my charge before treatment was completed (Nos 4, 6, 19, 21, 22, 35, 36), overcaution in abandoning treatment (five cases, Nos 5, 9, 12, 16, 26), and lack of uleron to complete treatment in three cases (Nos 38, 39, 40) These fifteen cases are not true failures They are short treatment failures, and should only be assessed as such They are included lest the false impression might be given that a high percentage of cures can be obtained after a few days treatment with uleron I am recording several such cures, but I regard them rather as the exception than as the rule—agreeable surprises when they occur, but not to be expected in any individual case It is rather unfortunate that nine out of these fifteen cases were in the acute stage—that is, in the first three weeks of the infection Of the six true failures it is significant that five were acute cases and that only two of the successes were acute

Clinical Observations

The immediate effects of uleron are remarkable In nearly every case the discharge dwindles rapidly and the urine clarifies within a couple of days The discharge becomes a morning dampness, and gonococci disappear almost abruptly from the urethral smears The usual transitional stage seems to be entirely absent, for no Gram negative extracellular diplococci were reported in any of the slides In only three adequately treated cases did gonococci persist in the urethral discharge Subjective symptoms such as dysuria and painful erections

ceased I had not the opportunity of noting the effect of uleron on acute complications as most of my compli cated cases had got over their acute symptoms when they reached me The extraordinarily rapid clinical improve ment and deceptively clear morning urines give rise to an expectation of speedy cure which is not always fulfilled The morning dampness invariably consists of pus cells and coccal organisms, Gram negative cocci being the most common finding To cause complete cessation of this pathological dampness was the difficulty for it sometimes proved resistant to second and third courses of uleron to periods of irrigations alone and to complete rest from treatment From the patient's point of view the gonorrhoea was cured and it would be easy to over look this slight persistent urethritis if the patient was not under strict observation Cessation of local treatment at this stage invariably led to a gradual increase in the amount of the discharge though gonococci were seldom demonstrated after they had been absent for about ten days

It was tantalizing to arrive almost at a cure so speedily only to be checked by the morning dampness It was felt that some small alteration in the dosage or prolongation of the courses would overcome this final obstacle to cure in many cases and it was this incentive which led me to pass on too quickly to seven day courses when my supply of uleron was running low In spite of some wonderful cures with three-day and four-day courses I felt that even two four day courses of 1 5 grammes per day would not give the best results of which I believe this drug to be capable Thirteen of my patients had more than eight (nine to seventeen) days treatment seven of them being cured four within the ten day limit Nineteen out of my twenty-two cures were obtained with a maximum of ten days treatment which I would cer tainly use as a standard basis for further clinical trials with uleron It is fully realized that one is not entitled to draw conclusions from experiences with a couple of dozen cases and that the adoption of a ten day standard is arbitrary and unproven The method of action of uleron is not fully understood Fischer says We cannot speak of its disinfectant action but rather of one affecting the reticulo endothelial system It is suggested that intermittent is preferable to continuous treatment in which case the dosage of 1 5 grammes per day might be increased with advantage in the absence of toxic symptoms With the smaller dose which I employed I feel that at least two day five day or even seven day courses would give excellent results and this matter deserves full clinical investigation

Impressions from the Treatment

The number of cases I have treated is too small to permit me to draw conclusions I can only record my impressions They are

That uleron is definitely a most valuable adjuvant in the treatment of gonorrhoea

That in the dosage I employed uleron appears to be non toxic

That with moderate doses used in conjunction with local treatment a cure can be obtained in a large number of cases more quickly than hitherto possible

That the non acute cases seem to respond more readily than the acute cases

That when the optimum dosage is established a high percentage of cures should be possible within three weeks

That a small percentage of patients may prove completely resistant to uleron treatment

1 Case No	2 Age	3 Last Infection of Gonorrhoea	4 Ce Present in Urethral Smear	5 Complications	6 Uleron Tablets Used	7 Urethral Smears	8 Prostatic Smears Reaction Cysto Counts etc	9 Result	10 Total Days on Uleron
1	30	1931	147	Nil	153 157	158 pec 163 nil		Cured	3
2	37	19 5	54	Ep L 20	75 77	76 nil		"	3
3	3_	1934 1931 1935	1	Nil	3_4	5 nil 20 nil	16 fp		3
4	33	1934 1935 1937	121	—	131 133	134 pec 139 pec		Failure P T	3
5	3	Nil	5	—	5 7	10 n l _1 pec		Failure T A	3
6	_1	—	2	—	_ _	5 pec 11 G		Failure P T	3
7	_4	—	_3	—	_5 0	0 fpc 3_ nil	25 6 000	Cured	3
8	_8	—	36	A P _0	46-48	49 pec 51 nil	44 8 600		3
9	_	—	74	N l	75-77 83 85	81 G 88 Ge	828 400	Failure T A	6
10	32	—	51	Ep R 2	52 54 62-64	53 nil		Cured	6
11	_	—	14	Fp L 1_	_ 2_ 30-3_	25 nil 29 G 33 nil	2_ 6 000 29 GFT – 33 GFT –		6
12	21	—	—	N l	_ _ _ _ 50- 2	47 pec 5_ nil 59 pec		Failure T A	6
13	_4	—	5_	—	56 57 73 5 8_ 5_	58 nil 71 pec 77 pc 85 e 88 nil	65 fp	Cured	9
14	26	—	83	Ac P 24	83 85 93 95 98 101	86 nil 93 pec 97 pc 102 nil	93 ed 107 d		10
15	31	—	70	Ac P 31	79 81 88 91 94-97	87 G 91 G 93 fpc 101 nil	98 e	"	10
16	_8	1935	20	Nil	21 23 28 30 37 39	24 pc 28 36 nil 36 pc 40 pec		Failure T A	9
17	25	1934 1937	115	—	115 117 125 127 132 136	115 pec 129 pec 137 nil	124 11 400	Cured	11
18	19	Nil	1	—	2-4 9 12 18 _0	9 G 13 pec 22 Ge	26 Ge 30 10 200	Failure T A	10
19	26	1931	1	Nil	2-4 9 11	5 fp 6_ nil 12 pec 19 Ge		Failure P T	6
20	28	1934 1935 1936	36	39-41	59-61 61 64	43 pc 50 Ge 64 nil	43 fp	Cured	7
21	18	Nil	6	—	9 1_	12 pc 18 Ge		Failure P T	"
22	23	—	1	—	1-4	5 pec 9 pec		"	"
23	20	1937	11	—	60-6_ 68 71 85 90	6_ pec 73 nil 8_ pec 91 fp 93 nil	79 sd	Cured	13
24	9	—	47	Ep L 28	52 55	54 nil		"	"
25	22	1936	6	Nil	122 125 133 135 142 144	126 pec 141 pec 143 nil 149 fpc 151 nil	135 ed —		10
26	29	—	7	—	12 15 20-23	19 pc 26 pc		Failure T A	8

1 Case No	2 Age	3 Previous Infections of Gonorrhoea	4 Gc Present in Urethral Smear	5 Complications	6 Uleron Tablets	7 Urethral Smears	8 Prostatic Smears Leucocyte Counts etc	9 Result	10 Total Days on Uleron
27	17	—	101	—	102 105 113 115	105 107 nil 108 pec 115 nil		Cured	7
28	19	—	37	—	41 44 48 51	45 pc 50 nil		"	8
29	43	1922 1927 1935	56	Ac P 16	73 76 80 83	77 fpe 86 nil			8
30	24	Nil	3	Nil	19 22 26 29 33 37 41 44	21 6 nil 31 pec 38 pec 50 ec	25 pec 37 GFT+ 44 GFT−	Failure T A	17
31	28	—	5	—	15 18 21 24 33 37	20 pc 30 pec 37 pe 47 pe	26 pe 36 ed		13
32	25	—	26	Ep R 27	44 47 50 54 61 65	48 pec 55 pe 68 pec 75 pec	45 pec 55 pec 72GFT+− 79 GFT−		14
33	21	—	49	Ep R 30	53 56 58 61	57 c 59 nil	57 fpe	Cured	6
4	31	1926	7	Nil	13 17 27-31 35 38	19 pe 23 Gc 35 Gc 43 Gc 50 Gc		Failure	14
35	30	Nil	97	Nil	97 101	103 pec	104 pec	Failure P T	5
36	34	—	5	—	11 15	18 pec	15 GFT−	"	5
37	32	1926	1	—	3 7 10 14 17	9 pec 15 pe 17 U 17 35 nil	16GFT+− 23 GFT− 40 fpe	Cured	11
38	35	—	2	—	16 21	22 pe 28 pec		Failure T A	6
39	33	1926 1931	34	Arth 32	37 42	45 pec 56 Gc	35 7,000	"	6
40	29	Nil	109	Ep L 44	109 115	116 pec	116 Gc	"	7
41	37	1925 1926 1929 1931 1933	18	Ep L 4	21 27	23 nil	29GFT+− 36 GFT− 43 ed	Cured	7
42	28	Nil	1	Nil	3 9 14 17 25 28	10 Gc 20 Gc 29 pe 30 36 nil 7 Ge	10 5 800	Failure T A	15
4	37	—	97	Ac P 28	100 106	106 nil		Cured	7

Columns 4 5 6 7 and 8—The numerals represent the number of days that the infection has been present

Column 4—The last occasion on which gonococci were demonstrated in a urethral smear prior to commencing uleron treatment

c=Gram positive cocci d=debris e=epithelial cells f=few—less than four per field Gc gonococci GFT=gonococcal fixation test p=pus cells s spermatozoa u urticaria PT patient transferred T A=treatment abandoned

The cases are not in strict chronological order Only the more relevant smears have been included In all Failure T A cases the discharge was present fourteen days after uleron had been stopped

I wish to express my thanks to Surgeon Rear Admiral I Warren O B E for permission to publish these cases and my indebtedness to Surgeon Lieutenant Commander A R Froggatt for the laboratory reports

BIBLIOGRAPHY

Falke H (1937) *Deut med Wschr* 53 1395
Fischer C (1937) *Fortschr Ther* 13 553
Grutz O (1937) *Munch med Wschr* 84 1201
Heerlein H (1937) *Practitioner* 139 65

A POST-MORTEM RECORD OF PULMONARY TUBERCULOSIS IN DIABETICS

BY

S ROODHOUSE GLOYNE, M.D., D.P.H
Pathologist London Chest Hospital E

The belief, based upon clinical observation, that diabetics are especially prone to tuberculosis is of long standing Fishberg (1932), however, was not convinced, and regarded the percentage of diabetics presenting tuberculous lesions at necropsy as not at all formidable Root (1934, 1937) has investigated the point statistically by means of post-mortem records from various published papers in different countries from the years 1888 to 1932 In 1,121 necropsies on diabetics the incidence of active pulmonary tuberculosis was 28 4 per cent, and in 51,705 necropsies on non diabetics 22 9 per cent He interprets these statistics to signify that since "two diseases occur in association with less frequency than either one alone is found in a series of necropsies, it would appear that tuberculosis is about two or three times as frequent at necropsy as would be expected in diabetes Analysing both the morbidity and mortality figures which deal with American hospitals, Root points out that the incidence of pulmonary tuberculosis in adult diabetics is not diminishing, despite the general decrease of tuberculosis mortality, and that this sequel occurs in juvenile diabetics more than ten times as often as among non diabetic grade and high school children in Massachusetts

I am not aware of any recent mortality statistics bearing upon this subject in England and Wales, though Dunlop (1937) has published a clinical record of twenty eight cases in Edinburgh The Registrar-General's report (1937) shows that the mortality from tuberculosis is declining and that from diabetes is rising the total number of deaths in 1936 from tuberculosis being 28,268 and from diabetes 7,119

The Material Investigated

The post-mortem records of the London Chest Hospital, which is primarily concerned with the treatment of intrathoracic disease, show twenty-one deaths (0 75 per cent) from diabetes in 2,826 necropsies (1,138 with active tuberculosis and 1,688 with non tuberculous diseases) between 1888 and 1937 Of the twenty one diabetics four were not associated with tuberculosis and a fifth had only calcareous tubercles with puckering of the lung apices The remaining sixteen had active pulmonary tuberculosis and comprised 1 4 per cent of the 1 138 necropsies with active tuberculosis

Root's collected records of 3 575 fatal cases of diabetes show 5 11 per cent with tuberculosis The twenty one cases of diabetes with a mortality from active pulmonary tuberculosis of 76 19 per cent are too few to be comparable with Root's figures Moreover, a selective influence has obviously been at work in admitting to a chest hospital diabetics with tuberculosis Some information however, may be derived from the details of the necropsies Eleven of them occurred before the introduction of insulin and five after Four of the sixteen cases were of the young adult type—a male aged 27 and a female aged 20 in the pre-insulin period and two males aged 28 and 23 in the insulin period The ages of the other twelve ranged from 40 to 65 and were therefore of the middle-age group Eleven of the patients w

males and five females The type of lesion noted was predominantly caseous frequently with tuberculous pneumonia and all but one had cavities the cavities being multiple in 60 per cent of cases This exception a male aged 20 was the only case showing signs of quiescence He had only a few widely scattered tubercles the size of a large pin head in all lobes which were almost calcareous There were three instances of acute miliary spread two of fatal haemoptysis two of empyema and one of pyopneumothorax Pleural adhesions were noted in all cases except one where there is no record on the point This is interesting in view of the fact that some American observers—for example Perla (1936)—have noted a less frequent occurrence of adhesions in tuberculous diabetics than in tuberculous non diabetics of comparable ages Only one patient was noted as having died in coma The most significant finding of all however was the absence of tuberculosis elsewhere excepting one instance of miliary tuberculosis in the kidney Even tuberculous laryngitis and enteritis which are such common features of the tuberculosis necropsies throughout the records were not found No tuberculosis was noted in the pancreas No instance of amyloid disease was recorded Chronic non tuberculous lesions were apparently not more common than might have been expected in a group of cases of which 75 per cent were middle aged There were two cases of chronic kidney disease two of fibrosis of liver two of atheroma one of renal calculus and one of uterine fibroid No significant differences can be made out in comparing the type of lesion found in the pre insulin and the insulin period

Summary of Data

The data may be summarized as follows

1 The figures recorded are too few and of too selective a character to throw any statistical light on the question whether or not diabetics are more susceptible to tuberculosis than are the general population No figures appear to exist for this country to confirm or refute the clinical impression that the diabetic is a favourable soil for the tubercle bacillus but the extensive American figures on the whole support the view

2 The majority of the patients in the present series were of the middle age group

3 The type of tuberculous lesion found was that of excavation with extensive caseation often pneumonic or bronchopneumonic in distribution The common sequel of tuberculous laryngitis and enteritis was not encountered

4 No tuberculous foci were found elsewhere in the body (including pancreas) except one example of miliary tubercles in the kidney evidently a terminal lesion

5 No instance of amyloid disease was recorded

6 Only one instance occurred in which there was any sign of quiescence

7 No significant differences were noted in the necropsies of the pre insulin and insulin periods

Commentary

Obviously the diabetic is exposed to the same risks of infection as the rest of the population but the salient features which stand out from this record are that (1) when tuberculosis developed in the diabetic it was almost invariably the uncomplicated pulmonary form of the disease and (2) signs of healing of the tuberculous process were rare These points confirm the observation of Perla in a comparable series of necropsies on diabetics and non diabetics with tuberculosis that in the former there was a greater rapidity of development of the tuberculous process The effects of altered metabolism in the diabetic state are however so numerous that it is impossible at the present time to attribute to any one of them alone the blame for providing the favourable soil for the growth of the bacillus Possibly the low respiratory quotient as found in the diabetic animal (Ralli Canzanelli and Rapport 1931) and in certain cases of diabetes in man (Joslin 1937) may be important in this connexion

REFERENCES

Dunlop D M (1937) *Edinb med J* 44 951
Fishberg M (1932) *Pulmonary Tuberculosis* 2 4th ed Henry Kimpton London
Joslin E P (1937) *Treatment of Diabetes* 6th ed Henry Kimpton London
Perla D (1936) Quoted by Wiener and Kavee *Amer Rev Tuberc* 34 179
Ralli E P Canzanelli A and Rapport D (1931) *Amer J Physiol* 96 311
Registrar General (1937) Statistical Review of England and Wales for the Year 1936 Part I Medical H M Stationery Office London
Root H F (1934) *New Engl J Med* 210 178 127 192
—— (1937) Joslin's *Treatment of Diabetes* p 496 London

Clinical Memoranda

Traumatic Rupture (Complete) of External Iliac Artery Amputation Recovery

This case so far as I know is unusual and one might say rare enough to justify publication

CASE RECORD

A quarryman aged 35 while removing a "relief valve" from a Diesel engine which was still running—he standing in direct contact with the valve—was struck in the right groin He was thrown backwards for about four feet and was very badly shocked This took place at about 10.45 a.m. on April 12 1938

Some ten minutes after the accident he was seen by Dr F W A Watt of Tavistock who telephoned to me about 11.15 a.m. The patient being badly shocked we agreed that I should call later in the day thus allowing time for the shock to be treated in hospital I saw him at about 4.30 p.m. the same day His temperature was then subnormal and his pulse which had been taken every half hour was 130 very thin and wiry and of poor volume He was still badly shocked His right leg was useless the toe nails were blanched and there was no pulsation in the posterior tibial popliteal or common femoral arteries This leg was considerably colder than the left There was an enormous swelling which filled up the right Scarpa's triangle and extended into the right iliac fossa It did not pulsate nor was any pulsation felt or heard in either swelling The skin was intact but extensive bruising was present over the lower abdomen not only on the right side but also on the left This bruising also extended up the outer side of the abdomen into the right axilla as well as into the scrotum It was perfectly clear that he had ruptured the right external iliac artery and that he would lose his leg but as there was good reason to think that he had ceased to bleed we decided to still wait until his recovery from the shock

I was kept informed as to his progress from day to day and saw him again on April 15 He then had a pulse of 80 of good volume and regular and as we thought it unlikely that his general condition would improve further we decided to operate the following morning—that is April 16 The condition of the limb on April 15 was about the same there was no pulse in any vessel but on auscultation over the swelling in the right groin transmitted pulsation could be heard By this time he had a distinct line of demarcation in the lower limb This extended from a line about eight inches down from the iliac crest horizontally inwards to a point about three inches below the pubic crest in front, to meet a line which practically took the gluteal fold behind

The skin and limb were warm above these lines but quite cold below with a patchy reddish-blue mottling There was some sensation over the warm area but none below We did not consider it advisable to give him a blood transfusion, as his recovery from the shock had been so satisfactory, and we did not want to raise his blood pressure too much, as this might possibly again bring on bleeding

Operation—With a premedication of morphine and under light gas and oxygen anaesthesia I operated on April 16 I decided to use the extraperitoneal approach, and made my incision as I thought accordingly about three-quarters of an inch above Poupart's ligament but on dividing the skin and deep fascia I came down upon the clot This was rapidly turned out and confined below to the attachment of the deep fascia to that in the outer half of Scarpa's triangle, with Poupart's ligament elevated so that it took a concave shape with the external iliac which was raised from its bed in the ilio psoas and presenting itself under the middle of Poupart's ligament, leaving a space of at least 4 inches between the proximal and distal ends of the vessel The lumen was filled with a firm clot and one could clearly see the torn and twisted intima I placed two floss-silk ligatures round the artery and vein and as the patient's condition justified it I proceeded to do a quick amputation by unequal lateral flaps, cutting just above the line of demarcation described The femur was divided about two inches below the great trochanter, the circulation in the muscles and bone being excellent He stood the operation well and was little the worse when it was finished He has since made an uninterrupted recovery

COMMENTARY

The relief valve ' which caused the injury is of solid steel eight inches in length, the outlet end, which carries a handle, has a diameter of three inches, and the inlet end has a diameter of two and a half inches It weighs 12 lb and was expelled at a pressure of 400 lb to the square inch

The interesting points of this case are

1 The man was in contact with the valve, which must have struck the external iliac vessel at a point on the pelvic brim near where one would normally compress the common femoral vessel, completely dividing it

2 Had he been standing a distance away, other than in direct contact with the valve, the chances of it breaking his pelvis and possibly rupturing his abdominal wall, with grave intraperitoneal injuries to viscera, vessels, etc, would have been considerable

3 The importance of waiting, if possible, in cases of extreme shock could not be better exemplified than in this instance Glucose and saline should be judiciously administered A very close watch must be kept on the pulse, so as to avoid giving an amount that might raise the blood pressure and so bring on haemorrhage

4 It was interesting to note at the end of three days the amount of collateral circulation that had taken place from the internal iliac and ilio lumbar branches, a matter which is so important in cutting the skin flaps

I am greatly indebted to Mr L W Proger to whom I sent the small specimen of the distal end of the vessel for his kindness in looking through the Library of the Royal College of Surgeons for any record of such a case This search proved unproductive but he has kindly sent me a bibliographical list although none of the publications, so far as I know, quite meet the case quoted

Plymouth H G PINKER FRCS

BIBLIOGRAPHY

Ferrari F (1929) *Bull Soc nat Chir* 55 161
Jean G (1923) *J Chir* 21 303 Abstract in *J Amer med Ass* 80 1652
La Roque G P (1921) *Ann Surg* 73 265
Letoux (1915) *Bull Mem Soc Chir Paris* 41 1803
Loubat and Perruchot (1913) *J Med Bordeaux* 43, 692
Ricard A (1910) *Ann Anat Path* 7 241
Shattuck J C (1901) *Boston med surg J* 144 183

Two Compressed Foetuses and Living Baby as an Unusual Cause of Hydramnios

The patient whose case I report had probably started with a triplet pregnancy, including uniovular twins which had died when they were about five months mature, and at that time the hydramnios occurred Owing, I presume, to the fact that there was still one living foetus and placenta, there was still enough of the necessary hormones available to prevent the expulsion of these dead foetuses, the living one growing normally and compressing the dead ones The hydramnios was, I suppose, reabsorbed

CLINICAL RECORD

A multipara, aged 29, with one child aged 4 years, consulted me on October 10, 1937, having had a slight vaginal haemorrhage of a few days duration following two months amenorrhoea the last menstrual period having started on July 10 On examination on October 19 she was not losing, the uterine os was closed, and she appeared to be about three months pregnant

I saw her regularly and the pregnancy progressed quite normally until December 23, 1937 when the uterus suddenly became enlarged to the size of at least a thirty six weeks pregnancy, and the abdomen was so tense that foetal parts could not be felt The patient complained of nothing except a little difficulty in bending, and as she had to go away the next day was not examined by x rays, though I warned her of the possibility of twins or some abnormality, and instructed her to see a doctor at her home if anything untoward occurred

I did not see her again till February 28 1938 when the uterus, though somewhat soft was of normal size for the term of pregnancy, then about thirty weeks, having diminished considerably in size during the interval Foetal parts of one foetus only, could be felt per abdomen, one foetal heart only could be distinguished, and everything appeared to be normal The pregnancy continued apparently normally until *April 6, one month* before the expected date for the baby to be born when the patient started labour spontaneously and was delivered of a living male infant about four weeks premature, and weighing 6½ lb After the delivery of the baby the uterus felt large and hard, but not large enough for the presence of a twin to be suspected After ten minutes a second bag of membranes presented, and with only one further uterine contraction the placenta, together with an unruptured bag of membranes, which contained foetal parts, was expelled On examination this proved to be twin foetuses, surrounded by and embedded in a brown clayey substance each in a separate amniotic sac There were two placentae, one of normal size healthy, and with the cut cord of the living baby and its own amnion and chorion, was fused along one border with a shrivelled white fibrous one containing numerous infarcts and having two amniotic sacs, each containing one of the compressed foetuses, with two small cords and only one chorion The twin foetuses were both female and were not much macerated and were not deformed They were 9 inches long and weighed approximately 12 oz each

The further history of the case is also of interest *After a perfectly normal puerperium with no pyrexia and good involution, what appeared to be a complete succenturiate placenta* about 4 inches across, and with membrane attached was passed on the eleventh day The living baby for the first three weeks after birth suffered from projectile vomiting and intractable constipation and caused us some anxiety The pylorus was palpable and elongated and he lost weight considerably A diagnosis of congenital stenosis of the pylorus was made, but with small hourly feeds of expressed breast milk and daily stomach and occasional bowel washouts he made a good recovery and at one month had entirely ceased vomiting had nearly regained his birth weight, and was able to feed from the breast He has got on well ever since

Hastings E D BLUNT, MB, BS, DCOG

Reviews

THE BACTERIOPHAGE

Le Phenomene de la Guerison dans les Maladies Infectieuses By F D Herelle (Pp 416 19 figures including 4 plates 75 fr) Paris Masson et Cie 1937

Professor F D Herelle has recently added to the already long list of monographs on the bacteriophage which come from his pen This last one bears the title *Le Phenomene de la Guerison dans les Maladies Infectieuses* but as a matter of fact it is only the second half of the monograph which deals with this problem the first two hundred pages being devoted to a consideration of the bacteriophage and the technique of its study Beginning with a brief historical account of the discovery of the bacteriophage the author considers in turn the technique of isolation of phages how to obtain them in pure culture the estimation of their virulence phage mutation and the characters and nature of bacteriophages All this is presented in lucid style and one notes that D Herelle adheres to his original conception of the bacteriophage as a living autonomous parasite of bacteria Considerable space is given to the question of the production of lysins by bacteriophages and one gathers that the author considers that bacterial mutation is the result of phage action —bacterium phage symbionts—and that opsonization of bacteria is brought about by phage lysins

In the second half of the monograph the author discusses the role of the bacteriophage in the recovery from disease and the evolution of epidemics For D Herelle recovery from bacterial infections is a function of phage action and cessation of epidemics is brought about by the dissemination of bacteriophage by convalescents Bacteriophage therapy of various bacterial diseases is also discussed and the results obtained are stated to be uniformly successful so much so that one wonders why other methods of treatment are still employed

X RAYS AND RADIUM IN DERMATOLOGY

X Rays and Radium in the Treatment of Diseases of the Skin By George M MacKee M D Third edition thoroughly revised (Pp 830 308 figures 31 charts 2 coloured plates 45s net) London Henry Kimpton 1938

There is no need to stress the importance of x rays and radium in the treatment of diseases of the skin In fact it is difficult to imagine what the practice of dermatology would be like if suddenly deprived of these powerful therapeutic agents The textbook before us which is now in its third edition is certainly the fullest and most complete account of the subject in the English language Dr MacKee has been interested in radiotherapeutics for many years and this book first appeared nearly twenty years ago In this the third edition he has had the benefit of the assistance of a large number of collaborators who have contributed chapters on those sections of which they have special knowledge In particular Dr Edith H Quimby has written important chapters on the physics biology apparatus, and measuring instruments required and dermatologists who wish to have more than a rule of thumb knowledge of what they are doing should study her writings with care

The clinical part of the book is mostly written by Dr MacKee himself whose clinical experience is unrivalled but in certain departments other physicians have collaborated with him There is also an interesting and important chapter on the medico legal aspects of x ray and radium therapy by Mr Harold Bouton This is founded of course upon the legal practice and procedure in vogue in the United States of America but after all since the legal system of this country is founded on the same principles it will be read with interest by British dermatologists Many will be anxious to see what opinion Dr MacKee has of the value of the so called Grenz rays which are really x rays of long wave length which will not penetrate ordinary glass and consequently necessitate the use of tubes in which a window made of special lithium borate glass is set to permit their escape Some optimistic workers have prophesied that these rays will one day entirely replace x rays of shorter wave-length in dermatology but Dr MacKee does not agree He is of opinion that enough work has not yet been done to substantiate the rather extravagant claims made by Bucky and others on their behalf We have to add that like most other American books this volume is well printed and well illustrated and well furnished with references to original papers It should be in every dermatologist's library

MEDICAL WOMEN IN PAST AGES

A History of Women in Medicine from the Earliest Times to the Beginning of the Nineteenth Century By Kate Campbell Hurd Mead M D (Pp 569 70 illustrations including a frontispiece 6 dollars) Haddam Connecticut The Haddam Press 1938

Dr Kate Hurd Mead deserves well of every woman who has adopted medicine as a profession She has read much and travelled widely to produce an excellent and well illustrated *History of Women in Medicine* It has the double merit of being interesting as well as accurate except for a few slight errors of fact The history begins with medicine in primitive times and is carried down the ages until the eighteenth century The method is to consider the practice of medicine by women in its relation to contemporary social history The book therefore contains many details of the domestic life of women at various periods independently of their professional work and this alone would make it attractive to the general as well as to the professional reader

It appears that from classical times until the end of the fourteenth century women held a recognized position in medicine acting for the most part as advisers often as curers of minor ailments and sometimes as operating surgeons Midwifery was always in their hands but in every country at one time or another they were licensed to practise medicine and in a few universities they were allowed to graduate on the same terms as the male students This was especially the case at Salerno and Dr Hurd-Mead makes a brave fight for the corporeal existence of Trotula the woman doctor whose influence on midwifery lasted for so many hundred years that her name has come down to our own times as Dame Trot Many great names are brought under review Dr Hurd Mead believes that both Moses and his wife Zipporah were instructed at the medical school at Heliopolis It is certain that Aristotle was helped by Pythias his wife in collecting material for some of his scientific treatises Many royal ladies were interested in and some actually practised the medical art St Hilda of Whitby Queen Margaret of Scotland the good Queen Maud (wife of Henry I) Eleanor of Aquitaine Berengaria and St Hildegard are all commemorated Then came a long period of eclipse when women were relegated to minor duties in the sick room though as in London in the seventeenth century they

received special instruction before they were licensed to practise as midwives

The book must necessarily reach a second edition, so a few minor errors may as well be pointed out The caption of the illustration facing page 232 is clearly wrong The ward is in a French, not an English, hospital, the sisters are engaged in the homely task of making the bolsters which preceded sandbags and not in sewing dead patients into their shrouds as is stated Mirfeld (p 262) was only in minor orders and was certainly never a prior, Mr John Flint South has been confused (p 269) with Sir James Paget and his work should be quoted as the memorials not the memories But these are only minor blemishes in a very satisfactory and pleasant book, which is provided with an excellent index and a list of errata

FRACTURES AND DISLOCATIONS

Fractures and Dislocations for Practitioners By Edwin O Geckeler M D (Pp 252, 213 figures 18s) London Baillière Tindall and Cox 1937

The author tells us in his preface that this book is written as a complete yet simplified guide to the management of bone and joint injuries, his purpose being to condense the subject of fractures and dislocations without omitting important details He has achieved his object in an attractive little work of convenient size, clear print, and good illustrations, and has been enabled to do so by adopting the sound policy of advising only what he considers the one most practical method of dealing with a particular lesion There is much to be said for this in a guidebook because, as the author points out, in emergencies the choice of the most appropriate treatment may be both confusing and time-consuming

The work is divided into two parts, the first dealing with fractures, the second with dislocations Provided the initial treatment is adequate, only a very small proportion of fractures require open reduction, and therefore description of operative technique has been limited to that of skeletal traction and subcutaneous leverage Plaster technique is explained in detail and an interesting chapter deals with follow up treatment This practical little guidebook should not only prove useful as a work for ready reference but also be of value to the busy practitioner who wishes with a minimum of effort to familiarize himself with modern methods of fracture treatment

APPROACH TO PHYSIOLOGY

The Living Body A Textbook in Human Physiology By Charles Herbert Best M D D Sc F R S and Norman Burke Taylor M D F R C S Ed (Pp 563, 283 figures 15 coloured plates 3 60 dollars) New York Henry Holt and Company 1938

The approach of students, including medical students, to the subject of physiology is a matter of the greatest moment Its basic importance to medicine, which can only be freed from mumbo-jumbo by a proper appreciation of its principles, together with its fundamental value as a subject of general education, make it one of the most useful of modern sciences As a rule the medical student at the outset of his physiological studies chooses one of the larger textbooks, often of vocational flavour, and most teachers will agree that the consequences of such an introduction are by no means good Yet teachers of the subject will also generally agree that elementary textbooks often leave much to be desired, or may even be positively misleading Leading investigators are often insufficiently acquainted with the broad outlines of the subject and competent teachers too occupied, or have too much of an eye to examination needs, to devote time and thought to the preparation of a book that might bring them little kudos, or even some scorn from their highbrow colleagues

It is a hopeful sign of the times that two such distinguished physiologists as Professors Best and Taylor, the one world-famous for his own research, the other as a teacher and investigator, should have bent themselves to such a task It is an agreeable task for a reviewer to be able to say that they have done a true service to their subject and that their work will be of value

In this book the main facts of physiology, brought right up to date, have been presented in a readable, informal, and accurate manner Apart from some of the half tone blocks which have come out poorly, the illustrations—283 in number—are well chosen and often original Some preliminary knowledge of physics and chemistry is assumed on the part of the reader, but little biology, histology, or anatomy is expected The authors state in their preface that the book is "written primarily for the usual college course in human physiology, a statement which indicates that Canada can give us points in general education they also had "in mind its use as a text in nursing schools as well as in the physiological instruction of dental and agricultural students Students of medicine may find it serviceable in gaining a bird eye view of the subject before reading more detailed texts' Its scope in Great Britain should be much the same, in fact we should be happy if nurses and dental students had knowledge to so good a standard The book is a good job well done, and it can be heartily recommended

STATISTICAL METHODS IN MEDICINE

The Treatment of Clinical and Laboratory Data An Introduction to Statistical Ideas and Methods for Medical and Dental Workers By Donald Mainland M B, Ch B D Sc (Pp 340, 23 figures 15s net) Edinburgh and London Oliver and Boyd 1938

Professor D Mainland's book, *The Treatment of Clinical and Laboratory Data*, like Dr A Bradford Hill's recently published *Principles of Medical Statistics* is intended to provide first aid to medical men and laboratory workers in the use of statistical methods Dr Hill's book covered a rather wider field Professor Mainland's book gives more detail, particularly with regard to the handling of small samples Practically all the methods of statistical analysis likely to be of use to a medical worker not primarily concerned with epidemiological or official vital statistics are lucidly explained or illustrated The methods of Professor R A Fisher rightly receive particular attention, indeed the book is in a sense, an introduction to that author's treatise, issued by the same publisher This, however, is not to say that Professor Mainland is a mere compiler At several places—for example, pp 131 *et seq* pp 283 *et seq* and in his discussion of the interpretations of particular results—criticisms and suggestions put forward have been the product of medical knowledge and experience well used We think the author's treatment sound We should, perhaps, have been inclined to stress even more than he does the limitations of usefulness of coefficients of correlation Galton's original idea of regression retains all its value, but few statisticians now attach much importance to coefficients of correlation 'in the air, dissociated from the notion of regression We have no doubt that any medical man or laboratory worker who reads this book carefully will avoid pitfalls in which many writers are entangled almost daily

Notes on Books

The *Year Book of Neurology Psychiatry and Endocrinology* continues its useful career In the volume for 1937 attention is called to the tendency to rely on the development of electric and acoustic technique to investigate the functions or dysfunctions of the nervous system though the editor regrets the lack of synthesis of the vast research material which leaves many clinical syndromes unexplained There is a full discussion of the treatment of schizophrenia by insulin and of the therapeutic value of oestrogenic hormones It is emphasized that the need for clinical discrimination in endocrinology is still urgent Towards that end this volume should certainly be helpful It is published in this country by H K Lewis and Co at 12s 6d (postage 6d)

GORDON W ALLPORT'S *Personality A Psychological Interpretation* is published by Constable and Company at 16s In this highly technical and not very readable book the author attempts to study the laws which determine the mental constitution of the individual in contrast to the general laws of mental process supposedly applicable to most or all individuals He defines personality as the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment In order to understand personality the units of analysis must not be too simple and the author lays stress on what he calls traits The book is divided into five parts The first is historical and discusses the various methods of approach The second discusses the origins growth and maturation of personality the third and fourth the units of structure and analysis of personality respectively and the fifth the understanding of personality

Mental Deficiency by J DUNCAN is published by C A Watts and Company as No 10 of their Changing World Library and costs half a crown It is a pleasantly written essay which covers the ground from the educational rather than the medical point of view since the author is headmaster of a special school He lays stress on the importance of the backward group in the population and points out that both these and the feeble minded may learn though they can only be taught with difficulty and that modern methods of education may not be best suited to their needs He regards this group as potentially of great danger to the community and thinks that the only solution lies in selective breeding the spread of birth control knowledge among the lower classes in the true sense of the word and some measure of State control over those who have produced mentally defective children

Gestalt psychology has won many adherents amongst those interested in both normal and abnormal mental processes That the mind deals with units of fairly elaborate complexity rather than with conglomerations of sense perceptions seems a reasonable conception and is certainly useful in helping to explain many phenomena which obtrude themselves on our attention in the study of mental mechanisms *A Source Book of Gestalt Psychology* by WILLIS D ELLIS (Kegan Paul 21s) is a well arranged series of abstracts in English of the papers published chiefly in German between 1912 and 1929 on which the theory has been built up The reader may discover from these that Gestalt psychology is not merely an armchair construction of what perhaps might happen—and if it did how convenient it would be for our understanding of the mind—but that it is derived from a long series of controlled experiments both of animals and man The author has sought and has certainly largely succeeded in giving experimental respectability to his subject

The first edition of Dr C SEYFARTH'S little book *Der Arzte Knigge* on the duties responsibilities and behaviour of hospital residents was noticed in this column on October 26 1935 That a third edition has now been called for seems a proof of its usefulness The publisher is Georg Thieme of Leipzig price RM 4 80 plus 2% per cent abroad

Dr H E COX'S *Chemical Analysis of Foods* is a useful little laboratory manual which has proved its worth by the call for a second edition The new edition (J and A Churchill 21s) shows manifold signs of attentive revision and although there is no great increase in the bulk of its contents the new presentation is such as to give the book the stamp of being fully up to date The matter is condensed to the extent necessary for its usefulness as a laboratory manual but is nevertheless adequately descriptive Apart from the requirements of unusual investigations this book will provide a working scheme for the chemical analyses of all ordinary foods

Preparations and Appliances

A MASTOID BRIDGE FORCEPS

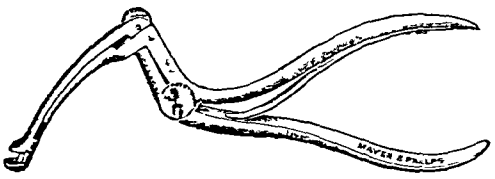
Mr T G WILSON M B F R C S I (Dublin) writes

It has often occurred to me while performing the radical mastoid operation that the final stages of removing the bridge would be much facilitated by the use of a suitable punch forceps The instrument makers catalogues illustrate several forceps which could be used for the purpose but none of them seemed to me quite satisfactory I therefore commissioned Messrs Maver and Phelps to make up a bridge forceps to my design as illustrated by the accompanying engraving Its principal features are two

(1) The angle of bite is greater than a right angle so that the lower jaw can more readily fit into the aditus

(2) The curved shank allows the action of cutting to be easily seen

The instrument is made on sound and therefore efficient mechanical principles The method of use is quite simple



The bridge is reduced to a thickness of about one-eighth inch or more in the case of children by the usual method It is then seized by the forceps and cut away with a slight rocking motion After this mallet and chisel are again resorted to but the use of the forceps will be found to have saved a considerable amount of time To junior surgeons with whom the facial nerve is still a bugbear as well as a landmark the added security given by the use of the forceps should prove a boon

OVARIAN HORMONES

The gynoestryl products (Roussel Laboratories Ltd 30 Cavendish Square W 1) include the following products (1) Gynoestryl tablets each of which contains 0 025 mg oestradiol (250 international units) (2) Benzo gynoestryl ampoules which contain *oestradiol benzoate in strengths of* 0 1 1 and 5 mg per ampoule Oestradiol benzoate 1 mg corresponds to 10 000 international units (3) Sedo gynoestryl ampoules which contain oestradiol 0 1 mg with sodium bromide and hyoscyamus extract

Ovarian hormones are finding increasing clinical uses The makers suggest a total dosage 1 to 2 mg. by mouth of oestradiol benzoate for treatment of ovarian hypofunction and about ten times this dose for treatment of severe ovarian deficiency

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY JULY 30 1938

THE PLYMOUTH MEETING

The pace set by the organizers of Annual Meetings has of recent years perceptibly quickened Each successor has determined not to be outdone by his predecessor—and even to outdo him So long as the desire to emulate does not provoke too much anxiety or strain, this competition in the production of excellence should be all to the good But perhaps the time has come when they may well ask themselves the difficult question, "Wherein does excellence lie?" Is it in the magnificence of the receptions, the number of the excursions the tonnage consumed of food and drink, the intensity of private and public hilarity? Before this question is examined further it must be said at once that Plymouth with the high example set it by Belfast, played to perfection the part of generous and charitable host The city took the B M A into the ordered routine of its domestic existence with such a friendly disregard of pomp and circumstance that for a short week the visitor felt himself indeed to be a Plymothian Each Annual Meeting has its own atmosphere, and the prevailing emotional tone of the Plymouth Meeting was one of domestic friendliness It was a family affair, and it was fittingly presided over by one who for years had been a family doctor, Dr Colin Lindsay It was a happy chance that at this moment, when the general practitioner is being assailed from all points of the compass, he should find himself so worthily represented in such high office by one who epitomizes in his own person those qualities of sincerity and integrity that are the hall-mark of the English doctor The need for such men is paramount

Dr Lindsay was ably and energetically seconded by those two hard-working members of any Annual Meeting team—the Honorary Local General Secretary Mr Cyril F Mayne, and his assistant Dr T T P Murphy We should like, too, to pay tribute to the gracious President of the Ladies' Section, Mrs Lindsay, and to all those who, working under her guidance arranged things so well for the wives and daughters of the menfolk These efforts were aided by the beautiful country round Plymouth the rivers and the moorland and the warm sunny weather that prevailed and were seconded by the kind attentions of the Civic and Naval authorities The scene was set for enjoyment We would not for one moment undervalue the importance of the social side of an Annual Meeting, nor even suggest that this was too heavily stressed at Plymouth But attention should be drawn to the fact that during recent years social events have tended to lure people from the Scientific Sections This is not to the good The excellence of an Annual Meeting must in the last resort reside in the debates conducted by the Representative Body and the discussions held at the Section meetings The latter, coinciding with the height of the social activities and coming towards the end of the meeting, inevitably suffer more than the former - The "representative mind" comes off decidedly worse than the Representative Body, which argues a lack of balance between the two

The generally poor attendance at the Scientific Sections was by no means a reflection on the standard of the papers read or of the discussions that followed them One of the most successful was the combined meeting of the Sections of Orthopaedics and Fractures and of Neurology and Psychological Medicine, when Professor Joseph S Barr drew attention to the significance of the prolapsed disk in the aetiology and treatment of sciatica and Professor H Olivecrona to the possibility of treating spasmodic torticollis by section of the cervical nerves The discussion on organotherapy held by the Section of Medicine attracted a good deal of attention, and in that on anxiety states in general and industrial medicine the remark of one speaker that it was important to "get hold of the children" drew from Dr T A Ross the apt retort that it was more important first of all to get hold of the medical student But the most stirring event was the description given by Mr R R Blewett of the medical and social changes that had taken place at St Day, a derelict mining area in Cornwall We would also mention the excellent films that were demonstrated on the three days the Scientific Sections met, those by Mr L O'Shaughnessy on surgery of the heart and by Dr C C Ungley on liver therapy and on polyneuritis being of special interest

The Annual Representative Meeting was notable for one event—the last appearance in an official capacity of Dr C O Hawthorne, who has decided no longer to seek election to the Council The warm reception that greeted him on the platform must have assured him of the affection and esteem in which he has been held for many years His gift of silvery speech and his constant upholding of principle when this was in danger of being overcome by expediency have for long been the admiration and instruction of those who listened to him In spite of Dr Hawthorne's

eloquent and logical opposition the Representative Body voted overwhelmingly in favour of the recommendation that a measure of recognition be accorded to chiropodists One of those who argued on behalf of this recommendation spoke with gratitude of the chiropodist who had "spotted' two cases of diabetes for him which perhaps rather begs the question What is a chiropodist' Apart from this the meeting was enlivened by a discussion on the activities of the Association in the field of propaganda and publicity and the Representatives went into committee so that the fullest freedom of speech could be allowed The champion of democratic principles Dr Murray of Banff made an eloquent attack on what he considered to be the unconstitutional action of the Council in setting in train a new line of policy without first of all consulting the Divisions But his indictment was more than matched by the masterly presentation of the case for' by the Chairman of Council who as a speaker goes from strength to strength His skill in debate coupled with the quick watchfulness of the Chairman of the Representative Body for any departure from the business in hand indeed made the platform appear at times too strong for those in the body of the meeting Nevertheless the Representative Body showed on more than one occasion that it had a lively sense of its responsibilities and was zealous on behalf of the rights of the general practitioner as could be seen in the modification it secured of paragraph 101 of the revised scheme for a General Medical Service for the Nation

The local and the national newspapers have always been generous in the attention they pay to the Annual Meetings of the Association, and it is not safe to make comparisons between this year and former years But the impression remains that printers ink has flowed more freely than before and that there has been more comment and more informed comment than previously This must be to the general advantage because the public in many respects is still lamentably ignorant of the aims of Medicine and the means it wishes to adopt to achieve them

THERAPEUTIC ABORTION AND THE LAW

The true physician s only desire is to do his best for his patient His problem is often to choose between two evils the possible ill effects of his treatment and the probable consequences if he does nothing The gynaecologist sees many pregnant women who if they go to term will probably suffer some harm This may be slight or so grave that it will almost certainly cause death In many of these cases he is convinced that an abortion is in the best interests of the patient His choice however is complicated by the knowledge that if he terminates pregnancy he will destroy a potential life and also that the law forbids abortion in some circumstances Many doctors have for a long time been anxious to know exactly what the law allowed them and did not allow them to do They found one answer only The Offences Against the Person Act 1861 Sect 58 said that a person who 'unlawfully' used an instrument with intent to procure the miscarriage of a woman committed a felony for which he could be punished with penal servitude for life They asked the meaning of 'unlawfully and were told that it had never been defined either by Parliament or by a judge but that the law almost certainly allowed the termination of pregnancy for the purpose of saving the mother s life When they discussed the subject among themselves they found wide variations of opinion on what the law was—apart from much wider variations of opinion on what the law ought to be They felt anxious and insecure and a strong movement grew up among them to have the law clarified

At the same time a number of lawyers who had paid special attention to the problem were aware that the law was vague but felt convinced that this very vagueness was a good thing They realized much better than the doctors the essence of the English legal system a man may do anything which is not expressly prohibited by law and where authority is lacking the law is written in the hearts of the people to be interpreted by the judges The undefined word unlawfully' allowed the authorities to give the medical profession whom they knew to be with very few exceptions not only responsible but conscientious a free hand to decide for themselves what was lawful in therapeutic abortion The lawyers were content in other words to assume that an abortion was carried out lawfully when a doctor performed it in good conscience after careful thought and observation and under proper conditions for the substantial benefit of the patient They felt that so long as the law refrained from saying what a doctor could do the question of what he could not do need not arise so long as he acted bona fide he could be left outside the sphere of criminal law and practice altogether and the police could devote their energies to detecting and prosecuting the people against whom the statute was directed—namely the professional abortionists lay or medical, about the unlawfulness of whose activities there was no possible doubt This attitude however did not allay the anxiety of medical men and

the situation was resolved last week in an English court of law

Mr Aleck Bourne has for some time been among the chief of those who have desired to know clearly where they stood under the law He is a leading obstetric surgeon with keen clinical and psychological insight He felt that in some cases, to do his best for his patient he must perform an abortion He also felt that the true interpretation of the law must allow abortion where it was in the best interests of the patient and he formed the resolution to take the first suitable opportunity of having the legal position made clear In this country a legal ruling can only be obtained in relation to a particular case, whether it be a civil action or a criminal prosecution He was therefore prepared to take the extreme course of risking his liberty, life's work, and reputation by submitting to a criminal prosecution in which the Crown would differ from him on the interpretation of the word 'unlawfully" As it happened, when the suitable occasion arose he was barred by a promise of secrecy from actively presenting himself as a sacrifice and it is understood that the Crown moved on information which he had not supplied A girl less than fifteen years of age was assaulted by some soldiers and raped under as revolting a set of circumstances as could be imagined She became pregnant and was taken to see Mr Bourne, who admitted her to St Mary's Hospital for observation He had a strong bias from the beginning in favour of an abortion but he did not perform it until he had satisfied himself, by tests and observation, that the girl would in all probability if she had gone to term, have suffered grave and lasting nervous damage which would have expressed itself in psychoneurotic and physical illness perhaps for the whole of her life Though he acted openly, he did not consult any of his colleagues, his reason being that in such cases he was accustomed to act as the 'second opinion" himself He was charged under Sect 58 of the Act of 1861 with unlawfully using an instrument with intent to cause miscarriage and the case turned on the interpretation for the first time of the word 'unlawfully"

The trial took place on July 18 and 19 at the Old Bailey before Mr Justice Macnaghten [1] and will long be remembered as one of the most remarkable that has ever taken place even in the Old Bailey The accused was treated throughout with admiration and respect his motives were regarded with what must have been almost unanimous approval It was less a criminal trial than a co-operative effort by judge, jury, counsel, and witnesses to create law out of strong but ill-defined feeling The foundation was laid by the judge after the Attorney-General, Sir Donald Somervell, K C had closed the Crown case he defined the word "unlawfully" by importing a phrase from the Infant Life Preservation Act 1929 That Act was passed to prevent the killing of a child in the short interval when it is capable of being born alive and therefore comes outside the law of abortion but has not yet acquired an existence independent of that of its mother and therefore cannot in law be murdered Sect 1 of that Act contains a proviso that no person shall be found guilty of the offence of child destruction unless it is proved that the act which caused the death of the child was not done in good faith for the purpose only of preserving the life of the mother The learned judge held that this proviso expressed what had always been the law in regard to abortion and was implicit in the word "unlawfully" of the 1861 Act He therefore ruled that the question for the jury would be "Has the prosecution proved to your satisfaction, beyond reasonable doubt, that the act which Mr Bourne admittedly did was not done in good faith for the purpose only of preserving the life of the mother?"

No one doubted Mr Bourne's good faith, but he himself admitted that he had not acted to save the girl from immediate death The next step in the case was therefore to determine the meaning of the phrase 'preserving the life of the mother" There was no doubt that the girl's health would almost certainly have been gravely injured In fact, the Attorney-General greatly clarified the case by admitting as much at the end of his closing speech He said, "I do not minimize the possible mental effects of which Mr Bourne and the other doctors spoke The question is whether those mental effects, grave as they are, justify under the law the termination of pregnancy" In answering that question the judge used words which will probably be quoted for a long time to come as a statement of the attitude which the law requires of the doctor who performs a therapeutic abortion He said, in effect, that no line can be drawn between danger to life and danger to health, that no doctor knows whether life is in danger until the patient is dead, and that if on reasonable grounds, based on adequate knowledge after consultation with colleagues, a doctor forms the opinion that the probable consequences of the continuance of pregnancy would make the woman a physical or a mental wreck then he is not only entitled, but it is his duty, to perform an abortion In saying this his Lordship was—most fortunately—saying that the law and the physician's duty are in harmony To preserve a woman's life he implied is not merely to save her from death, it is also to save

[1] *British Medical Journal* July 23 1938 pp 199–205

her from illness which would destroy so much of her life that it would hardly be worth living With this view the jury agreed as is shown by their verdict and it is now the declared law until it is corrected or modified by the Court of Criminal Appeal in some other case

The trial Rex v Bourne has therefore ventilated the whole subject of therapeutic abortion and produced a statement of the law which substantially allows the conscientious medical man to do what he has been doing already But the law hitherto vague has now been clarified and after the Ministry of Health s Inter-Departmental Committee on Abortion (the Birkett Committee) has issued its report it may be clarified still more

TREATMENT OF MALARIA

Methods for the treatment of malaria and particularly for personal prophylaxis still furnish a field for controversy as two recent *Bulletins of the Health Organization of the League of Nations* show [1] Despite the claims and hopes that have arisen the drug prophylaxis of malaria is still far from satisfactory It is true that plasmoquine in relatively large doses can exert a lethal action on sporozoites but in doses which may safely be continued for long periods its value is very slight neither can atebrin excepting in large doses nor quinine be considered true causal prophylactics since experimental evidence which is supported by practical experience shows that their action on sporozoites is doubtful The findings of the third report of the Malaria Commission published in June 1933 based upon experiments with *P vivax* therefore still stand Up to the present no drug is known which when taken in harmless doses during the period of infection will effectively destroy the causal organism of malaria (sporozoites) before they are able to continue their life cycle in the human host Nevertheless the regular use of either quinine or atebrin may be of value through the inhibiting effect these drugs exert upon the development of the asexual forms of the malaria parasite whereby clinical manifestations are damped down or suppressed For this purpose atebrin has not proved clearly superior to quinine and possibly may be more toxic Furthermore the harmlessness of quinine makes it a suitable drug for administration by subordinate personnel without constant medical supervision whereas such supervision is essential in the case of atebrin There therefore seems little ground for displacing the established daily dose of 5 grains of quinine where personal prophylaxis of malaria is practised The report concludes that in primary infections a mean daily dose of 15 grains of quinine may bring about the disappearance of trophozoites of benign tertian or quartan malaria on an average on the third day although relapses occur in a percentage of individuals which may be as high as 50 in the case of malignant tertian infections doses up to 30 grains daily may be necessary Quinine in the doses indicated exercises its parasiticidal activities on the young forms of *P vivax* and *P malariae* capable of producing gametocytes and also on fully developed gametocytes but on the fully developed gametocytes of *P falciparum* its action is only very slight Quinine therapy with the usual dose has no adverse effect on the patient s general condition and is generally free from depressive or toxic action if the period of administration is limited to the number of days strictly necessary nor is there any good reason for thinking that this treatment hinders the process of immunization Atebrin in daily doses of 0 3 gramme has a slightly more rapid action on trophozoites of *P vivax* and *P malariae* than quinine in the usual dose of 15 grains on the trophozoites of *P falciparum* differences between the strains of parasites prevent the drawing of uniform conclusions The parasiticidal action appears to continue for a longer period in that the phase of latency lasts rather longer after the end of treatment than with quinine The action on gametocytes is like that of quinine Unfortunately the yellow coloration of the skin is a disadvantage especially during prolonged prophylactic treatment and the drug may have other toxic effects The action of plasmoquine on the trophozoites of *P vivax* and *P malariae* is slight and on those of *P falciparum* almost *nil* though on the gametocytes its effect is marked There is therefore no advantage in using plasmoquine alone to combat the symptoms of an acute attack in any of the forms of malaria The simultaneous administration of atebrin and plasmoquine appears to aggravate the toxicity of each and is not to be advised The consecutive treatment with atebrin first followed by plasmoquine has no appreciable influence on the clinical manifestations or the proportion of trophozoites in the blood but the method has the advantage of decreasing and devitalizing the gametocytes especially those of *P falciparum* moreover from the clinical point of view it diminishes substantially the number of relapses The combined use of quinine with plasmoquine causes less frequent and less intense toxic symptoms than that of atebrin with plasmoquine There is therefore no particular contraindication to the simultaneous use of quinine and plasmoquine and the method has the advantage that the duration of treatment is shortened It is stated that the association of quinine with plasmoquine represents one of the most efficacious methods of treating benign tertian and quartan malaria Average doses of quinine and plasmoquine greatly reduce (perhaps more than any other method) the number of relapses in benign tertian and in some cases also in malignant tertian

[1] *Bull Hlth Org L o N* 1937 6 683 895

CALCIUM AND THE FOETUS

The quantity of calcium administered annually to pregnant women is so enormous as to be only computed in terms of tonnage for it has become customary to prescribe this mineral almost as a routine during pregnancy That this is justified has been proved in innumerable researches and it is certain that it effectively prevents the almost universal drop in serum calcium in the later months of gestation The effect on the foetus

has however, been generally ignored and Finola and his colleagues[1] have now drawn attention to possible dangers in this connexion In an exhaustive investigation they found that the normal foetal excess of serum calcium and inorganic phosphorus was increased by the administration of these minerals during pregnancy and that there was moreover definite evidence of increased bone density in the majority of infants born of mothers so treated The significance of this latter finding leaps to the eye for it is obvious that excessive osteosclerosis in the foetal skull might restrict moulding In the great majority of cases this is of little importance, but it is conceivable that it might be crucial in a "tight fit" disproportionate labour That this does not occur more often is perhaps due to the fact that calcium is usually prescribed in a practically unassimilable form, but where it is given scientifically (as dicalcium phosphate combined witht vitamin D) this possible cause of dystocia should be borne in mind and the drug supplied to women with undersized pelves only where indicated by an abnormally low calcium content

RESPIRATORY MOVEMENTS IN COLLAPSED LUNGS

The movements of the lung when collapsed by an artificial pneumothorax have been studied radiologically by Andrew L Banyai[2] In each patient radiographs were taken at the end of inspiration and expiration, the margin of the collapsed lung was outlined, and the pulmonary area was measured by means of a planimeter The radiological-respiratory ratio—that is a hundred times the radiological area at maximum expiration divided by the radiological area at maximum inspiration—was then calculated This ratio is inversely proportional to the extent of the respiratory excursion In collapsed lungs it varied from 54 to 99, indicating that in some patients respiratory movement persists in such degree that the radiological area of the lung in inspiration is almost twice as large as that in expiration, whereas in others the respiratory excursions of the treated lung are almost *nil* Banyai found that so long as the intrapleural pressure remained negative the movements of the affected lung were determined mainly by the stage of deflation and the movements of the overlying thorax, he indicates how both these factors are to be measured Changes in this relationship may be caused by various factors such as the extent and type of the tuberculous lesion and particularly the presence or absence of extensive fibrosis or consolidation pleural effusion extensive adhesions contraction of the thorax, the condition of the respiratory muscles, and the extent and type of disease in the contralateral lung The radiological-respiratory ratio was between 50 and 69 in half the patients investigated, between 70 and 89 in 45 per cent, and between 90 and 99 in only 5 per cent A comparison with a control group of normal persons showed that a respiratory ratio between 90 and 99 was not found in healthy individuals, on the other hand the proportion of respiratory ratios between 50 and 59, indicating marked respiratory excursions was four times greater in the pneumothorax group than in the controls The author emphasizes the fact that the conclusions based on investigation of the movement of the entire collapsed lung are not applicable to the diseased part of that lung The movement of the affected area was less than that of the uninvolved area in 63 per cent of cases, equal to it in 25 per cent, and more than that of the unaffected lung area in the remaining 12 per cent When the radiological respiratory ratios derived from the measurement of forced respirations are reduced proportionately to a level corresponding to that of quiet respiration, it becomes apparent that the respiratory excursions of a diseased area can be substantially restricted by an artificial pneumothorax Marked limitation of movement followed the induction of a pneumothorax in 19 5 per cent of cases, and these patients had respiratory ratios between 90 and 99, which do not exist in normal persons Further comparison with healthy adults showed that the proportion of respiratory ratios between 80 and 89, indicating limited movement, was more than three times greater in the group in which the movements of the diseased area in a collapsed lung were measured than in the controls Occasionally, however a pneumothorax seems to increase rather than decrease the respiratory excursions of the diseased lung Finally, comparison of the respiratory excursions of the lung before and during treatment by artificial pneumothorax revealed that the movement of the diseased area of the treated lung was less than that of the entire lung before treatment in 54 5 per cent, the movement of the two areas was much the same in 18 per cent, and the extent of the movements of the diseased area during treatment was greater than that of the entire lung before treatment in 27 3 per cent

[1] *Amer J Obstet Gynec* 1937 34 955
[2] *Amer Rev Tubere* 1937, 36 740

"THE SIGN OF THE CLAVICLE"

As far back as 1927 Dr G C Higoumenakis[1] of the staff of the Evanghelismos Hospital (Athens) and head of the skin and venereal diseases departments drew attention to the fact that in congenital syphilis the sternal end of the clavicle is sometimes enlarged, and since then he has come to the conclusion that it is one of the most certain and most common stigmata of the disease and is met with neither in healthy persons nor in those with acquired syphilis The swelling is due to a hyperostosis resulting from a syphilitic osteitis and there are three reasons why it should occur at this site The first is anatomical The inner third of the clavicle is derived from a secondary centre which appears from the eighteenth to the twentieth year whereas the acromial end and middle are ossified each from a centre which appears from the thirtieth to the thirty-fifth day of intra-uterine life Also, the ossification of the clavicle takes place directly from connective tissue and unlike the other long bones, without preformed cartilage Secondly, the *Sp pallida* has a predilection for connective and lymphatic tissue Thirdly, by reason of its function the sternal end of the clavicle—particularly the right—is irritated by

[1] *Ann Derm Syph* Paris 1937, 8, 939

continued shocks due to the movement of the arm and being membranous bone like the flat bones of the skull is a convenient place for the *Sp pallida* to settle in When the patient begins to use the arms the extra stress stirs up the spirochaetes and an osteitis is set up (In this connexion it is interesting to note that the author has demonstrated thirteen cases in which the left clavicle has been involved in left handed people) In support of his thesis Dr Higoumenakis quotes a number of other observers including French American and Greek who have also noted the sign and claim to have proved its syphilitic import The ages of twenty patients who showed the clavicular sign varied from 15 to 56 no very young children are included The Wassermann reaction was negative in eleven cases positive in eight and not stated in one Fourteen of these patients seem to have been fairly typical cases of congenital syphilis and one was apparently a case of third generation syphilis but the diagnosis of hereditary syphilis is not altogether convincing in the other five The author claims that the value of the ' sign of the clavicle in the diagnosis of congenital syphilis is greater than that of other stigmata on account of its frequency and the ease with which it is demonstrated It would be interesting to know in what percentage of cases of undoubted congenital syphilis this sign occurs since its existence does not seem to have been recognized by many eminent syphilologists and also whether it ever occurs in acquired syphilis or in other conditions A more detailed description of the pathological and radiological findings would be invaluable including an examination of sections for the *Sp pallida* In the meantime syphilologists would do well to keep a watchful eye for this sign and maintain an open mind with regard to its frequency and diagnostic significance

OPHTHALMOLOGICAL SOCIETY OF AUSTRALIA (B M A)

In this country we are accustomed to the formation and existence of independent clinical societies which are the meeting grounds of groups of local practitioners or of wider groups of practitioners who are engaged in some form of special medical work Our Association was originally a combination of the former and each Annual Meeting provides the latter to some degree in the Scientific Sections Nevertheless independent societies still exist because of our liking for old traditions There are weaknesses inherent in the small independent societies for they can rarely unite for common action In Australia the members of the B M A have evolved a more excellent way The ophthalmologists of the Commonwealth felt they needed a society in which those practising this branch of medicine could unite for the advancement of their specialty by meetings publications libraries and museums research work and the provision of prizes for research work and by postgraduate lectures Instead of starting an independent body they have formed such a society within the Association— The Ophthalmological Society of Australia (British Medical Association) Those eligible for ordinary membership are all those members of the B M A who specialize in ophthalmology and whose qualifications are approved by the Council of the Society Its rules show that it is completely autonomous yet it is part of the Association The first president is Sir James Barrett (who was President of the Association in 1935) with Dr James Flynn as vice president Dr Darcy Williams honorary secretary and Dr Leonard Mitchell honorary treasurer We congratulate our Australian colleagues upon their achievement and wish the new society every success An article in the *Medical Journal of Australia* of April 9 ends thus We welcome an intramural society with the hope that its success may induce some of the existing extramural bodies to become part and parcel of the British Medical Association That is a hope that might be fulfilled nearer home

THROMBOCYTOPENIC PURPURA FROM SEDORMID

An enormous number of new synthetic drugs have been introduced during the present century and many of them have become firmly established in clinical use In recent years there have been some notorious proofs of the fact that it takes a long time to discover all the potentialities of a new drug The occasional appearance of toxic jaundice after cinchophen and of agranulocytosis after amidopyrin are cases which illustrate this point Thrombocytopenic purpura has been known for some time to be caused by a variety of therapeutic agents—for example x rays radium benzene arsphenamine and quinine Five new cases of thrombocytic purpura induced by sedormid have been reported recently [1] This effect is rather surprising because sedormid (allyl isopropyl acetyl carbamide) does not contain a benzene ring and it is aromatic compounds which most often lead to undesirable changes in the blood Hoffman and his colleagues[1] suggest that the carbamide radical may be the active toxic agent Thrombocytopenic purpura after sedormid is evidently a very uncommon side effect of this drug since only about a dozen cases have been reported in the literature Its occurrence is however of interest as providing a new example of the curious idiosyncrasies that are being brought to light by the increasing use of a wide variety of synthetic drugs

MEDICAL RESEARCH COUNCIL

By an Order of the Committee of Privy Council made after consultation with the Medical Research Council and with the President of the Royal Society C R Harington, Ph D F R S (professor of pathological chemistry in the University of London) and W W C Topley M D F R C P F R S (professor of bacteriology and immunology in the University of London) are appointed members of the Medical Research Council in succession to Professor A J Clark M D F R C P F R S and Sir John Ledingham D Sc F R C P F R S who retire in rotation on September 30

1 *J Amer med Ass* 1938 110 725
Ibid 726

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

FRACTURES IN THE REGION OF THE ELBOW-JOINT

BY

S L HIGGS, F R C S

Fractures involving the elbow are common, especially in children and their treatment is often a matter of difficulty and anxiety Although painful at the time, there may be no very obvious deformity or alarming incapacity, as in the case of a broken leg, and parents are apt to regard treatment as a simple matter and blame the doctor if the result does not come up to expectations

Reduction may be difficult or impossible without surgical intervention Restoration of movement may be slow or imperfect because of the peculiar liability of the elbow region to form excess of bone and undergo fibrosis around the joint Deformity through interference with growth may be unavoidable At least some of these dangers and difficulties should be pointed out to those concerned at the beginning rather than wait until they arise Efficient treatment demands x ray examination, repeated as often as necessary probably a general anaesthetic and adequate nursing and supervision, at any rate for a day or two Where unhappy results occur it is usually found that in order to save trouble or expense some of these measures have been neglected Failure to provide the best treatment must be made the responsibility of the patient or parents as the case may be, and not of the doctor

Supracondylar Fractures

A fall on to the extended arm in an adult is likely to cause a dislocation of the elbow but in a child the weakest point is just above the lower epiphysis of the humerus and this common type of injury will produce a supracondylar fracture The most usual age is between 8 and 12 years The condition is easily recognized The arm hangs straight or is supported with the other hand Palpation may help very little because of the swelling but the slight backward displacement of the elbow combined with the unnatural side to side movement makes the diagnosis clear enough Movements of the finger and the hand should be tested in order to detect possible nerve injury

First aid consists in supporting the elbow in the position of deformity with a thick layer of wool and bandage perhaps combined with a light splint No attempt whatever should be made to bend up the elbow or to reduce the fracture until preparations have been made Although the longer the fracture is left the more difficult reduction becomes this applies to days and not to hours There is therefore time enough to allow the child to get over the immediate effects of the accident to obtain some x-ray films of both elbows for comparison and to allow a reasonable period to elapse since the last meal before giving a full general anaesthetic Gas is not enough, and local anaesthetics are unsuitable in the case of children

REDUCTION

Reduction is accomplished in the following manner An assistant steadies the upper arm while firm traction is applied to the pronated forearm with the elbow in extension While still maintaining the pull on the forearm the elbow is flexed gradually, and at the same time forward pressure is applied to the olecranon and lower end of the humerus by the thumb of the operator's other hand The sensation of reduction should be experienced If it is not, the lower fragment has probably got caught behind the shaft, and further flexion must not be pressed When reduction takes place the forward position is maintained by thumb pressure, while any side displacement is checked and corrected The elbow is then brought up into full but not forced flexion, in which position the fracture is stable The forearm should be pronated to relax the muscles, which otherwise tend to rotate the lower fragment

How should this position be maintained with security and safety? A collar-and-cuff sling supports the wrist from below the neck, but may cause twisting of the fracture and subsequent loss of the 'carrying angle' Strapping which encircles the flexed arm may cause danger from pressure, and must not be employed A satisfactory method is to apply a wet plaster-of-Paris "slab," made from a four-inch bandage, direct to the back of the elbow from the top of the upper arm to the palm of the hand At no point does it go more than half-way round the limb, and it cannot constrict It is closely moulded to the skin, and so gives firm support It is held in position by a few turns of bandage around the forearm and upper arm, but nothing whatever encircles the elbow itself The bend of the elbow is therefore uncovered and free for inspection When set the whole is supported in a sling Without delay an x ray examination should be made to check the position If this is unsatisfactory the arm must be dropped again into semi extension until a further attempt is made The child should remain in bed for twenty-four hours at least with the arm resting on a pillow and a constant watch should be kept for any disturbance of the circulation The signs of this are pain, congestion, and numbness of the fingers and weakness or loss of voluntary movements These are the danger signals of beginning ischaemia The fracture itself becomes a matter of secondary importance All pressure in the antecubital region must immediately be relieved by removing everything from the limb and reducing the flexion of the elbow It should be remembered that it is not as a rule the swelling and flexed position alone which cause pressure, but flexion in the presence of an unreduced fracture Hence the importance of obtaining x ray evidence of reduction before resting content

AFTER-TREATMENT

After-treatment consists in maintaining fixation until union of the fracture is firm This usually takes four weeks At the end of this time the plaster splint is removed and a collar-and-cuff sling substituted In a few days by gradually lengthening the sling, the elbow may be let down to a right angle, and then an ordinary sling can be substituted Active movements are encouraged and a careful watch kept for any tendency for the range of flexion to become diminished This may indicate the occurrence of myositis ossificans which would demand a further period of rest Radiographs will show this

The last stage before full movement is restored may take many months The parents must be made to understand it

massage vigorous stretching or manipulation of the joint would not only retard recovery but probably lead to still further stiffness In certain cases some treatment from a reliable masseuse who will help to restore the child's confidence but confine herself to heat and gentle active movements and exercises may help the situation and prevent the parents from seeking unskilled advice

Fractures of the Condyles

Injuries which cause either abduction or adduction strains of the elbow may lead to fractures of either the outer or the inner side of the lower end of the humerus They occur most commonly in children because of the weakness associated with the multiple centres of ossification For the accurate interpretation of radiographs a knowledge of these ossific centres and their appearance at different ages is necessary Mistakes however may be avoided if exactly corresponding films are taken of the uninjured and the injured elbow Careful comparison will disclose an abnormality and the error of mistaking a separate bony centre for a fracture is avoided It must be remembered that the lower end of the humerus in early childhood is largely cartilaginous and that a torn off epicondyle may be much larger than the x ray appearance suggests

INTERNAL CONDYLE

Forcible abduction of the elbow joint at any age up to 16 may cause avulsion of this part of the bone through a pull exerted by the attached flexor group of forearm muscles The importance of the injury lies in the close proximity of the ulnar nerve which may be damaged at the time or become the seat of delayed neuritis in after years Exact diagnosis of the injury is not always easy without an *x* ray examination but if displacement has occurred a movable lump can be felt below and in front of the normal situation of the epicondyle and there is lateral instability of the joint with a great deal of bruising Nerve pressure symptoms must be sought Treatment depends upon the degree of the injury

1 *Fractures without displacement* can be treated with a collar and cuff sling for a fortnight and afterwards the resumption of active use

2 *Fractures with downward displacement* are best treated by open operation The steps of this consist of first a dissecting free of the ulnar nerve which is often tightly stretched across the broken surfaces then reposition of the condyle and attached muscles fixing them in place by a few catgut stitches or a beef bone peg and lastly the transposition of the ulnar nerve to a muscle bed in front of the condyle to make sure that it will escape a traumatic neuritis later on The arm is fixed in flexion by means of a posterior plaster splint for three weeks and then active movements are begun If for any reason surgical treatment is impossible a fair result as regards function follows treatment by simply keeping the elbow flexed for three weeks The condyle will not unite however and some lateral instability of the joint will persist together with a variable degree of cubitus varus deformity Furthermore there is the risk of ulnar nerve irritation from friction behind the irregular condyle

3 *Fracture with Displacement of Condyle into Joint*—Although by manipulative methods it has been found possible to extricate the condyle yet in almost all cases operative treatment is necessary The ulnar nerve is often affected from the beginning and this may demand exploration The condyle is fixed back in position and the freed nerve transposed to the front

EXTERNAL CONDYLE

Fractures of the external condyle usually involve a part of the articular portion of the humerus and are not confined to the epicondyle itself In children particularly the large fragment may carry the whole of the capitellum and even part of the trochlear surface For purposes of treatment there are two varieties first fractures without displacement which should be dealt with on the lines of a supracondylar fracture secondly those with displacement In the latter the broken off portion is pulled out of the joint and drawn downwards by the muscles and operative treatment is imperative This may not prove a very easy matter as the fragment is often rotated and at a distance from the joint Some patience may be necessary to make out exactly how to fit it back without separating its muscle attachments When in place it may be secured by a catgut stitch or by a small beef bone peg The elbow is held at a right angle with the forearm supinated and the wrist a little dorsiflexed by means of a posterior plaster slab and bandage This is retained for three weeks before starting gentle active movements No physical treatment is required

Fractures of Head of Radius

A point to remember is that a supposedly sprained elbow may often contain a fractured radial head It is usually produced by a fall on to the hand There are none of the signs of gross fracture Pain in the elbow on twisting the wrist is suggestive Examination with the thumb over the radio humeral joint while rotating the forearm with the other hand will reveal localized tenderness limitation of movement and often irregularity of the head of the bone X ray examination will show the type of fracture and determine the line of treatment

1 *A crack with little or no displacement* should be treated by fixing the elbow in full flexion with the arm in supination This position is most easily maintained by a very light posterior plaster splint supported by a collar and cuff sling It should be retained for a month after which a sling should be worn for a further week Exercises and active movements are to be encouraged but movements especially extension are slow to return

2 *Fractures of a segment with displacement* do very badly with conservative treatment Pain and stiffness persist and traumatic arthritis develops later in the elbow-joint The broken off fragment should be removed by operation without delay The radio humeral joint is approached through a lateral incision which passes just behind and below the external epicondyle The muscles are raised for a short distance from their origin and the capsule of the joint incised The joint will be full of blood and when this has been cleared away the damage can be inspected The broken segment and any small fragments are removed as gently as possible leaving the standing portion of the head if this is undamaged Sometimes the articular cartilage of the adjoining capitellum is broken and rough It should be made smooth with a knife and a sharp spoon The capsule is closed and the muscles are replaced with a few interrupted catgut sutures and the skin with interrupted stitches The exposure and work inside the joint are carried out with bleeding controlled by an Esmarch bandage but in no circumstances should this be left on for more than half an hour

3 *Comminuted fractures of the radial head* demand surgical treatment The whole of the head should be removed together with any loose fragments After partial or complete excision of the radial head the arm is supported at a right angle by means of a thick layer of wool

and a firm bandage Rotation movements of the forearm are encouraged from the start, and flexion and extension of the elbow after a fortnight

Fractures of Olecranon

In these cases the question to be decided is whether or not to advise operation The age and occupation of the patient, which arm is injured, and the degree of comminution or separation of the fracture must all be taken into consideration The pull of the triceps and consequent separation cannot be efficiently overcome by any method of splinting, not even in full extension with strapping and pads Bony union will not be secured, but nevertheless a remarkably useful arm may result from a fibrous union with separation of the fragments

In elderly patients who are not required to do hard manual work the best course is to support the arm in a sling at a right angle and encourage active use from the beginning In all other cases operative treatment is the method of choice It should be carried out as soon as the skin condition is surgically satisfactory Only a few points of technique need be mentioned The patient lies prone with the arm stretched out from the side and with the front of the elbow resting on a flat sandbag An Esmarch bandage is used for the first part of the operation The incision should be a curved one, passing to the inner side of the point of the elbow The resulting scar is not in an exposed position and is hardly visible—an important point in women patients Aluminium-bronze wire, made of many strands and flexible for tying, or two strands of strong fishing-gut, will serve to hold the fragments together Silver wire is quite unsuitable The wire should lie within the bone, only emerging at the sides of the lower fragment, to get a grip on the cortex, and deep in the triceps insertion where the knot is tied A flexed post operative position of the elbow is desirable, but the amount of flexion will depend on the security of the fragments This can be tested before sewing up the wound A posterior plaster slab outside the dressings aids fixation and comfort In the average case active movements may be started in three weeks

Nova et Vetera

BICENTENARY OF BOERHAAVE'S DEATH

Friday September 23, 1938, will be the two hundredth anniversary of the death of Herman Boerhaave, the leading physician of his age At Leyden where he practised and died the Nederlandsche Maatschappij tot bevordering der Geneeskunst, in association with other learned bodies in Holland, will commemorate the occasion Dutch physicians and colleagues from other countries have been invited to pay homage to Boerhaave and a commemorative volume is to be prepared, which besides the addresses given on September 23, will include tributes from foreign physicians, botanists and chemists At the end of the ceremony a wreath will be laid before the statue of Boerhaave and visits will be paid to the church where he is buried to the old wards of the former St Cecilia Hospital where he taught clinical medicine, and to his country seat Poelgeest near Leyden The following day has been set apart for an excursion to the village of Voorhout where Boerhaave was born on December 31 1668 and thence to Harderwijk, the ancient little town near the Zuyder Zee, where formerly stood a university in which Boerhaave graduated M D on July 15, 1693 The arrangements are in the hands of a committee headed by Dr L C Kersbergen of Haarlem, whose office address is Keizersgracht 327, Amsterdam

Before turning to the study of medicine Boerhaave took his degree in philosophy at Leyden in 1689, in 1701 he was appointed lecturer on the institutes of medicine at Leyden and in 1709 professor of botany and medicine In 1714 he was appointed rector of the university and professor of practical medicine, and four years later professor of chemistry In 1728 he was elected into the French Academy of Sciences, and in 1730 the Royal Society of London made him a Fellow "His genius so raised the fame of the University of Leyden, especially as a school of medicine, that it became the resort of strangers from every part of Europe"

BENJAMIN TARNOWSKY, 1838-1906

Professor Benjamin Tarnowsky, the first Russian syphilologist, was born on July 9, 1838, in Poltava After medical education at Moscow, where he qualified in 1859, he went to Paris, where he studied syphilology and urology under Ricord On his return to Russia he settled in St Petersburg where he became attached to the Kalinkine Female Lock Hospital In 1863 he published his lectures on the diagnosis of syphilis in women and children, the first Russian manual on venereal diseases In 1868 he was appointed to the Military Medical Academy of St Petersburg where he lectured to young soldiers on the dangers of exposure to venereal disease, and was made assistant professor of syphilology in the medical faculty, becoming full professor three years later He also founded a school for the special education of midwives in syphilology In 1885 he founded a society of dermatology and syphilology which was the first society of the kind not only in Russia but also in the world, and served as its president for many years In addition to numerous original articles on various aspects of venereal disease most of which he published in the *Archiv für Dermatologie und Syphilis* Tarnowsky translated Lancereaux's monograph on syphilis His work met with wide recognition both at home and abroad The Russian Government conferred on him various distinctions, and he was elected honorary member of numerous Russian and foreign medical societies Throughout his married life he received valuable help from his wife Dr Pauline Tarnowsky, who was one of the first medical women in Russia and was well known for her work on psychiatry and craniology His death took place on May 17, 1906

HEINRICH MEIBOM, 1638-1700

From the stately days of the seventeenth century to recall into the hurried atmosphere of modern specialization the name of Meibomius, the tercentenary of whose birth occurred on June 29, engenders feelings of envy and melancholy regret Though he has found a narrow memorial in the Meibomian glands of the eyelids which he described so accurately in 1666 (De vasis palpebrarum novis, epistola) —these had previously been noticed by Giulio Casserio (1561-1616)—through the very act of eponymous commemoration however pious, we tend to drift away from the man behind the name Like so many of his contemporaries he was indeed a child of Apollo god of culture, poetry, rhetoric and healing While still a medical student (he became M D at Angers in 1663) he was appointed to and in 1664 took up the professorship of medicine in the University of Helmstedt Fourteen years later he accepted the additional chairs of history and of poetry He further showed his versatility by straying into the pleasant fields of archaeology, philology and philosophy and all his life he was an insatiate traveller His father, Johann Heinrich Meibom is a familiar figure in medical history, but his son, Brandanus, also a physician is a comparative stranger

A PERSONAL EXPERIENCE OF TETANUS

We print below an abridged account of a personal experience by TREVOR H KNIGHTS M B Ch B N Z of the Baptist Mission Hospital Yakusu Belgian Congo It has been communicated to the *Journal* by Dr C C Chesterman O B E medical officer and secretary Baptist Missionary Society 19 Furnival Street London E C

Source of the Infection

In November 1937 a native patient operated on in the Yakusu Hospital for a large hydrocele suddenly developed trismus and died forty eight hours after the onset of symptoms There are no horses or cattle in the region and tetanus has always been considered as exceedingly rare or non existent The source of the infection remained obscure but thanks to the help of Professor Geoffrey Hadfield M D F R C P of St Bartholomew s Hospital cultures have since been made of a large variety of materials from the hospital and have resulted in a growth of *Cl tetani* of slightly diminished virulence being obtained from the sweepings of the theatre floor Whether these came from or were the source of the original native infection is unknown but precautions have now been taken to prevent soiling of the theatre floor by the feet of those whose duty it is to enter it

Two months later January 19 1938 Dr Knights interrupted his morning list of operations between the clean and septic cases and removed with the help of his native dresser a couple of irritable pigmented moles one from his left arm and the other from his right forearm Novocain 2 per cent was used and the wounds were dressed and strapped with elastoplast no catgut was used Both wounds were subsequently irritable and neither healed by first intention

Onset and a Canoe Trip

Dr Knights writes

On the twelfth day after the operation January 31 1938 away on a bush journey I had a headache and slight dysphagia Next day the dysphagia had gone but I had an irresistible desire to yawn without the momentary relief from weariness which usually follows this exercise My face felt tied up but I failed to detect risus sardonicus in the mirror and dismissed it as tetanophobia and cycled fifteen miles to inspect a dispensary

At 7 a m next morning I set out on a similar errand but felt tired after the twenty-eight-mile non stop ride Lying down on the hard table of the rest house I took a drink and suddenly my jaws went into spasm Hurriedly altering notes I had written to various native chiefs and colleagues about my future plans I completed the inspection of the dispensary had a short sleep on the table and changed my clothes sodden with perspiration at the unsuccessful efforts to take a meal and rode back twenty eight miles through a tropical downpour to the river bank

While waiting for paddlers for the canoe I turned up Tidy and found I had probably four days to live Returning later to find my messenger still propping up the doorway I remonstrated a little angrily when suddenly my laryngeal muscles went into spasm and the resulting shriek sent the native off at the double

At last with no doubts left in my mind I began the long two-day canoe trip up to Yakusu taking only a few drugs and papers leaving my other kit as never wanting it again I lay on a deck chair covered with a camp bed mattress in an open canoe and as evening fell found that my back was stiffening so that at midnight I was very glad to be lifted out on to another rest house table just as a storm was brewing I passed the remainder of the night fitfully dozing amid the snores of paddlers the thunder and the noise of the rain on the leaf roof In the blackness of early morning I was assisted down through the elephant grass to the beach and we got off once more poling and paddling past the flickering lights of the fires in passing canoes The shimmer over the water gave me a headache but beyond an aspirin I took no drugs as I wanted to keep my head clear having several reports to make and money matters to arrange

The entry in my personally made case notes at this time was Stiffness of jaws still more marked in moving spasm Neck still remains free of stiffness which is noted across back Eating an agony and brings on free perspiration Spasm of left arm with hand in accoucheur s position Spasm of body legs arms and across chest

At 2 p m we drew alongside the Mission motor boat in which my colleague Dr Browne had responded to an urgent forest call that morning and to which he was due to return at dusk A native engineer took matters in hand and insisted on putting me on board and taking me up to Yakusu but though physically easier lying on the cane bunk I was tortured with the thought that I with so little chance of survival had possibly delayed somebody else with a less er complaint

Twenty eight hours after setting out on this trip which I felt was the last in my life I was once more living on a decent bed The only serum we had 6 000 units was injected by the nurse as an intramuscular barrage and a cyclist sent off to Stanleyville for more At 5 a m next morning Dr Browne arrived in the motor boat which had returned to fetch him Later I had 65 000 units A T S (non concentrated variety) intramuscularly

Horrors of Opisthotonos

That night I woke after a few hours sleep with the feeling that something was about to happen It was and did! Suddenly a great hand seemed to take me across the chest rendering respiration impossible Another two such hands forced my head backwards towards my heels and my heels towards my neck while my whole body poured perspiration I felt some of the dorsal musculature give way with a tearing agony and this made the pain worse at the slightest movement

By the tenth day from the onset I was thoroughly worn out and began to have thoughts of turning in the struggle even requesting two grains of morphine when my colleagues saw that I was in unbearable agony By this time I was making vocal protestation which relieved my feelings each time I felt the drumming pulse and tightening compression of my chest muscles

Then came the greatest contraction of all when I am told my pulse became imperceptible and my respiration ceased for two minutes Then the miracle for I dropped off to sleep and woke knowing I was going to live and though stiff as a ramrod and very weak felt that no more convulsions were coming my way and neither did they

In conclusion I would like to pay heartfelt gratitude to my colleague Dr Browne and to the nursing staff whose skilful care and unremitting attention are without doubt responsible for my being able to tell this somewhat adventurous tale

An Objective Postscript

Mr Stanley Browne F R C S., M R C P adds the following note

The eighth and ninth days of this illness showed a clinical picture of rapidly increasing seriousness but the will to live was very strong the patient voluntarily sucking up fluids through a rubber tube together with chloral and bromides

On the ninth evening I gave him 70 000 units A T S intravenously and 9 000 intramuscularly Lumbar puncture was impossible as he begged me not to give him an anaesthetic At this time morphine seemed to have no effect The symptoms were complicated by bromide rash and a serum rash and catheterization was necessary

Convalescence was complicated by an acute internal derangement of the right knee probably caused by a fatty fringe a condition from which he had suffered before when exhausted or emaciated The heart was dilated and a systolic mitral murmur appeared An impulse on coughing over the ruptured right quadratus lumborum disappeared and flat feet were prevented by massage and exercises

ELECTRICAL IGNITION OF ANAESTHETICS

BY

H W SWANN

His Majesty's Senior Electrical Inspector of Factories

Two papers on electrical ignition of inflammable anaesthetics were recently read at the Institution of Electrical Engineers and, with the discussion which followed, showed that useful research work has been done towards reducing the risk. The purpose of this article is to summarize the more recent contributions to the subject and to suggest their application in practice.

Whilst explosions attended by serious results are fortunately rare the Ministry of Health in 1935 thought it desirable to issue a memorandum entitled "Precautions Against Anaesthetic Explosions in Operating Theatres"* This was of a preliminary character, and may be supplemented now that further information is available. The Ministry is aware of a number of accidents, information on which has been gathered from various sources. Although this figure may bear no relation to the actual number of cases, it indicates where the chief risk may lie.

TABLE I

Cause of Ignition (Electricity)	Non Fatal	Fatal	Total
Static electricity	3	4	7
Surgical lamp in mouth	2	4	6
Cauteries	1	3	4
Surgical diathermy	2	1	3
Hot nozzle dental syringe		1	1
Table lamp (switch)	1		1
X ray apparatus	1		1
Totals	10	13	23

Table I summarizes the information available, and it will be seen that in recent years twenty-three cases of explosion are known to have occurred in this country and abroad which are attributed to electrical ignition in some form or other.

The Chief Risks

It will be noted that static electricity and the use of surgical lamps in the mouth constitute the chief risk, and although some degree of danger must inevitably attend the use of the general electrical equipment for lighting sterilizing, ventilating, etc., attention has focused on the first two causations especially as Coste and Chaplin† have found by experiment that the room distribution of ether vapour during operations under open-mask anaesthesia resulted in low concentrations. The air at about two inches from the patient's mouth contained less ether than would form an explosive mixture, and the proportion fell off rapidly as the distance from the patient increased.

Another bearing on the subject may be obtained from a statement by Dr. H. W. Featherstone‡ to the effect that from time to time he had heard of a minor pop when a small lighted electric bulb had been inserted into the mouth during ether–air anaesthesia. Dr. Featherstone described a case in which an explosion occurred in the patient's mouth and was attributed to defective contact between the lamp and the holder which caused a spark. He also discussed the possibilities of the leakage of ether into the gas stream even when the anaesthetist, in endeavouring to guard against risk, thought he had shut it off.

These and other opinions indicated that attention should be focused, in the first instance at least, on the electrical ignition risks in the immediate vicinity of the patient, and of these risks those attending nose and throat operations appeared to be the most important. It must not be assumed, however, that risk in other positions can be dismissed as negligible, especially where ventilation is bad. Dr. C. F. Hadfield* particularly stresses the danger of foot switches in relation to accumulations of ether vapour at floor level.

Intrinsic Safety Surgical Lamps

There is a wide variation in the design, construction, and maintenance of the different forms of surgical lamps in use, and with the limitations necessarily imposed on size, and the need of sterilization, it becomes difficult to suggest forms of construction which could be considered gas tight or immune from electrical defect. While there is little doubt that from the point of view of ignition risk design could be improved, it was thought that there was more hope in the direction of intrinsically safe circuits, which, if practicable, could be applied with less difficulty and delay. This principle has many successful industrial applications, but it was realized that there was no experience with mixtures possessing the inflammable characteristics of ether–oxygen. The problem has, however, been tackled by Professor W. M. Thornton†, whose researches are detailed in a paper read on February 24, 1938, at the Institution of Electrical Engineers. Thornton found that with hot wires, such as cauteries, ignition can occur within limits as wide as 3 to 80 per cent. of ether in oxygen. With sparks the limits are in general much narrower. The researches described determine these limits and also the least currents that cause ignition when broken slowly or suddenly or by fusing wires. Second only to hot wires as a possible risk are the fizzling sparks which may occur between fine wire ends, such as at an intermittent break in a fine wire flexible. Thornton found that when the current is kept below certain well defined values ignition did not take place, and thus he was able to specify the resistance for any given voltage which would limit the current in that circuit to safe values. This resistance is, of course, located at the source of energy—for example, battery or transformer—and is independent of lamp or other circuit resistances. Its effect is to limit the energy, which appears as a spark caused by an open or short circuit anywhere in that circuit. Thornton advocated a factor of safety of 2 as being an ample margin. Table II. takes account of this, and is amplified by a graph (Fig. 1).

TABLE II

Direct Current		Alternating Current	
Volts	Minimum Safe Limiting Resistance	Volts	Minimum Safe Limiting Resistance
0—2	0·25 ohms	0—2	1·25 ohms
2—4	1·25 „	2—4	6·00 „
4—6	3·25 „	4—6	14·00 „
6—8	7·00 „	6—8	25·00 „
8—12	27·00 „	8—13·5	54·00 „

The curves relate to fizzling sparks, which over most of the range of the experiments were the more dangerous. It is worthy of note, however, that the curve for plain break A C would cross the fizzling break at about 12·1 volts, which means that the plain break may become the more dangerous at voltages above this figure. Similarly, the curve for plain break D C would cross the fizzling break curve at 3 volts, and thus again plain break may be

* Memo. 191 Medical Ministry of Health 1935, S.O. No. 32–9999.

† J. H. Coste, I.I.C., F.Inst.P., formerly chemist in chief London County Council, and C. A. Chaplin, Ph.D., B.Sc., A.I.C., of the chemical branch of the Public Health Department, London County Council.

‡ *Proceedings of the Royal Society of Medicine*, vol. 25, Part I.

* Discussion on Professor Thornton's and Dr. Rayner's papers, February 24, 1938, the Institution of Electrical Engineers.

† The Electrical Ignition of Mixtures of Ether Vapour, Air and Oxygen,' by Professor W. M. Thornton, O.B.E., D.Sc., D.I.C., Past President.

the more dangerous below that figure Only the fizzling curves are shown and the scale figures on the right hand ordinate are those found experimentally by Thornton while those on the left side allow a factor of safety of 2

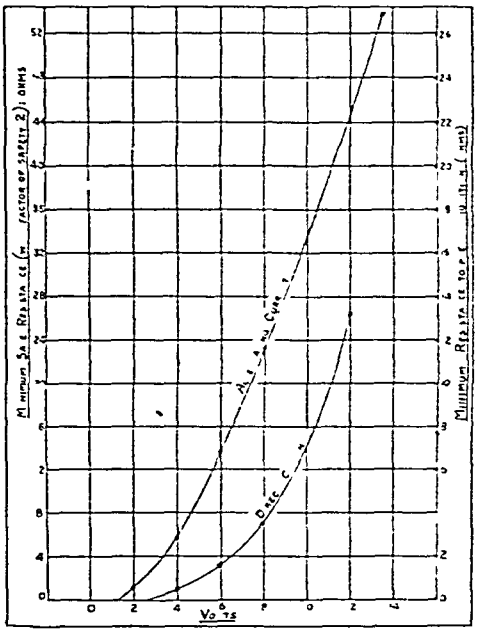


FIG 1—Curves for Fizzling Sparks

Hot wire Ignition and Spark Ignition

Thornton distinguished between hot wire ignition and spark ignition and the importance of the point has been brought out by Dr H L Saunders PhD FIC who found that although circuits incorporating the prescribed value of resistance may be safe as regards most forms of sparks a special case arises when a circuit is completed through a single strand of fine wire which may get hot Under certain conditions the temperature of the ether mixture may thus be raised above its ignition point causing explosion or sufficiently to predispose to spark ignition should the fine wire break Intermittent contact in a partly broken flexible conductor involving a combination of hot wire heating and sparking is undoubtedly the most insidious form of danger as a much smaller spark energy may be enough to cause an explosion This is a particularly difficult case to define accurately and may not be fully covered by Thornton's formulae Very finely stranded flexible is thus likely to be more dangerous than coarse strands as the heating will be greater in the last strand to break just before severance due to wear and tear

Saunders has suggested that the only safeguard against this dangerous combination is to test the resistance of the circuit regularly A partial break in a flexible will show up as an increase above the usual resistance and indicate the need for examination and repair Lamp resistances vary and it would be best to replace lamps by a low value of constant resistance for purposes of the test advocated

The "Cool Flame

Another aspect of the subject with an important bearing on the risk of ignition has been pointed out by Dr D T A Townend* in connexion with that peculiar type of combustion usually referred to as a cool flame In the case of ether–air mixtures in a 2·5-cm tube there is a range of inflammable mixtures which at atmospheric pressure is capable of normal flame explosion between about 3 and 9 per cent of ether in air and a quite distinct range for the cool flame between about 19 and 24 per cent of ether in air Within the normal flame range the mixture can be ignited by sparks but to initiate a cool flame it is necessary to use a hot wire—a distinction of great importance Townend places the ignition temperature range of cool flame between *circa* 170 and 270 C and describes cool flame combustion as very incomplete and invisible except in darkness The flames travel slowly with a speed of something like 20 cm per second in a tube 3·5 cm in diameter and at about atmospheric pressure which is that approximately customary in anaesthesia the ranges overlap as the normal flame range starts at about 250 C

Much the same type of system is formed with ether–oxygen enriched mixtures as with ether–air mixtures though with the former the ranges are naturally much wider Townend showed that a cool flame initiated by hot wire could travel some distance in a tube leaving behind it incompletely burnt products capable of normal flame explosion and ignitable from the preceding cool flame Thus where the velocity of the supply of anaesthetic is low a cool flame initiated at the patient's mask during anaesthesia may travel back along the rubber tube to the gas producing equipment and may cause a normal explosion either by ignition as above or on encountering a more explosive mixture

Townend also discussed the possibility that although sparks of *normal* intensity such as those from an induction coil or a broken wire do not initiate cool flame there may be a range of *weak* spark intensities capable of doing so and the point has an obvious bearing on explosions caused by static sparks which may attract the attention of an interested investigator

Overrunning Surgical Lamp Bulbs

Surgical lamps are often used in conjunction with some form of regulating resistance which allows of overrunning The little bulbs are as a rule rated at between 2·5 to 3·5 volts and when overrun to the point of burning out the glass may reach temperatures capable of igniting ether mixtures A valuable contribution to this subject has been made by Mr C T A Harper who has measured bulb temperatures of typical lamps when overrun to an extent causing collapse and burning out of filaments He employed a special fine thermocouple which was kept in intimate contact with the bulb thus avoiding the use of material which might act as lagging and so produce a higher temperature than would normally be obtained Capped lamps did not reach such high temperatures as uncapped bulbs possibly owing to the increased area of dissipation and it is worthy of note that in no case did the collapse of the filament result in bursting or damage to the bulb

Harper recorded his measurements on graphs of which Table III is a summary The graphs are reproduced as Figs 2 3 4 and 5

TABLE III

Description			Bulb Temperature		
				At Burn-out of Filament	
Type of Lamp	Number Tested	Rated Voltage	At Rated Voltage (Average)	Lowest Value Noted	Highest Value Noted
Surgical uncapped	4	2.5	120° C.	305° C.	359° C.
Pharyngoscope capped	5	3.5	60° C.	158° C.	230° C.
Urethroscope capped	4	3.5	80° C.	165° C.	250° C.
Ward's flexible capped	4	3.5	70° C.	218° C.	270° C.

In most cases the filaments appear to burn out at just under double the rated voltage

* Discussion on Professor Thornton's paper February 24 1938 the Institution of Electrical Engineers

The importance of this work is seen when it is remembered that the ignition temperature range for normal ether-flame explosions lies between 250° and 350° C and for a cool flame between 170° and 270° C It seems likely that some explosions in anaesthesia may have been due to overrunning, as it is believed that burning out of bulbs from this cause is not uncommon The limiting resistance specified by Thornton for intrinsically safe circuits tends to diminish the risk of overrunning, but it will be obvious that it is in addition necessary that the rated voltage of the lamps should not be materially less than the voltage of the battery or transformer constituting the source of supply An intrinsically safe 6-volt circuit would still allow a 2 5-volt lamp to be dangerously overrun

CONCLUSIONS

The following conclusions may now be drawn as to the conditions under which surgical lamps may be used with comparative safety in the presence of inflammable ether–oxygen mixtures

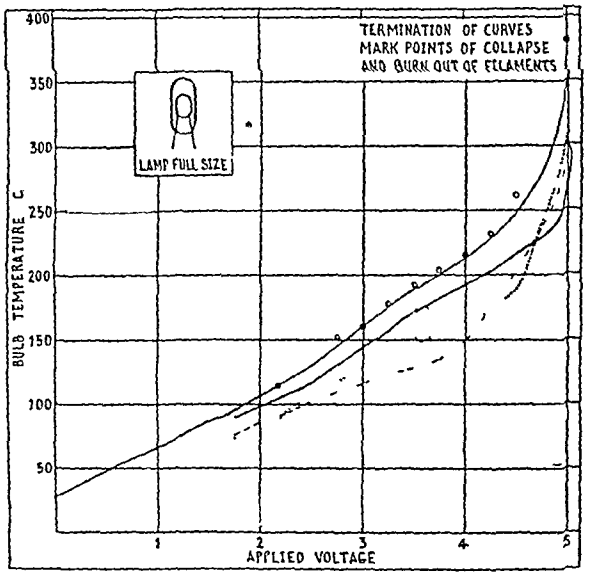


FIG 2—Relation between applied voltage and bulb temperature Surgical lamp, 2 5 volts, uncapped

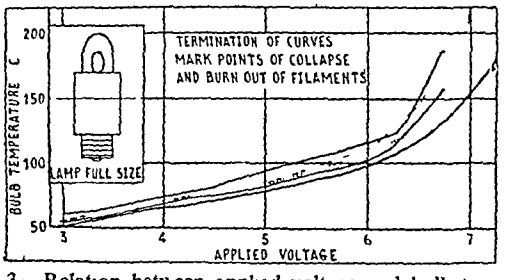


FIG 3—Relation between applied voltage and bulb temperature Pharyngoscope lamp, 3 5 volts capped

1 The adoption of Thornton's formulae for intrinsically safe circuits will prevent any form of spark ignition on either A C or D C circuits

2 The danger of hot-spot or hot-wire ignition, or a combination of this with sparking at the moment when the last strand of a flexible breaks, may be minimized by a regular test of the circuit resistance and the keeping of records

3 The supply voltage should not exceed the rated voltage of capped lamps by more than 25 per cent Uncapped lamps should not be overrun

Experiments made to demonstrate the utility of circuits conforming to conclusions 1 and 3 above showed that a useful degree of light was obtainable, especially on D C circuits At the higher values of A C voltage the inductive effect has led to the necessity of high values of resistance, which diminish the light considerably The utility of the battery-fed circuit is therefore the greater

Static Electricity

Although the climate of this country can as a rule be depended upon to produce a degree of humidity which is incompatible with the retention of static charges, the modern practice of supplying large buildings with cleaned and conditioned air tends to neutralize the climate, and Dr Rayner has presented a paper,* read on February 24, 1938, at the Institution of Electrical Engineers, which is devoted to a study of the manner in which static charges can be built up in operating theatres Explosions attributed to static have occurred, and it has been found that rubber-tyred vehicles used for carrying patients can be electrified by withdrawing a warm dry blanket Bulgin† says that an ordinary standard tyre of specific resistance 10^8 to 10^9 ohms will generate enough static to raise the potential of any vehicle to about 5,000 volts at a speed of ten miles an hour on a smooth road during warm weather If sparks are produced in these or other ways they may jump not only to an earthed object or person but also to a rubber-tyred vehicle carrying an anaesthetic equipment Thus the most likely place for static appears to be in the immediate vicinity of the patient, where the risk of ether concentration is greatest

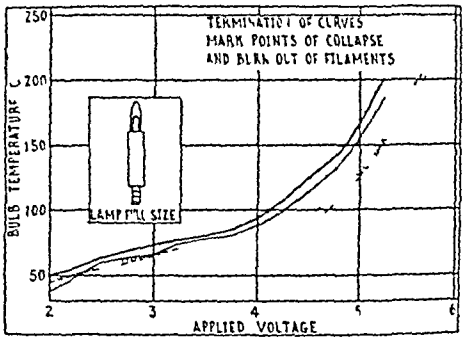


FIG 4—Relation between applied voltage and bulb temperature Urethroscope lamp 3 5 volts, capped

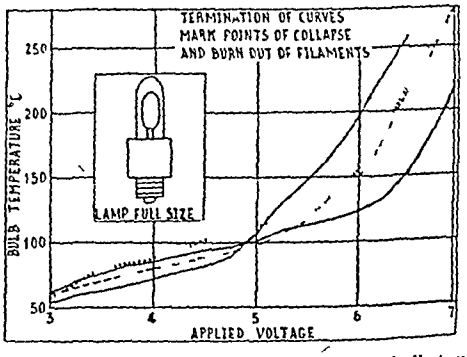


FIG 5—Relation between applied voltage and bulb temperature Lamp for Ward's Flexible, 3 5 volts, capped

The risk with rubber-tyred vehicles is easily overcome by the use of light trailing chains, but there is a good deal of misconception as to the conditions under which these are likely to be successful Chains are usually effective on most floor surfaces, excepting rubber and linoleum, and quite high surface resistances, of the order of 100,000 ohms, are permissible The point is easily settled in individual cases by producing electrification *without* a trailing

* 'The Risk of Explosion due to Electrification in Operating Theatres of Hospitals,' by Dr E H Rayner M A D Sc Dr Rayner's work was done at the National Physical Laboratory for the Department of Scientific and Industrial Research in consultation with the Anaesthetics Committee jointly appointed by the Medical Research Council and the Royal Society of Medicine

† Discussion on Dr Rayner's paper, February 24, 1938, Institution of Electrical Engineers

chain and then attempting to repeat it after the chain has been attached In the absence of a suitable instrument a charge can be detected by holding a finger tip about one-eighth of an inch away from the metal work of the vehicle while a dry blanket is smartly pulled away

A form of rubber possessing conductive properties has recently been developed with special reference to the risk of static in operating theatres and has several similar industrial applications It can be used in the shape of tyres or in sheets for flooring but low values of resistance are both unnecessary and apt to be dangerous Rubber is inherently inflammable and if the resistance is low there is risk of fire should electrical leakage occur through it as for instance from a defective vacuum cleaner or a defective pedestal type lighting standard At 230 volts a specific resistance of the order of 100 000 to 150 000 ohms should be free of fire risk and yet quite effective for dispersal of static

Electrical practice has always associated *non* conducting properties with any form of rubber and if accidents are to be avoided it is imperative that the new conductive variety should be plainly marked in a permanent manner It is known that the India Rubber Manufacturers Association has both resistance standardization and marking under consideration

Dr Rayner also gave attention to the possibility of static being produced at the anaesthetic equipment by discharge of gas from high pressure storage cylinders Some earlier work* on the electrification of oxygen cylinders has been done at Birmingham Central Technical College from which it was concluded that in the absence of foreign matter in the gas stream there appears to be no electrification The point is no doubt relevant also to cylinders containing carbon dioxide and nitrous oxide and as a high degree of purity is ensured in manufacturing and bottling the risk is small and may be minimized still further by maintaining electrical conductivity between all gas cylinders and other metal work comprising anaesthetic equipment supplemented by earthing either direct or through conductive rubber This measure will prevent sparking between components or to other bodies but does not deal with the rare case of combustion at the oxygen valve The design of the latter has however recently been improved by the elimination of ebonite for purposes of valve seating The usual precautions of opening valves gently and keeping them free from oil or grease are of course desirable

Gas cylinders may be located at a central point away from the operating theatres the gas supply being distributed by permanent pipe line This affords an opportunity for reducing the cylinder pressure in two stages that in the pipe line being maintained at say 60 lb per square inch This arrangement would reduce risk and has already been adopted in America and in a few cases in this country not only for the distribution of oxygen but also for nitrous oxide and other gases

In cases of exceptional dryness the use of rubber shoes may insulate the person sufficiently to allow static charges being set up by friction with the floor and of being carried Rayner found that a similar condition may arise with leather shoes on cork carpet This would mean the possibility of sparking from the finger tips a phenomenon almost unknown in this country but well recognized in very dry climates An effective safeguard lies in the use of conductive rubber for the shoes

CONCLUSIONS

The following conclusions may now be drawn as to the means of dispersing static charges

1 Rubber tyred vehicles should be earthed by trailing chains or conductive rubber

2 Electrical conductivity should be maintained between gas cylinders and other metal components of anaesthetic equipment and the equipment should be earthed direct or through conductive rubber Gas cylinders may with advantage be situated at a central point outside the theatres

3 In exceptional cases of dryness rubber shoes should be conductive

X Ray Apparatus and Electrical Equipment

The information recorded in Table I shows that although static and the use of surgical lamps constitute the chief risks there are other matters which may probably be regarded as of secondary importance such as the diagnostic use of x ray apparatus during anaesthesia and the general electrical equipment of the theatre Surgical diathermy or the use of cauteries in the presence of an inflammable anaesthetic would of course be a mistake but modern forms of x ray equipment probably introduce little risk except as regards defects such as in flexible conductors during use The general electrical equipment—pendants switches plugs sterilizers etc—is not as a rule in the immediate vicinity of the patient but the degree of risk depends entirely on this factor and the fortunate lack of coincidence between an electrical defect and the presence of a mixture rich enough to ignite With the exception of mercury type switches there is little that can be suggested in connexion with the general equipment which would not involve revolutionary changes and thus the greatest importance attaches to efficient ventilation

Collaboration

The inquiries made in connexion with anaesthetic explosions and the result of the work described in this paper lead to the conclusion that some central representative body is required which could influence the design of electrical apparatus for the operating theatre or perhaps for the hospital as a whole and advise on its use The employment of electro medical apparatus is increasing as the applications of electricity become more numerous and such a body might without retarding progress foresee risks and combine the views and requirements of surgeons and engineers to the best advantage

* G F Partridge B Sc M I E E in a report dated April 1 19 to the British Oxygen Co Ltd

STUDENTSHIPS AND FELLOWSHIPS IN CLINICAL SCIENCE AND EXPERIMENTAL PATHOLOGY

The Medical Research Council invite applications for a third series of studentships and fellowships intended to encourage young British medical graduates of special ability and original mind towards becoming investigators in those branches of medical science which are concerned directly with disease as it occurs in human beings This field of research includes investigations into disease or manifestations of disease in patients together with experimental work of an immediately relevant kind

Postgraduate Studentships—Postgraduate studentships are offered for medical graduates who have already held house appointments and are strongly inclined to a career in clinical science or experimental pathology Each student chosen will receive a stipend at the rate of £200 per annum during a period not exceeding twelve months for personal maintenance while undertaking approved courses of study in this country such as may be regarded as best calculated to advance his training in methods of research This study may include modern languages and such advanced physiological pathological and special clinical work under recognized teachers as may be regarded as forming a suitable preliminary to serious research work to be undertaken later but the approved course may not include studies of which the purpose is to enable the student to pass further examinations

Research Fellowships—The Council also offers research fellowships for candidates of similar qualifications who have already had some experience in the use of research methods Each fellowship will be tenable for one year at the ordinary value of £250 per annum and will be renewable in approved instances at the rate of £300 per annum for a second year These fellowships are intended as probationary appointments for research in clinical science or experimental pathology under suitable direction in this country Research expenses may be provided in addition to stipend Applications should be lodged with the Secretary Medical Research Council 38 Old Queen Street London S W 1 before October 1 1938 Forms for the purpose will be supplied on request.

ONE HUNDRED AND SIXTH ANNUAL MEETING

of the

British Medical Association

HELD IN PLYMOUTH, JULY, 1938

THE SECTIONS

SUMMARY OF PROCEEDINGS

During the next few months there will be published in the BRITISH MEDICAL JOURNAL *the opening papers communicated to the Scientific Sections of the Annual Meeting at Plymouth The reports of discussions in this and successive issues are intended to give members who were not present a general idea of the proceedings*

SECTION OF MEDICINE

Wednesday July 20

Toxic Infective Jaundice

With the President of the Section, Dr T H G SHORL (Plymouth), in the chair, Dr C E LAKIN opened a discussion on toxic and infective jaundice

Dr C E Lakin said he accepted the conventional classification into obstructive haemolytic, and that form of the disease caused by liver damage He was concerned only with this last toxic or hepatogenous jaundice Exogenous poisons, bacterial toxins, virus infection, and autogenous intoxication were the principal causes of this disease, in which the patient was likely to be more ill than jaundiced Generally the stools remained normal in colour, but the urine might contain bile in addition to urobilin and albumin The liver parenchyma underwent pathological changes, ranging from the severe necrosis due to massive doses of toxin to gradual replacement fibrosis when the poison was less virulent According to present day conceptions acute yellow atrophy at one end of the scale and cirrhosis of the liver at the other fell into line Until recent years ordinary catarrhal jaundice had been regarded as a form of obstructive jaundice While there was pathological proof of this, a disease clinically indistinguishable occurred in epidemic form In a recent outbreak among nurses at the London Fever Hospital the incubation period appeared to be twenty one days The infecting organism had so far not been discovered, but in one epidemic nasopharyngeal 'droplet' infection seemed to be the method of spread Hurst had taken the view that there were two varieties of catarrhal jaundice, but Dr Lakin was doubtful of their existence He had seen cases of epidemic catarrhal jaundice ushered in with fever several days before the jaundice appeared, while vomiting and abdominal discomfort had shown themselves in the pre icteric period He found it difficult to differentiate these symptoms from those of the acute gastritis which were emphasized as preceding the obstructive form of catarrhal jaundice Perhaps a deeper jaundice and paler stools suggested a blocked duct, while enlargement of the spleen was more constant in mild subacute hepatitis The Van den Bergh and laevulose tolerance tests could not be relied upon to differentiate these diseases The work of Bloomfield in America had suggested that catarrhal jaundice might be followed by permanent or even progressive hepatic damage Dr Lakin had seen cases which supported this view, and he wondered whether changes of this type in the liver might explain the varying effect that alcohol had on different people

Professor G R CAMERON referred to the toxic substances which might damage the liver The pathological changes could be divided into four groups according to their severity In the most acute forms yellow atrophy produced rapid shrinkage of the liver and death, next came subacute atrophy, which was followed by a regenerative process, thirdly, less severe poisoning resulting in multiple nodular hyperplasia (toxic cirrhosis), with its brunt often on the right lobe, and, fourthly a slow pathological change, which might after some years be followed by primary carcinoma In two thirds of all cases the kidneys were affected, and in a smaller proportion the heart The action of hepatotoxic substances was influenced by the amount of the poison, the spacing of the doses, personal idiosyncrasy, diet, and the presence of associated infection The young were more susceptible than the old, while pregnancy and alcoholism might aggravate the effect of any poison

Major H C BROWN discussed Weil's disease, its occurrence in the British Isles, and its differential diagnosis In collaboration with Alston he had recorded 142 cases in Great Britain in four years from July, 1933 The causal organism was known to be carried in the kidneys of 41 per cent of brown rats Human infection took place through the abraded skin coming into contact with material contaminated with the urine of infected rats The disease could also be acquired from bathing in infected water Almost every case in the British Isles had been traced directly or indirectly to the agency of rats—for example, a dog bite might convey the disease if the dog had recently killed an infected rat Men were affected far more frequently than women, except in fish working and tripe dressing occupations in which many women were employed Differential diagnosis from epidemic catarrhal jaundice might be very difficult, prostration, ocular congestion albuminuria and haematuria were found in both diseases but the intense muscular pain in Weil's disease was an important factor in diagnosis The differential blood count was of value a polymorphonuclear count of 85 per cent or 90 per cent being usual in Weil's disease, whereas in epidemic catarrhal jaundice there was a considerable relative increase in the mononuclear cells Stokes and Ryle in Flanders had shown that many patients with Weil's disease were not jaundiced Obscure influenzal attacks among the labouring classes were to be looked upon with suspicion when association with rats could be traced

Dr G W M FINDLAY considered that the common form of infective hepatic jaundice was epidemic catarrhal jaundice, although obstructive cases certainly occurred Many workers in other countries had produced overwhelming evidence that the condition was a hepatitis He advocated replacing the term 'epidemic catarrhal jaundice' by epidemic hepatitis The aetiology was unknown, although a virus might be responsible the long incubation period of four to five weeks supported this All efforts to infect experimental animals had failed During recent work on immunization against yellow fever it became obvious that the initial slight reaction might be followed by jaundice several weeks or months afterwards This occurred in ninety-three out of 3,100 patients inoculated The urine became dark and the skin yellow a prodromal period with fever might occur the Van den Bergh reaction being diphasic It became clear that some virus was being cultivated in association with the strain of yellow fever virus in use subsequently methods had been found to abolish the risk of jaundice after these inoculations

Dr E R CULLINAN described a syndrome in which attacks of jaundice, without apparent cause, were associated with subacute necrosis of the liver In its early stages it might be confused with recurrent catarrhal jaundice, cholangitis, pancreatitis, Hanot's cirrhosis or biliary cirrhosis Later it might be difficult to differentiate the condition from splenic anaemia Banti's disease, or portal cirrhosis The onset resembled that of catarrhal jaundice, there was no fever or severe pain The jaundice often fluctuated The liver was enlarged but not the gall bladder The illness might be prolonged, and jaundice might last any period from two weeks to ten years Deepening jaundice with increasing anaemia, fever, and quick pulse heralded a fatal issue The Van den Bergh reaction

gave no help in the diagnosis but the lævulose tolerance test was important in distinguishing this disease from malignant obstructive jaundice Correct diagnosis as between these two conditions was essential as laparotomy in these cases was frequently fatal Treatment should include the administration of large amounts of glucose calcium and alkali were also of value

Sir ARTHUR HURST was convinced that there were two types of catarrhal jaundice In that associated with hepatitis the patient was more ill and had fewer preliminary symptoms the prognosis was good on the whole The lævulose tolerance test showed impaired liver function in this group while in obstructive catarrhal jaundice it gave a normal result He agreed that operation was extremely dangerous in toxic jaundice Cholecystography had sometimes been misleading as the absence of a gall bladder shadow might lead to the inference of gall bladder disease whereas the liver was actually at fault in being unable to excrete Atophan which was widely used in cases of arthritis was in his opinion a cause of toxic jaundice

Dr DONALD HUNTER made the broad clinical distinction between catarrhal jaundice and Weil's disease that in the former the patient was not ill whereas the latter was characterized by severe illness and haemorrhages The statement that Weil's disease occurred only in the poor might be misleading and he quoted the case of a well to do patient who died of this disease which he contracted while bathing in a contaminated stream He agreed with Sir Arthur Hurst that atophan was very dangerous and he never used it there were safe and effective drugs available for the treatment of gout Dr G S ASTON (Barnstaple) described his recent experience of epidemic catarrhal jaundice in three separate households His observations supported those of Dr Lakin in indicating a twenty one day incubation period Pain was not severe except in one case and several patients had prodromal symptoms Dr H F BELL WALKER (Balfour South Africa) described a form of epidemic jaundice which occurred in South Africa Fluctuation in the incidence of epidemic jaundice corresponded with plagues of rodents Rat bites were unusual but rat flea bites were common Many of the patients were children and there was no case to-case infection There was evidence that the infection resulted in permanent damage to the liver

SECTION OF SURGERY

Wednesday July 20

Acute Appendicitis

With Mr V ZACHARY COPE President of the Section in the chair Professor G GREY TURNER opening a discussion on the treatment of acute appendicitis stated that according to the Registrar General's statistics there were 3 000 deaths from appendicitis annually in Great Britain This was equal to 12 per cent of deaths from diseases of the digestive system and 0 61 per cent of deaths from all causes He had taken the combined figures of two large general hospitals—the London Hospital and the Royal Infirmary Newcastle—for the five years 1933-7 to determine the present position of operative mortality Of acute cases excluding localized abscess there were 6 725 with 247 deaths a mortality of 3 67 per cent In 604 cases with localized abscess there were fifty one deaths —8 44 per cent mortality These two acute groups combined gave a mortality rate of 4 07 per cent In the total series of 9 973 cases acute subacute and interval there were 308 deaths—a mortality rate of 3 10 per cent Appendicitis he said was at its inception a local disease and the essence of success was both early diagnosis and early operation Once infection was well established in the peritoneum or in the veins a secondary nidus was established which might go on in spite of removal of the original focus As to early diagnosis he did not think that Murphy's dicta regarding symptoms had been improved upon These were abdominal pain of abrupt onset nausea or vomiting abdominal sensitiveness settling in the region of the appendix and rise in temperature Any variations in the order of these symptoms caused Murphy to question the diagnosis The omissions from Murphy's list were he thought significant Indiscriminate diagnosis was the great fault Too commonly such a thing as abdominal influenza was diagnosed Rutherford Morison had put forward a statement that if pain in the abdomen required morphine the case was a surgical one and must be thought of in terms of operation The time for operation apart from very few exceptions was as soon as the diagnosis was made With regard to cases apparently subsiding it was not good practice to delay unless all the symptoms were subsiding spontaneously He believed in doing an operation which was essentially local and this was best performed through Rutherford Morison's muscle cutting incision parallel to Poupart's ligament Professor Grey Turner concluded by quoting Murphy's dictum that early operation was the only safe practice

Mr R J MCNEILL LOVE confined his contribution to the discussion to cases which presented themselves with an appendix mass For these he advocated delayed treatment because of the difficulty of operation and of the breaking down of adhesions which were limiting infection The procedure was the adoption of the Fowler position the application of fomentations and the maintenance of a constant watch on the pulse temperature and changes in the character of the mass Whereas previously a limited amount of fluid used to be given by the mouth this had been discontinued because of the relaxation of the ileo-caecal valve so caused with consequent local peristalsis Instead the patient had saline and glucose administered to him by continuous intravenous infusion Expectant treatment was not suitable for children or the aged—in the former because of the difficulty of obtaining a satisfactory history and because frequently the mother had administered a purgative in the latter because of the common rapid development of gangrene The results of expectant treatment were that in 65 per cent resolution occurred and a clean operation could be performed three months later in about 25 per cent of cases an abscess formed which might require drainage but might be absorbed in about 10 per cent of cases operation became imperative because of increased severity of the symptoms He denied that complications were more frequent with delayed treatment and thought that, whereas the probable mortality in these cases was about 6 per cent if immediate operation was performed it was only 3 per cent if expectant treatment was employed He agreed however that experienced surgeons had produced as low figures as the latter by immediate operation but maintained that most cases were operated upon by the less experienced

Mr H C W NUTTALL (Liverpool) said that much of the difficulty in such a discussion was the lack of uniformity in classification so that similar series could be compared He suggested a classification first into the unperforated the perforated and the complicated The unperforated he further subdivided into the non obstructed and the obstructed The perforated group might develop into localized peritonitis diffuse peritonitis or localized abscess In the complicated group he included only immediate complications due to direct spread of the infective process to neighbouring structures the most important being pylephlebitis ileus residual or subphrenic abscess and cellulitis of the abdominal wall He did not advocate delayed treatment although he thought that in exceptional circumstances and in inexperienced hands it had its place The amateur surgeon was out of place in either the immediate or the delayed treatment of acute appendicitis

Mr H H RAYNER (Manchester) said that despite the national mortality rates he thought there had been a striking improvement in results due to the realization of the value of early operation the use of the continuous intravenous drip of saline and glucose and the aspiration of the stomach contents when necessary through an indwelling catheter He emphasized the care necessary to remove an appendix on the point of rupture In cases with local peritonitis he was in favour of immediate operation except in the very fat the alcoholic and the patient with chronic bronchitis and

emphysema In these the risk of operation was greater than the risk of waiting for spontaneous subsidence Where there was a local lump which appeared to be more in the nature of inflammatory infiltration rather than an abscess he favoured delay, provided the patient was placed under proper hospital conditions

Mr W SAMPSON HANDLEY thought that practically all cases of acute appendicitis were of the obstructive type, and that for twelve to forty eight hours the inflammation was limited to the appendix Removal during this period left an "aseptic patient" In cases in which the appendix had ruptured a trickle of pus often escaped into the pelvis, and to meet this danger in late cases he advocated an initial small suprapubic incision to pass down a diagnostic swab

Mr H H BROWN (Worthing) referred to the occurrence of septicaemia in some cases operated upon after the first forty-eight hours There was, he considered, a negative phase about the third to the fifth day in which operation might induce a septicaemia In these cases no sign of local infection was found post mortem

Mr VICTOR HURLEY (Melbourne) said that it was a disappointing fact that in Australia as well as in England and the U S A the mortality from acute appendicitis was still rising The practice in Melbourne was immediate operation except in occasional bad risks, and he agreed with Mr Rayner on the subject of obese patients He thought the most dangerous cases were those of pelvic appendicitis, both from the diagnostic and operative points of view

Mr HERBERT CAIGLR (Sheffield) endorsed a previous speaker's plea for not attempting removal of the appendix where such removal appeared difficult

Mr W MCADAM ECCLES described how in three generations, of which he was the senior, prompt and immediate operation had been employed with success

Mr H C RUTHERFORD DARLING (Sydney, New South Wales) doubted if the obstructive type of appendicitis was so common as supposed He also thought it often impossible to determine the position and state of the appendix from clinical examination With regard to expectant treatment he thought that resolution did not necessarily occur in cases which subsided He had twice performed late operations for cases so treated, only to find dense adhesions and the stump of an appendix

Mr HAROLD DODD analysed five deaths in the past five years Two patients died from bronchopneumonia Both had had a common cold recently One had died from pylephlebitis Two had died from ileus, and he deprecated any active treatment in this complication

Professor GREY TURNER, in reply, said he did not object to expectant treatment in experienced and competent hands But there was a great danger, if the practice was widely preached and advocated, of an increased mortality The trouble was that the inexperienced frequently stretched the possibilities of a method far beyond what had originally been advocated

Mr A M BOYD read a short paper on arteriography

SECTION OF OBSTETRICS AND GYNAECOLOGY

Wednesday July 20

Occipito-posterior Positions of the Vertex

Professor J CHASSAR MOIR (Oxford) opening a discussion on occipito posterior positions of the vertex and their complications, said that most posteriorly placed occiputs rotated to the front during labour, and a spontaneous delivery was the rule rather than the exception About one third of cases of failed forceps were associated with undiagnosed occipito-posterior cases The real cause of the difficulty in delivery was, he believed, a simple one, and was essentially a mal-adjustment of the shape of the foetus to the shape of the birth canal Face to pubes' was a common method of spontaneous delivery and occurred when the mother's pelvis was large and the foetus small But this was not an argument in favour of delivering occipito posterior cases in the face to pubes position it was much easier to rotate the occiput to the front Recent radiological investigations by Thoms and Caldwell, Moloy, and D Esopo had thrown new light on the mechanics of labour They had suggested that in some cases an occipito posterior case might be more easily delivered as a face to pubes case The actual causes of a persistent occipito posterior position were a large pelvis, a small foetus, and a deficient perineum Increased pelvic inclination and an extended foetal head favoured a posterior lie while minor degrees of pelvic contraction and abnormalities of uterine action were also complicating factors The foetal mortality in non rotated cases was high Forceps were apt to slip and damage the child's brain, and a gross damage to the pelvic floor was easily sustained The foetal mortality in neglected cases might be as high as 25 per cent In the diagnosis of occipito posterior position the presence of short ineffectual and severe pains with no advance should be regarded with suspicion

Professor J M MUNRO KERR (Canterbury) said the commonest diameter in which the foetus engaged was the transverse diameter of the pelvis—that is, the occiput lay L O T or R O T If the occiput was directed further posteriorly then a primary posterior position resulted, more commonly the occiput did not rotate backwards until the onset of labour, giving rise to a secondary posterior position Oxley had shown that in 90 per cent of such cases spontaneous rotation and delivery would occur Of these about 10 per cent were delivered face to pubes The foetal mortality was about 1 2 per cent In large maternity hospitals there was a high percentage of spontaneous deliveries with a low foetal mortality in cases from the district, but in in patient departments where early interference was undertaken the foetal mortality rose sharply

Professor FARQUHAR MURRAY (Newcastle) advised the correction of occipito posterior positions of the vertex during the later weeks of pregnancy by means of a pad and binder He always delivered such cases in the "cross bed" position, as it made the recognition of the obliquity of the head in relation to the outlet much easier Foetal distress with a still incompletely dilated cervix required very careful extraction past the cervix and a rapid delivery after an episiotomy at the outlet, owing to the possibility of the cord being round the neck Mr BRYAN WILLIAMS (Liverpool) considered that many of the so called persistent occipito posterior positions were in reality cases of 'transverse arrest of the head" He considered that this complication was imperfectly recognized and taught in this country, and that it presented far more difficulties than the occipito posterior position Out of 3 004 deliveries in the Walton Hospital the previous year there were fifty-three cases of persistent occipito-posterior position Spontaneous delivery occurred in forty one of these, and intervention was required in twelve, with no foetal or maternal mortality There were forty eight cases in which intervention was necessary for a transversely arrested head, the maternal morbidity rate being 27 per cent and the foetal mortality 27 per cent In deep transverse arrest manual rotation was difficult or impossible, and the application of forceps to the unrotated head led to a high foetal mortality Kjellard's forceps, in the hands of the expert, were of great help in such cases The use of intrapartum radiology should be widely extended

Mr L CARNAC RIVETT emphasized the necessity for early diagnosis in non rotation of the head Frequent vaginal examinations should be made, and the head rotated as soon as possible Professor J PRESTON MAXWELL (Pekin) stated that most cases could be rotated and easily delivered He also stressed the importance of measuring the outlet in all cases Mr JAMES W G H RIDDELL (Plymouth) recalled the important fact that pains in occipito posterior positions were severe early in labour It was no use encouraging the patient to bear down too early Internal version described by Smellie, was occasionally necessary Professor F J BROWNE recounted the original description of rotation by Smellie He emphasized the need for deep anaesthesia thorough "ironing" out of the vagina with plenty of lubricant, and the insertion of the whole hand in the vagina

SECTION OF NEUROLOGY AND PSYCHOLOGICAL MEDICINE

Wednesday July 20

Angiography

With the President Mr GEOFFREY JEFFERSON in the chair Professor HERBERT OLIVECRONA (Stockholm) in a paper on angiography said that the risks of this procedure must be considered in determining the indications for it He would not examine the possibility of a delayed radio active effect of retained thorium dioxide the amount injected was probably too small for this and speculation in the absence of clinical or pathological material was idle There were two other undesirable effects of angiography One was the development of thrombopenia pointed out some time ago by Lohr which might be complicated by oedema of the glottis This was of minor importance because with proper care there need be no such sequel If the thrombopenia was marked a blood transfusion should be given A more serious effect was the plugging of small vessels by thorotrast demonstrated by Nordmann (1936) and by Northfield and Russell (1937) Their observations had been amply confirmed by Ekstrom and Lindgren in the speaker's clinic This injury had been the main cause of death in two or three cases and possibly a contributory factor in some of the others In the light of this knowledge it was necessary to revise our attitude towards arteriography and Professor Olivecrona agreed that it should be used only where information necessary for treatment could not be obtained by other means It should be limited to cases where specific information on the condition of the cerebral blood vessels was required such as aneurysms In dealing with arterio venous aneurysms it might be preferable to perform an exploratory craniotomy if the evidence in favour of aneurysm was equivocal Other indications for arteriography lay in the diagnosis of glioblastoma and in those rare cases where localization was impossible and ventriculography had been unsuccessful He stressed the importance of limiting the amount of thorotrast by every precaution Only where strictly necessary should there be exposure in more than one plane and bilateral injections

Mr NORMAN DOTT (Edinburgh) considered that arteriography was of special service in studying lesions of the blood vessels especially congenital aneurysms of the larger cerebral arteries Such aneurysms might act as tumours by compressing adjacent structures or might make their presence felt by leakage or frank rupture It was in the latter that angiography was of special value for there was usually no other means of precise localization From his experience Mr Dott advocated expectant measures consisting of rest and the maintenance of a low blood pressure in patients over 50 years In younger patients angiography followed by ligation of the internal carotid artery or local treatment of the aneurysm according to its site was preferred In such cases angiography would show the degree of patency of the aneurysmal sac its exact site and relation to the arterial tree and the state of the local cerebral circulation Mr Dott emphasized the importance of the last point since ligation of the carotid artery in the presence of an impaired circulation might lead to an extensive softening and was therefore contra indicated Proceeding on these lines he had performed fourteen carotid ligations since 1933 with only one fatality that could be attributed to the operation

Mr D W C NORTHFIELD endorsed Professor Olivecrona's plea for caution in the use of thorotrast, and described certain clinical and histological sequels when thorotrast caused blockage of the small vessels about a compressing lesion of the brain Because of these sequels he now restricted the use of thorotrast to cases where the regional and pathological diagnosis could not otherwise be established and to clinch the diagnosis of spongioblastoma multiforme He considered with Mr Dott that angiography was most clearly indicated in cases of cerebral aneurysm and vascular malformations Dr HARDMAN (Manchester) in a series of lantern slides demonstrated peculiarities in the angio architecture of certain tumours of the brain The vessels were visualized in post mortem specimens either by injection of barium gelatin or by Pickworth's benzidine method By these techniques a characteristic vascular architecture had been demonstrated in three types of tumour spongioblastoma multiforme astrocytoma and meningioma The existence of numerous large venous sinusoids was a striking feature of spongioblastoma multiforme but no arterio venous anastomoses could be demonstrated

Mr JEFFERSON agreed that in border line cases of arterio venous aneurysm it might be advisable to perform a craniotomy first for diagnostic purposes and to define the extent of the lesion later by arteriography

Spasmodic Torticollis

In a paper on spasmodic torticollis Professor OLIVECRONA pointed out that in most cases the aetiology was obscure Opportunities for examination at necropsy were rare The association of the condition with epidemic encephalitis and Parkinsonism had among other observations supported the view that the essential lesion was extrapyramidal in situation Although spontaneous remissions sometimes lasting for years might occur the disability was often so great that patients insisted upon some form of treatment Medical treatment both with atropine and by the cultivation of an antagonistic gesture was sometimes effective in the milder types If such measures failed surgical intervention should be attempted Since operations aimed at the paralysis of those muscles which contracted during the spasm it was necessary accurately to assess the muscles involved and to plan accordingly Out of thirty three cases four showed slight symptoms and were treated medically In five the spinal accessory nerve was divided with complete or nearly complete relief In another the three upper cervical sensory root were divided on one side with nearly complete relief In the remaining twenty three cases division of the upper cervical motor roots was combined with peripheral division of one or occasionally of both spinal accessory nerves In two third of this group the patients were completely or almost completely relieved of spasm and were able to work they showed fair compensation towards the effects of the operation and the early instability of the head gradually disappeared some stiffness of the neck persisted In the remaining third the results were unsatisfactory either because the general condition of the patient was poor or because there were other ailments In some the spasm had extended into adjacent muscle groups or a major extrapyramidal syndrome had developed These patients were therefore incapacitated from some cause outside the scope of the operation

Dr MACDONALD CRITCHLEY divided cases of spasmodic torticollis into four types (1) purely psychogenic a variety of tic (2) following epidemic encephalitis in this the torticollis might be transitory (3) forming part of a more wide spread extrapyramidal motility disorder such as chronic progressive chorea bilateral athetosis etc and (4) a slowly progressive tonic clonic spasm not confined to the neck muscles The last group was the commonest and he regarded such cases as intractable Investigation often showed an occupational background and possibly a psychogenic basis He was sceptical about the surgical treatment of the condition largely because it appeared unscientific A more rational approach might lie in the operative ablation of cerebral cortex on the lines of the newer technique for the relief of hemi athetosis

Dr H V DICKS supported Dr Critchley in his pessimistic outlook He admitted an organic basis in spasmodic torticollis but felt that a functional element was also present in the sense in which psychologists spoke of purposiveness

Professor HENRY COHEN regarded Dr Critchley's classification of torticollis as a useful clinical basis The psychogenic cases were more commonly seen in the young the movement was purposive in origin and this type of case was usually amenable to psychotherapy There were three features of chronic encephalitic torticollis which merited comment first

its extreme rarity, secondly, its transitory character, and, thirdly the torticollis was part of a more general dystonia and might be preceded or followed by Parkinsonism The natural history of the fourth group was fairly constant The patient was usually over 40 years of age and showed a unilateral tonic clonic torticollis sometimes with bilateral retronuchal involvement Occupation, ocular muscle imbalance, psychopathic tendencies, and other factors might play a predisposing part, but treatment directed solely to these produced at best only partial and temporary alleviation In selected cases operation at this stage, though purely palliative, was a most helpful measure

Dr DOROTHY RUSSELL recorded the accidental experimental production of torticollis in a monkey This had followed an intracardiac injection made by a colleague The animal's brain, examined about eighteen months later, showed a symmetrical butterfly shaped area of softening in the subthalamic region which histologically appeared to be an infarct Dr F R FERGUSON (Manchester) recognized the psychological element in spasmodic torticollis, and agreed with Professor Cohen that a distinct type could be recognized in the elderly He did not, however, agree that the spasm in these patients was confined to the neck He advocated a combination of physiotherapy and surgical treatment until the part played by organic and psychogenic factors could be more clearly defined

Mr JEFFERSON in a warm tribute to Professor Olivecrona, urged that the organic background of this neglected disorder should be more fully explored, and that the surgical treatment should be taken up more vigorously in this country

COMBINED SECTIONS OF NEUROLOGY AND ORTHOPAEDICS

Wednesday July 20

Sciatica

After the chair had been taken by Mr GEOFFREY JEFFERSON (Manchester) President of the Section of Neurology and Psychological Medicine, Dr WILFRED J HARRIS opened a discussion on sciatica Dr Harris, in a general review of the subject, said that sciatica might be of the high type, in which case the lesion was above the level of the sciatic notch, or low, when the lesion was at or below the level of the notch In the first group the possibility of skeletal changes must always be borne in mind—conditions such as congenital abnormalities of the spine, new growths, or inflammatory lesions such as tuberculosis, and, lastly, hernia of the nucleus pulposus The spinal cord or nerve roots might be the site of a neoplastic or inflammatory process, requiring investigation as in cases in which the lesion was at a higher level Low sciatica was more difficult to elucidate, for after such well defined causes of neuritis as lead poisoning or diabetes were excluded (or more rarely found) cases remained in which chill, slight trauma, or focal sepsis were the only detectable factors, and a considerable residue in which the nerve pain had to be labelled "idiopathic' The truth was that there were still unpleasantly big gaps in our knowledge of the aetiology of sciatica

Professor JOSEPH S BARR (Boston, Mass, U S A) described only one type of sciatica—that resulting from compression of a nerve root by a prolapsed intervertebral disk, or hernia of the nucleus pulposus Although this lesion was found in only a minority of the cases it was of great interest as being the most recent and well defined addition to our knowledge of sciatica Though lesions of the intervertebral disks had been described in such admirable detail by Schmorl, he was not aware that posterior protrusions could be of clinical significance In brief, he noted merely that more or less posterior protrusion was present in about 15 per cent of spines examined post mortem Although a displaced disk might rarely produce complete paraplegia the typical syndrome was a sciatica with astonishingly few clinical signs referable to the nervous system The crucial finding in localizing the compression was a constant filling defect opposite one of the lower lumbar intervertebral disks in the radiographic picture obtained after the injection of 5 c.cm of lipiodol into the spinal theca Operative removal of the mass was usually indicated, and laminectomy with removal of the hernia had been performed in eighty three cases seen at the Massachusetts General Hospital The results were most satisfactory

Professor HENRY COHEN (Liverpool) discussed the common type of sciatica in which 'rheumatism' was the only obvious cause—a lesion allied to fibrositis He invited consideration of four points which had a direct bearing on the problem First, that nerves and muscles had a fascial covering which contained a small space lined with mesothelium this allowed gliding movements to occur, and, as in joints, interference with movement and pain would result if the space contained adhesions Secondly, an inflammatory focus in the soft parts of the lumbar region frequently caused pain referred along the course of the sciatic nerve injection of the affected area with a local anaesthetic abolished not only the local pain and tenderness but also the secondary sciatica Thirdly, the peri articular areas of the lumbar region were supplied by nerve filaments arising from the fourth and fifth lumbar and first sacral nerves Fourthly, there was a rich lymphatic anastomosis in the lumbar region which enveloped nerves as well as muscles a localized infection might therefore rapidly become widespread In a series of 420 private cases of sciatica he had found that most of his patients recovered completely within a relatively short period they behaved as if they were suffering from an inflammatory lesion which ran a fairly well defined course In the early days rest in bed and sedatives were essential If recovery did not follow within five or six weeks, persistent pain was due either to the presence of adhesions or to a major lesion which at first had not been apparent As with joints the presence of adhesions called for treatment designed to break them down Manipulation and the epidural injection of saline solution were two ways of accomplishing this He favoured epidural injection and employed 2 per cent (hypertonic) saline solution, which had the effect of disturbing intraneural relations so tending to break up scar tissue within the nerve trunks

Dr MACDONALD CRITCHLEY described various causes of sciatica none of them common but all of importance He described cases in which minor traumata or abnormality of posture were followed by sciatica commercial travellers driving for hours in small motor cars with badly sprung seats, the front rims of which pressed into the back of the thigh, miners sitting tailor fashion in low galleries, and an artists model who was required to sit for long periods in an unaccustomed attitude Damage to the sciatic trunks during the course of a protracted labour was a well known entity, and it was often found that the lateral (external popliteal) division was the more liable to suffer This was due to the lateral division being compressed against the ischium, whereas the medial division rested on the less resistant pyriformis muscle Sciatica might also result from varicosity of the veins draining the nerve trunk The presence of varices in the legs of a patient with sciatica was always suggestive though varicosity of the veins of the nerve might occur as an isolated lesion Sometimes the varices could be felt as a soft mass when the patient was examined in the erect position

Dr FERGUS R FERGUSON (Manchester) distinguished three types of sciatica neuritic, neoplastic and nuclear It had surprised him to find that the neoplastic type was often characterized by a sudden onset He emphasized the importance of lumbar puncture and determination of the protein content of the cerebrospinal fluid The presence of a tumour was suggested by finding xanthochromia, an increase in the protein content, and absence of manometric changes when the jugular veins were compressed Such findings should lead to localization of the block by the injection of lipiodol At the same time it must be remembered that an increase in the protein content of the cerebrospinal fluid was often found in the neuritic type The PRESIDENT, who had operated on two

cases of neurofibroma causing sciatica in the series of cases reported by Dr Ferguson said that this type of tumour was easily missed To overlook a growth of this type was all the more unfortunate seeing that surgical removal so often resulted in a complete cure

Most of Dr HUGH G GARLAND'S (Leeds) cases of idiopathic sciatica had been dealt with by epidural injection of saline solution He felt that it was the volume rather than the nature of the fluid that mattered and there was little to choose between 0 5 per cent novocain and normal saline solution He reported thirty seven cases in which fifty two injections had been given Immediate and noteworthy improvement often amounting to complete relief was seen in 80 per cent In the remaining cases further injections had been given but the results were discouraging In other words if a first injection failed it was unlikely that a later one would succeed The only complication he had seen occurred in four cases in which after the injection of about 50 c cm of fluid (he usually injected 60 to 160 c cm) the patient went into an epileptiform convulsion losing consciousness for a few seconds He attributed this to a sudden rise in intracranial pressure fortunately no lasting ill effects had been observed

Chill as a cause of sciatica had never appealed to Dr J B MENNELL There were records of people being chilled on a very large scale—as when the *Titanic* went down—yet nothing had been heard of sciatica among the survivors although they had been exposed to cold for many hours scantily clad and sitting on hard seats His experience had led him to pay great attention to focal sepsis

---

SECTION OF RADIOLOGY

Wednesday July 20

X Rays and Haemoptysis

With Dr R BOULTON MYLES in the chair Dr F G WOOD opened a discussion on x rays in the elucidation of haemoptysis Dr Wood's paper is published in this issue at page 211

Dr W E LLOYD speaking particularly of tuberculosis said that haemoptysis could occur at any stage in the disease and there were many cases in which it was the first symptom Patients rarely ignored this symptom and this gave the doctor opportunities of diagnosing very early cases in which physical signs were absent It was well known that in the days before accurate radiography the patients in such cases who had had sanatorium treatment at once became well and remained well Clinicians now had the added advantage of accurate radiological investigation The earliest radiographical evidence of tuberculosis in Dr Lloyd's experience was an apical area of infiltration with or without evidence of incipient cavitation Tomography should be helpful here Reliance on radiographic appearance alone was only justifiable when a single cavity was demonstrable When the appearance was doubtful further radiographs should be taken after a month at the end of which period cases of so called pulmonitis would have cleared up whereas a tuberculous focus would remain Frequent sputum examinations were a valuable aid to diagnosis but in some cases of haemoptysis due to tuberculosis there was no sputum Basal infiltration always suggested bronchiectasis and this could be confirmed by lipiodol but basal tuberculosis was not so uncommon as it was once thought to be In more advanced cases where the clinical diagnosis was simple radiography indicated the extent of the disease Haemoptysis occurred in fibroid pulmonary tuberculosis where the condition was clinically inactive the physical signs were those of chronic bronchitis and emphysema Radiological investigation revealed the true nature of the disease Sometimes there was collapse of the lung, usually when the haemoptysis was profuse Aspiration of blood might alter the radiographic picture temporarily

Dr S WHATELY DAVIDSON (Newcastle-on Tyne) said that with the development of thoracic surgery it was essential to obtain evidence of active disease in the lung and of the progress of the disease after operation The difficulties were due to the thoracic bony structures pathological changes round the lesion lipiodol residues and operative procedures such as thoracoplasty and plombage Much information could be gained by ordinary radiographic methods but such information was often not enough for the thoracic surgeon Indiscriminate use of lipiodol was to be deprecated on account of the residues which might take months to disappear and might therefore prevent successful re-examination and observation of progress The tomographic method was essential in selected cases and might obviate the necessity for lipiodol Twining of Manchester had placed it within the reach of British radiologists It was possible by this method to locate filling defects in bronchi and to demonstrate cavities which remain uncollapsed after procedures such as thoracoplasty and plombage The follow up of cases by radiography was important and was a means of encouraging collaboration between clinician and radiologist

Dr E L RUBIN (Liverpool) discussing haemoptysis with special reference to cardiovascular disease said that radiography was of greater value in excluding lung disease than in establishing the presence of heart disease but that it might be very helpful in the latter condition The commonest cause of haemoptysis in heart disease was mitral stenosis If there was undue prominence of the middle arc on the left border of the heart in a case of haemoptysis oblique views should be taken in order to demonstrate or exclude enlargement of the left auricle Haemoptysis might happen in early cases with little structural change while in cases with marked enlargement of both auricles this symptom might be absent In congenital heart disease haemoptysis was commonly the result of superimposed pulmonary tuberculosis but it did arise even in cases where there was complete stenosis of the pulmonary artery and no patent ductus arteriosus The blood supply to the lung in such cases came via the bronchial arteries which were enlarged and atheromatous Haemoptysis occurred occasionally in cases of hypertension and x ray examination might be the only means of demonstrating the previous presence of high blood pressure Radiographs showed elongation and tortuosity of the thoracic aorta and sometimes tortuosity of the oesophagus Aneurysm was a cause of haemoptysis which might also result from pulmonary arteriosclerosis Infarction of the lung was not often seen radiographically Massive infarction was rapidly fatal and small infarctions produced the appearance of localized collapse—they could not be diagnosed radiologically unless the clinical evidence suggested their presence Haemoptysis might arise from congestive changes in the lungs due to heart failure but the radiographic appearances were subject to wide variation and might simulate metastatic carcinoma or pulmonary tuberculosis

Dr E C WYNNE EDWARDS (Mundesley) discussing the occurrence of haemoptysis in known cases of pulmonary tuberculosis stressed the importance of radiographs in the lateral and oblique positions in addition to the antero-posterior position and drew attention to the need for tomography in some cases It was important in a given case to decide whether haemoptysis was a cause or only a symptom of a spread of disease There were certain cases in which there was recurrent haemoptysis without obvious deterioration in the condition of the lung or in the general health There were however two other types in which a radiograph following a haemoptysis showed a fresh area of disease In one this area had really been present before the haemoptysis and was often excavated in whole or in part In the other the lesion was fluffy in outline and was usually in the lower lobe It might be a true tuberculous extension or an area of pneumonitis due to aspiration of blood Subsequent radiological investigation would establish the diagnosis because the latter condition would clear up after a time A third type was that in which there was collapse of a whole or part of a lobe due to bronchial blockage by blood clot The differential diagnosis in such a case was important

because the patients required different treatment He would like to know whether radiologists had any method of deciding in a given case to which of these causes spread was due

Dr E J E TOPHAM drew attention to new growth of the lung as a cause of haemoptysis and quoted two cases in which it had been the first symptom Referring to a statement by Dr Lloyd, he said he doubted whether a radiologist was justified in diagnosing pulmonary tuberculosis on radiographic appearances alone

Dr P KERLEY said that he had seen cases in which haemoptysis was the first symptom of an abscess in the lung The radiographic appearance of blood in the lungs was important from a diagnostic point of view Inhaled blood gave the appearance of incompletely resolved lipiodol The best radiographs he had seen were taken with a rotating anode tube Dr Kerley quoted a rare case of recurrent haemoptysis in which the radiographic appearances were those of inhaled blood There were no indications of other disease and the abnormal radiographic appearances disappeared soon after each haemoptysis Bronchoscopy revealed a haemangioma of the trachea

The CHAIRMAN stressed the importance of close collaboration between clinician and radiologist without which it was impossible for the radiologist to get the best results It was important that radiologists should have more opportunities of following up cases

Dr WOOD in reply said that the orthodox view had always been that the left auricle formed no part of the left cardiac border This was based on post-mortem appearances which were obviously misleading Kymography revealed different wave forms in different parts of the heart, and recent papers by Stumpf and by Bordet on kymography confirmed the fact that the left auricle formed part of the lateral border

SECTION OF PHARMACOLOGY

Wednesday July 20

History of Anaesthetics

At the opening meeting of the Section of Pharmacology, Therapeutics and Anaesthetics, the President Professor A J CLARK (Edinburgh), gave an address on certain aspects of the history of anaesthetics

Professor Clark said that this subject had a unique interest for the pharmacologist because anaesthetic agents were the first synthetic organic chemical products employed to produce a therapeutic effect of major importance The discovery of the pharmacological action of nitrous oxide was of special local interest, because Sir Humphry Davy, born in Penzance, published in 1800 his *Researches Concerning Nitrous Oxide*, in which it was suggested that the gas could be used with advantage during certain surgical operations This prophecy, however, was forgotten, and it was not fulfilled until forty years later Professor Clark surveyed the early work of Hickman in connexion with carbon dioxide and the early use of nitrous oxide by Wells The news of Morton's successful employment of ether in 1846 quickly reached this country and created considerable interest in anaesthesia, which led to the discovery of the anaesthetic properties of chloroform by Simpson in 1847 For the next fifteen years many other drugs were investigated, only to be discarded in favour of the original three agents—nitrous oxide, ether, and chloroform, not until 1923 were there further appreciable advances in this subject He believed that further progress in anaesthesia was only likely to be made by co-ordinated work and by carefully organized large scale trials of new agents He regretted that, while this country was a pioneer in the investigation of problems in the early days of anaesthesia, recent advances had been made mainly abroad

The President then exhibited a cinematograph film showing individual variations in the effect of sodium evipan upon mice

Variations in Effective Anaesthetic Doses

Opening a discussion on variations in effective anaesthetic doses Dr J W TREVAN described a series of experiments in which mice were subjected to intravenous injection of paraldehyde He showed that, owing to the overlap of the statistical distributions of the fatal and of the anaesthetic doses, no single dose, the administration of which would ensure that all mice were anaesthetized without killing more than one in 10,000, could be prescribed This could not be overcome by giving the dose in six fractions The only feasible method was slow continuous infusion of a dilute solution which was stopped when anaesthesia had reached the desired level Similar results had been obtained with sodium amytal, sodium evipan, and avertin

Dr C J M DAWKINS referred particularly to the effect of changes in the weather as a cause of individual anaesthetic response in the patient In a series of 675 dental cases he had found that induction time increased as the barometric pressure fell With relative humidity the lower the percentage the shorter was the induction time He had also investigated the connexion between the complexion of the patient and the induction period, and he found that, whereas the average time taken to produce anaesthesia in fair-haired patients was fifty two seconds, the figure for dark haired was sixty two seconds, and for red haired sixty eight

Spinal Anaesthesia

Professor A D MACDONALD (Manchester), referring to spinal anaesthesia, considered there was only one way in which a spinal injection of a local anaesthetic might kill an animal—namely, by respiratory depression and paralysis Provided the phrenic roots and respiratory centre were not exposed to paralysing concentrations of the drug, the anaesthetic seemed perfectly safe If adequate oxygenation was maintained it was extremely difficult to kill an animal with a local anaesthetic irrespective of the method of administration The principle of individual variation seemed to apply to those cases in which paralysis of tail, bladder, and rectum was observed after spinal anaesthesia He believed that this effect was provoked solely by the anaesthetic drug and he disregarded mechanical trauma and other constituents of the solution, such as dilute alcohol or glycerin, as possible causal agents

Basal Anaesthesia

Dr B P HILL (Reading), discussing basal narcotics said that cases showing hypersusceptibility were very rare when paraldehyde was employed More frequent susceptibility was observed with avertin and more information as to the cause and avoidance of symptoms was available He thought that the damage to the liver cell produced in certain cases indicated hypersusceptibility, and was due to deficiency of a substance which normally protected this organ from necrosis during detoxication of the drug Hypersusceptibility to barbiturates was inconstant even in the same individual Certain inconstant factors predisposed to an undue reaction after a normal dose There was no reliable test by which a hypersusceptible patient could be detected he had tried out a skin test which proved to be quite unreliable

The PRESIDENT asked if individual variation could be controlled by fractional dosage He believed that administration of a non-volatile anaesthetic in a dosage per kilogramme of body weight was unsafe In practice, however, susceptibility to paraldehyde per rectum was not such as might be expected from animal experiments Dr R K FOULKES (Exeter) inquired if liver extract should be given before the administration of chloroform and avertin in order to minimize the risk of toxic effects Dr O C CARTER (Bournemouth) had given 1,500 administrations of avertin without anxiety and had never observed damage to the liver cell He had used this drug for operations upon the gall bladder, and even when there was jaundice Dr B P HILL (Reading) quoted a case of damage to the liver following avertin in which severe headache, vomiting dehydration, and conjunctival icterus were marked features

Professor W P KENNEDY (Baghdad) stated that the depth and duration of avertin narcosis varied considerably in different patients and so the amount of supplementary anaesthetic necessary was a variable quantity He believed the amnesia produced by avertin to be a great advantage Mr W ETHERINGTON WILSON (Torquay) emphasized that a safe and well thought-out technique was important in helping to eliminate the various dangers of spinal analgesia He drew attention to the method of timed vertical ascent based upon mock spinal experiments This was a safe and simple method achieving real control It was he believed safe to administer spinocain by this technique and he described a small series of cases in which percaine 1 in 2 500 had been given to infants with satisfactory results

Ovarian Therapy

Dr P M F BISHOP in a paper on ovarian therapy stated that the oestrogens of which oestrone oestriol and oestradiol were available had a therapeutic effect when given by the mouth Intramuscular administration however was preferable and esterification of the hormone enhanced the effect The action of oestradiol benzoate administered in this fashion lasted for three days and the desire to increase further the interval between injections had led to the institution of crystalline tablet implantation With this method a small compressed tablet of crystalline oestradiol benzoate was introduced under the skin through a small incision by reason of the slow absorption there was a continuous constant effect over a period of time The oestrogens were of value in the treatment of true menopausal symptoms but he believed that even in large doses they were ineffective in conditions commonly thought to be associated with the menopause—for example menopausal arthritis

SECTION OF PHYSIOLOGY AND BIOCHEMISTRY

Wednesday July 20

Methods of Testing Colour Vision

Professor R J S MCDOWALL took the chair when the programme in this section was opened with a paper by the President Professor H E ROAF (Liverpool) on methods of testing for colour vision and theoretical deductions from observations on colour vision

Professor Roaf referred to the fact that in the spectrum there are two main maxima of colour discrimination corresponding to the sensations of yellow and blue green These two regions had been studied to determine whether the sharpness of discrimination was related to any special recognition of these colours when there was no fixed wave length with which to compare them The method of investigation using the spectroscope was illustrated first in respect of the yellow sensation the range being marked between extreme points where the subject saw the yellow to be just tinged with the neighbouring colours of the spectrum Figures obtained with respect to normals showed a narrower range of wave length—that is a higher power of discrimination—than for those with defective colour vision Similar studies in the blue green had led to the conclusion that subjects with defective colour vision had no special difficulty in distinguishing colours produced by this region Professor Roaf then went on to discuss the various methods in use for testing for defective colour vision mentioning first the fundamental lantern method In regard to the Nagel anomaloscope he cited evidence which suggested some systematic defect in this method Passing next to the use of pseudo isochromatic plates on which the normal person could see a design not visible to the subject with defective colour vision he considered Ishihara's plates as probably the best form and explained how they worked Finally he dealt with binocular colour fusion and instanced practical applications that might arise out of a study of this aspect of the subject

Professor MCDOWALL asked whether perception of any one colour was more acute than the rest Dr A SAND (Plymouth) raised the question of the mechanism of conveying colour to consciousness and also referred to colour perception in the lower animals Professor ROAF in reply illustrated the retinal cones with their different colour filters in birds which would explain a three colour vision Dr T S HELE (Cambridge) inquired whether there was any evidence of defective colour vision being associated with vitamin deficiency A number of interesting points were then raised by Dr W R G ATKINS (Plymouth) whether didymium glass would be of use in detecting defective colour vision how far colour vision was affected by fatigue and to what extent the owl was sensitive to infra red Dr L H N COOPER (Plymouth) drew attention to the desirability of testing the colour vision of chemical analysts who have to match colours accurately

Hearing in the Lower Animals

With the President Professor H E Roaf in the chair Dr A SAND (Plymouth) opened a discussion on hearing with special reference to the lower animals

Dr Sand stated that in fishes the organs of the lateral line had a histological structure almost identical with the hair cells of the organ of Corti and they arose in embryological development out of the same anlage as the eye so that one spoke of the acoustico lateral system which included the lateral line and labyrinthine organs By physiological experiments recording the active potentials from lateral line nerves it was found that lateral line receptors were exceedingly sensitive to vibrations of low frequency Moreover perfusion experiments showed that a constant deformation of the hair cell provided a slow adapting rhythmical response in single fibres Extending these conceptions to the organ of Corti one was led to recognize that the frequency of discharge was not determined by the intensity of the stimulus which was an alternating (or oscillating) mechanical change but was driven by the frequency of the stimulus up to the limit of frequency of which the nerve was capable There followed phenomena of alternation and equilibration which destroyed the direct connexion between the frequency of the sound stimulus and the frequency of the nerve impulse discharge They were thus led to the resonance or place theory of pitch discrimination and the interpretation of loudness in terms of the number of sensory elements excited Fishes had been shown to have excellent hearing and to be capable of discriminating pitch to within a minor third But fishes had no cochlea and so the resonance theory could not apply to them

Dr H C PURCER SMITH (Barnes) raised a question regarding high levels of intensity in relation to the sensation of pain while the PRESIDENT drew attention to the possible relation of intensity to the number of hair cells affected Dr SAND in reply stated that loudness was conveyed by the greater or less width of basilar membrane set in oscillation

In the afternoon the section attended the Marine Biological Station where a series of extremely interesting demonstrations were given by members of the staff and visiting members

SECTION OF PATHOLOGY, BACTERIOLOGY, AND IMMUNOLOGY

Wednesday July 20

Aetiology of Rheumatism

With the President Dr M H GORDON in the chair Dr H J GIBSON (Bath) opening a discussion on the aetiology of acute rheumatism and rheumatoid arthritis proposed first to discuss the phenomenon of throat infection with *Str haemolyticus* followed by a latent period which in turn was followed by an attack or relapse of acute rheumatism The epidemiological and serological findings taken together provided a mass of evidence in favour of the aetiological relationship of the haemolytic streptococcus to rheumatic fever Contrary evidence from sporadic cases not susceptible to bacteriological study in the pre rheumatic stages was less

convincing Two alternative theories appeared to fit the observed facts either the disease was an infection with *Str haemolyticus* or some other specific rheumatic agent was primary and the streptococcus merely one of a number of secondary inciting causes Direct evidence for the former theory was slight, though failure to find organisms was not conclusive evidence against a low-grade generalized infection Failure to find the organisms had led to the theory of allergy The acceptance of this presupposed that we knew that the pathogenic potentialities of the streptococcus were insufficient to explain how chronic infection with it could cause disease of the rheumatic type by ordinary means Such an assumption was unwarranted The allergic theory had, however, received support from recent histological and experimental studies, and the hyperergic reaction probably had a place, whatever the nature of the primary infecting agent, and was an important field of investigation that would certainly lead to a fuller understanding of the pathogenesis of the disease Therapeutic evidence of the effects of Dick toxin, passive immunization with serum, or administration of sulphanilamide did not support the streptococcal viewpoint or disprove it The alternative hypothesis of a specific rheumatic infective agent was an almost equally satisfactory explanation of the facts as we knew them, and there was much to be said in favour of it The relation between acute rheumatism and rheumatoid arthritis was a subject of much controversy Clinically there was little similarity, but on the pathological side there was evidence that the diseases might be related Haemolytic streptococci had been recovered from the blood and joint fluid in rheumatoid arthritis and these streptococci agglutinated with the patient's serum The agglutinins resembled the natural antibodies of normal sera more than immune agglutinins following infection or immunization

Dr G H EAGLES said that the possibility of a virus playing a part in the causation of rheumatism had been considered by several investigators Schlesinger, Signy, and Amies had shown in rheumatic exudates particles morphologically similar to those of known viruses which were specifically agglutinated by the sera of rheumatic patients in the active stage of the disease This investigation suggested that these particles were true elementary bodies and were the actual infective agent Eagles, Evans, Fisher, and Keith extended these observations Elementary bodies were obtained from acute rheumatic exudates, cerebrospinal fluid from chorea with carditis and nodules joint fluids from rheumatoid arthritis and, as a control, from non-rheumatic exudates Morphological examination did not suffice to differentiate between those of rheumatic origin and those of non rheumatic Morphological evidence alone was therefore insufficient Considerably greater significance attached to serological evidence gained by agglutination of these particles by patients sera The distribution of positive and negative agglutination was very similar to that observed with the preparations from cases of rheumatic fever, and suggested a common factor in the causation of rheumatic fever, rheumatoid arthritis, and chorea Adequate controls with non rheumatic suspensions suggested that positive results were confined to rheumatism Experiments had been made to establish the infectivity of these particles in monkeys In certain instances the clinical behaviour had suggested grave cardiac damage as a result of inoculation These, along with some abnormalities in electrocardiographic records, were suggestive, but had not been supported by pathological findings He emphasized the need for adequate infection experiments with any supposed elementary bodies before these could be accepted as the aetiological agent

Dr D H COLLINS (Harrogate) said that no one of the pathological phenomena of rheumatism or rheumatoid arthritis was specific to the disease in question Experimental production of various connective tissue changes should not be too readily accepted as having direct bearing on the problem of rheumatism The ultimate aim of experimental work must be to produce rheumatic disease rather than microscopical appearances In view of the fact that so many of the pathological data were of doubtful specificity and that the clinical differences between rheumatic fever and rheumatoid arthritis were so pronounced it was better to regard these two diseases as independent The histologist could see in rheumatic fever phenomena which indicated widespread damage throughout the body, caused either by an infective agent or by its soluble products, together with phenomena resulting from tissue hypersensitivity produced as a phase of the infection These changes might be followed at any time by the non specific processes of repair In rheumatoid arthritis the disease was more clearly localized to the joints and to the subcutaneous tissues which were exposed to trauma Bacteriological researches in both forms of rheumatism seemed to incriminate the streptococcus The histological findings, though unlike those of any hitherto proved streptococcal disease, did not weigh against the possibility of a streptococcal aetiology, since the protean capabilities of the streptococcus in pathogenesis were only just beginning to be explored

Dr C A GREEN (Edinburgh) said that in a group of 200 subjects acute or subacute rheumatic manifestations had been found to be preceded by nasopharyngeal infection in 78 per cent and in 58 per cent haemolytic streptococci were still present in the nasopharynx at the onset of the rheumatic syndrome A relatively high incidence of recent nasopharyngeal infection, 46 per cent was found in a control group, and haemolytic streptococci were found in 30 per cent Of the strains from the rheumatic group 87 per cent were of Group A, while only 42 per cent of the control strains were of this group Further indirect evidence of streptococcal infection in rheumatic persons was provided by their raised anti-haemolysin titres In the quiescent phase the subcutaneous injection of haemolytic streptococcal nucleoprotein might induce local reactions clinically indistinguishable from erythema nodosum and a general reaction simulating a naturally occurring recrudescence of the acute phase of illness As direct evidence of such infection cultures from heart valves with vegetations or from pericardial lesions had yielded haemolytic streptococci in nine out of ten consecutive cases of acute rheumatism examined post mortem Control cultures from healthy valves without vegetations from the same hearts and of heart blood were negative for haemolytic streptococci From six of these cases haemolytic streptococci had been recovered from the nasopharynx during life and in all instances these were serologically identical with those isolated post mortem Rabbits inoculated with post mortem pericardial fluid from rheumatic subjects died as a result of haemolytic streptococcal infection and showed a peculiar distribution of cocci in their tissues The same distribution could be recognized in tonsils infected with streptococci, and a similar appearance could be demonstrated in human heart valves with rheumatic vegetations

Dr E P POULTON said that, in collaboration with Dr Koerner, Gray-Hill and Todd he had observed high antistreptolysin titres in various conditions which had been hitherto regarded as associated with haemolytic streptococcal infection Apart from acute rheumatism erythema nodosum chorea and acute nephritis where a high titre had already been described, they had found high values in purpura whether the platelets were normal or reduced and in two cases where fever and glands following sore throats were the only symptoms He suggested that acute rheumatism might be a syndrome due to different exciting agencies The tubercle bacillus appeared to be the cause in one instance and the relation of the syndrome to the haemolytic streptococcus might be regarded as parallel to the relation of epituberculosis to the tubercle bacillus

Dr M H GORDON said that he himself had injected rabbits intravenously with a highly virulent virus isolated by rabbit testicle passage from a case of small pox These rabbits developed peri articular swellings from which the virus was recovered in greater concentration in the serofibrinous exudate than from the other organs Microscopically the lesions showed the same changes as had been seen in lesions of fibrositis in rheumatism Control experiments with normal horse serum, *Staphylococcus epidermidis Staphylococcus aureus* and *Bact coli* were negative Haemolytic streptococci however did produce arthritis He then tried the effect of mixing virus and streptococci In these experiments the streptococcus alone sometimes produced arthritis, the virus

alone never but the mixture always The streptococcus could never be subsequently isolated from the lesions but the virus was always present in great amount *In vitro* the virus had no inhibiting action on the streptococcus but when the mixture was inoculated intradermally the streptococcus again disappeared though the virus could be recovered from the skin lesions

Sir WILLIAM WILLCOX said that progress in our knowledge of this subject was due to recent advances in bacteriological technique Rheumatism was not a specific disease but a syndrome Fibrositis occurred in many other diseases such as gonorrhoea bacillary dysentery brucella infections etc He urged that investigations should be carried out on virgin soil—that is to say in primary attacks of rheumatism

SECTION OF TUBERCULOSIS

Wednesday July 20

Radiography of the Chest

With Dr ERNEST WARD President in the chair Dr GEORGE JESSEL (Leigh Lancs) opening a discussion on radiography of the chest said that even when pulmonary tuberculosis had been diagnosed radiography was often of much value particularly in treatment by artificial pneumothorax and in surgical procedures and in ascertaining the progress of the disease Caution must be exercised in interpreting radiographs because the x ray appearances of several chest conditions might at times be indistinguishable from each other

Dr G T HEBERT said that the radiological interpretation of fibrosis in the lungs had become more difficult since it had been shown that the lung markings were due to shadows caused not by the bronchi but by the vessels He classified fibrosis into (1) perifocal giving nodular shadows and caused by tuberculosis or silicosis (2) interstitial giving haziness or a ground glass appearance and frequently associated with emphysema and (3) peribronchial simulating congestion Dr Hebert described how thirty radiographs of patients he had fully investigated or whom he had been able to follow up long enough to be certain about the diagnosis were sent without clinical details to about seventy radiologists physicians and tuberculosis officers for an opinion as to whether fibrosis was present or not In regard to some films a correct diagnosis was given by 85 to 90 per cent of the examinees in regard to others an erroneous diagnosis was given by over 50 per cent From this investigation he concluded that it was difficult with certain exceptions to recognize fibrosis of the lungs from the radiographic appearances alone a diagnosis of fibrosis made in this way was usually based on inference rather than on shadows actually cast by fibrous tissue Contraction of the lung was good inferential evidence of fibrosis The earlier stages of the nodular form of silicosis might be simulated by several non fibrotic conditions One should beware of ascribing linear shadows to tuberculous fibrosis unless there was much nodular or confluent shadow in the neighbourhood and of regarding the wall of a circular or oval cavity as fibrous just because it was dense And above all one should beware of diagnosing general fibrosis when the pulmonary markings were merely more prominent or more streaky than usual

Dr W BURTON WOOD without minimizing the importance of the physical examination suggested that physical signs were almost useless in the diagnosis of pulmonary tuberculosis On the other hand radiology could not be relied on alone He deplored the use by some radiologists of the terms active and non active when they were based solely on radiographic appearances Several chest conditions could give similar appearances He expressed some doubts of the value claimed for tomography

The PRESIDENT emphasized that radiological examination was essential but some physicians were specially gifted in the elicitation of physical signs For contact cases an elaborate examination of the chest in addition was generally not necessary particularly as contacts were often much more likely to agree to having a radiograph taken All patients referred to the tuberculosis officer should be x rayed

Dr G GREGORY KAYNE (Staines) expressed surprise that no radiologist had been chosen to be one of the openers of the discussion even though all the three openers practised radiological examination of the chest This would help however to stress the fact that a knowledge of radiology was now an essential equipment of the tuberculosis physician But the radiologist was still required for consultation in difficult cases and for advice on any ancillary radiological examinations that should be carried out to elucidate a doubtful case—for example bronchography oblique films tomography etc He referred to taking films in vertical shift for the detection of small shadows behind the ribs The interpretation of tomograms might be misleading as demonstrated by a recently published case—the tomograms showed a whole system of cavities at necropsy shortly afterwards only one cavity was found Radiological examination was of the greatest value in the prevention of tuberculosis for it enabled the detection of minimal lesions in the apparently healthy Dr Hebert's investigation stressed the fact that skiagrams should not be interpreted in terms having a pathological connotation

Dr PETER W EDWARDS (Market Drayton) stressed the value of thorough screening The interpretation of tomograms was still uncertain but there was no doubt as to the value of the method Stereoscopic films were useful in the diagnosis of early cases and in locating foreign bodies In regard to cutting of adhesions radiology was of little value—one must insert a thoracoscope and look in He stressed the value of serial skiagrams both in diagnosis and in deciding treatment and referred to the confusion that might arise from shadows persisting after injection of lipiodol

Dr H T CHATFIELD (Plymouth) referred to the frequency of pulmonary tuberculosis among naval men from the China station as compared with those from other stations Dr A MCK FLEMING (Gibraltar) contributed some remarks on the recent organization of the anti tuberculosis campaign in Gibraltar Dr J R GILLESPIE (Belfast) recommended the use of the subcutaneous tuberculin test in diagnosis Dr D A POWELL (Cardiff) stressed the value of screening and the need for revision of the nomenclature in radiological interpretation of radiographs Dr SCOTT (London) speaking as a general practitioner defended the use of the stethoscope Dr H S HOWIE WOOD (Shanklin) suggested that radiologists with small but adequate plants should be allowed to take radiographs even if someone more expert was asked to interpret the films

SECTION OF OTO RHINO LARYNGOLOGY

Wednesday July 20

Malignant Disease of the Pharynx

Mr LIONEL COLLEDGE (the text of whose paper was published in the *Journal* of July 23 p 167) opening a discussion on the treatment of malignant disease of the pharynx and larynx and its results said that the problem of treatment had been complicated by the introduction of irradiation especially as in so many cases tumours which responded to this were those particularly amenable to ordinary surgical measures He divided the malignant growths into tumours of the oropharynx and of the laryngo pharynx confining the discussion to epitheliomata which were by far the commonest Unless he found by biopsy that the epithelioma was of group IV a particularly radio sensitive type he preferred surgical treatment In the oropharynx diathermy gave on the whole the best results While admitting that the functional result in surgical treatment of carcinomata of the laryngo-pharynx and larynx was not so universally good as in irradiation he said that the percentage of cures was so much higher in the former that it should always be the procedure of choice

Mr C HAMBLEN THOMAS in a paper on the treatment of such tumours by irradiation said that an operation when possible should be preferred to irradiation having regard

always to preservation or restoration of function The suitability or otherwise of a growth for treatment by irradiation depended upon its situation and the character of its cells The presence or absence of enlarged lymph glands also influenced the choice of treatment glandular metastases being highly resistant to irradiation In many cases irradiation could be a most useful preliminary to operation provided not more than about twenty five days elapsed between the two treatments On the whole he preferred radium needles to radon seeds and deep x rays to the radium bomb To ensure better results from irradiation all cases should be treated as in patients institutional accommodation for these people was at present hopelessly inadequate

MR E MUSGRAVE WOODMAN (Birmingham) said that he had gradually abandoned diathermy for the oropharyngeal growths in favour of irradiation Further he found better results from radium needles than from radon seeds In extrinsic carcinoma such as post cricoid growths one must not hesitate to sacrifice a healthy larynx if by such an operation one could save the patient's life

MR F C ORMEROD then showed lantern slides to illustrate the technique of treatment of carcinoma of the pharynx and larynx by the radium bomb together with radiographs illustrating the results of treatment of post-cricoid growths and metastases in the cervical glands

Injuries of the Nose

MR T POMFRET KILNER in discussing injuries of the nose stressed the importance of early and complete disimpaction and setting of all simple fractures He considered intratracheal anaesthesia and efficient blood suction apparatus essential for careful unhurried work and advocated the use of a simple splint of stent moulded over lead for one to two days after operation In fractures accompanied by external skin wounds he deprecated debridement there being insufficient skin in this particular region to allow of trimming of the edge of the wound without producing distortion A careful search should be made for foreign bodies in such wounds, and all glass and road metal fragments should be removed Fragments of wood were particularly apt to be overlooked Completely separated bone fragments should be removed and in the absence of infection an attempt should be made to manipulate displaced fragments into correct position The wound should be sutured accurately but loosely and a sharp watch should be kept for infection calling for early removal of sutures *Associated fractures—for example of the malar* bone—should be looked for and treated In cases in which there was loss of surface skin he advised early free skin-grafting to prevent distortion Where the loss involved all thicknesses he advocated careful mucous membrane to skin suture around the defect thus paving the way for future reconstruction

MR KILNER showed lantern slides illustrating various types of injury and the results of treatment of these by simple disimpaction and setting surgical refracture hump reduction shortening cartilage and bone grafting and reconstruction by forehead and other flaps

MR E WATSON WILLIAMS (Bristol) thought that simple fractures of the nose were the province of the nasal surgeon but was anxious to hear from Mr Kilner the best method of treating fractures involving backward displacement of both superior maxillae MR HAMBLEN THOMAS preferred to operate if possible within seven days of the injury He asked if Mr Kilner could guide him in the treatment of collapse of the alae nasi MR I SIMSON HALL (Edinburgh) asked whether cartilage or bone grafts were preferable MR GRIMWADE (Birmingham) asked if a chisel were preferable to a rasp for removing humps of the nasal bridge

MR KILNER in reply said he preferred cartilage to bone grafts being so much easier to mould and manipulate except in small children In the case of fractures he advocated immediate reduction and replacement the next best time was as soon as swelling had subsided but even as long as five weeks after the accident it was often possible to manipulate the fragments without refracture A chisel was preferred to a rasp as the latter left much bone dust He had not had cases of collapsed alae referred to him but thought that such cases would benefit by a shortening operation on the septum rather than by any plastic alar operation

Deflection of the Septum

MR W S SYME (Glasgow) opened a discussion on septal deflection He maintained that there were many reasons why a septal deflection tended to be blamed for more ills than it deserved and through this to be treated surgically more frequently than was actually necessary It was easy to diagnose, generally simple to treat surgically and such treatment did not usually cause extreme discomfort or lasting harm Deflection was reported as occurring in from 60 to 80 per cent. of Europeans with no ill effect and was stated by some to be commonly due to trauma by others seldom so Was it abnormal? Its most troublesome effect was the blocking of sinus drainage Nature made compensation for the difference in size of the two nasal cavities When was surgical intervention justified?

MR T RITCHIE RODGER (Hull) questioned whether there had been excessive operation on the septum in early days He thought that submucous resection still had a great sphere of usefulness both as a means of increasing the patient's comfort and to facilitate surgical approach to other nasal conditions requiring operation

SERVICES SECTION

Wednesday July 20

Evacuation and Treatment of Gas Casualties

With Surgeon Rear Admiral F J GOWANS (Plymouth) in the chair Major E H HALL R A M C (Porton) opened a discussion on the treatment and evacuation of gas casualties

Confining his remarks to the problem as it affected the R A M C officer who had to deal with gas casualties in the forward areas during actual warfare Major Hall pointed out that gas casualties in these areas were first dealt with by regimental stretcher bearers and brought to the regimental aid post Here those suffering from the effects of lachrimatory gases could be reassured and returned to their units Also at this post the diagnosis must be made between patients severely affected by sensory irritant gases and those less severely affected by lung irritant gases The former should be retained at the post until fit to return to their units but the latter must be regarded as stretcher cases and treated with rest and warmth and removed to the field ambulance as quickly as possible Vesicant gas cases would probably form the bulk of the gas casualties and for dealing with these Major Hall advocated the marking off at the aid post of a dirty area a decontamination area, and a clean area There should also be extra transport to provide supplies of clean clothing This would ensure that no cases were sent to the next medical unit not properly decontaminated Major Hall considered that in a war of rapid movement the provision of special units purely for dealing with gas casualties was impracticable At the field ambulance cases severely affected with lung irritants and with vesicants could have further treatment, such as the administration of oxygen and saline infusions before being removed to the casualty clearing station This unit should also have sub units with decontamination centres to deal with cases occurring in the immediate vicinity and medical personnel that might have become contaminated The gas proofing of advanced dressing stations was impracticable but if a main dressing station was situated in a building a room and operating theatre might be gas proofed for the reception of the seriously wounded who could not wear respirators At the casualty clearing station special wards might be set aside for the treatment of gas cases and oxygen administered simultaneously to several Here also simple decontamination centres might be necessary to deal with cases occurring in the area of the station but elaborate centres were probably not necessary Major Hall did not deal with cases arising at the base, as measures for

these were exactly similar to those for civilian populations and were given in the A R P handbook

Surgeon Captain E ST G S GOODWIN R N said that accurate assessment of the severity of cases and their treatment at advanced posts would save the time of medical officers and also much hospital work This applied especially to the sorting out of patients who only believed themselves to have been gassed The speaker also emphasized the importance of the recognition of the delayed action of some lung irritant gases He advocated that where possible special wards should be made for gas cases or at least that they should be segregated from the other patients for a time Methods for dealing with gas cases occurring at sea were in principle similar to those clearly explained by Major Hall

Colonel F R SANDFORD R A M C T A considered that special anti gas units should be formed to deal with the treatment and evacuation of gas casualties in forward areas These could be mobile and be moved quickly to the scene of any gas attack This would leave the field ambulances more free to deal with ordinary casualties

Squadron Leader C J S O'MALLEY R A F emphasized the importance of reassurance in dealing with gas cases He agreed with Colonel Sandford that anti gas units should be formed as only in this way could adequate training be provided He spoke of the difficulty of getting sufficient equipment for practical instruction in gas work in his own Service

Major HALL in reply held that segregation was not called for and that urgent treatment for wounds might require immediate admission to the acute surgical ward He also considered that special anti gas units besides being impracticable owing to the rapid movement of troops placed too much importance on the use of gas as a weapon of attack in modern warfare

SECTION OF DISEASES OF CHILDREN

Wednesday July 20

Breast Feeding

With Dr LINDSAY A DEY vice president (Sydney N S W) in the chair Dr J C SPENCE (Newcastle) in opening a discussion on the modern decline of breast feeding said that in the eighteenth century there were few women who did not either feed their babies or hire a wet nurse Now owing to the invention of the feeding bottle and the rubber teat the cow was the mother substitute With an infantile mortality rate twice as high as that in many other countries and about 20 000 preventable deaths each year among young infants, it was important to combat the tendency—shown even in the preventive medicine service—to deprecate the value of breast feeding Analysis of figures led to the conclusion that 20 to 30 per cent of babies were artificially fed from birth in most big towns and not more than one third of the mothers of these towns were fully feeding their babies until the sixth month Dr Spence stressed the likelihood of late evil effects in the adult who had been artificially fed in infancy The effect on the mother who cut short the reproductive cycle had also to be considered It was essential he continued to study closely the different stages in the full establishment of lactation and the large variations in the quantity and quality of breast milk Only 5 per cent of mothers who did not succeed in feeding their infants failed because of physical abnormalities The remainder either would not or did not know how to feed their infants on the breast Ignorance and selfishness were important factors and the fault often lay not so much in the mothers as in their advisers Mismanagement was the chief cause of the failure to establish lactation Better education of doctors and maternity nurses was among the most important ways of correcting this

Dr S J FOLLEY (National Institute for Research in Dairying) describing recent work on the endocrine control of lactation said it was probably true that in the development of the human breast the corpus luteum hormone was necessary as well as the oestrogenic hormones of the ovary and it was likely that mammary growth was induced indirectly by the action of oestrogens upon the pituitary causing this gland to secrete a mammogenic hormone The prolactin of the anterior pituitary activated the adequately developed mammary gland Crude extracts of this substance were more effective than refined preparations in initiating and maintaining lactation in hypophysectomized animals and this was explicable on the lines that the integrity of the adrenal cortex was essential for lactation the crude prolactin supplying this Administration of thyroid gland to cows in declining lactation stimulated secretion of milk It was possible that there was more than one lactogenic factor in the anterio pituitary

Dr AUDREY RUSSELL pointed out that clinical studies o the factors controlling lactation were complicated by the frequent spontaneous return of ovarian activity during lactation Investigation of the lactation and menstrual histories of a large group of mothers in St Pancras where the figures for successful breast feeding seemed to be about 5 per cent higher than those given by Dr Spence for the North of England indicated that there was a definite relation between amenorrhoea and successful lactation Although failure of lactation was possibly due to endocrinal changes in less than 10 per cent of women in fully 50 per cent the cause was mechanical inefficiency of suckling and emptying of the breast The maintenance of this secretory reflex was most important and Dr Russell described an ingenious method of introducing a catheter into the baby s mouth to give complementary feeds at the same time as breast feeding was going on in cases of insufficient secretion in order to encourage good suckling despite the poorly filled breasts

Dr ETHEL CASSIE (Birmingham) said that among maternity and child welfare workers she had found the belief widespread that breast feeding was diminishing, that this was the result of maternal over anxiety or because the mothers were going out to work and that as artificial feeding was now so easy and safe this state of affairs did not matter It was obvious that if such views were held advocacy of breast feeding could not always be as whole hearted as many people desired Dr Cassie thought that the mother s diet especially as regards first-class protein was not sufficiently taken into account Figures for Birmingham showed that while the babies were under the care of the midwife only 3 per cent were artificially fed, and that by the time the health visitor took charge the figure had jumped to 12 per cent Better management of breast feeding and careful instruction of the mothers was the main solution of the problem

Dr C K J HAMILTON thought that proper management was the most important factor in success it was a mistake to imagine that breast feeding was a natural process which could be left to maternal instinct as was shown by the fact that breast feeding had been re established successfully in fifty out of fifty four cases Failure began when the mother left her bed and went back to household duties and it was important that mothers should be able to obtain prompt advice when there was any temporary diminution in secretion Advice at the ante-natal clinics should be of great help Test feeding was most valuable in estimating the degree of failure and in helping in its correction

The CHAIRMAN (Dr Lindsay Dey) emphasized the great importance of breast feeding during the first three months of life Postgraduate instruction of doctors in this matter was necessary Dr J GREENWOOD WILSON (M O H Cardiff) agreed that more knowledge of the advantages of breast feeding over bottle feeding was needed Working back from a series of children leaving school he had been unable to detect any difference between those who had been breast fed and those who had been bottle fed in infancy He thought from personal experience that well managed bottle feeding was easier to attain than well managed breast feeding Modern unrest and pleasure seeking were perhaps the strongest influences against breast feeding Dr P DE FREMERY (Holland) described the activity of the lactogenic and oestrogenic hormones in goats Under the influence of oestrogenic substances the udder developed percutaneous administration being best Dr A G WATKINS (Cardiff) thought that the

solution of the problems of lactation must begin with the adequate training of medical students and nurses Public health workers in particular required more detailed practical instruction Instruction of mothers during the ante natal period was most essential Dr RUTH YOUNG (New Delhi) said that in India the majority of infants who survived the first month showed a steady increase in weight up to the seventh or eighth month of life Yet the diet of many of the mothers was extremely defective according to usually accepted standards often lacking entirely in first class protein frequently in fat and sometimes in fresh vegetables It was possible therefore that defective diet was not such an important cause of failure of breast feeding as had been suggested Dr MAVIS H D GUNTHER (Esher) speaking as a mother who had breast fed her baby pointed out that breast feeding entailed a big social sacrifice and it was also far too much wrapped up with modesty Mothers fed their babies in solitary state and lacked encouragement Dr DOROTHY E MASON (Bethnal Green) described the overfeeding that resulted from rigid insistence on a four-hourly programme In her district recently abscess of the breast had appeared as an important cause of failure of breast feeding and might be due to non emptying of the breasts Dr E C DAWSON (Derby) stressed the significance of psychological factors The baby was most often brought to the general practitioner for fretfulness and he found small doses of sedative drugs (bromide and chloral) most valuable as a first step in getting things right again

Dr F M B ALLEN (President Belfast) remarked that the problem had existed in ancient Rome As a teacher he found it essential to be dogmatic with definite rules, especially paying attention to the difficulties and how they might be overcome

BEIT MEMORIAL TRUST FOR MEDICAL RESEARCH

A meeting of the Trustees of the Beit Memorial Fellowships for Medical Research was held on July 13 for the election of Fellows and other business

The total number of Fellowships held by full-time workers during the year 1937–8 was twenty-three The number of candidates at the present election was higher than usual Five applied from Canada and three from Australia Fortunately reserve funds made it possible to award more Junior Fellowships than are ordinarily given each year and the election of twelve new Junior Fellows brought the total of those elected since the beginning of the Trust in 1910 to exactly 200 A fresh edition has been printed this year of the Green Book, which summarizes briefly the after careers of each Fellow and their present position in research

Election of New Fellows

The following elections were made

Senior Fellowship (value £700 a year)—David Ezra Green M Sc Ph D To continue his research on the role of vitamin B_1 in the oxidation of pyruvic acid and to study a new flavin-protein compound in milk (Institute of Biochemistry Cambridge University)

Fourth Year Fellowship (value £500 a year)—Myer Head Salaman M A M D To continue his research on vaccinia and animal pox viruses (Lister Institute of Preventive Medicine London)

Junior Fellowships (normal value £400 a year)—Geoffrey Bourne D Sc Biochemist Commonwealth Advisory Council on Nutrition Sydney N S W 1937 Proposed research the significance of vitamin C in the endocrine system (Department of Human Anatomy Oxford University) Andrew Lawrence Chute B A M D *Proposed research* experimental studies in metabolism of the brain (Department of Physiology University College London) Robert Oswald Lennard Curry M A Ph D Proposed research the physiology of speech disorders by photographic study of laryngeal movements (University College London) James Frederick Danielli B Sc Ph D Proposed research the permeability of normal and denervated muscle to metabolic products and to drugs (Institute of Biochemistry Cambridge University) John George Dewan M A M D Proposed research insulin shock treatment of schizophrenia by experimental studies of brain metabolism (Institute of Biochemistry, Cambridge University) Catherine Olding Hebb, M A, Ph D Proposed research the effect of thoracic sympathectomy on the activities of the lung (Department of Physiology, Edinburgh University) Bernhard Katz M D Ph D Proposed research electric excitation and transmission of impulses in nerve and muscle of animals (Department of Biophysics University College London) Jonas Henrik Kellgren M R C P, F R C S Proposed research painful conditions of the limbs and back (Department of Clinical Research University College Hospital) John James Duncan King Ph D L D S Proposed research dental caries and parodontal disease (Medical School Sheffield University) Hermann Lehmann, M D Ph D Proposed research blood sugar in animals, and iron metabolism in plants (Institute of Biochemistry Cambridge University) Walter John O'Connor M B B S Proposed research effect of strophanthin on the oxygen consumption of the heart (Laboratory of Pharmacology Cambridge University) Harold Scarborough M B Ch B Proposed research mode of destruction of vitamin C in the human body (Clinical and Chemical Laboratories Royal Infirmary, Edinburgh)

All correspondence of Fellows and candidates should be addressed to Professor T R Elliott M D F R S honorary secretary Beit Memorial Fellowships University College Hospital Medical School University Street, W C 1

THE CANCER CAMPAIGN

Viscount Hailsham presided at the sixty seventh quarterly meeting of the Grand Council of the British Empire Cancer Campaign held at 11 Grosvenor Crescent on July 11 On the recommendations of various committees the following grants were made totalling £3 715 in addition to the sum of approximately £45 000 which has already been approved in grants for the calendar year 1938 £1 100 towards the expenses of the work of the Radium Beam Therapy Research £750 for the expenses of the research being carried out by Mr F C Pybus at Newcastle £300 to Dr P R Peacock at the Glasgow Royal Cancer Hospital for the salary of a whole time assistant £495 for the salary of the physicist at the Strangeways Research Laboratory Cambridge £750 for the expenses of certain investigations being carried out under the direction of Dr P M F Bishop and Mr H J B Atkins at Guy's Hospital £270 to Dr John Bruce at Edinburgh University, for part time investigations and £50 for a replacement in apparatus at the Strangeways Research Laboratory

The Council decided that the fifth biennial informal conference of cancer research workers should be convened by the Campaign in the spring of 1939 It was gratified to learn that King Edward's Hospital Fund for London had intimated its willingness to co operate with the Campaign in its newly inaugurated scheme for the co ordination of clinical cancer research by stimulating the establishment of efficient follow up systems for cancer patients in the hospitals

A selection committee is considering applications for the post of full-time Medical Secretary and Registrar When appointed the successful candidate will proceed to the United States and other centres to study the latest methods of dealing with statistical information The new department of the Campaign will deal with the records of approximately 17 000 new cases of cancer annually, supplied by over 100 hospitals in the London metropolitan area

Grand Council approved of the reappointment of Dr G Cranston Fairchild as the William Morris Research Fellow in Radiology at Mount Vernon Hospital for a further period of three years subject to an annual recommendation from the Council of the Radium Institute and the Mount Vernon Hospital This Fellowship was created by the Campaign in 1931 at the request of Lord Nuffield who provided a sum of £25 000 for the purpose of promoting research work and study concerning the treatment and cure of cancer by radiology

Local News

ENGLAND AND WALES

National Hospital New Wards and Research Department

The new wing of the National Hospital for Diseases of the Nervous System perhaps better known as Queen Square Hospital, London which was opened by Queen Mary on July 19 increases the accommodation of the hospital by 43 beds and provides two entire floors and a basement for research work The building adjoins the old hospital overlooking the square, and is severely simple in its lines with no ornamental detail

The two highest of the seven floors are devoted to single bed wards where patients can have the privacy that is often so desirable in an institution for this class of case Each ward has one of its walls consisting almost entirely of window which can be opened out upon the gardens and trees of the square below The fifth floor contains two operating theatres with a large sterilizing room and a room for x ray diagnosis Students galleries are built in the theatres in such a way that their occupants can obtain a close view of an operation from the best possible angle although separated from the main theatre by sloping glass screens Below this theatre floor there are three floors occupied by four bed wards two of them surgical and one medical and here again one of the walls is glazed and can be opened out to give the ward the effect of a balcony The first floor ground floor and basement are given over to the purposes of laboratory research and teaching The post mortem department is in the basement with two small chapels attached one for Jewish rites On the ground floor there is a large lecture theatre and two sets of consulting rooms where the physicians and surgeons of the hospital can see private patients and all the remainder of the space on these floors apart from a library and a refectory is occupied by laboratories The furnishing of these laboratories has had special attention and in the search for ideas some of the best equipped laboratories in various parts of the world have been visited including the famous physical chemistry institute of Upsala The complicated system of electrical and mechanical services has been installed in such a way that in the finished building they obtrude themselves to the least possible extent All the benches are standardized and movable and can be placed anywhere around the walls or in the centre of the room with the certainty that the necessary services will be available at any point On each landing there is a clock which dials the number of any member of the staff who is wanted and the number is dialled fifteen times in succession until the truant is traced Electrically controlled blinds close the windows when a button is pressed In the private wards the lights can be dimmed from outside without the necessity of entering and disturbing the patient There are innumerable contrivances of this kind Another amenity is the provision of waiting rooms on each floor for the friends of patients

The new building which is not yet occupied—the shortage of nurses here as in other new hospitals is one cause of delay—is by no means the end of present developments at Queen Square It is hoped to build a new nurses hostel for which a neighbouring site has been acquired and to reconstruct the out patient department The new wing especially the research department has been rendered necessary by the fame of the research work in neurological medicine and surgery done at this hospital The accommodation for research became inadequate and in 1935 the Rockefeller Trust gave £60 000 towards the building on condition that another £60 000 was raised The Trust gave a like sum to be invested for the endowment of research The second £60 000 was more than secured from three sources—£29 000 from Lord Nuffield £11 600 in response to a broadcast appeal and £20 000 from picture house collections In addition there have been many other large gifts including £1 000 from the Corporation of the City—recalling the fact that the hospital itself was started as the result of a Mansion House meeting—and the building fund has now reached £158 000

Voluntary Hospitals of Sheffield

The Duchess of Gloucester visited Sheffield last week to inaugurate an appeal for £1 000 000 for the city's voluntary hospitals During the day she attended a meeting at the City Hall opened a new ward at the Children's Hospital for the treatment of children under 1 year suffering from dietetic disorders and laid the foundation stone of the new maternity block at the Jessop Hospital It was announced by Mr W R S Stephenson chairman of the executive committee of the appeal that two thirds of the sum required would be found by employees and employers in the district who already contributed to the maintenance of the hospitals through the penny in the pound scheme The remaining third would it was hoped be subscribed by the general public and public bodies The aim of the scheme of reorganization of the Sheffield hospitals was to centralize all specialized work At the Jessop Hospital Mr James Henderson chairman of the board of management explained that additional maternity beds were the most urgent of Sheffield's hospital needs and the financing of the new block at that institution would be the first call on the £1,000 000 appeal fund

A Convalescent Home in Kent

The opening of a convalescent home near Tunbridge Wells by Sir Kingsley Wood on July 1 marks the recognition by the Kent County Council of the need for restoring the individual to fuller health than is afforded by actual hospital treatment The establishment of this home has been made possible through the generosity of Mrs Vera Salomons who has presented the house and grounds by deed of gift The house was formerly the home of her family and is being named the David Salomons House in memory of the father of the donor It is a spacious country house standing in about thirty five acres of beautifully wooded grounds and has been adapted by the County Council to provide accommodation for seventy female patients between the ages of 15 and 45 In view of the importance of diet during convalescence a cook dietitian has been appointed and every effort has been made to depart from the hospital atmosphere and to create restful and pleasing surroundings There are adequate facilities for rest and recreation both indoors and out and there is a well-equipped theatre attached to the house for the entertainment of the patients Until recently convalescent treatment has only been possible through the agency of voluntary bodies or by the private arrangements of the patient and the fact that the Kent County Council has provided such treatment as part of its public health service is a noteworthy advance in the care of the sick The decision to use the home for female patients in the 15–45 age group is important While the average man after his discharge from hospital has some time on sick benefit before returning to work the housewife who will be represented by many patients in this group often goes straight from hospital to full and arduous work in the home

Notification of Measles and Whooping-cough in London

The Minister of Health on July 15 inserted a notice in the *London Gazette* advertising regulations which it is proposed shall come into operation on October 1 next for the compulsory notification by medical practitioners of all cases of measles and whooping cough occurring in the Administrative County of London except in the following cases (1) If a previous case of measles or whooping-cough has occurred in the house and has been notified within the preceding period of two months (2)

If the case is being treated in a hospital for infectious diseases (3) Where the patient has been admitted into a hospital belonging to the London County Council Regulations which are already in operation in certain Metropolitan Boroughs for the notification of one or both of these diseases will be rescinded by the new regulations Measles and whooping-cough are notifiable only in those places for which special regulations of this kind have been made Reference to this matter was made in our Epidemiological Notes last week

Cost of Medical Care to Local Authorities

The Minister of Health has now issued Part I of the Costing Returns for the year ending March 31, 1937 (H M Stationery Office, 1s 3d) The returns relate to all the principal institutions (other than infectious disease hospitals) for the treatment of persons in need of medical or surgical care and attention which are administered or utilized by local authorities in England and Wales The institutions for which particulars are given comprise Poor Law hospitals, general hospitals administered by local authorities sanatoria and other residential institutions for the treatment of tuberculosis and maternity homes and hospitals The main object of this publication is to assist local authorities in the economical administration of the institutions under their control by enabling each authority to make comparisons between the average costs of their own institutions and of the comparable institutions belonging to other authorities Careful investigation into the causes of divergencies in unit costs is a valuable method of securing economies and improvements in methods of administration

Board of Education Report

The annual report of the Board of Education for 1937 (Cmd 5776, H M Stationery Office, 3s 6d) covers the calendar year and is, as usual, combined with the Board's statistical tables, most of which relate to the period ending in March or July The introduction to the report mentions some of the outstanding events of the year One was the introduction of the Government scheme for the development and extension of opportunities for recreation and physical education, a fuller account of this is given in Chapter I The Board's total estimate for the year 1937–8 was £49,500,000—nearly £1,500 000 more than that for the previous year Most of this increase was due to larger expenditure by local authorities on elementary and higher education Substantial progress was made in all branches of educational activity including the School Medical Service, and in particular the report comments on the more rapid growth in the provision of nursery schools Widespread attention has been given by local authorities to the institution of preventive and instructional measures designed to promote the safety of children on the roads The results of an inquiry into children's homework and the conclusions of the Board on the subject were published in 1937 The Board again calls attention to the importance of the appointment of organizers of physical education At the beginning of 1936, out of 316 local education authorities, only 124 employed these organizers By the end of last year the number had increased to 232 authorities Steps were taken to meet the need for an increased supply of teachers capable of giving instruction in physical training The Board explains in some detail the circumstances in which the Government scheme for the development of opportunities for recreation and physical training was launched During the past quarter of a century educational practice has been steadily moving from a narrow interpretation of formal training to the wider conception of developing the individual A similar change has transformed physical education in the schools from a system of formal drill into one of free exercise embracing not only gymnastics and physical exercises but games swimming and all sorts of outdoor activities This wider view of the educational process was recognized in the Education Act of 1918, which gave local authorities power to supplement and reinforce the instruction given in the schools by providing opportunities of social and physical training for school children and young persons But the opportunities for young people to indulge these interests have in the past been incomplete These considerations moved the Government, spurred on by the British Medical Association Report, to set up the National Fitness Council, and through the Physical Training and Recreation Act 1937, to confer on local authorities new and extended powers for providing gymnasiums, playing fields camps community centres, swimming baths, and the like The report gives some account of the work which the National Fitness Council has already accomplished From the section on school meals and milk it appears that only about half the children in public elementary schools take advantage of cheap milk The number of authorities providing school meals or milk during the year ending March 31 1937, was 247, compared with 235 in the preceding year by the end of the calendar year 1937, 249 authorities were providing meals or milk The Board points out that the Advisory Committee on Nutrition recommended that children should take from one to two pints of milk a day, and it regrets that parents do not appreciate more fully the opportunity provided by the milk-in-schools scheme of obtaining so valuable a food for their children at half-price

Preston Hall, Maidstone

Two matters call for special notice in the report of the medical director of British Legion Village, Preston Hall for the two years ended September 30, 1937 The first concerns the future of this settlement It has been obvious for some time that Preston Hall could not continue as a centre for the treatment of ex-Service men only Indeed, 38 per cent of those now under treatment are not ex Service men The council of management has therefore recommended to the National Executive Council that the British Legion should continue to be the owners of Preston Hall and be responsible for its future and that a separate appeal should be made on behalf of Preston Hall 'with the clear understanding that the money would be required to carry on a national work for the whole of the community, and not for ex-Service men only' The second matter is the "arrested-cases scheme' A number of patients in whom the disease has been arrested and who are still working in Preston Hall industries are now resident not in the Village Settlement itself but in houses in the near neighbourhood These houses are being built by private enterprise, and are purchased or rented, sometimes with the assistance of the British Legion In addition, twenty-four settlers considered to be within the category of "arrested cases' have left the Village and are working elsewhere in England It is emphasized that no pressure of any kind is brought to bear on these men to move that no relapses have been reported in this group and that the introduction of this scheme has had no effect on the number of fresh applications for admission to the settlement

London Emergency Bed Service

The Voluntary Hospitals Emergency Bed Service has now completed its fifth week of working, and in spite of having taken deliberate steps to avoid any rush of calls when it was opened it has already dealt with well over 500 cases The actual cases offered have varied very considerably, and though all types of medical and surgical emergencies have been dealt with, the average length of time between receiving a message from a doctor and obtaining admission for his patient is still in the neighbourhood of five minutes It is possible, if all the circumstances are favourable, to complete the arrangements for the admission of a patient within three minutes as was done in the case of a doctor who telephoned at 1 17 p m asking for admission for a patient suffering from acute appendicitis, by 1 18 p m the Miller Hospital had agreed

to take the case at 1 19 p m an ambulance had been ordered and at 1 20 p m the doctor was informed that an ambulance would call for his patient Many doctors are apparently still reluctant to use the Service as is evidenced by the fact that on several occasions doctors who have made use of it have said that they had already tried three hospitals all of which had recommended them to ring Metropolitan 8781 In one instance a doctor said that he had spent over an hour trying to get admission for his patient and when he finally rang the Service admission was obtained in seven minutes The Service is now capable of dealing with any call that may be made upon it, and it is no longer necessary for doctors to hold back for fear of overwhelming an untried institution

The Case for Cremation

A conference organized jointly by the Cremation Society, of which he is president and the Federation of British Cremation Authorities was opened by Lord Horder on July 22 at Balliol College Oxford Lord Horder said that earth burial which had long been a luxury was to day a social crime On the score of lack of reverence this at least could be said for cremation—that it spared the irreverence of exhumation which was the lot of so many thousands of bodies and it spared also the neglect of graves so evident in many cemeteries Moreover, the crematorium chapel was more comfortable than an open graveside and spared much to mourners who often attended funerals in an impaired state of health due to the anxiety of the period through which they had passed *Cremation by reason of its system of certification* enforced by the law both prevented and detected crime Death certificates signed by medical men who had not examined the bodies after death were impossible in the case of cremation, for which two medical certificates were demanded and these must be completed to the satisfaction of a medical referee before cremation could take place Leeds City Council was represented at the conference and this week Alderman Masser has opened a new crematorium at Cottingley Hall Dr J Johnstone Jervis medical officer of health for Leeds in a handbook describing the Cottingley Hall Crematorium writes If anyone were to ask me what, in my opinion was the ideal method of disposing of the dead I would unhesitatingly reply cremation The reasons for this answer are first that it is the most hygienic method secondly that it is the most expeditious method and thirdly, that it is the method *best suited to the times in which we live* Who will say that a graveyard in the midst of a thickly populated city or even in a suburban area, is a benefit to the people s health?

SCOTLAND

Edinburgh University Graduation

At the medical graduation of Edinburgh University on July 20 Lord Tweedsmuir was installed as Chancellor of the University in succession to the late Sir James Barrie There were thirteen recipients of the honorary degree of LL D including the Governors General of Canada India and Australia and two Cabinet Ministers one of whom was Dr Walter Elliot the Minister of Health Lord Tweedsmuir in his address, said that a university was not a mere wicket gate which once passed was no more thought of it should influence every stage of life. It had two plain duties—to transmit knowledge and to advance knowledge—and both required equal emphasis General culture was of little value to a young man if he was going to starve but on the other hand if they had only what had been called the service station conception of a university they would have men entering a profession without having been taught to think The purpose therefore of the university should be to combine humanism with technique The other primary function of a university was to pursue truth by research experiment and speculation Our forefathers based all learning on the study of philosophy and Lord Tweedsmuir suggested that they should return to an insistence upon the liberty of the mind If they could give to the youth minds accustomed to think and inspired with a reverence for thought and at the same time give them the perspective created by understanding our long human story they would be endowed with confidence and hope It was often said that modern youth lacked the enterprise stamina and fortitude of their fathers, but he believed this to be untrue Those who to day entered the church medicine law or commerce found the technique of these professions more elaborate than it was in their fathers day that delicate structure called civilization had to be maintained in a world full of destructive forces The mechanism of society to-day had become so intricate that it was far more exposed to disaster than the simpler mechanism of earlier days and they could only preserve the standards by the constant exertion of intelligence The Chancellor afterwards conferred the M D degree upon sixteen graduates and those of M B Ch B upon 163 graduands

Principal of the Veterinary College

The Governors of the Royal (Dick) Veterinary College Edinburgh have appointed Colonel Sir Arthur Olver C B C M G F R C V S to be principal of this institution in succession to the late Dr O Charnock Bradley Sir Arthur Olver who is 62 recently retired from the post of Animal Husbandry Expert to the Imperial Council of Agricultural Research in India In 1908 he was appointed Assistant Director General of Army Veterinary Services and for his work in the war he was awarded the C M G and C.B He was instrumental in introducing many improvements in animal husbandry and veterinary education, among them were dairy farms in each of the five provincial veterinary colleges of India He also drew up the scheme for a higher-grade veterinary college in India in which he laid special stress upon the subjects of animal nutrition and animal genetics

Conference on Health Education

At a conference organized by the Department of Health for Scotland in the Empire Exhibition, Glasgow on July 19, Mr H J Scrymgeour Wedderburn Parliamentary Under-Secretary of State for Scotland who presided said the future of Scotland depended on the health of the young people who were leaving school at the rate of 90 000 a year Mr Joseph Westwood M P *suggested that the three routine medical inspections* during school life could be cut down to two and that medical staffs might thus be freed for work among pre school children Medical services should be provided for the family in the same way as they were for the insured worker The law should be amended so that local authorities might provide meals for school children as a preventive measure a good midday meal would prevent much of the debility which they were now seeking to remedy The medical profession must work in the closest harmony with the local municipal services, and the State must give local authorities the necessary financial assistance Mrs Walter Elliot speaking of the young citizen pointed out that there was really no control after boys and girls left school there were many voluntary organizations to cater for them but these did not attract more than one in three of the juvenile population When people were removed from the slums to charming new houses their social interests and leisure time should also be catered for Sir John Boyd Orr considered that the physique of the youth of to day was better than that of his father s generation and he believed that twenty years hence there would be

still further improvement The extension of the school-leaving age by another year would be a great benefit in providing another year's discipline and much could be done in the last two years of school to impress upon the child that its future lay in its own hands A healthy physique and character were of more importance for success in life than a good deal of money or a great deal of academic learning The youth of to-day was not so much impressed with the necessity for getting on in life as was the youth of twenty-five or thirty years ago, but he was beginning to realize that he was a debtor to the community, and that he had to make some contribution for all he had received from it The chairman said that Scotland was a small nation with a population under five millions The fall in the birth rate had raised many issues of high policy in the State and one problem was to secure that those who were born were equipped to lead a full and useful life The conference had brought home to them that the health organization of Scotland was doing a great work, although it was not perfect and was not sufficiently used They were now spending £20,000 000 in Scotland on health services of every kind, but he doubted whether they were getting as high a return for it as they ought

Correspondence

Bragg-Paul Pulsator

SIR —On July 8 an S O S message was sent out by the British Broadcasting Corporation asking for a Bragg-Paul pulsator, which was required for a case of respiratory paralysis at the Ipswich Hospital A pulsator was at once sent off from the London Hospital, but did not arrive in time In a recent article (*British Medical Journal* June 4, p 1206) Dr C J McSweeney, of the Cork Street Hospital in Dublin, described the use of the pulsator, which he said had enabled him to tide over the period of complete paralysis of the thorax muscles, and to save life, in twenty-six cases Quite recently a pulsator was required for a serious case in Belfast, fortunately, a spare pulsator had just arrived at Dr McSweeney's hospital, and was sent off at once It was hurried through the Border Customs, and arrived in time to be applied successfully It is hoped that by this time the child is out of danger It seems obvious that pulsators should be kept in readiness at known centres so as to be available for immediate use by qualified practitioners

The particular form of apparatus which goes by the name of the Bragg-Paul pulsator had its origin in an attempt to give relief to a friend of mine and to his family My friend suffered from an extensive paralysis he was quite unable to breathe For months he was kept alive by nurses and relations who used a simple method resembling that which is prescribed for cases of apparent drowning I thought that it might be possible to reduce the labour and inconvenience and I arranged that a football bladder should be bound upon my friend's chest connected with a similar bladder fixed between two hinged boards By closing and opening the boards the chest was alternately compressed and allowed to recover by its natural elasticity It was very much a home-made apparatus but it worked and was in use for a long time I then asked my friend Mr Robert W Paul to improve the design and if possible to draw power for working it from the water mains electricity was not then available This he did in a very ingenious manner For three years or so my friend's breathing was accomplished entirely by the pulsators we made He lay in bed all the time The application of the apparatus caused him no inconvenience nor did it interfere with his nursing The tube connecting the pulsating machine with the hollow bandage which had now replaced the football bladder was hidden by the coverings of the bed and there was no evidence of anything unusual except the quiet click-clack of the pulsator in another part of the room

Mr Paul then designed the apparatus for use on the electric circuit and has recently improved it in many ways, which have been suggested during its use in hospitals Among other changes the electrically driven gearing is enclosed in an oil bath, and the new pulsator is practically noiseless Several pulsators have been made by Mr Paul, or under his direction, because he is naturally interested in perfecting the design I am sure that Mr Paul (69 Addison Road, London, W 14) will gladly give advice to any person or institution proposing to procure one of the new pulsators To avoid misunderstanding I would add that I am not financially interested in the apparatus —I am, etc,

The Royal Institution, London, W 1, July 21 W H BRAGG

Abortion and the Law

SIR —There has been so much discussion in the lay press on the different aspects of my recent prosecution that, for the first time, I should like to make some points clear to my fellow members of the profession through your columns

Before this case was brought before the courts it is a fact that, despite what has been said to the contrary, the question of even therapeutic abortion has been a source of great anxiety to doctors, chiefly those in general practice Uncertainty exists because it is so difficult to define what constitutes an indication for the operation

We all know that there are many vague and almost indefinable conditions which, as serious danger to health though not to life, are much more important than many straight cases of heart or chest disease The latter often suffer little or no real depreciation of health, but they carry the label of a named disease, which is readily accepted by laymen, the former class, by reason of the lack of concise clinical definition, may not be readily convincing cases in any subsequent legal investigation These patients form the real problem

It is comparatively simple for the consultant obstetrician behind his defence of special knowledge and experience, particularly in large centres, to induce abortion, but it is a very different problem for the general practitioner in a small town or country district Between the pressure exerted on him by the patient and her husband on the one hand and the justifiable fear of misinterpretation of his action by gossips, or even the police, on the other, his position can be very difficult

For years I have been impressed by this difficulty and decided to bring forward a test case, when the opportunity arrived, in which there would be no real danger to *life* (except suicide, which is occasionally committed by girl patients) but in which one might very strongly suspect great danger to health I was also concerned to establish in the eyes of the law that mental health was just as important as physical health and in certain cases perhaps even more so This does not mean that I regard abortion as necessary in most cases of insanity I am informed by my colleagues practising psychiatry that the operation plays little or no part as a treatment or prophylaxis of most forms of insanity I also wish to state once again that I did not bring the case forward as an attempt to alter the law by direct action, but to obtain a further definition of the present law

The Attorney General admitted that abortion is legally recognized when life is in danger Now we know that it is also admitted where there is *serious* danger to health Much emphasis must be placed on the italicized word *serious* I would not have it be believed that I have worked for a loose interpretation of a law which I have observed myself perhaps too rigidly Nevertheless I cannot help feeling that the majority of the profession would feel that they are on safer ground if the precedent just established were incorporated in a new Act passed in days of much more knowledge of medicine surgery, and psychology than was available in 1861—I am etc,

London W 1 July 25 ALECK BOURNE

SIR—We read in the newspapers here that Mr Aleck Bourne is being prosecuted in London on account of the performance of an illegal operation From what one has seen it would appear that the operation was the production of abortion in a girl who had become pregnant through rape It would also appear as though he had done this openly perhaps as a test case If this is so he surely deserves not only the thanks of his medical colleagues but also the gratitude of the public, who may at any time be victims of such assaults No doubt he will have the utmost support from the great body of his colleagues at home

The subject has of course received a good deal of publicity in your columns of late and different views have been expressed I think it was recently reported that, during a discussion on the subject Mr Justice Humphreys had expressed the opinion that a doctor feeling he should take this course would be advised to collect his colleagues about him thus being open in the matter, and that he then would have little to fear from the law It would appear that this is what has here been done, and, if so it is to be hoped that the law will play its part fairly and honourably

Why after all, the inconsistency? If it is technically illegal to procure abortion, then why has it been winked at where the reason was the preservation of health if an attempt is to be made to enforce it in cases where the motive is to relieve the patient and her relatives of what is to them a very real misery? It has long been realized by many, and prominent among them the late Mr Justice McCardie that it was high time that such abortions were legalized and now surely it is more than time that this should receive official recognition Doubtless a good deal will appear in the *Journal* regarding this case from better informed and abler pens than mine, and members of the profession will follow events with interest and feeling—I am, etc,

Natal S Africa July 3 DAVID T MACLAY M B

The Unconscious Mind and Medical Practice

SIR—In the *Journal* of July 9 (p 93) the late Dr Harry Campbell confesses to a difficulty in understanding what the unconscious of the psycho analysts may be, and blames them for not giving a precise definition of the term Speaking not as a psycho analyst but as a medical man interested in psychological medicine I share his difficulty but recognize the impossibility of defining one unknown quantity in terms of another Like Dr Campbell, I do not wish to initiate a useless discussion on terms and I have found the psycho analyst's view of the unconscious quite clearly put forward by Galton many years before psycho analysis had become the little understood but freely discussed and much misused term that it is to day True, Galton explains it by analogy only but perhaps this is as far as it is possible to go Interested readers should refer to the Everyman's Library edition of *Inquiries into Human Faculty* wherein is a great deal of extremely stimulating material of which the section on psychometric experiments has most bearing on the present question On page 131 Galton writes

> The furniture of a man's mind consists of his recollections and the bonds that unite them As all this is the fruit of experience it must differ greatly in different minds according to their individual experiences
>
> When I am engaged in trying to think anything out the process of doing so appears to me to be thus The ideas that lie at any moment within my full consciousness seem to attract of their own accord the most appropriate out of a number of other ideas that are lying close at hand but imperfectly within the range of my consciousness There seems to be a presence chamber in my mind where a full consciousness holds court and where two or three ideas are at the same time in audience and an antechamber full of more or less allied ideas which is situated just beyond the full ken of consciousness Out of this antechamber the ideas most nearly allied to those in the presence chamber appear to be summoned in a mechanically logical way, and to have their turn of audience

The passage is too long to quote further but it is of interest to note that it was written in 1883—I am, etc,

Sheffield July 20 E FRETSON SKINNER

The Final M B, B S.Lond

SIR—Sir Ernest Graham Little's letter in your issue of July 16 (p 153) seems to suggest that there is now some cause for congratulation at the recent decision of the Royal Colleges *not* to co operate with the University of London in regard to the final medical examinations With all due respect to Sir Ernest with whom I have for many years maintained the friendliest relationship may I as a general practitioner who is a graduate of London University and a holder of the Conjoint diplomas as well but who has also maintained close touch with his university ever since graduating on Convocation and as a member of the Standing Committee since 1927 be allowed to express a contrary opinion? I would like everyone to take the broadest possible view of the whole matter

Ninety per cent of medical men enter into general practice—that is, into medicine in the widest sense When we begin a course of study at one of the London medical schools we do so with one object in view—namely to get qualified to get upon the *Medical Register* to be able to earn a living in the field which we have chosen and to be able to attend people in sickness and distress Once engaged in general practice the question of what degrees or diplomas we hold plays no part in the scheme of things at all Only one thing counts—work—and for that we require not degrees but common sense energy keenness concentration and an insight into the patient's mind If further help specialist skill or additional advice are required we must know where to get them whom to call in and the right moment to do so We who hold the M B B S Lond degrees are not conscious of superiority over our colleagues who possess merely the Conjoint diplomas Not only the public but the profession itself pays no more deference to the M B B S Lond than to the Conjoint diplomate Many London medical graduates are anything but a success in practice whereas many a Conjoint man has the biggest and most successful practice in the whole district We must look

these facts in the face and see them as they are and not just as we would like them to be It is popularity that counts in general practice not the possession of degrees

Since 90 per cent of our medical students are engaged primarily in securing a registrable qualification in order to be allowed to practise, is it not fantastic that twenty men in one class should all end up with different degrees and diplomas after the same course of study? Is not the greater plea not merely for one common final examination in London but for one State final examination for everyone? After that, specialistic and higher degrees and diplomas would still be available in medicine, surgery, midwifery and gynaecology laryngology ophthalmology, and so on

I maintain that every medical man, after five to six years study, *should be a graduate* and should exercise a graduate's Parliamentary vote It is not really difficult to arrange a final medical examination in London which at once gives the M R C S, L R C P diplomas and *ipso facto* passes three-quarters of the final London M B B S leaving only one quarter such as more advanced papers in medicine, etc, to be completed to get the degrees—I am etc,

CHARLES A H FRANKLYN
Lincoln July 17 M D B S M R C S, L R C P

X-Ray Screening Stand for General Practice

SIR—I should like to congratulate Dr Douglas Gordon on his description of a screening stand suitable for fluoroscopic examination of the chest and abdomen (*Journal* July 2 p 21) I feel however that his description of the simplicity of this method of examination may be misleading as it is by no means an accurate method of assisting in diagnosis, in fact it may easily prove to be the reverse Early lesions in the lungs are often not visualized by screen examinations and when of sufficient density or translucency to reveal themselves can seldom be differentiated Such a screen examination is more profitably made after an examination of the preliminary chest radiograph A screen examination of the abdomen without utilizing an opaque meal is only likely to give useful information in cases where the presence of a foreign body is suspected In such cases a negative finding of necessity would have to be verified by radiography

I trust that none of these criticisms will deter any medical practitioner from making the fullest use of radiology in his practice, while realizing the limitations of fluoroscopy *per se* In congratulating Dr Gordon on the design of his stand, which should prevent any recurrence of 'the sudden attack of alopecia, one cannot help remembering that it is the patient who receives most of the rays A filter of 1/2 mm of aluminium should be helpful—I am, etc,

London W 1, July 19 J V SPARKS

Prophylaxis of Measles

SIR—During the months of May and June we have had the usual administrative difficulties in the children's wards of the Royal Northern Infirmary at Inverness on account of measles In our efforts to immunize not yet infected children Lederle's immune globulin was used exactly as described by Dr T N Parish (*Journal* July 9 p 65) The results were disappointing as in every case in due course measles developed All the remedy seemed to do was perhaps to limit the severity of the clinical picture and to delay the incubation period—at much expense to a voluntary hospital I am further prompted to write this letter as I have just read the following in a Northern paper under the heading "Boy loses eye after measles Gets £3,500 damages

Three year old Joseph Henry West, of Dickens Street Miles Platting Manchester received £3,500 and costs at Manchester Assizes yesterday for the loss of his right eye after an attack of measles Through his father he sued the Manchester Corporation for damages for personal injuries

'Mr G J Lynskey, K C, for the boy, said that he had had an attack of measles, and following this an attack of scarlet fever, after which he was admitted to Monsall Hospital Manchester While in hospital he had another attack of measles, as a result of which his eyes became septic and the right one had to be removed The claim on behalf of the boy Mr Lynskey contended was that he was not given anti measles serum and that he was exposed while suffering from scarlet fever, to risk of infection from another child who was a suspected case of measles

—I am etc

W LEONARD FORSYTH, M D
Med Supt Royal Northern Infirmary, Inverness
(Emeritus Professor of Bacteriology, University of Cairo)
Inverness July 12

Eventration of the Diaphragm

SIR—In the *Journal* of April 30 (p 948) there is a report by Mr A L McFarlane and Dr W N Dickenson of a case of hernia through the diaphragm The case reported seems to be almost identical with one which I saw some years ago, and which was fully described in the *Australian and New Zealand Journal of Surgery* of October 1932 My patient was a schoolgirl aged 14 who had an ovarian cyst Operation showed a complete absence from the general abdominal cavity of small intestine ascending colon, and half the transverse colon and subsequent x-ray examination revealed these organs lying above the liver within the thoracic cavity The diaphragm, greatly elevated, seemed to be above the intestines She had had no other disability, and took an active part in her school games Such a condition was described by Petit in 1774, and later Cruveilhier also gave account of it He gave to the condition the name "eventration of the diaphragm, under which name some half-dozen cases have been reported in the *American Journal of Roentgenology*—I am, etc

Christchurch, New Zealand June 17 P STANLEY FOSTER

Anaemia and the Gastro-intestinal Tract

SIR,—Dr Janet Vaughan in her recent article on anaemia and the gastro intestinal tract (*Journal* July 9, p 57) states "There is no evidence that intestinal abnormalities affect the utilization of vitamin C In actual fact, however, there is abundant evidence to the contrary It is becoming increasingly evident that deficiency states may occur even when individuals are taking diets adequately supplied with vitamins That vitamin C may not be utilized although taken in adequate quantities is suggested by several interesting observations

1 Scorbutic-like syndromes may develop in individuals taking three oranges daily (Wright and Lilienfeld 1936)

2 Scorbutic patients who have failed to respond to fruit juices or ascorbic acid orally do so when the latter is administered intravenously (Birch *et al* 1933)

3 Wright and Lilienfeld (1936) have actually induced relapses in such patients by placing them on a regimen of vitamin C orally, then cured the relapses by the parenteral exhibition of the vitamin

4 Mahlo and Multi (1936) believe from their experiments that there is a failure of absorption of vitamin C in patients

with gastro-enteritis owing to the presence of a specific peroxidase which destroys the vitamin in the stomach

Stepp (1936) Schroeder (1936) and Einhauser (1936) claim that certain bacteria especially *B coli communis* may cause destruction of the vitamin Marin (1936) reports that orally administered vitamin failed to cure a case of scurvy in which *B coli* and paratyphoid B organisms were present in the intestinal tract

In the same way that anaemia is often found in association with various disturbances of intestinal function so are deficiency states commonly associated with gastro-intestinal disease Mackie and Pound (1935) for example found evidence of deficiency states in 63 per cent of seventy-five cases of chronic ulcerative colitis although a history of a defective dietary was seldom elicited—I am, etc,

BENJAMIN PORTNOY M D
Department of Clinical Investigations and Research
The Royal Infirmary Manchester July 18

REFERENCES

Birch T W Harris L J and Ray S N (1935) *Nature* 135 275
Einhauser M (1936) *Z ges exp Med* 98 461
Mackie T T and Pound R E (1935) *J Amer med Ass* 104 613
Marin P (1936) *Minerva med* 2 25
Schroeder H (1936) *Munch med Wschr* 21 871
—— and Einhauser M (1936) *Ibid* 23 923
Stepp W (1936) *Ibid* 28 1119
Wright I S and Ehrenfeld A (1936) *Arch intern Med* 57 241

National Food Policy

SIR,—I was only a little less astonished at the contents of the special report Towards a National Food Policy, than I was at the commendatory terms in which it is referred to in the *Journal* of July 16 (p 141) Rarely can one have seen sponsored as it is such an inconsequent *melange* of mutually contradictory suggestions One suggestion however, appears to have been placed in the forefront and as from the context we may suppose that it is regarded as a serious constructive effort I propose to single it out for discussion On page 5 of the circular the following statement occurs Our argument is that basic food should be taken deliberately out of the normal field of supply and demand in that food is a primary necessity and must be guaranteed inalienably to all

The law of supply and demand is a law of Nature as inexorable as the law of gravity Treating the matter more seriously than it deserves however let us try to find out how exactly it is proposed to realize this aspiration On page 5 it is suggested that boards should be established to handle the whole distribution of food from the point of production or import to the home of the consumer Clearly this implies that these boards will be the purchasers of the foodstuffs How demand in the form of the mouths of the populace to be filled and supply in the shape of competing home colonial and foreign sources are to be brushed aside and ignored is not and indeed never can be clear It is possible that owing to its general indefiniteness there may lurk somewhere in this circular something that may be construed as a suggestion such as has indeed been made elsewhere by one of the signatories that foreign competition should be excluded and that by means of a Government grant to the undernourished food stuffs should be purchased from the home farmer thus at one blow according to the original proposer setting the farmer on his feet doing away with undernutrition and encouraging trade If such a suggestion exists apart from pointing out the difficulties in getting the undernourished to spend this extra money in the way desired I am content to leave it to be dealt with by the arguments employed by the Prime Minister in his Kettering speech of July 2

Fortunately in the interests of space this subject need not be pursued further, nor need attention be given to the related proposals for dealing with the distributor and middleman for it has to be stated that strange as it may appear the real crux of the case has entirely escaped the notice of the committee against malnutrition Their proposals as just outlined it has to be emphasized contemplate interference with the food supply of each and every individual in the nation Let us therefore examine what necessity there exists for such a procedure

It has been stated that 50 per cent of the population of this country are in a state of undernutrition On the evidence submitted by the author of this statement it is impossible for anybody to believe it nor is there anything to show even if *such undernutrition did exist that it could be attributed to lack* of food and not to other conditions which everybody knows are active in producing undernutrition Further even if undernutrition to the degree alleged existed and even if it were due to lack of food nobody can believe that in the majority of cases it is caused by an actual lack of money wherewith to buy food Money is often through ignorance misspent in buying the wrong type of food or in purchasing what under the circumstances can only be termed luxuries

It would seem therefore that of the population there is only a certain minority small in proportion to the whole whose state of undernutrition may justifiably be attributed to actual lack of money wherewith to buy food To suggest that the food supply of the whole nation should be turned upside down and subjected to control under the ill considered scheme here suggested in the interests of this minority is as if one were to contemplate the burning down of a palace in order to fry an egg

The irony of the situation is that there is not, and never has been, any need for the mental agonizings of committees formed or forming themselves for the purpose of finding a solution As I have pointed out elsewhere, and as must have been obvious to everybody for decades we have the precedent and practice of hundreds of years standing in the shape of public dispensaries for providing medical and other help to those unable to afford such The matter appears so simple and common sense that I have the greatest hesitation in elaborating it Briefly stores—Government and otherwise—could be established in poorer districts in which foodstuffs purchased wholesale in large quantities to effect an economy could be sold (or in some cases given away) to those unable through lack of means to buy them in the ordinary way By such means the expenses and profits of the distributor and middleman could be largely eliminated and such places could under the direction of say the medical officer of health not only serve the purpose of giving advice to individual purchasers as to the best manner of expending the money available but also act as centres for the dissemination of correct ideas regarding the purchase utilization etc of foodstuffs The latter activity, be it said in parenthesis is apparently the only practicable method of dealing with the group who having money to spend spend it so unwisely as to lack suitable food

Moreover with the experience of the parent institutions as a guide the scheme could be put into practice forthwith and function practically from its inception—a situation vastly different from that envisaged on page 1 of the circular It is doubtful whether dietary surveys owing to the intrinsic nature of the subject will ever produce anything of academic interest even to the ethnologist not to speak of the practising nutritionist Time and money it would seem could be employed more usefully in carrying out practical schemes such as the one just outlined—I am etc.,

J P MCGOVERN
Aberdeen July 19

Antimony Therapy

SIR,—Drs Hans Schmidt and F M Peter are to be congratulated on their English edition of *Advances in the Therapeutics of Antimony* which may well be compared with what is included in Dr G M Findlay and C M Wenyon's *Recent Advances in Chemotherapy* Unfortunately the report states on page 112 that the first patient to receive the tartar emetic treatment was not cured, though Dr J B Christopherson[1] recorded absence of ova and a negative antigen reaction Difficulty in obtaining evidence of cure is specially difficult in *japonicum* infection and for this reason the advocation of proprietary remedies in place of tartar emetic must be taken with caution

I have recently had the opportunity of observing a gradual increase of degenerative changes in the ova of *Schistosomum mansoni* which was the only type present in the urine of a little schoolboy of 11 whilst undergoing treatment with anthiomaline I observed between forty and fifty of these ova during treatment Four months later, though no symptoms of infection were detected I observed one ovum of *Schistosomum haematobium* thus confirming a report from the Natal Pathological Laboratory of mixed infection some months before I had seen the case This suggested that a total of only 30½ c cm in twenty-seven days had been insufficient to effect a cure of this patient, thus confirming the opinion that it is seldom wise to discontinue treatment before the twenty-eighth day—I am, etc,

Durban South Africa, July 11 F G CAWSTON

Small-pox and Compulsory Vaccination

SIR—I am indebted to Dr C Killick Millard for the information contained in his letter (*Journal* July 16 (p 151) I admit ignorance of the current views among those most familiar with the questions of the aetiology and prophylaxis of small-pox, and his letter was therefore enlightening perhaps to some others as well as myself I should be interested to hear to what informed opinion does attribute the decline of small-pox in this country, is it considered to be naturally dying out? Most of us have heard the opinion expressed that the repealing of compulsory vaccination might expose the next generation to a severe epidemic of the disease Having recently witnessed the effects of a severe epidemic in a country in which small-pox is endemic perhaps I may be pardoned for feeling that we should be absolutely confident of the results before abolishing compulsory vaccination and those who advocate it must presumably have a sound basis for their confidence

The fact that Leicester, where compulsory vaccination was abandoned over fifty years ago, has had such a fortunate experience is perhaps not such a convincing criterion as a similar experience might be in a city like Liverpool, where exposure to infection is presumably greater Has the experiment of abolition been tried in this city or in any other large port? It would appear on the surface that Leicester's experience might be misleading in that compulsory vaccination may have been responsible for a reduction in the incidence of infection from which the whole country including unvaccinated areas might have benefited I was chiefly concerned in my previous letter with the question of compulsory diphtheria immunization and if it was somewhat startling to hear from Dr Killick Millard that both the Association of County Medical Officers of Health and the Society of Medical Officers of Health have passed resolutions in favour of the abolition of compulsory vaccination at least it would be interesting to know whether they would recommend its replacement by compulsory diphtheria immunization—I am, etc,

London, W 12, July 21 A L CRADDOCK

The Cancer Campaign

SIR—Are we conducting the cancer campaign aright? Judging by the meagre results obtained the question can hardly be answered in the affirmative Great efforts are being made to discover the cause but, as Mr Hastings Gilford in his thoughtful letter (*Journal* July 2, p 41)—one of the best I have seen—points out, already many of the causes are known, to which may be added tertiary syphilis, especially of the mouth also lupus Mr Lockhart-Mummery (*Surg Gynec Obstet* 1938, **66** 2?1) considers that the condition is bound up with eugenics which, in my humble opinion, is a very promising field of research, enabling tainted stock to be watched carefully for early manifestations, though marriage on eugenistic grounds is a far cry I understand that negroes are much less liable to the disease than the white and yellow races so that a guess may be hazarded that civilization is a factor It would appear that cancer tends to attack the previously healthy rather than those stricken with other disease, but this is unproven

Like Mr Gilford, I think that possibly a cure may be found, as witness the striking successes of sulphanilamide in the treatment of streptococcal infections It is not right to discourage research work on these lines One solid rock of truth stands out in this sea of mystery—the fact that *the knife can cure in the early stages* Admittedly this is a crude weapon, but its results compare favourably with those of radium and x-ray therapy which likewise demand early diagnosis

To my mind the most obvious method of attack is the dissemination of knowledge already possessed regarding the early symptoms and the discovery of new ones Nowhere is this called for more than in the case of the commonest of all—gastric cancer Lord Moynihan used to teach that the symptoms of carcinoma of the stomach were loss of interest in life loss of appetite, loss of blood (anaemia) to which may be added loss of abdominal comfort due to meteorism in a patient of previous good health Now he would be a bold surgeon who would operate for these symptoms, but fortunately we have radiology to clinch the diagnosis At the very onset the stomach becomes lazy peristaltic waves are few, and pictures taken at intervals present the same pattern I have diagnosed a cancer 1 cm in diameter on this finding alone The peristaltic waves may be constantly arrested at a particular point, proving destruction of musculature often by malignant disease An ulcer of large dimensions is suggestive A patent pylorus, permitting the continuous entry of barium into the duodenum, means destruction of the sphincter A small stomach with obstruction signifies malignant disease (L A Rowden) Localized disappearance of the mucosal rugae indicates cancer

All these signs appear long before the classical symptoms occur Let us examine these symptoms *Vomiting* This occurs with a number of gastric and extragastric conditions *Coffee-ground vomit* The "grounds" represent blood altered by long contact with the gastric juice, not necessarily due to cancer *Tumour formation* This is of the utmost value when present, unfortunately the commonest cancers do not produce palpable growths

[1] Christopherson J B *British Medical Journal* October 8 1921, p 551

Cachexia But surely this is a sign of hopelessness as is Virchow's gland at the termination of the thoracic duct Thus it is apparent that carcinoma of the stomach in its operable stage is diagnosable by x rays long before classical signs and symptoms manifest themselves Similarly oesophageal and colonic—not including rectal—cancers are diagnosed with greater ease and accuracy with x rays than clinically Renal pelvic growths lend themselves well to this form of diagnosis as do cerebral growths Consecutive films reveal bronchial carcinoma long before clinical signs are present

My idea of a cancer campaign would be the wholesale education of the profession in clinical as distinct from technical radiology This would be attained by the establishment of an x ray museum on the lines indicated previously (*Journal* 1937 2, 1054) a place where men could wander imbibing knowledge as they can in that magnificent display of the Pathology of the Living the Wellcome Museum of Medical Science organized by Dr Daukes It would be supplemented by short intensive courses of demonstrations I do not agree with Dr Douglas Webster that the difficulty would be in finding a curator Provided adequate remuneration was available many men could be found Money is being poured out on apparatus all over the country with scant justification judging by some of the results in bone radiology yet no one seems to realize what a tremendous help a museum would be I believe with Dr Webster (*Journal* 1937 2 1152) that a long time would be necessary Rome was not built in a day but on one particular day it was started The museum would never be complete, but therein would lie its fascination I agree with Dr Webster that a suitable resting place should be found for apparatus which has represented stepping stones in the development of the beautiful apparatus of to day — I am etc,

London W 1 July 20 A P BEPTWISTLE F R C S Ed

Subvesical Diathermy Prostatectomy

SIR,—The short article on subvesical diathermy prostatectomy in the *Journal* of July 23 (p 175) by Mr R Ogier Ward raises some points which appear to call for comment The perurethral operation as he rightly says is now firmly established as a *therapeutic measure of the greatest use* in urological surgery Mr Ward in advocating his subvesical operation claims that in the ordinary resection operation a large portion of the trigone sometimes almost up to the ureters is removed If this were so the operation would long have been abandoned extensive resection of the trigone inevitably predisposes to sepsis in the underlying space with serious consequences The operation as carried out to day by urologists versed in this type of operation means virtually a subtotal prostatectomy It has long passed beyond the stage of being a tunnelling or whittling procedure anything from one quarter to four-fifths of the gland is removed The subvesical operation advocated is that which is normally carried out on the subvesical type of gland but where, as is certainly more common there are intravesical projections of the lateral lobes a more radical procedure is manifestly required The removal of a single piece from the region of the posterior commissure followed by intra urethral resection of tissue from the floor and lateral walls as I interpret Mr Ward's recommendation leaves the upper limits of the lateral lobes projecting into the bladder and ideally situated for a ball valve mechanism to come into play at an early date so leading to recurrent obstruction It would to me appear more rational to remove as much of the obstructing tissue as is mechanically possible bearing in mind of course the danger of encroaching too far on to the trigone Familiarity with the operation should guard against this—I am etc

London W 1 July 22 TERENCE MILLIN

Incomplete Descent of the Testicle

SIR — Undescended testicle is not itself a disease but is simply one symptom of a general constitutional disturbance of diencephalo pituitary origin Investigation of the morphology reactivity psychology and biochemistry of such patients if carried out with the precision with which the testicles are palpated points distinctly to this fact Failure to perform this general constitutional investigation is responsible for many mistakes in treatment To attempt surgical correction of undescended testicle without previous correction of the basic constitutional disturbance is contrary to all the rules of contemporary medical practice The assertion made by Mr Denis Browne in his interesting paper (*Journal* July 23 p 168) that pregnyl treatment will not bring down any testis that would not have descended without it is sweeping and goes against the experience of most recent workers on this subject In the first place pregnyl and all other pregnancy urine gonadotropic substances are far from constituting the whole endocrine metabolic treatment of undescended testicle Further, I often see in my everyday practice tragedies resulting from the abandonment of cases of diencephalo pituitary disturbance with undescended testicle to their fate or ultimately to the surgeon without any attempt at early correction by means of general constitutional treatment including endocrinotherapy The disquieting possibilities of hormone treatment mentioned by Mr Denis Browne do not exist when treatment is planned and given by skilful clinicians but tragic certainties assuredly make their appearance when such constitutional disturbances are not sought discovered and corrected in the early years of life I am the first to protest against abuse of hormone treatment but the method is undeniably efficacious provided that the injected hormones are mixed with the commodity used by the great painter in the mingling of his colours—brains—I am etc,

London W 1 July 22 A P CAWADIAS

Cancer of Pharynx and Larynx

SIR —This subject selected for discussion at the recent Annual Meeting of the British Medical Association was well chosen for as Mr Lionel Colledge mentions when opening the discussion from the surgical aspect (*Journal* July 23 p 167) the introduction of irradiation has rendered the problem of treatment in various situations infinitely more complicated This problem of treatment —namely 'surgery *versus* irradiation —is particularly difficult in those early cases of a small cancerous growth limited to the true vocal cord the extremities of the cord being free of disease

In an endeavour to clarify the present position I recorded (*J Otol Laryng* 1937, 52 463) the results which had been obtained at the Manchester Radium Institute following irradiation of intrinsic laryngeal cancer and contrasted them with those following surgical treatment (laryngo fissure) in a similar series of cases collected from my own records and those of my Manchester colleagues This comparative review was restricted to that type of intrinsic laryngeal cancer which was suitable either for surgical treatment or irradiation by the Finzi Harmer technique For comparative purposes I adopted a three

year symptom-free rate, meaning thereby freedom from recurrence during a period of three years or longer

The records showed that of eighteen patients treated by irradiation fourteen (77 8 per cent) were alive without disease (nine for three years two for four years and three for five to six years) while recurrence or continuance of malignancy, occurred in four (22 2 per cent) There was no operative mortality In the surgical group (laryngo-fissure) sixteen patients were treated with an operative mortality of 12 5 per cent and a recurrence rate of 18 7 per cent while eleven (68 7 per cent) survived three years or longer (one for fourteen years one for thirteen years two for eleven years one for six years six for three to five years)

On figures alone it would appear, therefore that treatment by irradiation gives a lower mortality with a greater risk of continuance or recurrence of disease This however, is not 'all the picture, for there can be no doubt that the convalescence in patients treated by irradiation is often most tedious and prolonged, and in my opinion the voice is never quite so good An operative mortality in the recorded surgical group of 12 5 per cent is, I think too high, as is shown by the fact that there was only one post operative death in twelve of my own cases Mr Colledge in his present paper recalls two (8 7 per cent) deaths in twenty-three operations

I think it can still be said that, given a case of limited laryngeal cancer surgery offers the better chance of success, with a slightly higher operative risk but with a quicker and happier convalescence In conclusion, may I congratulate Mr Colledge on his excellent surgical results especially in those cases requiring pharyngotomy or laryngectomy I feel certain it is to be assumed that the cases he records in Table II of his paper fall within the three-year survival rate as mentioned in Table I, though this is not stated May I suggest that confirmation of this point would be most valuable statistically — I am etc,

Manchester July 25 F HOLT DIGGLE

Chemotherapy of Gonorrhoea

SIR —In Colonel Harrison's letter (*Journal*, July 9 p 90) reference is made to the disulphanilamide drug "uleron" and to the technique of its administration in gonorrhoea as practised in the German clinics

Over one hundred Continental publications on this drug have appeared since last July, and these include reports from the leading German university clinics Since that time considerable improvements in end results have been obtained with the drug and it might therefore be of interest if (as an observer and *not* a clinician) I gave a brief outline of what the current practice of administration in Germany is, and of the views held in that country as to the advisability or otherwise of withholding this chemotherapeutic—as recommended by Colonel Harrison—in the early stages of acute gonorrhoea This seems all the more necessary as there appear to be wide differences between the technique of sulphanilamide therapy in England on the one hand and of uleron therapy in Germany on the other

When the latter drug was first introduced immediate application was practised in the acute case and it was given for periods of ten days or more continuously Experience soon showed that gonorrhoea responds to uleron in a few days if it responds at all It was further observed that lengthy administration besides being unnecessary could be harmful The so-called "Stoss method of treatment was therefore adopted—that is, the drug was administered in a maximum of three short bouts of treatment lasting generally, for three to four days apiece and separated by intervals of six days It is now believed that toxic effects—which reference to the literature shows to have included instances, happily rare, of a serious condition (namely, polyneuritis)—can be avoided altogether if this Stoss method of interrupted treatment is employed At the present time the best results in Germany appear to have been obtained by the use of this 'Stoss therapy supplemented by vaccine in certain cases As urethroscopic examinations suggested that many relapses may be due to inflammatory gland foci, urethral dilatation has recently been performed with marked success on the second, fourth and sixth days after the beginning of uleron treatment In brief the rather complicated technique of administration which is now recommended by those responsible for the introduction of uleron into the German clinics and which is based on results reported in publications referred to above is as follows

In the acute cases a three to four day Stoss (totalling 12 grammes) is given at once $KMnO_4$ or weak silver irrigations being started at the same time and continued throughout If at the end of this course smears are negative for gonococci the Stoss is repeated after a six-day pause as a kind of security measure If smears are positive one can either (*a*) repeat the course once or if need be twice after the necessary pause or (*b*) (as practised by Schreuss) give a six day course of vaccine followed by a second course of uleron Tests of cure are done ten to twelve days after the last dose of uleron has been given

As regards the advisability of withholding uleron treatment for three weeks, as advocated by Colonel Harrison opinion in Germany seems to be divided on this point At a recent meeting of the Berliner Medizinische Gesellschaft, Spiethoff, discussing this question, sponsored immediate treatment and quoted as his supporters Schubert Lohe Fuss, and also Bernhard, one reason for this system being the likelihood of complications such as epididymitis and adnexitis occurring during the waiting period On the other hand, Schreuss and Behring's clinic recommend preparatory vaccine treatment prior to application of chemotherapy The former has stated that with early vaccine therapy and uleron administered as from the tenth to the twelfth day he obtained results at least as good as those with the drug administered at the outset Felke quoted by Colonel Harrison, has also emphasized the importance of waiting for three weeks or more before using the drug Opinion is thus divided the balance numerically, being in favour of immediate as opposed to delayed treatment

It is almost trite to say that as treatment with uleron —and even with sulphanilamide—is still in the very early stage of development it is as yet impossible either to lay down hard-and-fast rules for administration or to assess the end-results with any certainty —I am, etc,

London, W 1 July 19 RIPLEY ODDIE

Sulphanilamide in Acute Maxillary Sinusitis

SIR —I have just had experience of a use for sulphanilamide which I thought might be of interest as I have not seen it described so far My patient an adult woman developed acute pain in the antrum and an intense headache on the same side, following a short typical attack of influenza The sinusitis showed all the classical symptoms, with an intermittent temperature of about 101°F The condition was becoming unbearable and she was very reluctant to submit to surgical drainage so, although the causative organisms were not identified, I started her on prontosil album After 4 grammes the first day the pain had decreased 90 per cent and natural drainage became established, she had 3 grammes for two days

following and then 1 5 grammes for another two days making a total of 13 grammes in five days She experienced slight nausea throughout but no other disadvantages and she avoided surgical treatment which pleased her greatly Drainage is still free but the discharge is decreasing steadily, and the patient feels well and is about her household duties —I am, etc,

Rangeon July 18 J SHANKS LAURIE

Sulphonamide for Epilepsy

SIR —The following notes on the action of sulphonamide in a case of old standing epilepsy may stimulate interest in trying out this drug

A boy aged 11¼ years physically sound with no family history of epilepsy at the age of 4¼ years had major fits once a month for six months He had no fits for two years then a bad fit followed by coma lasting one week He improved and had only occasional attacks of petit mal till four years ago, when he came under my supervision For the last three years he has averaged six attacks of petit mal a day and two to three major fits a week His mental development was normal till 1934 since when it has gradually deteriorated All sources of reflex irritation were dealt with and in December 1937 he was completely investigated in hospital Ventriculography showed no focal damage Encephalograms showed enlargement of the ventricular system explained by widespread cerebral atrophy

During the last four years ketogenic diet prominal luminal and bromides have been tried—prominal and luminal in small, moderate and large doses There was no improvement in the number of fits or in the deterioration of the mental condition

In despair 7½ grains of sulphonamide were given thrice daily In three days the boy ceased having either major or minor fits but was very restless and had night terrors The sulphonamide was stopped at the end of a week and two days later he had two major fits which recurred each day Treatment with sulphonamide (15 grains t d s) was re instituted after a week's interval (and is still being continued under observation for toxic symptoms) The boy has had no fits of any kind from two days after re instituting the sulphonamide treatment (fourteen days ago)

The boy's mental condition shows definite improvement He is having no sedatives and is on a normal diet and regime After four years of depressing results with cerebral sedatives the action of the sulphonamide appears nothing short of miraculous —I am etc

J C YEOMAN MB BS

Cullercoats Whitley Bay July 20

Complications of Gold Therapy

SIR —Any who wish can prove for themselves the truths contained in the letter from Dr H Warren Crowe *Journal* July 2, p 44) Since 1930 suitable cases of rheumatic disease have been treated at the Royal Portsmouth Hospital with small doses of the vaccines advised by Dr Warren Crowe and the claims advanced for this treatment have many times been substantiated For the last two years or so vaccine resistant cases—a small minority when correct doses are employed and the doses are properly spaced—have been given intramuscular injections of gold The doses have often been as small as those given at the Charterhouse Clinic and the results seemingly have run parallel with those of that clinic, no toxic symptoms have occurred Home exercises insisted on from the first attendance are of the greatest value When the disease has become less active physiotherapy and/or manipulation are combined with injection treatment

My colleague Dr R S MacHardy treats cases of arthritis, preferably those of the rheumatoid type, with low voltage x rays (60 to 90 kV) He gives a first dose of 80 *r* units on not more than two joints His aim is to get a slight local reaction within forty-eight hours as evidenced by some increase of pain and heat in those joints Should the reaction not appear he halves the dose at the next visit when the desired reaction is likely to occur unless the dose is still too large This technique is a further example of the value of small doses in the treatment of rheumatic disease Though quick local improvement is aimed at when vaccines and gold are employed rather than the slight local reaction which follows the use of the small doses of x rays both methods produce a definite improvement in the patient's general health in a short time —I am etc

Southsea, July 11 H FARNCOMBE

SIR —Our researches at the Charterhouse Rheumatism Clinic have demonstrated that the differential sedimentation test,[1] which is an elaboration of the blood sedimentation rate supplies just that method for which Dr J B Bennett (*Journal* July 16 p 152) and his collaborators at Bath are searching From its indications we have been able to decide which cases are suitable for gold and, after the first determine the proper size of subsequent doses Further, the test gives adequate warning of the approach of toxic reactions

I gather that Dr Slot (*Journal* July 16 p 152) must have tried the small-dose method following a letter of mine in the *Lancet* (1937 2 990) but possibly the last paragraph of that letter escaped his notice for here I ventured to claim that the direct result of gold was like that of vaccine—an immunity response The two methods vaccine therapy and chrysotherapy would thus be complementary and not as Dr Slot says, based on entirely different conceptions of therapy

The opinion of Koppenhofer is that gold acts as a catalytic stimulator to the reticulo-endothelial system He showed that when a colloidal gold salt is injected it finds its way immediately into the cells of an inflammatory area where it is reduced to the metal or the simple sulphide If this view is correct there does not seem to be any obvious necessity for the more complicated gold salts Experience at the Charterhouse Rheumatism Clinic tends to confirm Koppenhofer's views of the action of gold, as at present we are using with quite appreciable success a simple colloid emulsion of gold sulphide, prepared for us by British Colloids in doses up to a maximum of 2 5 mg

I understand it to be a principle of the chemistry of catalysts that the optimum concentration is rarely the largest tolerable and quite commonly it is an extremely small quantity Since we find that we are able to obtain both the desired clinical and biochemical effects which we seek by using gold in these small doses at long intervals there seems no sound reason for following blindly the manufacturers posological tables into the regions of hundreds of milligrammes and toxic reactions

It must be understood that we only use gold in that small proportion of cases which show extreme sensitiveness to vaccine but that is because in the majority of cases vaccines give as good results as can be expected

I do feel that it is extremely important for the profession as a whole to decide whether doses of gold are inadequate unless they are large enough to carry the risk of toxic reactions Through these reactions this valuable method is rapidly falling into disrepute One often has the greatest difficulty in persuading an entirely

[1] *Charterhouse Rheumatism Clinic Papers* 1937 1 35
[2] *Beit klin Tuberk* 1935 86 549

suitable patient to agree to chrysotherapy The fact is that rheumatic patients are getting increasingly alarmed by the stories of severe illness," of "terrible skin trouble ' of ' gold abscesses which fail to heal for months, and such like I am personally quite convinced that none of these is necessary and that in the great majority of suitable cases (those showing some degree of hyperergy) subtoxic doses at prolonged intervals are effective—I am etc,

London, W 1 July 25 H WARREN CROWE

Keratoplasty

SIR—Referring to the letter of Mr B W Rycroft in the *Journal* of July 2 (p 43) concerning my case of keratoplasty, I should like to point out that what is seen in the photograph is the apparent position of the rim of the pupil Under normal conditions the pupil dilates up to a diameter of 4 mm, whereas the trephine used to prepare the graft was 4 63 mm in diameter It is well known that the usual results of optical iridectomy are disappointing Regarding the duration of the transparency of a graft I quoted in my paper the observations of those who have had considerable experience in corneal grafting—for example, Filatov—I am, etc

Bath July 15 T H S TIZZARD

Medico-Legal

THE BOURNE CASE A LEGAL VIEWPOINT

[BY A BARRISTER]

So far as the ethical and social aspects of the Bourne case were concerned probably everyone, except those who adopt the extreme view, on religious grounds that abortion is never justified, was glad that Mr Bourne was acquitted Looking at the matter, however, from a purely impersonal standpoint as a member of the legal profession, it is rather to be regretted that there was not a formal conviction and a nominal sentence of one day, in order that the law might be discussed in the Court of Criminal Appeal and possibly even in the House of Lords, if the Attorney-General's *fiat* could have been obtained to take the case there as involving 'a question of law of exceptional public importance For it is no disrespect to the judge to say—and he would certainly admit it—that no summing-up to a jury, however careful, fair and accurate carries the same weight of authority as the deliberate pronouncement of an appellate tribunal Strictly speaking indeed the opinion expressed in the summing-up is not binding on other judges of co-ordinate jurisdiction though they would be reluctant to differ from it But the fact remains that it is still open to any other judge to say 'I have carefully considered the statement of the law by Mr Justice Macnaghten in Rex v Bourne, but with the utmost respect to the learned judge I do not agree with his view and am not prepared to follow it ' And the rival view might be more rigid or more liberal than that of Mr Justice Macnaghten Whereas if the case could have been taken higher the decision of the Court of Criminal Appeal would have bound all judges of first instance until either the House of Lords overruled it or Parliament dealt with the position by statute

Abortion, Lawful and Unlawful

The general opinion of the legal profession seems to be that as the law stands Mr Justice Macnaghten's ruling was right erring if at all on the side of rigidity No doubt exists that abortion to save the mother's life is lawful, few will doubt that it was correct to extend that to include the prevention of serious or permanent injury to her health, some would go further No definition these would say, has been laid down by Parliament of "lawful ' or "unlawful in this connexion The saving of life is admittedly an example of that which is lawful, but is there any authority for saying that it is the sole and exclusive example and that there cannot be other circumstances of sufficient gravity to render abortion lawful? Among such possible alternative grounds they would probably be willing to include the desirability of terminating a pregnancy resulting from a criminal assault on a girl under the age of consent and possibly any pregnancy resulting from a criminal assault whatever the age of the expectant mother Such a view might well be based on the intolerable position of a mother whose child, by its very existence was a continual reminder of the ordeal to which she had been subjected, to say nothing of the undesirability of bringing her into further contact with the assailant over questions of maintenance, which would probably arise if the child were born As to this, one may observe in passing that, while something more than the expectant mother's mere assertion that she has been assaulted is obviously required something less than the conviction of the assailant ought to suffice, since there may well be cases where the fact of an assault is not in doubt but where the identity of the culprit is never established Apart from a conviction therefore, if this ground of abortion were allowed adequate medical or other evidence should be accepted

There is a certain amount of inferential evidence to support this more extended and liberal view of the law It is only within recent years that Parliament has raised the minimum age of marriage to sixteen, from which one may conclude that it was thought that motherhood even in wedlock ought not to be permitted below that age and that pregnancy in a girl under sixteen must always and in all cases result from a crime In the Infant Life (Preservation) Act, 1929 which created the specific offence of child destruction it was expressly enacted that to kill a child *capable of being born alive* should be felony unless it was done for the purpose only of preserving the life of the mother This appears (*a*) to draw a distinction between abortion after the child is viable and abortion at an earlier stage and (*b*) to imply that at the earlier stage some other causes may justify abortion for otherwise this express restriction with regard to the later stage seems wholly superfluous

Difficulty in Framing a Definition

When one considers possible reform of the law to make more explicit the circumstances in which abortion should be lawful, one is faced with the usual difficulty in framing a definition which will not, on the one hand, let in too much and make abortion easy for any unwilling mother or on the other hand, shut out some cases which a humane and conscientious surgeon would desire to include No is reliance on a second opinion even if it were given statutory, as distinct from professional and customary recognition, a wholly satisfactory safeguard against improper interference with pregnancy

I have more than once heard it stated—with what truth your medical readers will be better able to judge than I—that a woman provided with sufficient funds can easily get an illegal operation performed with all the appurtenances of respectability provided she goes to the right man (or men) The very existence of such a "racket" may be apocryphal one would certainly not suggest that it is widespread but the fact that it is obviously possible minimizes considerably the value of the protection afforded to the honest surgeon by a second or third opinion

It has been suggested that a solution of the problem might be found in legislation on the following lines

(*a*) Abortion to be an offence in any circumstances if performed by anyone other than a registered medical practitioner

(b) An obstetric board of say seven eminent gynaecologists to be set up The method of nomination of such a board is obviously a matter for the medical profession not for a lawyer to suggest The board to have power to act by a panel of not less than three (This provision is necessary to prevent the possibility of a member being called on to adjudicate on a case of his own) It would probably be necessary to appoint regional boards in a number of large towns to prevent patients having to come long distances for examination

(c) Any medical practitioner to be at liberty to refer to the board any case in which he considered that abortion ought to be allowed on any ground and the board after examining the patient and considering all the circumstances of the case including the mother's health the probability of good or bad heredity for the child and any special ethical or social problems arising out of the case to have power to permit or refuse abortion

(d) Abortion without the board's permit to be unlawful except in cases of immediate urgency in which case a full report on the circumstances should be furnished forthwith to the board by the surgeon

(e) A reasonable fee to be paid for the board's examination and certificate by those who can afford it hospital cases to be given it as part of the hospital service

If such legislation were introduced the opportunity might perhaps be taken to overhaul and bring into line with modern thought and knowledge the whole criminal law with regard to sexual offences

MA, BCL

UNSUSTAINED CHARGE OF NEGLIGENCE

On July 21 without leaving the box a special jury at Leeds Assizes returned a verdict for Dr Florence Slade in an action against her for alleged negligence in the course of attendance upon a young married woman in her first pregnancy Mrs Isabella Mary Lloyd Hughes sued to recover damages from Dr Slade and Trevor Lloyd Hughes her husband of Headingley an insurance official claimed for out of pocket expenses incurred as a result of the alleged negligence Dr Slade denied negligence and counter claimed for her fees against the husband Mr G H B Streatfield K C for the plaintiffs submitted that complications were discovered by another doctor after some lapse of time and the result was that Mrs Lloyd Hughes had to undergo a much more serious operation than otherwise would have been required The defence called Mr Carlton Oldfield consulting gynaecological surgeon to the General Infirmary at Leeds who said that there was no one symptom in the case which should have induced Dr Slade to suppose that everything was not perfectly normal Judgment was entered for the defendant with costs on both the claim and the counter-claim for fee

The Services

DEATHS IN THE SERVICES

Colonel ALEXANDER FRASER RUSSELL C M G late R A M C died at a nursing home in Edinburgh on June 12 aged 81 He was born at Kilmodan Argyllshire on December 21 1856 and was educated at Edinburgh University where he graduated M A in 1877 and M B C M in 1881 Entering the Army as a surgeon on February 5 1882 he attained the rank of colonel on November 2 1911 and retired on December 21 1913 He served throughout the South African War of 1899 to 1902 when he took part in the relief of Kimberley and in operations in the Transvaal Orange Free State Zululand and Cape Colony and was present in the actions at Paardeberg Poplar Grove Dreifontein Karee Siding Zand River Johannesburg Pretoria and Diamond Hill He was mentioned in dispatches in the *London Gazette* of April 16 1901 and received the Queen's Medal with six clasps the King's Medal with two clasps and the C M G He rejoined for service during the war of 1914–18 throughout which he served as A D M S on Salisbury Plain

Obituary

CHARLES H H HAROLD O B E M D D P H.

Lieutenant-Colonel R.A.M.C. (ret.) Director of Water Examination Metropolitan Water Board

We announce with great regret the sudden death on July 18 of Colonel Charles Harold who succeeded the late Sir Alexander Houston as Director of Water Examination Metropolitan Water Board in March 1934 Only a fortnight ago at Plymouth he was re-elected for the third time to represent the Royal Army Medical Corps upon the Council of the British Medical Association

Charles Henry Hasler Harold was born on January 1 1885 and studied medicine at Liverpool University graduating M B Ch B with honours in 1907 after which he spent two years in house appointments at the Liverpool Royal Infirmary He was elected Holt Fellow of the University in 1909 and in the following year took his M D degree and joined the R A M C as a lieutenant, winning the Tulloch Memorial Medal and the Ranald Marten Medal After several years service in India he was promoted captain in 1914 while at Dagshai During the war he served with the Indian Expeditionary Force in Mesopotamia and with the Marri Punitive Expedition in 1918, for his services in East Persia and Afghanistan 1918–20 he was mentioned in dispatches and promoted brevet major He had been D A D M S (San) of the 3rd Lahore Division and on the Lines of Communication East Persia and sanitary adviser to the Forces in Transcaspia In 1921 he was made instructor at the Army School of Hygiene Aldershot and five years later Assistant Director of Hygiene and Pathology Northern Command India His last military post was that of Assistant Director of Hygiene Southern Command England and he retired from the Service in 1924 with the rank of brevet lieutenant-colonel on taking up the important duty of watching over the purity of the water supply of the Metropolis Colonel Harold's presence in London gave the British Medical Association an opportunity to profit by his knowledge and sound judgment at headquarters In 1935 he was appointed to the Naval and Military Committee and elected to the Council as representative of the R A M C he was also a member of the Subcommittee on Terms and Conditions of Service of Civilian Medical Practice



After graduation at Liverpool he published jointly in the *Journal of Physiology* a paper on the influence of the presence and position of various radicles of adrenaline on its physiological activity he also wrote on his war experiences with tick fever in East Persia on the breeding of *Anopheles maculipennis* in captivity and on mosquito bionomics A contribution to the *Journal of State Medicine* in 1925 on sterilization of water by chlorine and some of its compounds had been preceded by a paper on the chloramine treatment of water in the field and these foreshadowed the nature of his future line of work The two annual reports bearing Harold's

signature on the results of chemical and bacteriological examination of the London waters were lucid and informative documents lacking only the picturesque touch that readers had looked for year by year in the writings of Alexander Houston Under Harold the high standard of purity of the water supplied by the M W B was fully maintained It is said to think that death has prevented him from continuing his valuable career in the large new chemical and bacteriological laboratories at New River Head He was a man of the most kindly and approachable disposition

[The photograph reproduced is by Lafayette London]

The death of Dr ANDREW WILLIAM THOMSON of Jamaica which occurred on May 30 was mourned throughout the parish of Clarendon Born on December 29, 1868 he pursued his medical studies at the University of Aberdeen graduating M B C M in 1892 and returning home entered the Government Medical Service in the same year His first appointment was acting district medical officer at May Pen in the parish of Clarendon Soon however he was transferred to Stony Hill and later to Falmouth and it was not until 1902 that he returned to Clarendon where as district medical officer at Chapelton he was to serve the community faithfully until his death For forty six years Dr Thomson was an active member of the Jamaica Branch of the British Medical Association, and in 1932 his colleagues showed their esteem by electing him to the office of president In more recent years he was forced by ill health to curtail his activities but his interest in Branch affairs never abated In municipal life any scheme for the improvement of the lot of the working man was assured of his whole hearted support and despite the continuous pressure of a very large practice he still found it possible to give much time even in his busiest years to this cause Loyal to his colleagues sympathetic with his patients and courteous to all he won the esteem and affection of all with whom he came in contact The profession is the poorer for his passing

The death of Dr DAVID LAURENCE TATE which occurred early in June robbed the parish of St James Jamaica of one of its outstanding personalities Although his health had been failing for some time his sudden death came as a shock to his many friends throughout the island He studied medicine at Glasgow graduating M B Ch B Glas in 1906 and taking the F R C S Ed in 1918 A very able surgeon and keenly interested in his profession Laurence Tate was incapable of sparing himself His early years in the Government Medical Service were spent in the parish of St Mary whence he was transferred to Montego Bay where as district medical officer he served zealously until his retirement a few years ago In 1908 he became a member of the British Medical Association and to the end he maintained a lively interest in the activities of the Jamaica Branch particularly in medico political problems To his sorrowing widow and daughters the Branch tenders its sincere sympathy

Dr WILLIAM CLAUGHTON DOUGLASS who died at Stanmore Middlesex on July 7 was for many years a keen worker in electrotherapy and x-ray diagnosis He studied medicine at St Bartholomew's Hospital and qualified M R C S L R C P in 1900 During the war he attained the rank of major R A M C and won the Military Cross He had been clinical assistant in the x-ray and electrotherapeutic departments at St Bartholomew's medical superintendent of Clare Hall small pox hospital and medical director of the Comely Bank electrotherapeutic clinic at Walthamstow He obtained the Cambridge D M R T in 1926 and in recent years held the posts of assistant medical officer in the x-ray and electrotherapeutic department of the Metropolitan Hospital and medical officer in charge of the electrotherapeutic and light departments at the Connaught Hospital Waltham Stow Dr Douglass published a small work *The Elements of Medical High Frequency and Diathermy* in 1930 and wrote several papers on his specialty He had been a member of the Harrow Division of the British Medical Association for the past ten years

Dr CHARLES R DICKSON who introduced x rays to the Toronto General Hospital and, after losing his sight through exposure to the rays founded in 1914 the Canadian Institute for the Blind, died at Toronto on July 9

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

The following candidates have been approved at the examinations indicated

DIPLOMA IN MEDICAL RADIOLOGY AND ELECTROLOGY—*Part I* J C A Liddy *Part II* S J H Douglas, Heather D Dowlar Kathleen M Henderson F B Kiernander Mary C Leishman K Lumsden, J K Muir R S Padaki C N Pulvertaft S J R Reynolds Alice M Ross A Smerasuta, S E D H E Taouli L Werbeloff M A A Zohdy

UNIVERSITY OF LONDON

At a meeting of the Senate held on July 20 the following titles were conferred in respect of posts held at the Schools of the University *Professor of Anatomy* Mr E P Stibbe (King's College) *Reader in Clinical Pathology* Dr M Marcel (University College Hospital)

Dr C K Meek and Professor W M MacMillan were appointed Heath Clark Lecturers for 1938–9

UNIVERSITY COLLEGE

The following awards have been made in the Faculty of Medical Sciences *Bucknill Entrance Scholarship* S M Christ *Entrance Exhibitions* D B Griffiths Lesley M M Sexton *Entrance Scholarship* H E Thomas *Anatomy* (Senior Course gold medal) Gwendoline R Briggs, (B Sc) Scholarship D G Lambley *Practical Anatomy* (Suckling Memorial Prize) S D V Weller *Physiology* (Senior Course gold medal and (B Sc) Scholarship), Gwendoline R Briggs (Schäfer Prize) R A Gregory

UNIVERSITY COLLEGE HOSPITAL MEDICAL SCHOOL

The following scholarships exhibitions and prizes have been awarded at University College Hospital Medical School

Goldsmid Entrance Scholarships E Emanuel Janet W Shrimpton *Goldsmid Entrance Exhibition* W D M Paton *Fillitter Entrance Scholarship in Pathology* Angela E Rigby *Atchison Scholarship* Josephine Barnes *Atkinson Morley Scholarship* J D N Nabarro *Magrath Scholarship* J I P Jan J D N Nabarro *Fillitter Exhibition and Alexander Bruce Gold Medal* A Hargreaves *Liston Gold Medals* J C Ford B J Harries *Erichsen Prize* J C Ford *Fellowes Gold Medals* R N Houlding Elizabeth Topley *Fellowes Silver Medals* J R Squire A G Spencer *Tuke Silver Medal* Elizabeth Topley *Junior Clinical Surgery Prizes*, E Neumark D Cou *Ferriere Scholarship* Annie E Walker *Postgraduate Awards* *Leslie Pearce Gould Scholarship* Margaret D Baber

LONDON HOSPITAL MEDICAL COLLEGE

The Price Scholarship in Anatomy and Physiology open to students of the Universities of Oxford and Cambridge has been divided between A H Ferguson of Wadham College Oxford and F H Howarth of Corpus Christi College Cambridge

UNIVERSITY OF MANCHESTER

The following appointments were made on July 14

Lecturer in Medicine for Dental Students Dr C S D D *Lecturer in Surgical Pathology* Mr A H Southam *Lecturer in Operative Surgery* Mr R L Newell *Special Lecturer in Biology* Dr R W Fairbrother *Demonstrator in Anatomy* Dr I W Ball

UNIVERSITY OF DUBLIN

SCHOOL OF PHYSIC TRINITY COLLEGE

The following candidates have been approved at the examinations indicated

M D—W B Roantree C G S van Hesningen

FINAL MEDICAL EXAMINATION—*Part I Materia Medica Therapeutics Pathology and Bacteriology* L Soloman

*I C J Millar *D Aiken I H Acton G H Bennett Hazlett J I Harris Catchpole A M Ivett D I Harbinson M A Mackie[illegible] K St C Moxon J M Taylor D K M Cailly K J S Wilson Lockhart-Lake H J Smith I M Mc G I F Kelly I F Lamph I J R Healy W M Winn Isobel M Woodside C F G W Lamb C Lawson B E K Solomon A F Tinkler H K Boyle D S M Lyon[illegible] Mooney I Kamerman *B.M.M.P. G E Nevill *F H Cushan *H I Lawson *K I Buck *Hilda M Dyson *N Scott *H A D Dugan K W Tempest B Mayne I D I Steele Elizabeth M Reed Deborah Brown D B Davies K J Grove-White W W McGrath K Wilson Muriel H. I. F. W. Parke S. I. Weir I. W. Bailey Mary C. Conlin J. R. Mahon D. K. Stewart Freda I. F. H. I. G. D. Swenson I. W. R. Hake H. K. T. Devlin M. I. N. Sattery W. C. Cook D. E. Meade-Smith C. Balmer J. W. Cashman D. M. K. Bain K. J. B. Ife J. C. de R. Sugrue I. A. S. Edmondson J. P. Conner *B.Ch. G. I. Seed H. A. Duggan R. I. Burke I. I. Laws *Isabella M. Dunn *W. C. Good *B. Mayne *J. C. de R. Sugrue *K. J. Grove-White *D. B. Davies Elizabeth I. J. Kerr I. H. Cranshaw R. Wilson J. R. M. Neal W. W. McGrath J. G. Waugh Muriel E. [illegible] D. M. R. Barry Deborah Brown R. W. Temple C. M. Ludlow W. A. J. Lake I. D. I. Steele T. W. Bailey I. W. R. Hake J. T. Speed I. Mary C. Conlin G. D. Swenson *B.A.O. *S. Scott *M. Herman *I. S. Levinson *Isabella M. Dunn Mary A. Cranshaw V. I. Williams J. I. Handelman B. Kerr J. R. Mahon Elizabeth M. Reed Sylvia M. FitzGerald W. Sandford L. H. Barber I. Cranshaw I. K. T. Hollin W. B. Wolfe F. R. I. Mc[illegible] I. G. Millar H. J. I. Dragon Elizabeth I. J. Kerr Rosaleen de C. M'Conkey *M.A.O. D. P. Harte

DIPLOMA IN GYNAECOLOGY AND OBSTETRICS—P. M. Bloom A. L. V. E. Tawil M. Mufti S. C. Weeb O. K. Khalifa A. Thomas W. N. Chan Y. Y. Arthur G. B. Kabray

DIPLOMA IN PUBLIC HEALTH—*P. I. H. W. A. Gillespie I. Keane *Charlotte I. Pike *Eveleen M. H. Scott †B. I. I. Berney *G. H. B. Roberts *R. A. Heatley A. Dolphin

* First-class honours † Second-class honours

The following prizes have been awarded

Surgical Travelling Prize *Bentley's Medical Prize* *Edward Hallett Memorial Medal* G. N. Macfarlane M.B. *Fitzpatrick Scholarship* T. I. Lawson M.B. *Medical Scholarships* Anatomy and Physiology W. L. O. C. C. Lowell Chemistry Physics Botany and Zoology C. S. Cummins *Dr. Henry Hutchinson Stewart Medical Scholarships* Anatomy and Physiology Elizabeth D. L. Simpson Chemistry Physics Botany and Zoology T. N. Strong *Dr. Henry Hutchinson Stewart Scholarship in Mental Diseases* J. F. Gillespie M.B. *John Mallet Purser Medal* Maude I. I. Berney *Durie John Cunningham Memorial Medal and Prize* Elizabeth D. I. Simpson *Dr. Kenny Centenary Prize* Eveleen M. H. Scott M.B. *Aquila Smith Prize* I. Solomon *Walter G. Smith Prize* Mary K. McCarthy *Certificate Normal Medicine Mental Diseases* H. A. Dourish

NATIONAL UNIVERSITY OF IRELAND

UNIVERSITY COLLEGE, CORK

The following medical degrees and diplomas were conferred on July 9

M.D.—O. T. D. Loughnan T. P. O'Connor

M.B. B.Ch. B.A.O.—R. A. MacCarthy Ellen Murphy W. J. Twohig R. G. Barry A. S. Beare M. I. Beckett C. J. Clohessy M. M. Corran Mary Cotter M. Cronin G. R. Cubitt P. Farrell J. FitzGerald L. Kelly Mary Lawton J. Lucey D. J. R. McConnell Josephine C. Murphy N. Newman C. I. O'Connell I. O'Flynn P. O'Keeffe Mary F. O'Leary J. G. Paton Eileen L. Quinlan M. I. Ronayne R. H. Watson

D.P.H.—V. J. Dillon T. P. P. O'Riordan

B.Sc. P.H.—T. P. P. O'Riordan

ROYAL COLLEGE OF SURGEONS OF ENGLAND

A quarterly Council meeting of the Royal College of Surgeons of England was held on July 14 with the President Sir Cuthbert Wallace in the chair

Mr Hugh Lett was elected President Professor G. Grey Turner was re-elected Vice President and Mr R. F. Kelly was elected Vice President for the ensuing year

Mr Victor Bonney Mr R. C. Elmslie and Sir William Girling Ball were readmitted and Mr I. F. C. Norbury was admitted to the Council

Dr Mahmud Bayumi Bey (Cairo) was admitted to the Fellowship of the College having been elected in April last

The congratulations of the Council were expressed to Mr Cecil P. G. Wakeley and Professor A. St G. Huggett who have been awarded the Insignia of Officer of the Order of the Nile (Third Class) and to Mr Horace H. Rew Director of Examinations of the College who had been awarded the Insignia of Officer of the Order of the Nile (Fourth Class) after the Primary Examination for the Fellowship conducted in January of this year

Lecturers

The following lecturers were appointed for the ensuing year

Hunterian Professors—Mr George Armitage one lecture on Gastric Operative Observations on the Healing of Chronic Gastric Ulcer Miss Dorothy J. Collier one lecture on Facial Paralysis and its Operative Treatment Mr A. I. d'Abreu one lecture on Congenital Cysts of the Lung and Pleura Mr I. R. Edwards one lecture on Studies in Experimental Pneumonectomy and the Development of a Two-stage Operation for the Removal of a Whole Lung Mr A. J. Gardham one lecture on Surgery of Carcinoma of the Mouth and the Tongue Mr I. J. S. Gower one lecture on Pulmonary Tuberculous Post-operative Complications and their Prevention A Clinical and Experimental Investigation Mr C. A. Joll one lecture on the Pathology Diagnosis and Treatment of Lymphadenoid Goitre (Hashimoto Lymphogranuloma) Mr J. H. Mulvany one lecture on Differentiation in the Mechanism Symptomatology Pathology and Treatment of the Two Types of Exophthalmos associated with Graves's Disease and a Short Account of their Probable Pathogenesis Mr D. W. G. Murray one lecture on Heparin in Thrombosis Mr E. W. Riches one lecture on Hydrocephalus The Results of Conservative Treatment Professor J. Pierson Ross one lecture on the Effects of Radium upon Carcinoma of the Breast Mr H. T. Simmons one lecture on Relapse following Sympathectomy

Arris and Gale Lecturer—Dr John Beattie three lectures on subjects relating to Human Anatomy and Physiology

Erasmus Wilson Demonstrators—Mr R. St I. Brockman one demonstration on Some Inflammatory Lesions of the Alimentary Canal Mr R. Davies-Colley one demonstration on the Pathological Contents of the Museum Mr I. W. Proger four demonstrations on the Pathological Contents of the Museum

Arnott Demonstrator—Mr A. J. I. Cave six demonstrations on the Contents of the Museum

The Hallett Prize was awarded to Howard Hadfield Fddey of the University of Melbourne and the ninth Macloghlin Scholarship to Frank Bailey of Oldham Hulme Grammar School

The new regulations for the Licence in Dental Surgery which will become effective gradually as from October 1 were approved and the Council agreed to a recommendation that a Postgraduate Diploma in Dental Surgery should be instituted

The Council appointed Professor R. J. S. McDowall (Physiology) and Professor R. Bramble Green (Anatomy) to act as Examiners for the Primary Examination for the Fellowship to be held early in 1939 in Lahore (India) and Cairo (Egypt)

The following reappointments for the ensuing year were approved Mr I. W. Proger Pathological Curator of the Museum Sir Frank Colver Honorary Curator of the Odontological Collection (on the nomination of the Royal Society of Medicine) Mr C. J. S. Thompson Honorary Curator of the Historical Collection

Mr George Kent Harrison (Toronto) was appointed a Leverhulme Scholar for one year from October 1 and Dr David Slome was reappointed a Mackenzie Mackinnon Research Fellow

Diplomas

A Diploma of Membership was granted to Chelliah Ponnambalam (Ceylon) and Diplomas of Fellowship were granted to Edward Philemon Connolly and Louis Julius Horne both of Sydney

Diplomas were granted jointly with the Royal College of Physicians of London as follows

DIPLOMA IN ANAESTHETICS—W. Bourne S. M. Campbell A. L. Flemming P. V. Francis S. Johnston H. J. Shields C. C. Stewart

DIPLOMA IN PUBLIC HEALTH—R. H. Barrett C. Crowley F. R. Glover J. C. Hogarth N. D. Karani Susan MacMahon A. W. McRone J. Marshall B. Roberts C. Seeley C. G. K. Thompson F. W. Vilain

DIPLOMA IN PSYCHOLOGICAL MEDICINE—M. J. Brookes B. Finkleman J. F. R. Goodlad R. K. Grossart C. R. Harris C. Holmes A. A. Huse A. Leitch J. P. McGuinness R. L. Moody R. B. Morton E. K. Mulinder J. E. Saville S. Sharman A. Stoller V. H. Tompkins Betty M. Zeal

DIPLOMA IN LARYNGOLOGY AND OTOLOGY—R. H. B. Bettington B. K. Kapur K. M. Mayall D. G. Phillips I. M. Robertson R. A. Syed R. Thomas

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH

The Dr Jessie Macgregor Prize in Medical Science has been awarded to Dr Susanne Jean Paterson for her work on the therapeutic uses of progesterone The value of the prize is £50

BRITISH COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS

At the quarterly meeting of the Council held in the College House London W on July 23 with the President Sir Ewen Maclean in the chair the following officers were elected to take office at the October meeting of the Council

President Professor W Fletcher Shaw *Vice Presidents* Professor R W Johnstone Professor Miles H Phillips *Honorary Treasurer* Mr Eardley L Holland *Honorary Librarian* Mr Frederick Roques *Honorary Secretary* Mr G F Gibberd

The following were admitted to the Fellowship

M W B Bulman Norwich I G Phillips London

The following were admitted to the Membership (*in absentia*)

F G McGuinness Winnipeg G J Strean Montreal

The following were elected to the Membership

V C Blield New Zealand Muriel S Brander India W M Capper Bristol P G Charlewood India J C Coetzee South Africa Gladys S Cunningham China J B Dewar Edinburgh J Edis Myers Cuba H M Edwards London A B Evans London J G Gallagher Dublin Anne J Herring Dundee R E Hirson Manchester D F Lawson Australia T F Lennon Liverpool Mary H Mercer London C R Morrison Harrogate H A Rippiner Bradford Dorothy A Sharpe London P V Venkatswami India H S Waters India

Medical Notes in Parliament

Both Houses of Parliament were occupied this week in clearing away arrears of business before the Recess which was due to begin on July 29 On the previous day a debate was arranged in the House of Commons on health administration The Parliamentary Medical Committee also arranged to meet before the Recess

Two members of the Parliamentary Medical Committee Sir Francis Fremantle and Dr Haden Guest were able to accept the invitation of the Council of the British Medical Association to attend the Annual Representative Meeting at Plymouth

On July 12 five members of the Parliamentary Medical Committee and two miner M P s were received by Captain Crookshank Secretary for Mines and Sir Alfred Faulkner to discuss rheumatism among coal miners and its treatment The Minister made it plain that his Department would not be interested in a scheme for the general health of the people or with merely experimental work but said that if proposals to be submitted could be shown to be for the treatment of conditions peculiarly affecting miners the Miners Welfare Committee might then be able to interest itself in them He suggested that in the first instance the Miners Health Research Board should be approached Sir Francis Fremantle undertook to convey this suggestion to the Empire Rheumatism Council with whom he is now in touch

The National Health Insurance (Medical Benefits) Regulations (Scotland) 1938 were laid on the table of the House of Commons on July 25

The Report of the Board of Control for 1937 Part I was presented to Parliament on July 26

Lord Horder on Quack Medicine Trade

In the House of Lords on July 26 Lord HORDER called attention to the enormous growth in the quack medicine trade and to the incongruity of exercising no control over the deleterious effects of such trade upon health at a time when strenuous efforts were being made to improve national fitness He also moved for papers He said he had been told that if he had not raised this question he would be charged with having failed to create a monopoly for his own profession and with depriving the poorer classes of cheap cures If there was a monopoly at all in his view with the trade that had the profits of £25 000 000 or £30 000 000 a year—nearly as much as we spent on all our hospital services He was glad to break up a formidable and largely unscrupulous monopoly which judging from the exclusion of patent and proprietary medicines and foods from the Food and Drugs Bill successive Governments seemed almost to go out of their way to guard If the doctor thought only in terms of hard cash he would benefit from this unprincipled trade which eventually brought him more patients, ultimately even the undertaker benefited sooner and oftener than he need Only now was there something better to put in the place of these dubious specifics We had the finest health services in the world The slogan "Use your Health Service was one of the most intelligent he had heard His main reason for pressing the matter at this time was his concern for the success of the national fitness movement For every £100 the Government spent in making the people health-conscious the quack medicine mongers paid £1,000 in making them disease conscious A few patented and proprietary things were good and the claims made for them reasonable a great many did little good or harm and were sold at fantastic prices and now and again something was sold that did definite harm There were an enormous number of preparations that were fraudulent in varying degree The great increase in advertising media was capable of appalling results in its mass suggestion on the country's health and moral The advertisements had become a graver danger than the medicines they served

The debate was continued by Lord ADDISON

Viscount GAGE said that investigation had borne out the fact that improper use of substances in themselves harmless was a distinct danger to the health of the country and hindered the work of the medical profession He was ready to agree that it might constitute an obstacle to national fitness The problem of the dangerous drug had been solved except possibly for new drugs which were being put on the market It had been said that the public were being used as a guinea pig by unscrupulous manufacturers He was informed that there was no method of foretelling the effect of some compounds and that the effects on the human body could only be ascertained by experiment That constituted a positive danger but it was difficult to put absolute restriction on new inventions The majority of the substances were made by firms of the highest repute which in their own interests saw that the precautions taken were very complete

The real difficulty arose from products and substances which were not in themselves harmful but the improper use of which constituted a danger Aspirin used properly provided relief from a number of minor ailments but used to excess it was not beneficial The inherent difficulty in dealing with certain substances was that the real fault lay with the individual who used them If people did not use the immense State assistance medical schemes and preferred to diagnose and treat their own complaints it was largely their own responsibility if they suffered in consequence They were encouraged to do so by very carefully worded advertisements In theory there was a case for controlling the advertisements but it was not easy to design forms of words which could not be evaded He was not attempting to exclude the possibility of some legislation on certain lines suggested but it was difficult to guarantee that it would be effective Repression alone was one of the most dubious of all lines of progress The Minister of Health would examine what Lord Horder had said and see if anything could be done to incorporate in the education aside of the national fitness movement some warning against the abuses of drugs generally Perhaps Lord Horder might still be unconvinced by his reply If so possibly he would like to have a try at legislating himself In regard to publicity matters the Government would be pleased to place all the resources at Lord Horder's disposal but on medical matters they had no higher sources of information than Lord Horder himself commanded The Government's attitude must to some extent at any rate be dictated by public opinion because in these matters the public must have the last word The Government were perfectly prepared to lay any papers for which Lord Horder might wish

Lord HORDER asked leave to withdraw his motion for papers and this was agreed to

Abortion and the Law

Sir HENRY MORRIS JONES on July 25 asked the Minister of Health whether his attention had been directed to the recent acquittal at the hands of the jury of Mr Aleck William Bourne who was charged at the Old Bailey with unlawfully using an instrument with intent to procure the miscarriage of a girl of 14 years and whether as this was a test case he intended introducing legislation to clarify or amend the law dealing with such offences

Dr ELLIOT Yes Sir My attention has been drawn to this case I am not in a position to make any statement pending the issue of a report by the Interdepartmental Committee which is investigating this and other matters concerning abortion

Sir HENRY MORRIS JONES asked if Dr Elliot was aware that during the hearing of this case the defendant stated in evidence before the court that had the subject of the operation been mentally defective he would not have operated and was not defective mentality a case of extreme ill health also?

No answer was given to this question

On July 25 Mr MACNAY asked the Minister of Health if he was prepared to bring in a regulation requiring all members of the medical and nursing professions to certify and notify to the medical officers of health all operations for abortion in view of the fact that such operations differed from others in that the life of another was involved

Dr ELLIOT This is among the matters which are under consideration by the Interdepartmental Committee on Abortion and I am unable to make any statement at the present time

Mr MACNAY In view of the grave concern throughout the country on this matter will the right hon gentleman take care to make representations to the committee to show clearly that this sort of thing is not a private misdemeanour but a deadly national crime?

Dr ELLIOT An influential committee has been considering this for some time and I have no doubt it will take all these matters into consideration

Mr LOCKER I take it that no recommendation will alter the law with regard to murder and the taking of life?

Progress of Bills

The Royal Assent was given on July 13 to the Street Playgrounds Act the Housing (Agricultural Population) (Scotland) Act the Children and Young Persons Act the Baking Industry (Hours of Work) Act the Mental Deficiency Act the Inheritance (Family Provision) Act and other Acts

The Registration of Stillbirths (Scotland) Bill was read a third time in the House of Lords on July 20

On July 21 the House of Lords agreed to the Commons amendments to the Food and Drugs Bill

The Milk (Extension and Amendment) Bill and the Finance Bill were read the third time and passed in the House of Lords on July 25

The following day the Commons amendments to the Young Persons (Employment) Bill were agreed to and the Holidays with Pay Bill passed through Committee

The Annual Report of the Chief Inspector of Factories and Workshops for 1937 was presented to the House of Commons on July 15

A Prohibition of Vivisection on Dogs (Scotland) Bill was introduced into the House of Commons by Mr Mathers on July 26 and was read a first time

Health and Education Services in Scotland

Estimates for the Department of Health Scotland were debated by the House of Commons on July 20 Mr COLVILLE said the period he had to review fell entirely within the term of office of Dr Elliot The House knew the keen interest which Dr Elliot as Secretary of State for Scotland took in health matters These estimates included a new item of £40 000 for grants under the Maternity Services Act passed last year In public health Scotland was going forward It had in the spring the worst influenza epidemic since 1929 yet the general death rate had remained practically the same Infant mortality fell from 82·3 to 80 per 1 000 and the figures for the first quarter of 1938 were still better Most welcome of all was the fall in the maternal mortality rate from 5·6 per 1 000 registered births in 1936 to 4·8 per 1 000 in 1937 The 1937 figure was the lowest recorded in Scotland this century These figures should be an incentive to further effort in which the Maternity Services (Scotland) Act would be of great help The local authorities were pushing on with the preparation of schemes and he hoped that soon every mother in Scotland could secure the services of midwife doctor and if necessary consultant The school health service was working the conception of health into the whole of school life and the 90 000 children who left school yearly in Scotland were fitter than previous generations were The Insurance Act passed last year had enabled the Department to link up the school health service with the insurance medical service and links were being established with the industrial health service under the Factories Act This medical service was given in Scotland by about 2 000 doctors who under a new scheme organized by the Department received opportunities for postgraduate courses Under the Insurance Act it had been found that about two fifths of the total sickness among insured persons was accounted for by those who were ill for more than a year The Department of Health with the co operation of insurance doctors and of the approved societies had begun an investigation of this chronic sickness in such a way as to bring the services of the regional medical officer and the specialist to bear on individual cases In that way they hoped to help the individual case and to discover facts on the handling of chronic sickness generally Other services contributed to the whole health effort For example tuberculin tested cows in Scotland had increased from 20 459 to 70 002 Since the post war housing effort began 290 000 houses of working class type had been built in Scotland 235 000 of them with State aid but 250 000 houses were still needed In the first half of 1937 local authorities completed 5 973 houses in the first half of 1938 9 095 houses Since 1935 the Department had refused to approve the building of houses with less than three apartments but he proposed to authorize the erection of two roomed houses up to the number ascertained to be necessary for old people

Mr TOM JOHNSTON moved a reduction of the vote remarking that 100 000 households in the burghs had no lavatory accommodation Sir ARCHIBALD SINCLAIR said a grant of £50 000 yearly in aid of the statutory health services in the Highlands and Islands had been recommended by the Departmental Committee on the Scottish Health Services and should be implemented

Mr LEONARD spoke of dental defects among school children and suggested that these could be abated by greater attention to the diet of pregnant mothers and younger children He was advised that the Notification of Births Act 1915 would permit local authorities to pay attention to this

After further debate on housing and on water supply Mr WEDDERBURN replied for the Department and the motion to reduce the Vote was defeated by 162 to 111

Medical Examinations of School Children

On July 21 Mr WEDDERBURN moved a Vote for Public Education in Scotland He said that the year 1939–40 would find education authorities generally prepared to make effective provision for the children between 14 and 15 who after September 1 1939 would continue at school There must then be additional accommodation for physical education Considerable progress had been made in providing gymnasia swimming pools and playing fields Continuation classes in physical education were expanding Keep fit classes chiefly for women were successful

In moving a reduction of the Vote Mr WESTWOOD said the school health service had largely fulfilled its purpose of becoming one of the main preventive health services At present children were examined as a routine thrice during school life at entry at age 5, at age 9 and before leaving

school—about age 13 Now that health and education authorities were usually the same age 5 had no special significance and the routine medical examinations could be cut down to two at age 7 and age 13 This would release some of the medical staff for a pre school medical examination to discover defects which should be remedied before the children entered school Mr TOM JOHNSTON said Mr Colville was for the first time giving monetary grants to two Universities—Edinburgh and Glasgow—out of the Education (Scotland) Fund

Mr COLVILLE said 27 per cent of 180 482 children in Glasgow schools received milk free on March 31 1938 It was not necessary that a child should have a medical certificate that it was in need of food before food was provided Many children were provided with food on the report of the head master or teacher

The motion to reduce the Vote was defeated by 171 to 102 and the House went on to discuss the Vote for the Scottish Office On this Mr COLVILLE gave an account of work done under the National Fitness Council He mentioned the expenditure on juvenile welfare and said that he desired to extend the system of probation for adult and juvenile offenders in Scotland

Certification of Criminal Lunatics

Mr NEIL MACLEAN moved a reduction of the Vote and pointed out that in a recent reply to a question in the House it had been stated that a lunatic had been certified by two medical officers of the Department Mr Maclean contended that this was against the intention of an amendment made to the Act passed for the building of a new criminal lunatic prison in Scotland The amendment proposed that one of the persons certifying should not be from the Department but someone from outside preferably a medical man who knew something of the family history of the individual being certified That proposal had been accepted by the Government and the House but he was now told that it only applied to persons likely to be committed to the new Scottish criminal lunatic prison at Carstairs which was not yet completed

Mr CASSELLS said he had been shocked to be told in reply to a question that no instructions had been issued to courts in Scotland concerning the examination of juvenile delinquents by psycho analysts He had merely been told that on every occasion where there was a suspicion of defect or abnormality an examination was to be made

Mr WEDDERBURN replying to the point raised by Mr Maclean said that at Barlinnie and Perth prisons certificates of insanity were normally given by two prison doctors employed at those prisons At Edinburgh prison the certificates were normally given by the prison doctor and by the medical adviser to the Prisons Department At all other prisons the certification was normally by the prison doctor and a doctor independent of the prison service When the Criminal Lunatics (Scotland) Act came into operation on a date to be appointed by the Secretary of State it would remain competent to remove a person from prison to the new criminal lunatic asylum on the certificates of two doctors in the employment of the prison authorities but it would be open to that person or to someone on his behalf to demand that he be examined by an independent doctor Secondly no person could be detained in the criminal lunatic asylum after expiry of his sentence unless a medical certificate was granted by a doctor who was not a salaried officer of the Prisons Department

The motion for reduction of the Vote was rejected by 157 to 98

Divorce in Scotland Bill

The Divorce (Scotland) Bill was read a third time by 77 to 19 in the House of Commons on July 12 Earlier in the sitting at the close of the Report stage the words and nullity of marriage were deleted from the title of the Bill

In the House of Lords on July 19 the Commons amendments to the Bill were agreed to In regard to the deletion of Clause 4 which dealt with nullity Lord Alness said there was a strong feeling in the Scottish Grand Committee against the retention of the clause Its deletion would not affect the main purpose of the Bill which was to reform the law of divorce

Maternal Mortality Rates

On July 12 Mr SANDERS asked the Minister of Health the names of the countries with a lower maternal mortality rate than that of Great Britain Dr ELLIOT in circulating this tabulated statement said that the figures in it except where otherwise shown were for 1935 The comparability of the published rates of maternal mortality was however affected by many factors (for example differences in methods of classification and in completeness of national arrangements for the collection of vital statistics)

Maternal Mortality	*All Causes*	*Rates per 1 000 Live Births*	
Great Britain	4 3	Iceland (1934)	1
England and Wales	4 1	Italy	0
Belgium	4 2	Japan (1934)	2
Denmark	4 0	Netherlands	3 0
Spain	3 4	New Zealand	4
Estonia (1934)	3 4	Norway (1934)	2 9
Finland (1934)	2 7	Sweden (1933)	3 1
France	2 3	Uruguay (1934)	2 3
Hungary (1934)	3 8		

Cost of Health Insurance for Dependants

Dr ELLIOT on July 14 told Mr Graham White that on the assumption that the term dependants was restricted to wives and to children up to the school leaving age the cost of providing medical benefit to the dependants of insured persons would be about £10 000 000 a year if the annual charge per head were the same as that now applicable to insured persons themselves

Medical Examining Bodies

Mr SORENSEN on July 14 asked whether, in view of the multiplicity of examinations and examining bodies relative to the training and professional status of medical practitioners Dr Elliot would consult with the British Medical Association and other medical and surgical organizations about the co ordination and simplification of such training with a view to considering the institution of a State medical examination and establishment of a State medical training hospital Dr ELLIOT replying for the Lord President of the Council said there was no present prospect of the introduction of legislation which would be necessary for this purpose

Medical Refugees

In a reply to Mr Riley on July 14 Sir SAMUEL HOARE said it had always been recognized that a policy of unrestricted admission to this country for qualified doctors or dentists would be out of the question Only a small number of foreign practitioners could be absorbed into the medical and dental professions It would be necessary to select this number with care To assist him in making this selection it was proposed that applications should be examined by a committee on which there would be representatives of the medical and dental professions and of the refugee organizations He was not informed that there was a shortage of medical practitioners in this country

Mr MATHERS asked if Sir Samuel had received intimation of the concern of doctors practising in this country about the numbers already admitted to practice

Sir SAMUEL HOARE said he had had discussions with representatives of the principal medical organizations who agreed with him that discrimination must be exercised The Home Office would be able to admit a limited number and to maintain effective discrimination

Replying to Sir HENRY MORRIS JONES who asked about the admission of medical practitioners of Austrian nationality Sir SAMUEL said he had agreed with representatives of the medical profession that the number of Austrian doctors who could be absorbed into the profession was limited But in deciding on a precise figure he would await further opportunity of ascertaining how many of the applicants possessed special qualifications or special claims to consideration In reviewing applications the Home Office would consider

arrangements the applicant proposed for acquiring the necessary qualification for practising in this country and in what part of the country he proposed to settle It must take into account that as Sir Henry Morris Jones pointed out many of the foreign practitioners were able to practise in this country after a short period of study Sir Samuel added that with co operation between the medical profession the refugee organizations and the Home Office he believed that refuge could be afforded to a number of refugees without flooding the profession in this country with doctors who were not required

Dr SUMMERSKILL said many doctors in this country believed that the Austrian doctors could make a helpful contribution to medical knowledge here

Sir SAMUEL HOARE said that was the fact and showed how necessary it was to deal with the applications case by case on their merits

On July 20 Mr HIGGS put a question which asserted that medical practitioners were very concerned at the intention of the Home Office to admit further alien doctors into this country and allow them to practise here Mr KIRBY on the same day asserted that the medical profession strongly resents their entry and consequent competition with them on a lower standard of training than is required here

Lord WINTERTON referred the questioners to replies previously given to Sir Henry Morris Jones and others

Answering a general question by Mr Riley on July 21 Sir SAMUEL HOARE said traditional hospitality would be extended so far as was compatible with our social and economic conditions to persons obliged to leave their own countries on political racial or religious grounds but individuals who came here must be carefully selected

Nursing Homes Registration in Scotland

Lord Alness in the House of Lords on July 14 moved the second reading of the Nursing Homes Registration (Scotland) Bill which had he said been piloted through the House of Commons by Sir Douglas Thomson Its purpose was to require every nursing home in Scotland to be registered and to make it an offence in that country to carry on a nursing home without registration In Scotland maternity homes had been registrable since 1927 but nursing homes had not been The Bill proposed to repeal the Act of 1927 and to make all nursing homes in Scotland subject to one code as in England to-day This would bring the law of the two countries into complete harmony

The Bill was read a second time without a division

On July 19 the Bill was considered in committee An amendment by Lord Alness to make it clear that a qualified nurse might act as an officer authorized by a local authority to inspect a nursing home was agreed to

Lord Alness moved a new clause giving power to the Department of Health for Scotland to exempt any nursing home carried on in accordance with the practice and principles of Christian Science from the requirement that the home should be in charge of either a registered medical practitioner or a qualified nurse who was or would be resident in the home He said that the clause merely echoed the corresponding provision in the English Statute of 1927 which was re-enacted in the Public Health Act 1936 The new clause was drafted in the Department of Health for Scotland and came before the House with their sanction The clause did not exempt these nursing homes from any of the structural or sanitary requirements which the Board of Health might impose and merely related to the requirements about doctors and nurses The English Act had worked smoothly and well

The new clause was agreed to and the Bill passed through committee

The Bill was read a third time and passed on July 25

Immunization against Diphtheria in Scotland—On July 12 Sir THOMAS MOORE asked the Secretary of State for Scotland what assistance was provided by his department for the immunization of school children against diphtheria and whether in view of the danger of epidemics of this disease, progress in this matter could be accelerated Mr COLVILLE said that the Department of Health had laid stress in their annual reports on the value of immunization of children against diphtheria A number of local authorities with the encouragement of the Department had proceeded with the formulation of schemes for securing such immunization and the Department's medical officers had co operated with medical officers of health to that end

Recall of Patient on Licence—On July 12 Mr LOGAN asked the Minister of Health why a man named Thomas Fisher after being out of Calderstones Institution for five years was recalled and if he was aware that the doctor said he could be considered for release if he had a permanent job

Mr BERNAYS said that the authorities at Calderstones recalled the patient because questions had arisen as to the suitability of the occupation and the adequacy of the supervision available at his home The Board of Control however on June 21 last asked the committee to reconsider the matter and to furnish their observations on the suitability of Mr Fisher for discharge As a result it had been decided to discharge the patient Mr Bernays added that the Minister of Health appreciated Mr Logan's anxiety that patients on licence should not be recalled unnecessarily The Board of Control had in fact issued a circular and the Minister was in communication with the authorities concerned

Somnifaine Narcosis in Dementia—Dr ELLIOT stated on June 14 in reply to Mr Sorensen that it was not proposed to issue a report on the treatment of dementia by somnifaine narcosis The report on cardiazol treatment would be published shortly

Bragg Paul Respirator—Answering a question on July 14 Dr ELLIOT said he knew that a broadcast on July 8 asked listeners whether they knew where a Bragg Paul respirator or iron lung could be found to save the life of a child He regretted a respirator could not be found in this case A certain number of respirators were already available at hospital centres and his medical officers in their visits of inspection were prepared to advise local authorities upon the question of providing them in suitable centres Under the circumstances and having regard to the infrequent occasions on which these appliances were required provision by Government funds of a number of such appliances would not be justified In a supplementary question an assertion was made that there were eighteen such respirators in Great Britain

Rheumatic Fever on a Training Ship—There have been thirty one fresh cases of rheumatic fever amongst the trainees in the *Caledonia* at Rosyth since April 1 last a ratio of approximately 18 per 1 000 strength The sewage arrangements both on board the *Caledonia* and on shore have been under continuous observation by the departments concerned and except for one temporary breakdown against the recurrence of which steps have been taken no deficiency has been reported

Nursing Services Inquiry—The interdepartmental committee on the nursing services hopes to make an interim report before the end of the year It is still hearing evidence

Notes in Brief

A report from the departmental committee on the use of celluloid in the manufacture of toys fancy goods etc was presented to Parliament on July 6

Correspondence relating to the welfare of women in tropical Africa was presented to Parliament on July 5

Replying to Dr Summerskill Sir Samuel Hoare says the removal of women from Holloway Prison to a modern prison outside of London is under consideration

The Scottish Office has recommended to all courts in Scotland that on every occasion where there is suspicion of defect or abnormality a medical and mental examination should be conducted by the most skilful specialist available

No 28

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended July 16 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths and of Deaths recorded under each infectious disease are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 13 principal towns in Eire (e) The 10 principal towns (9 in 1937) in Northern Ireland

A dash — denotes no cases a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929-37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	20	2	9	2	—	22	2	6	1	—		
Deaths		—	1				1	3				
Diphtheria	1,075	153	121	58	24	979	125	145	36	19	912	158
Deaths	26	3	2	4	—	17	1	3	2	—		
Dysentery	39	16	25		—	21	4	8	1	1		
Deaths				—	—				1	—		
Encephalitis lethargica acute	3	—	—		—	2	—	—	1	—		
Deaths		—					1					
Enteric (typhoid and paratyphoid) fever	26	5	3	1	2	45	5	4	7	—	54	—
Deaths	2	—	—	—	—	3	—	—	—	—		
Erysipelas			58	9	1			70	1	4		
Deaths		1					1					
Infective enteritis or diarrhoea under 2 years												
Deaths	61	17	14	5	—	39	12	9	3	3		
Measles			109		4			63		—		
Deaths	5	1	1	—	2	15	—	1	1	—		
Ophthalmia neonatorum	94	12	39		—	104	5	35		—		
Deaths												
Pneumonia influenzal‡	528	37	9	1	8	510	47	3	1	1	533	47
Deaths (from influenza)	23	1	3	—	1	10	4	—	—	—		
Pneumonia primary			143	13				105	7			
Deaths		11		13	8		7		1	6		
Polio encephalitis acute	1	—				1	—					
Deaths		—					—					
Poliomyelitis acute	8	1	3		—	8	—	1		—		
Deaths		—					—					
Puerperal fever	6*	6	7		1	32	4	17	1	—		
Deaths		—					1†					
Puerperal pyrexia	195	22	13		—	132	14	42		—		
Deaths												
Relapsing fever	—	—			—	—	—	—		—		
Deaths												
Scarlet fever	1,740	168	310	73	56	1,665	184	334	69	43	1,673	247
Deaths	3	—	1	—	—	3	1	—	1	—		
Small pox	—	—	—		—	—	—	—		—		
Deaths	—	—		—	—	—	—		—	—		
Typhus fever	—	—	—	—	—	—	—	—	—	—		
Deaths				—	—				—	—		
Whooping cough			25		3			42		4		
Deaths	6	2	1	1	—	13	4	3	2	—		
Deaths (0-1 year)	290	44	42	15	24	296	58	57	24	17		
Infant mortality rate (per 1 000 live births)	48	36				50	48					
Deaths (excluding stillbirths)	3 856	686	553	152	121	3 747	705	534	163	115		
Annual death rate (per 1 000 persons living)	9 5	8 7	11 3	10 2	10 7	9 3	8 9	10 9	11 1	11 0		
Live births	6 907	1 285	876	430	229	6 780	1,244	911	343	240		
Annual rate per 1 000 persons living	17 0	16 4	17 8	29 1	20 3	16 8	15 7	18 6	23 4	23 0		
Stillbirths	254	32				293	41					
Rate per 1 000 total births (including stillborn)	35	24				41	32					

* After Oct 1 1937 puerperal fever was made notifiable only in the administrative county of London

† Dea h from puerperal sepsis

‡ Includes primary forms in figures for England and Wales London (administrative county) and Northern Ireland

EPIDEMIOLOGICAL NOTES*

An Outbreak of Poliomyelitis

A small outbreak of poliomyelitis in Essex was reported to the Ministry of Health early last week and is under investigation by one of the medical officers of the Ministry in conjunction with the local medical officers of health Up to July 27 18 cases have come to notice 11 in Halstead Rural District 3 in Braintree and 4 in Dunmow Rural District There has been one death Four of the cases have occurred in a boarding school for boys The ages of the persons affected range from 3 years to adolescence One case has occurred in an adult of 26 years of age The local health authorities are taking all necessary precautions and the county medical officer of health for Essex is co-operating with the medical officers of health concerned Dr Norman Smith a medical officer of the Ministry of Health is assisting the local health authorities and is visiting the affected districts Small outbreaks of this disease are not uncommon in this country and an average number of 10 or 12 cases a week are notified A memorandum of the Ministry of Health on acute poliomyelitis which includes advice on precautionary measures against infection can be obtained from H M Stationery Office price 2d

Diphtheria and Scarlet Fever

Notifications of diphtheria in England and Wales during the week under review rose from 1 001 to 1 075 and in London from 127 to 15 There was a decided decrease in the notifications for Scotland—121 as against 151 recorded in the previous week—but in Eire and Northern Ireland there were small increases—58 compared with 49 and 24 compared with 21 respectively Deaths from diphtheria in the 126 Great Towns of England and Wales rose from 22 to 26 and in London from 2 to 3 Of the 26 deaths recorded in the 126 Great Towns 5 (1) occurred in Liverpool 3 (1) in South Shields and 2 each in Chester (0) and Sheffield (1) There were 2 deaths from diphtheria in the 16 principal towns of Scotland during the week under review—1 each in Glasgow and Edinburgh There was a slight decrease in the number of notifications of scarlet fever in England and Wales during the week—1 750 compared with 1 781—but in London an increase was noted—168 (157) In England and Wales the figures were in excess of the median value for the last nine years but in London they were considerably less There were 3 deaths from scarlet fever in the 126 Great Towns of England and Wales during the week under review compared with 2 in the previous week Notifications of scarlet fever in Scotland rose from 295 to 310 with 1 death (in Greenock) In Eire they remained at 7 while in Northern Ireland they fell from 71 to 56 in the week under review

Primary and Influenzal Pneumonia

There was a rise in the notifications of primary and influenzal pneumonia in England and Wales during the week under review—500 to 528—but in London the figures dropped from 42 to 37 both these figures are below the median values for the last nine years

Measles and Whooping-cough

The incidence of measles in England and Wales continues to decline Deaths in the 126 Great Towns have fallen from 7 to 5 during the week under review one of them being in London The number of cases reported in the L C C elementary schools during the week was 176 compared with 250 in the previous week while the average daily admissions to the L C C fever hospitals fell from 12 to 9 for the week under review Notifications dropped in nine of the metropolitan boroughs in which measles is notifiable and rose in Fulham—10 as against 9 in the previous week—and Greenwich—22 as against 19 In Scotland the figures for measles rose during the week from 91 to 109 of these 54 (19) were in Kirkcaldy 22 (18) in Falkirk and 8 (23) in Dunfermline There have been more deaths from whooping-cough than from measles during the week—6 for England and Wales as against 5 for measles and 2 for London as against 1 for measles in Scotland there was 1 death each from both diseases in Glasgow and Dundee respectively

* Except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

Cholera

A considerable increase in the incidence of cholera has been reported in China during the week For the week ended July 16 in Shanghai there were 418 cases with 152 deaths compared with 225 cases in the previous week in Hong Kong in the same week there were 60 cases with 53 deaths compared with 43 cases and 32 deaths in the previous week The Chinese Health Administration which has been working in close co-operation with the League of Nations has asked the League for 6 000 000 doses of cholera vaccine In response to the appeal Australia and Ceylon have each sent 500 000 doses the American Red Cross 1 000 000 doses Turkey and Rumania each 1 000 000 doses Yugoslavia and the Pasteur Institute at Hanoi each 500 000 doses Smaller amounts have also been received from the Serum Institute at Copenhagen the Egyptian Ministry of Health and the Institute of Bacteriology at Buenos Aires In British India cholera has been declining in recent weeks with the exception of Berar with 2 825 (1 959) cases and Madras 434 (414) cases

Small-pox

A review of the epidemic of small-pox at Hong Kong has revealed that nearly 2 000 persons lost their lives this year The total figures were 2 284 by the end of May and 1 920 patients died (case fatality 84 1 per cent) Over 75 per cent of the fatal cases occurred among children The epidemic reached its peak in the middle of March when an average of 40 cases daily were recorded but for the last few weeks only one or two cases have been reported

Medical News

The House of the British Medical Association including the Library will be closed from 5 p m to-day (Friday July 29) to 9 a m on Tuesday August 2 (Library 10 a m)

All who contemplate attending the third international congress for microbiology New York City September 2–9 1939 are asked to send their names to Dr R St John Brooks secretary of the British National Committee (Lister Institute Chelsea Garden London S W 1) Some knowledge of the numbers likely to make the journey will greatly facilitate arrangements for securing advantageous terms of transport from shipping companies

The first number has been published this week of the *British Journal of Rheumatism* edited by Dr M B Ray and described in the subtitle as an independent review mainly devoted to the practical and clinical aspects of rheumatism Lord Horder writes a short send-off Dr Fortescue Fox follows with a foreword and there is an editorial outlining the aims of the new quarterly publication (price 12s 6d per annum single copies 3s 6d)

The issue of *Paris Medical* for July 16 which is devoted to psychiatry contains the proceedings of the seventeenth international neurological reunion held in Paris on May 31 and June 1

During the State visit of the King and Queen to Paris last week Her Majesty accompanied by the Duchess of Northumberland inspected the Hertford British Hospital This institution with forty beds is in the Rue de Villiers Founded in 1877 by Sir Richard Wallace it was made over to the British Government by deed of gift in 1892 Its object is to give medical care and relief to needy men and women from any part of the British Empire but the original endowment only suffices now for one third of the annual expenditure The chairman of the hospital Sir Alfred S B Tebbitt presented members of the Committee of Management and the French visiting physicians and surgeons headed by Dr Charles Flandin to the Queen before she made a tour of the wards

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR BRITISH MEDICAL JOURNAL B M A House Tavistock Square W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary B M A House Tavistock Square W C 1 on receipt of proofs Authors overseas should indicate on MSS if reprints are required as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary B M A House Tavistock Square W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are

EDITOR OF THE *BRITISH MEDICAL JOURNAL* *Aitiology Westcent London*

SECRETARY *Medisecra Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Irish Free State Medical Union (I M A and B M A) 18 Kildare Street, Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Mammary Cancer and the Menopause

Dr R ANDERSON (Birmingham) writes For a long time I have been under the impression that women who suffer much from the flushings of the menopause are not so prone to breast cancer as those who don't Yesterday I saw a woman who is suffering from a secondary growth after excision of the breast three years ago She told me that she had had very few flushings and that her mother who died of breast cancer also had very few Judging by the treatment now advised for post menopausal symptoms I suppose it is taken as proved that these are due to a diminution or lack of oestrone in the system It would be interesting to know whether those women who do not suffer to any extent from flushings have an excess of oestrone Dr W E Gye (*Journal* March 12 p 551) states that oestrone injected into mice causes tumour formation not at the site of injection but in the mammæ Oestrone is evidently one of the factors concerned in the production of breast cancer and I think therefore that a great deal of caution should be used in giving it I would like to know whether any other reader has formed the same impression about the incidence of breast cancer

Hormone Therapy of Prostatic Hypertrophy

V EACH (Cornwall) would like advice from any reader who has had personal experience of the treatment of prostatic hypertrophy with injections of testicular hormones What dosage should be administered and at what intervals?

LETTERS, NOTES, ETC

"Q" Fever in Queensland

The annual report for 1936–7 of the Health and Medical Services of the State of Queensland shows vital statistics which compare favourably with those of the other States of the Commonwealth The crude birth rate was 19 7 and the death rate 8 78 the infant mortality rate was 36 20 per thousand The respective figures for the Commonwealth of Australia as a whole were 17 13 9 43 and 41 16 The report states that work on the unclassified fevers of the coastal districts of South Queensland proceeded steadily throughout the year with special concentration upon the problems involved in two fever types Q fever and seven day fever The latter is due to a leptospira of mild virulence All the cases of Q fever occurred in men Thirteen were employed in an abattoir some were farmers or farm workers, one was a braceman employed on new sewerage construction and one was a laboratory technician engaged in the actual study of the fever itself The report describes at some length the clinical features of the disease and the results of laboratory investigation The problem of leptospirosis was studied by the mobile unit attached to the Laboratory of Pathology and Microbiology and it appears to be established that a mild leptospirosis is a not uncommon cause of illness in South Queensland previously diagnosed as coastal fever influenza or dengue An appendix to the report is devoted to the hookworm campaign

Parturition with Albuminuria and Raised Blood Pressure

Dr C DYSANT (Bromley Kent) writes The following case may perhaps be of interest A multigravida aged 40 five previous confinements began labour at 12 noon and was delivered at 1 30 p m one and a half hours later of a 15 lb male baby She had been confined to bed for three weeks with albuminuria and blood pressure up to 174 mm Hg systolic 110 diastolic The albuminuria cleared up but the blood pressure varied and was 160 mm Hg systolic 90 diastolic before confinement There was no shock and both mother and child are doing well

Epsom College

Major W L GIFFARD O B E Secretary of the Royal Medical Foundation of Epsom College, writes At the annual general meeting of the Governors of Epsom College held last month after reference had been made to the kindness of the Editor of the *British Medical Journal* in publishing articles and notices about the Royal Medical Foundation and its aims a resolution as under was unanimously passed by the meeting That the Annual General Meeting desires to place on record its appreciation of the kindness of the Editor of the *British Medical Journal* for his readiness at all times to publish notices regarding Epsom College and its Royal Medical Foundation'

Artificial Respiration Apparatus

Dr D EDGE (Medical Superintendent Ladywell Sanatorium and Isolation Hospital) writes In view of the demand for the artificial respiration apparatus miscalled iron lung may I be permitted to point out that there is one available at Ladywell Sanatorium and Isolation Hospital Eccles New Road Salford 5 Lancs

*** An authoritative letter on the Bragg Paul pulsator by Sir William Bragg appears this week at page 254

Sterilization of Syringes

Dr A E FINCKH (Sydney N S W) writes I have been in practice as a clinical pathologist for over thirty years during which time I have made thousands of venupuncture Needles and syringes have always been subjected to boiling being placed in cold water and brought to the boil Not once have I experienced a mishap

Medical Golf

Dr A Keith Forbes and Dr A J Buchan each won two of the five events held by the Scottish Medical Golfing Society at its meeting on Princes course (Sandwich) last week end Keith Forbes (16) won the bogey competition with a return of one up and the Silver Haggis (Eclectic) 64 net while Buchan (7) took the stroke competition with 76 net and the Captain's Prize with 72 net The four ball event against bogey went to Drs G Gilchrist (6) and Norman Fleming (14) with a return of 9 up

Corrigenda

A printing error which it is important to correct occurred in Dr F G Hodson's article on Measles in the *Journal* of July 23 (p 174) Owing to a misplaced line the inscription under Table V was without meaning It should read 100 per cent infected 0 per cent escaped no complications 22 protected cases all had attenuated attacks

Our recent notice of *The Diet for Expectant and Nursing Mothers* published by the Food Education Society erroneously named Miss J Halford as the author The little book is the work of the Society and Miss Halford contributed a foreword

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Canadian Medical Association Journal

Montreal vol 38 May 1938

Abnormal Functioning of Certain Secretory Mechanisms as a Possible Factor in Pathogenesis of Peptic Ulcer—B P Babkin
Partial Bloodless and Safe Haemorrhoidectomy—F B Bowman
Cutaneous Leukaemia and Pruritus Vulvae Treatment by Resection of Sensory Nerves of Perineum—B L Ker and A D Campbell
Xanthomatous Odontoma—G S French
Carcinoma of Appendix of Vermiform Appendix—L G McCabe
Appendicular Colic—D E Robertson
Appendicular Colic—A Brown
Venereal Disease in Relation to Pregnancy—J C Goodwin
Treatment of Amoebic Dysentery—P Beregoff Glaw
Use of Insulin in Urticaria—W R Caten
Deaths in Tetanus Phenomenon of Tetanus release—W F B Hill
Effect on Donors of Repeated Limited Blood Loss—F Cadham
Radiotherapy of Cancer of Breast—P Boldeu
Carcinoma of Oesophagus—F R Scott
Case of Pellagra—M L M L Palmer
Spinal Cord Injury without Evidence of Fracture or Dislocation of Vertebral Column—B Plewes
Unusual Affection of Eye in Leukaemia—F A Aylesworth
Amoebic Dysentery Methods of Diagnosis—P Beregoff-Glow
Method of Administration of Anti pneumococcal Serum—O Cannon and H Ewart
Treatment of Acne—D E H Cleveland
Applied Physiology of Thyroid Gland—J E Pinkett

Venereal Disease in Pregnancy—The incidence of syphilis and gonorrhoea in pregnancy would appear to be decreasing as the result of education of the public venereal disease control methods and adequate facilities for and improved methods of treatment Examination for these diseases including Wassermann and Kahn tests should form an integral part of every pre natal routine Anti syphilitic treatment is safe provided the dosage of arsenicals is moderate and the patient is kept under close observation for evidence of toxic manifestations Routine plans for the treatment of pre natal syphilis and gonorrhoea are fully described in this article by Goodwin

Insulin in Urticaria—Two cases of urticaria are reported which showed remarkable improvement after the administration of small doses of protamine zinc insulin One of these was associated with sensitivity to wheat eggs and milk and the other was of unknown origin

Blood Donors—In order to obtain convalescent serum for the treatment of poliomyelitis during an epidemic in 1936 Cadham had occasion to withdraw frequent small amounts of blood varying from 65 to 140 c.cm from 125 donors None of the donors reported any ill effects On the contrary many of them stated that they were definitely improved in general health Points noted were an improvement in appetite disappearance of acne cessation of attacks of urticaria and increase of weight Cadham suggests that under certain circumstances the withdrawal of limited amounts of blood at regular intervals may prove of decided therapeutic value

Deutsche Medizinische Wochenschrift

Berlin vol 64 May 20 1938

Introduction to Rhythm Research—A Jores
Daily Rhythm in the Vegetable Kingdom—A Kleinhoonte
Rhythm of Functions of Liver—E Forsgren
Liver Rhythm and Fat Resorption—H Holmgren
Twenty four hour Rhythm of Diuresis—F Gerritzen
Syphilis Treatment and Serological Findings—J Richter
Surprising Discovery by Tomography of a Foreign Body in a Bronchus—M Daelen and K Greineder
Calcium in Treatment of Asthma—H Minibeck
Leukichtan in Treatment of Sunburn—E W Dorffel
What Must the General Practitioner Know of Electrocardiography?—G Budelmann
High Court Medico-legal Judgments in 1937—Patch and Frembur
Johann Lukas Schonlein Founder of the Berlin School—E H G Atzrott.

Journal of the American Medical Association

Chicago vol 110 May 21 1938

Premenstrual Tension—S L Israel
Pressure on Brachial Plexus causing Simulation of Coronary Disease—W D Reid
Head Trauma—N Gotten
Experimental Requirement of Insulin and Salt Solution in Diabetes—H F Root and J E F Rieman
Certain Viruses as a Therapeutic Agent—R L Sutton
Female Perineum—R J Pien
Need of Redetermining Schick negativeness in School Children—A B Schwartz and F R Janney
Chemistry of Vitamin A and Substances having a Vitamin A Effect—L S Palmer

Premenstrual Tension—The syndrome of premenstrual tension includes as symptoms irritability restlessness crying spells headaches vertigo insomnia painful turgidity of the breasts and nymphomania It arises during the height of corpus luteum activity and is aggravated by oestrogen therapy Israel studying fourteen cases found that substitutional therapy with progestin and low dose irradiation of the pituitary and ovaries relieved the symptoms

Gentian Violet—Sutton strongly recommends the use of gentian violet in dermatological conditions due to such Gram positive organisms as *Staphylococcus aureus* the gonococcus and *C diphtheriae* and in those due to monilia and to a less extent to trichophyton epidermophyton torula and saccharomyces The main disadvantage is the conspicuous colour which can however be removed from linens etc by repeated washings with water and alcohol or bleaching with chlorine Applications of a 1 to 2 per cent aqueous solution are best Gentian violet is non toxic and hypersensitive skin reactions to it are unknown

Klinische Wochenschrift

Berlin vol 17 May 21 1938

Allergy and Resistance to Tuberculosis—W Seifert
Determination of Vitamin C Balance in Man—G Gehrgens
Typical Variations in Renal Function Determined by Posture in Healthy and Fat Children and Children with Cardiac Changes—H Hunzelard
Aneurysma of Cardiac Muscle in Paroxysmal Tachycardia and Respiratory Insufficiency—K Voit and G Landes
Acid Cover of Skin and Anti bacterial Protection II—A. Marchionini R Schmidt and J Kiefer
Elimination of Flavines in Urine.—L Armentano E. B Hatz and S Ruszniak
Is Furunculosis an Allergic Condition?—C Pohl
Biological Difference between Old and Bovine Tuberculin shown by Schultz Dale Test—P W Schmidt and B Bausch
In Memory of Otto Naegeli—W Gleer Meyer

Anti bacterial Protection of Skin—Further experiments with cultures taken from various parts of the skin which had been painted with an emulsion of *B prodigiosus* proved that an acid reaction of the surface of the skin definitely inhibited the growth of this bacillus and of the usual skin flora

Lancet

London vol 234 May 21 1938

Biological Thought and Chemical Thought—G Hopkins
Photodynamic Action of Carcinogenic Agents—J C Mottram and I Dornach
Simulation of Acute Abdomen in Carbon Tetrachloride Poisoning—W H Graham
Haemorrhage and Intestinal Obstruction due to Meckel's Diverticulum—B H Pace
Effect of Testosterone Propionate on Testicular Function in Monkeys—S Zuckerman
Simple Electrical Device for Fourth Electrocardiographic Lead—A Schott.

Medizinische Klinik

Berlin vol 34 May 20 1938

Disease produced by Excessive Smoking—R Schmidt
Poliomyelitis—W Hoffmann
Principle of Give and Take in Education of Children—F Hamburger
Feeding of Babies with Full Cream Acid Milk—J Scharff
Air in Artificially Heated Rooms—F G Meyer
Simultaneous Appearance of Prostatic Hypertrophy in Uniovular Twin—O Kaufmann
Exposition of Wilful Simulation of Chronic Poisoning—P Keckzeh
Virus Diseases in Germany—H H Siemens

Medizinische Welt

Berlin vol 12 May 21 1938

Character and Treatment of Hyperemesis Gravidarum—F Heynemann
Treatment of Abortion in Hospital and Private Practice—G Haselhorst
Relief of Pain in Childbirth—W Hoffmann
Determination of Date of Delivery in Panel Practice—E Oldemeyer
Treatment of Vaginal Flora especially Trichomonas Infection—W Lucke
Treatment of Pseudoneurasthenia Arteriosclerotica with Jodipin—A Richter

Munchener Medizinische Wochenschrift

Munich vol 85 May 20 1938

Haemorrhage from Smallest Blood Vessels in Circulation—E Jurgensen
Intrathoracic Displacement of Air—H Wenderoth
Tumours in over 1,300 Gynecological Cases—H Kraimann
Composition of Alkaloid Mixture in Belladonna Root—A Kuhn and G Schafer
Enteric Like Epidemic caused by Different Specific Organisms in One Family—G Russo
Treatment of Insomnia—L R Muller
Dry Nipple Treatment in Puerperium—E Leinzinger
Practical Oro-nasal Protector—E Hopmann
Dry Blood Test in Elimination of Syphilis—R Müller
Legal Estimation of Infanticide—H Cummersbach

Nature

London vol 141 May 21 1938

Toxicity of Mercury Vapour to Insects—H C Gough
Blood Groups and Pigmentation—M A MacConaill
Fertile Haploid Sectors by Partial Merogony in Mozaics of *Drosophila pseudoobscura*—J A F Crew and Rowena Lamy
Chemical Identification of Oestrone in Human Male Urine—L Dingemanse, J Laqueur and O Muhlbock

London vol 141 May 28 1938

Vitamins in Plant and Animal Tissues—B C Guha and P N Sen Gupta
Action of Anol and its Derivatives on Nipple of Guinea-pig—H E Fierz, W Jadassohn, E Uehlinger and R Monnier

New England Journal of Medicine

Boston vol 218 May 19 1938

Some Newer Aspects of the Alcohol Problem—F Leary
Nephritic Toxaemias of Late Pregnancy—L Phaneuf and M Belanger

Nephritic Toxaemias—Careful ante-natal supervision has greatly improved the results in nephritic toxaemia of pregnancy. In seventeen years at the Carney Hospital there were 6,909 deliveries with eighty-eight cases of late nephritic toxaemia, an incidence of 1·3 per cent. Six women in the series had convulsions or eclampsia, an incidence of 0·1 per cent.

Nordisk Medicinsk Tidskrift

Stockholm vol 15 May 21 1938

Chemotherapeutic Essays in Gonorrhoea—C A Falk
Poisoning with Trichlorethylene with Special Reference to Chemical Cleaning Works—F H Schmitz

Chemotherapy of Gonorrhoea—The administration of a Swedish preparation of sulphanilamide at the St Goran Hospital in Stockholm in cases of gonorrhoea has been very successful. The best results were obtained in old and complicated cases. Though no serious sequelae were observed after the administration of sixteen tablets each of 0·3 gramme by the mouth daily for four days and a smaller total daily dose for the next eight to ten days, Falk considers that this treatment should as a rule be given only in hospital and that the public should not be free to purchase this drug.

Policlinico

Rome vol 45 May 16 1938 (Sez. Prat.)

Green Urine in Spirochaetosis Haemorrhagica—G Ghisio
Mercurin in Treatment of Undulant Fever—P Timpano
Myomectomy in Fifth Month of Pregnancy for Necrobiosis—I Tomai

Presse Medicale

Paris vol 46 May 18 1938

Variations in Reticulocytosis in Course of Acute Non-tuberculous Lung Conditions—Jean Minet and E Houcke
*Staphylococcal Anatoxine in Furunculosis—M R Lacassie
Loeffler's Syndrome Transient Pulmonary Infiltrations with Eosinophilia—René Cohen

Furunculosis—The author discusses the aetiology of furunculosis and other staphylococcal manifestations and comes to the conclusion that they are due to underlying digestive disorders and particularly to hepatic dysfunction.

Paris vol 46 May 21 1938

Thymectomy and Parathyroidectomy for Disturbance of Growth and Generalized Calcinosis: Result after Eighteen Months—R Leriche and A Jung
Syphilitic Gumma of Lung—Michel Léon Kindberg and G Lapine
*Slow Progressive Eroding Cancer of Stomach—René A Gutmann and Ivan Bertrand
Technique and Immediate Results of Extrapleural Pneumothorax—Pierre Bourgeois and Mario Lebel
Ventricular Fibrillation and Ultra-fractional Systoles—R Lutembacher
*Total Pneumonectomy for Bronchiectasis—P Santy and Marcel Berard
Bactericidal Power of Blood: Its Measurement and Clinical Importance—H Tajerman and L Van Dimmc

Gastric Carcinoma—The authors give an account of a hitherto undescribed and quite distinct variety of cancer of the stomach which affects only the mucosa and does not involve the lymph glands.

Pneumonectomy—The authors describe a case of bronchiectasis of the left lung in a girl aged 10. Total pneumonectomy was undertaken with success.

Schweizerische Medizinische Wochenschrift

Basle vol 68 May 21 1938

Prognosis of Old-standing Fracture of Scaphoid—A Brunner
Differential Cerebrospinal Fluid Pressure in Brain Injuries—P Decker
Treatment of Fracture of Patella—M Dubois
Stereoscopic Radiographs—E Hagenbach
Massage of Walls of Veins and Surrounding Tissues after Phlebitis and Thrombophlebitis—C Henschen and F Becker
*Non-puerperal Osteomalacia treated by Ovariectomy—A Jentzer and R Weyeneth
Treatment of Protrusion of Lower Jaw—C Jaillard
Gunshot Wound of Heart with Ligature Infarction—H Matti
Review of Plastic Operations in Children—E Mounier
Spinal Cord Surgery—T Naegeli
Post-operative Malady—J H Oltramare
Intrafocal and Hypodermic Auto-psychotherapy of Circumscribed Pleural Effusions—H Paschoud
Experiences with Catgut—A Ritter
Osteogenic Function of Heliotherapy—A Rollier
*Experiences in Treatment of Surgical Tuberculosis—F Ruppanner
Four Cases of Polyneuritis following Cyprian Anaesthesia—F Rutishauser
Development of Sarcoma in Paget's Disease—O Schurch and F Uehlinger
Diagnosis and Treatment of Renal Carbuncle—F Suter
Treatment of Injuries of Veins and Arteries in Cubital Region—R Veraguth and R Montant

Ovariectomy in Non-puerperal Osteomalacia—The writer holds that the clinical picture of osteomalacia can be simulated by simple senile osteoporosis, fibrous osteitis of endocrine origin, exogenous causation and Paget's disease. Differentiation is only possible by biopsy of a bone. A portion of the iliac crest was taken in the case here described. The patient aged 38 had had no pregnancy for fourteen years. The bone findings are illustrated in detail before and after successful treatment by ovariectomy.

Surgical Tuberculosis.—In a consideration of the results of sunlight and climatic treatment of surgical tuberculosis in the Upper Engadine Kuprianer reports conspicuous success in disease of the spine sacro-iliac joint shoulder and wrist surgical measures are considered often preferable in advanced tuberculosis of the elbow and in tuberculous disease of the knee or foot the frequent occurrence of arthritis deformans after the conservative treatment of the foot is pointed out Ruppanner has found tuberculous disease of one or both kidneys in one third of his cases of tuberculosis of the lumbar spine The parts played by heliotherapy and by tonsillectomy in tuberculosis of the cervical lymph glands are discussed Good results are usual in peritoneal tuberculosis In tuberculosis of the epididymis local heliotherapy is to cease and excision is recommended

Science

New York vol 87 May 6 1938

Comparison of Absorption Rate exciting under Ferial Conditions.—J Meikler and F D Pace
Cerebrospinal Drug Administration in Evaluation of Therapeutic Results.—E T Junge
Concentration and Purification of Chicken Tumour I Agent.—A Claude
Estimate of Relative Dimensions and Diffusion Constant of Tobacco Mosaic Virus Protein.—A L Tompkins and H Neurath
Molecular Weight and Shape of Tobacco Mosaic Virus Protein.—M A Lauffer

New York vol 87 May 13 1938

Bacteria in Dutch Eiderdown Sweat.—A C Leuchtenberger
Immunization against Equine Encephalomyelitis with Chick Embryo Vaccine.—J W Beard H Finkelstein W C Scally and R W G Wyckoff

South African Medical Journal

Capetown vol 12 May 14 1938

Limitations.—H F Bell Walker
Pituitary Hormones and their Therapeutic Application.—P Keet
Lament for the Boer Medical.—L S Williams
Thesis In or Out?—F A Lomax
Impressions of American Medicine.—H L Heimann
Scope of Radiotherapy.—H H Navid
Notes on Use of Thirteen Endotoxoid Vaccine.—R Masterson

Ugeskrift for Laeger

Copenhagen vol 100 May 19 1938

Twenty-eight Cases of Bronchiectasis suspected of Tuberculosis.—J Sigurdsson
Pyothorax provoked by Ulceration.—G Feldbjerg Hansen and K H Krabbe
Treatment with Dorsyl of Postoperative Retention of Urine.—S Brimberg
Pleuritis Problems.—O Thorgarson
Case of Quincke's Oedema treated with Intravenous Injection of Glucal in Leo.—O Ovesen

Bronchiectasis and Tuberculosis.—This is a bronchographic study freely illustrated with skiagrams carried out at the Spangsbjerg Sanatorium in Denmark

Dorsyl.—Post operative and puerperal retention of urine reacts satisfactorily to the subcutaneous injection of dorsyl which is a carbaminoylcholine chloride—a derivative of acetylcholine

Wiener Klinische Wochenschrift

Vienna vol 51 May 6 1938

Natural Sex Limitation and Sex Change.—F Lenk pf
Sex Changes in Women.—T Leipert
Influence of Spiritual Attitudes on Internal Organic and Experimental Production of Life.—O Stricker
Fright against Diphtheria and Scarlet Fever in Vienna.—O v Kopetzky
Treatment of Pneumonia with Ethyl Chloride.—J Meller and K Thalhofen
Cranial Disease and Vegetative Nervous System.—K Pleyer
Sudden Death during Childbirth.—F Bernhart
Importance of Circulation in Abdominal Surgery.—R Frey dorfer
Treatment of Anaemias.—W Berenbeck
New Methods in Differential Diagnosis of Blood Diseases.—H Fleischhacker
In what Way should Central Institutes draw up Medical Reports.—A Werkgartner

Sudden Death in Childbirth.—The possibility of sudden death occurring during parturition must be borne in mind by the obstetrician Bernhart classifies the causes as (1) birth traumas including post partum haemorrhage rupture of the uterus and other complications associated with parturition (2) constitutional anomalies and individual indispositions—for example status thymolymphaticus and diseases of the heart lungs and endocrine glands and (3) toxaemias of pregnancy affecting the liver kidneys skin or nervous system

Wiener Medizinische Wochenschrift

Vienna vol 88 May 21 1938

Haematuria.—E Lauda
Vitamin Feeding of Cancer Cells for Reduction of Malignancy.—F Orthner
Changes of Voice in Diseases of Larynx.—E Wessely
Epidemic Sore Throat and its Relation to Virus Diseases of Central Nervous System.—H Schreiber

Voice Changes.—These are caused by (*a*) changes in the mucous membrane (*b*) diseases of the musculature (*c*) disorders in innervation and (*d*) affections of the crico arytenoid joint and its surroundings Any of these may give rise to dysphonia or in extreme cases aphonia Proper diagnosis is not possible from the change of voice alone If hoarseness gradually appears and if it persists for more than four weeks a local examination is essential A number of causes are discussed ranging from simple catarrh tumours tuberculosis and syphilis to polypus pachydermia and perichondritis Infectious causes as in diphtheria or the ulcerations in tuberculosis sepsis or typhoid fever may also be responsible as may hysteria or paresis of the recurrent nerve

SPECIAL JOURNALS

Acta Chirurgica Scandinavica

Stockholm vol 81 May 1 1938

Condition of Tongue in Dehydration.—E Sven Kirk
Intestinal Intussusceptions (including one Remark on Passage of Small Bowel).—Torsten Bjerkvik
Case of Double Kidney of Diagnostic Interest.—Bertil Bager
Influence of Dilatation of Stomach on Circulation.—Hermann Wahren
Electrocardiographic Examinations of Operation Patient.—N H Broedsen
Importance of Electrocardiography for Judgment of Risk in Thyreodectomies and Thoracoplasties.—H Fr Harbitz and A Jersild
Investigation of Importance of Pre-operative Electrocardiography.—O Ramke
Lobectomy and Pneumonectomy for Bronchiectasis and Bronchial Stenosis.—John Holst

Tongue in Dehydration.—The author finds that dryness of the tongue is not related to dehydration of the blood A definite relationship however was observed between the appearance of the tongue and the degree of intestinal motor activity

Pre operative Electrocardiography.—In three articles this problem is discussed In all about 800 patients were submitted to pre operative electrocardiographic investigation The authors are unanimous in reaching the conclusion that no useful prognostic information can be gained from this procedure

American Heart Journal

St Louis vol 15 April 1938

Causes of Death in Patients with Congestive Heart Failure.—R H William and J Ramsey
Some Problems in Diagnosis Prognosis and Treatment of Acute Arterial Occlusion.—H E Rykert and Duncan Graham
Electrocardiogram of Cardiac Muscle II Lengths of Stages of Activity.—A Garrard Mudd
Ventricular Deflections in Myocardial Infarction.—J G M Hamilton and Jan Snyder
Comparative Effects of Water Bath and Mustard Bath at Varying Temperatures on Rate of Peripheral Blood Flow in Man.—J A Killian and C A Owen
Electrocardiographic Changes found in Twenty two Cases of Carbon Monoxide (Illuminating Gas) Poisoning.—W H Stearns C K Drinker and T J Shaughnessy
Blood Pressure and Size of Cardiac Infarct.—J Travell H Gold and W Modell
Coronary Vasoconstrictor Action of Foreign Species Blood.—L N Katz W Winternitz and K Jochim

*Occlusion of Coronary Arteries by Haemorrhage into their Walls—W B Wartman
Study of Electrical Activity in Auricles—D J Abramson N M Lenichel and C Shookhoff
Congenital Transposition of Great Arterial Trunks—D W Ingham and I A Willius

Acute Arterial Occlusion—The characteristics of the pains which accompany embolism of the large peripheral arteries are described. The results of certain forms of treatment are given and the authors suggest that a combination of various non-operative methods is best.

Haemorrhage into Coronary Artery Wall—Cases are described demonstrating the complete occlusion of the coronary artery by haemorrhage into the atheromatous wall. Thrombosis within the vessel may or may not be present. When it is it is probably a secondary effect. An infarct was not present in all cases but death was attributed to the coronary lesion in every one.

American Journal of Surgery

New York vol 11 May 1938

Renal Rickets or Renal Dwarfism—I Leon Howard
*Difficulties in Urethral Catheterization—John L Emmett
Traumatic Lesions of Kidney—J T Priestley and F Pilcher jun
Measurement of Kidney Function during Pregnancy—Albert W Holman
Transperitoneal Exclusion Cicatrix in Section—Ingle F Frost
Intravenous Anaesthesia in Obstetrics—F A Kisselhorn and M J Schreiber
Surgical Treatment of Syringomyelia—L J Adelstein
Common Duct Obstruction—W S Sargent
Ligation of Cystic Vessels in Subserous Cholecystectomy—I I Whitaker
Enterogenous Cyst—B Sherwin
Carbuncle—J K Berman
Physiological Basis for Ligation of Great Saphenous Vein—J R Veal and B Van Werden
Rationale of Surgical Technique in Carcinoma of Rectum—J M Lynch and G J Hamilton
Electrosurgery in Proctology—R V Gorsch
Low Back Pain—A I Bukr
Fractures of Hip-joint—Francesco Mogavero
Femoral Herniorrhaphy—S J Burrow
Carcinoid Tumour of Meckel's Diverticulum—D C Collin I K Collin and V L Andrews
Carotid Body Tumours—H K Shawan and C I Owen
Chromargentaffine Tumours of Appendix—A M Grassi
Jejunal Ulcer following Gastro-enterostomy—P K Sauer
Multiple Vesical Calculi—E K Morgan and C M Stone
Repeated Ectopic Pregnancy—Harry Martz
Perforated Appendicitis—Calvin B Rentschler
Total Removal of Patella—Addison H Bissell

Catheterization—This paper presents to the practitioner an explanation based upon anatomical considerations of the common difficulties encountered in catheterization. Simple technical measures to overcome these difficulties are described. The choice of suitable instruments and the care of the in-dwelling catheter are also dealt with.

Anesthesie et Analgesie

Paris vol 4 April 1938

Peripheral Element in Pain—A Baudouin
Some Criticisms of Evaluation of Activity of Local Anaesthetic by Measurement of Chronaxie of Isolated Nerve. Some Improvements in Technique—J Regnier and A Quevauviller
Local Anaesthesia—A V Vichnevsky
Recent Comparative Studies on Activity of Various Salts of Morphine administered in Various Ways. Urinary Elimination—J Regnier and S Tambun

Annals of Surgery

Philadelphia vol 107 May 1938

*Intracranial Aneurysm of Internal Carotid Artery—Walter E Dandy
*Aneurysms of the Circle of Willis—Rudolph Matas
Brain Abscess due to Gas forming Spore bearing Anaerobes—C Bagley jun
Use of Fascia and Ribbon Catgut in Repair of Cleft Palate and Hare-lip—A G Brenizer
*Tracheo-oesophageal Fistula—H A Gamble
Scalenus Neurocirculatory Compression—R Glen Spurling and F Keith Bradford
Carcinoma of Breast in Negro—Isidore Cohn
Carcinoma of Breast—Hugh H Trout
Simple Treatment for Empyema in Children—B C Willis
Thoracoplasty in Treatment of Pulmonary Tuberculosis—L W Trink and P Turner
Lung Abscess—J D Rive R C Major and S A Romano
Carcinoma of Stomach. Total Gastrectomy—A W Allen
Diverticula of Jejunum—John C A Gerster
Complicating Effects of Diverticulitis upon Abdominal Surgery—V C Dandy and R K Gilchrist
Surgical Treatment of Intractable Chronic Ulcerative Colitis—Henry W Cave
Retroperitoneal Appendix—W B Marbury
Unilocular Cyst of Liver—I H Ochsner
Prosed Spleen with Torsion of Pedicle—F H Adkins
Comparison of Three Types of Hysterectomy—C H Tyrone
*Simple Method of Constructing a Vagina—L R Wharton
Foetero-Vaginal Hernia—W F Black
Vaginal Cysts—R L Sanders

Intracranial Carotid Aneurysm—This is a description of a case of lateral aneurysm of the internal carotid cured by occlusion of its connecting stalk. It is the first of this kind to be recorded.

Aneurysms of Circle of Willis—The evolution of the surgical treatment of intracranial aneurysm is reviewed. The problems in diagnosis and treatment of aneurysms of the circle as opposed to aneurysm of the internal carotid, are discussed.

Tracheo-oesophageal Fistula—A new method of surgical treatment is described. The stomach is divided transversely, the distal portion being made the site of gastrostomy while the upper segment provides free oesophageal drainage to the exterior. Subsequently the fistula is attacked directly.

Plastic Vagina—The space between the rectum and bladder is dissected and an adequate cavity is kept open by a vaginal mould. Rapid epithelialization occurs from the surface of the rudimentary vagina. Successful cases are described.

Archives des Maladies du Cœur et des Vaisseaux

Paris vol 31 April 1938

Terminal Infective Endocarditis complicating Old Rheumatic Endocardia—A Dumas
*Value of Certain Chest Lead in Diagnosis of Myocardial Infarction of T_1 Type—I Donzelot and M Lenier
Reduplication of First Sound—C Frain and J J Welti
Electrocardiographic Study of the Carotid Sinus Reflex—Jean Lenegre

T_1 Type Myocardial Infarction—Clinical details and electrocardiographs are given of eight cases with infarction of the anterior type to show that the apical chest lead may reveal characteristic changes more marked than those of the limb leads and that in the chest leads these changes may appear before and also outlast those in the limb leads.

Archiv fur Gynakologie

Berlin vol 167 May 24 1938

Displacement of White Blood Corpuscles in Normal and Toxic Pregnancy—Heinrich Siedentopf
Critical Consideration of Best Treatment for Placenta Praevia—D Liepelt
Physiology of Vaginal Musculature in Rabbits—H Dworzak
Connexion between Foetal Membranes and Placental Vascular Pattern in Twin Pregnancy—B Szendi
Fate of Glutathione and its End-products in Blood of Pregnant Women—H Siedentopf and W Hertel
Influence of Iron-containing Uterine Pessaries on Sterility of Vagina—W Sturzewski
New Method of X-Ray Calculation of Size of Foetal Head—I A Wahl
Functional Condition of Vaginal Mucosa following Operations on Genitalia—E Murray and K Herrenberger
Endometropathia Hyperplastica—A Honermeier
Regulation of Uterine Function by Ovarian Hormones acting via the Thyroid—P Grumbrecht and A Loeser
Determination of Stages of Ovulation by Serum Flocculation Reaction—M Takata
Ossification in Os Capitatum as Sign of Post-maturity—K Kloppner
Pulse Volume in Pregnancy—H R Schmidt-Elmendorff C Effkemann and W Borgard
Physiology of Vaginal Mucosa in Newborn—M Alexiu

Archives of Internal Medicine

Chicago vol 61 May 1938

Arachnoidectomy and its Medical Complications—P H Futcher and H J Southworth
Heart in Acromegaly—C Courville and V R Mason
Cholesterol Content of Blood in Heart Disease—C A Poindexter and M Bruger

Clinical Significance of Hospital Admissions for Epistaxis—Air Hunger and Dyspnoea Produced by Physical Exertion in Normal Subjects and in Patients with Heart Disease—J A Green and I W Sternberg
Post Mortem Measurement of Heart and Its Ventricles: Method of Assessment of Therapeutic Results—R W Keys and P Stark
External Secretion in Relation to Pancreatic Physiology and Pathology—J M McCutcheon, B L Newton and C J Stillman
Lymphosarcoma with Cholesterol Effusion in Thymus—Hepatic Disease—L M Boyd and W J Cornell
Stenosis of Peripheral Arteries: Acute Idiopathic Embolism—W J Turner
Cardiac Secretion in Man: Observations on Effect of Repeated Injections of Hormone and on Temperature Mechanism—L Noble, C D Ermann and I Tahl
Calcium Assimilation: Clinical and Biochemical Study—I H Berk and M D Bernstein
Osseous Form of Ganglioneuroma—C C Reposa, S Mehamed and W Chester
Progress in Internal Medicine: Diseases of the Heart: Review of 1937—A Grant and P D White

External Secretion of Pancreas—Observations carried out on a man with a pancreatic fistula are recorded. Foods, secretin, acid, water, mecholyl and physostigmine increased the rate of secretion; bile salts, bicarbonate, magnesium sulphate, adrenaline, atropine and histamine diminished the secretion. Qualitative without necessarily quantitative variations in secretion were seen in response to various stimuli.

Calcific Aortic Stenosis—Fourteen cases of this condition are reviewed and it is concluded that it is now possible to make this diagnosis in the living. Signs of aortic insufficiency associated with electrocardiographic evidence of myocardial disease in the absence of syphilis and bacterial endocarditis suggest the diagnosis. X ray examination will confirm or refute this impression. Cardiac failure occurs late in the disease, but syncope and sudden death are not infrequent.

Archives of Pediatrics

New York vol 55 May 1938

Prophylaxis of Common Communicable Diseases of Childhood—I H Lipp
Anaemia in Digestive Diseases of Children—I N Kugelmass
Indican Excretion in Newborn—H Shardt
Influenzal Meningitis—R H Young and C Moore
Tuberculosis Meningitis resembling Diabetic Coma—L R Kerbaugh and L B Sperry
Agenesis of the Lung—J Yamins, Jr and C D Fowler
Case of Nutritional Oedema—H L Swerbutg and A B Miller
Fibrosarcoma of Skin in Children—J Epstein
Meriphen Borate and Sulphanilamide in Experimental Pneumococcic Infection—J A Toomey and W S Takacs
Few Sketches on Paediatrics and Psychology—J Zahorsky
Low Forceps Delivery in Relation to Mental Deficiency—I Wagner

Influenzal Meningitis—According to Young and Moore this condition is more common than is usually thought, especially in children under the age of 5. Occasionally the diagnosis is not made because of the pleomorphic appearance of the organisms. Prognosis is not uniformly bad provided adequate treatment is carried out with anti-influenzal serum together with sulphanilamide. The authors report a case treated in this way with remarkable success, and suggest that this combined treatment should be generally adopted.

Archives of Surgery

Chicago vol 36 May 1938

Intra-abdominal Apoplexy—C B Morton
Acute Retrocaecal Appendicitis—D C Collins
Fresh Fracture of Os Calcis—G W Goff
Collection of Air in Right Subdiaphragmatic Space—S G Schenk
Mechanics of Simple Intestinal Obstruction—L Sperling
Intestinal Obstruction—H G Scott
Osteogenic Sarcoma—Gaston A Carlucci
Duras on Curability of Inflammation—C C Mettler
Partial Cholecystectomy—W L Estes
Fractures of Both Bones of Leg—G J Curry and E Stewart Taylor
Suppurative Intrathoracic Thyroiditis—J D Kirshbaum and A H Rosenbluth
Polyostotic Fibrous Dysplasia—L Lichtenstein

Fracture of Os Calcis—The methods reported in the literature for the treatment of os calcis fractures are ingeniously summarized by a pictorial review. Eight cases treated by immediate reduction by moulding with a clamp and blocks and subsequent plaster fixation are described.

Mechanics of Intestinal Obstruction—This is an experimental study of the effects of increased intra-enteric pressure in simple obstruction of the lower ileum. The resulting changes in the length and weight of the bowel wall are noted. The influence of enemata on intestinal tone, secretion and absorption and the transperitoneal passage of dyes are recorded. Increased secretion and diminished absorption are shown to produce a progressive distension leading to venous stasis, haemorrhage, infarction, necrosis and perforation of the gut. Impaired viability is followed by the passage of toxic material into the peritoneum. Death results from transperitoneal absorption of toxic substances or from peritonitis.

Polyostotic Fibrous Dysplasia—The author describes a group of cases characterized by multiple fibrous foci in the shafts of long bones, frequently unilateral and sometimes associated with similar changes in the skull and with a tendency to pathological fracture. Serum calcium readings are usually above the normal level. No evidence of parathyroid tumour has been found.

Australian and New Zealand Journal of Surgery

Melbourne [illegible] 7 April 1938

Varicose Veins and their Complications—D R Bell
Activities of Thirteenth Ophthalmic—H C Loverdale
Surgical—C M Greenslade
Anaesthetic Fires and Explosions—G Kaye
Treatment of Hernia with Reference to Congenital Oblique Stomach Aspiration and Massive Intravenous Infusion—I J Wood

Anaesthetic Explosions—This is a review of the physical factors contributing to anaesthetic fires and explosions with some general conclusions as to the optimum design of a modern operating theatre.

British Journal of Radiology

London vol 11 May 1938

Radiological Experience in Ventriculography—E Lysholm
Low Voltage Deep Ray Therapy—J F Bromley
After-care of Patients suffering from Breast Cancer—F Hernaman-Johnson
Case of Marble Bones—J S Veitch
Dosage System for Interstitial Radium Therapy: Part II Physical Aspect—H M Parker

Ventriculography—The authors experience is based upon 806 ventriculographies in cases of verified cerebral lesions of which 643 were supratentorial and 163 subtentorial. By using a special technique and taking both sagittal and lateral views it was possible to localize the lesion in nearly all the cases examined. The size of the tumour generally corresponded to the amount of ventricular displacement except in cases with marked cerebral oedema.

Low Voltage Near distance X Ray Therapy—The strict localization of the x ray beam both in width and in depth is an advantage in numerous situations. Full dosage accurately measured is essential. At least 6 000 *r* must be given to carcinomatous tumours. For rodent ulcer the doses may be smaller. Multiple small fields are in general more efficient than single large fields. Occasionally however—as for example in rodent ulcer of the canthus of the eye—a small single field is permissible.

Bruns Beitrage zur Klinischen Chirurgie

Berlin vol 167 June 1 1938

Olliers Growth Disorder—W Stark
Reaction of Cartilage to the Penetr therm—G Sack
Hyperdesis Vesicae Felleae: Statistical Investigation of Post mortem Material—T Ahlin
Treatment of Central Luxation of Hip Joint—B Kantzky
Experimental Investigation on Avoidance of Post-operative Adhesions in Abdominal Cavity—W Imhofen
Acute Osteomyelitis—W Imhofen
Present-day Position of Cholecystectomy and its Results at the Frankfurt Clinic—H Gerstenberger
Formation of Clefts and Free Bone Shadows in Articular Processes of Lumbar Vertebral Columns—K Regensburger

Lumbar Clefts and Free Bone Shadows—Eighteen such cases showing these radiological changes were found by the author on looking through 2 000 x ray films of patients complaining of pain in the back. A developmental and a traumatic group can be differentiated.

Endocrinology

Boston vol 22 May 1938

Role of Hypophysis in Cranial Osteomyelitis Petrositis and Sinus Infections—G Levene L F Johnson R M Lowman and I G Wissing
Relation of Iodine Tolerance to Thyroid Function—I M Watson
Influence of Thyroid and Ovary on Metabolism of Iodine—H J Perkin and B R Brown
Dynamic Tests in Thyrotoxicosis—W Bartlett jun
Metabolic Cardiovascular and Biochemical Changes Associated with Experimentally Induced Hyperthyroidism in Schizophrenia—L H Cohen and J H Fierman
Experimental Induction of Oestrus in the Dog—J H Leathem
Inhibition of Gonadotropic Activity by Sex Hormones in Parabiotic Rats—E Cutuly and E C Cutuly
Electrical Excitability (Chronaxie) of Rat's Uterus throughout Oestrus Cycle—F C Katzenstein
Potency of Certain Commercial Hormone Preparations—I I D'Amour and M C D'Amour
Gonadotropic Potency of Hypophysis in Wild Male Rodent with Annual Rut—L J Wells
Feminization in Male Adult with Carcinoma of Adrenal Cortex—S L Simpson and C A Joll
Pituitary Emaciation—R H Kunstadter
Occurrence of Coitus induced Ovulation in Adrenalectomized Rabbit—C McC Brooks and S W Page
Keratodermias of Hands and Feet and Thyroid Deficiency—J M Cervino A Bertolini and R A L Helguera
Dysostosis Multiplex—W A Reilly

Eugenics Review

Letchworth vol 30 April 1938

Medicine and Eugenics—J A Ryle
Some Anthropological Characteristics of Hybrid Populations—J C Trevor
Declining Birth Rate and Cost of Education—G G Leybourne
Danish Law on Abortion
Population Problems in the British Commonwealth—G F McCleary

Folia Haematologica

Berlin vol 59 April 1938 Heft 3 4

*Relationship between Leucocytosis and Leukaemia—S Oliver and B Katzman
*Methodical Essentials for Quantitative Use of Sternal Punctures—S Greif
Results of Sternal Puncture in Eosinophil Infiltration of Lungs—R Stahel
Leukaemic Infiltration of Stomach Wall in Lymphatic Leukaemia—W Steinbrinck
Genesis of Leucocytosis and Leucopenia—F Faludi
*Human Lymph Glands containing Blood—O Carere Comes
Bibliography of American Haematological Literature of 1936—O P Jones
Bibliography of Dutch Haematological Literature of 1934 to 1936—G Wallbrich

Leucocytosis and Leukaemia—Mice were injected with sodium nucleinate sodium caseinate and bile salts While the first two compounds caused leucocytosis bile salts produced leukaemia like changes in the blood and tissues This can perhaps be explained by the chemical structure of the bile salts which is similar to that of carcinogenic substances

Sternal Puncture—In sternal punctures the normal content of nucleated red blood cells is between 45 000 and 150 000 per c mm in leucopenia the figure is usually under 45 000 and in leucocytosis over 150 000 The margin of error is from 0 4 per cent to 14 4 per cent the average being 6 54 per cent Less than 0 1 c cm should be taken and the first drop only should be counted as this gives the highest and the most reliable results

Lymph Glands containing Blood—Blood is formed in the tissue of some human lymph glands especially in pre vertebral glands and in those of the splenic hilus Diapedesis through the wall of the venous capillaries is the most frequent cause There are usually other signs of a haemorrhagic diathesis The existence of haemolymph glands like those in ruminating animals can be excluded in human beings

Journal of Bacteriology

Baltimore vol 35 April 1938

David Hendricks Bergey 1860–1937
Mitosis like Activity in Bacillus Sp Preliminary Report—H L Chance
Use of Chorio allantoic Membrane of Developing Chick Embryo as a Medium in Study of Virus Myxomatosum—R E Hoffstadt and K S Pilcher
Effect of Eh and Sodium Chloride Concentration on Physiology of Halophilic Bacteria—L S Stuart and L H James
Effect of Sodium Chloride on Eh of Protogenous Media—L S Stuart and L H James
Strict Anaerobes in Slime and Intestines of Haddock (*Gadus aeglefinus*)—J M Shewan
Effects of Surface Tension and Osmotic Pressure on Gross Morphology of Certain Pathogenic Fungi—J W Williams
Tyrosinase Reaction of Actinomycetes—C I Skinner
Serological Identification of *Streptococcus anginosus* with the Lancefield Group—D J R Smith C J Niven and J M Sherman
Experiments on Nutrition of Streptococci—S H Hutner
Electrophoretic Migration Velocity of *Escherichia coli* after Cultivation on Media of Various Composition II Observations following Changes in Inorganic Constituents—R P Tittsler and G T Berry

Journal of Industrial Hygiene and Toxicology

Baltimore vol 20 May 1938

*Chronic Lung Changes in Electric Arc Welders—N Enzer and O A Sander
*Isolation of Mineral Dust in Lungs and Sputum—N Sandiks and A Byers
Comparison of Toxicity of Carbon Tetrachloride and Trichlorethylene—H M Barrett D J McLean and J G Cunningham
Health Hazard in Metal spraying—H J Miller jun G M Hamm E C J Urban and Philip Drinker

Lung Changes in Electric Arc Welders—Iron oxide is deposited in the lungs to a marked extent only when the work is very confined The resulting nodulation gives ray appearances similar to those of silicosis Functional impairment of the lungs appears to be lacking however as to both the development of clinical symptoms and of susceptibility to infection

Isolation of Dust in Lungs—The merits and demerits of different methods of quantitative determination of mineral deposits of various kinds in lung tissue are discussed The authors favour the use of perhydrol (Merck) with 30 per cent hydrogen peroxide added to decompose the lung tissue The small amount of acid formed during the process does not affect the result unless carbonates are present in the lung tissue to a marked degree Iron ore dust was removed unchanged and confusion with the iron content of blood avoided Where this method was not applicable (asbestos carbonates) fine grating of the tissue and centrifuging from a heavy fluid (acetylene tetrabromide diluted with benzene) was employed

Journal of Laboratory and Clinical Medicine

St Louis vol 23 April 1938

Inadequacies of Conjunctival Smears in Diagnosis of Slight Vitamin A Deficiency in Adults—J B Youmans M B Corlette M G Corlette and H Frank
Trichinosis Distribution of *Trichinella spiralis* in Pork Products sold in Philadelphia—N Dickman
Correlation of Clinical Diagnosis and Post mortem Findings in Trichinosis—M M Schapiro B I Crosby and M M Sickle
Importance of Concentration Preparations of Leucocytes in Study of Leucopenias—R L Haden
Relationship between Chlorides and Nitrogenous Waste Products in Blood—M Tuttelbaum
Method of Studying Some Physiological Actions of Benzedrine Sulphate—E Davidoff and E C Reifenstein
Cholesterolysis in the Blood Plasma of Normal Man—P G Schube N Rakin and I Campbell
Pentothal Studies with Special Reference to Electrocardiogram—R Kohn and L Lederer
Laboratory Diagnosis in Chronic Gonorrhoea of Females—F Jacobson H C Mason and L Arnold
Concentration of Tubercle Bacilli from Sputum by Chemical Flocculation Method—J H Hanks H I Clark and H Feldman
Use of Index of Haemolysis in expressing Fragility of Erythrocytes—F R Waugh and E G Ashcraft
Method for Collection of Peripheral Blood Samples—M I Andresen
Colour Photography and its Application in Medical Teaching—H Jeter and W M Hull
Intradermal Antitrin S in Children—I P Bronstein
Sterilization of Sodium Bicarbonate Solution for Intravenous Use in Acidosis—F E Holmes and G E Cullen
Reaction of Sera of Different Animals to Kahn Kline Ide Eagle and Laughlen Tests—R A Greene H B Harding W T Hudspeth and W J Pistor

Journal of Pediatrics

St Louis vol 12 May 1938

Focal Infection and Metabolism—J A Johnston and J W Marony
Immunological Reactions for Undulant Fever in Apparently Healthy and in Tuberculous Children—J R Lewin and P Gersh
Effects of Tannic Acid Nasal Sprays on Incidence of Upper Respiratory Infections—M H McKee
Hurler's Syndrome (Gargoylism)—R J Kressler and E E Aegerter
Ehlers Danlos Syndrome—A C Rambar

Surgery of Sporidia Alkalescens—I. V. Wesson and M. Sweet
Care of Skin of Newborn Infant—H. Smith
Granulocytopenia and Hyperleucocytosis following Sulphanilamide Therapy—C. K. Albert and R. P. Forbes
Use of Sulphanilamide in Conservative Infection in Children—J. W. Hume, J. A. Jones and N. C. Reeve
Subcutaneous Botanical Paraffinoma—D. Graham-Smith. Purpura treated by Mechanical Respiration with Recovery—A. H. Neffendorf and S. M. Wright
Active Immunization against Pertussis with Formolized Vaccine—M. L. Bell, J. M. Levin and I. I. Shaper
Vincent Clarke Clinic—Sir D. Orme, C. Forbes and S. M. Brown
Vincent Laceration complicated by Acute Thrombosis of Portal Vein—A. V. Stephenson and W. W. Eckersley
Influence of Heart on Blood and at Time of Delivery on Premature Mortality—P. B. Reese

Skin of the Newborn—One of the chief problems of maternity hospitals is the prevention of skin infections in newborn infants. Different methods of prevention are described. The author however suggests that the baby should not be cleaned in any way so that the vernix caseosa is not removed. The infant's skin is neither oiled nor bathed and only warm water is used to clean the buttocks. It is believed that the great advantage is that there is less handling of the skin and so less chance of infection.

Sulphanilamide—This drug was tried in a large series of children suffering from vulvo-vaginitis with no good result contrary to what has been reported by many writers.

Journal of Pharmacology and Experimental Therapeutics

Baltimore. Vol. 62. April 1938.

Pharmacological Action of Diethylene Oxide. VI. Its Influence on Irreversible Water Loss—H. C. Barbour and L. F. Rice.
Subacute Toxicity, Teratogenic and Intoxicating Properties of Different Chemical Administrations—P. J. Hanzlik, A. J. Lehman and A. P. Richardson.
Conditioned Vegetative Drug Action of Scopolamine. I. General Effects—P. J. Hanzlik and A. J. Lehman.
Experiments on Blood after Intravascular Injection of Substances. I. Experimental and Clinical Results—P. J. Hanzlik, A. J. Lehman and A. P. Richardson.
Intramuscular Injection of Substances. Absorption and Distribution of Bismuth—P. J. Hanzlik, A. J. Lehman and A. P. Richardson.
Effect of Pressor and Antipressor Humoral Substances on Vessels in Bulk. Laewen and A. G. Johnson.
Relation of the Acetylcholine Action of Choline Derivatives—R. F. Rendleman, D. Green and M. Zaft.
Action of Acetylbetamethylcholine Chloride (Mecholyl) on Nerve-endings of the Urinary Bladder (the Nature of Mechanism of Special Stimulation)—P. M. Levin.
Influence of Oxygen-tension on Contraction Started Muscle—F. C. Lette.
Relation of Acetylcholine and Other Depressor Agents on Mackerel Heart—P. K. Smith.

Journal of Physiology

London. Vol. 92. May 14 '38.

Experimental Traumatic Shock—J. R. Bell, A. M. Clark and D. F. Cuthbertson.
Quantitative Data on Inhibition of Ostrya by Extracts of Pregnancy and Certain Other Compounds—J. M. Robson.
Some Factors influencing Venous Pressure in Man—J. Dupre, R. A. Kenyon and S. R. Sowdall.
Antagonism between Prostigmine and the Synthetic Oestrogenic Substance Triphenyl Ethylene—J. M. Robson.
Effect of Adaptation on Differential Brightness Discrimination—K. J. W. Craik.
Action of Hormone Composition on Central Nervous System—V. Schweizer and S. Wright.
Respiration and Metabolism of Submaxillary Gland. Effect of Cutting Duct—W. Dilworth and H. S. Raper.
Effect of Large Doses of Insulin on Arterial Sheep and Goat Blood—R. Passmore and H. Schwarzmann.
Circulation studied by Means of X-Ray Cinematography—K. J. Franklin and R. Janker.

Journal de Radiologie et d'Electrologie

Paris. Vol. 22. May 1938.

Fundamental Principles of Radiotherapy in Inflammatory Conditions—W. von Wiesen.
Radiographic Visibility of Left Auricle within Cardiac Shadow—R. Hude de Balsac.
Congenital Hypertrophy of Left Lower Limb. Remote Result of Irradiation of Epiphyseal Cartilage during Active Period of Growth—P. Dosquet.
Collective Radiophotography—V. de Abreu.
International Radiological Congress in Chicago, September 1937—J. Belot.

Collective Radiophotography—The radiographic examination of the thorax becomes expensive when many such examinations are undertaken in the course of a campaign against tuberculosis. The author has therefore adopted the principle of indirect photography of the radioscopic image. The image of the chest is projected on to the radioscopic screen which is then photographed by means of a miniature camera. The principle is not unlike that used in x-ray cinematography except that only one view of the chest is obtained.

Journal of Tropical Medicine and Hygiene

London. Vol. 41. May 2 1938.

Preliminary Note on Filaria in Ceylon in 1936—W. L. P. Dassanayake.
Experimental Pellagra in Monkeys (Hamadryad Baboons) at Zoological Garden, Cairo—Alfred Clark.
Electrical Genesis of Q as observed in First Three Standard Leads of Electrocardiogram—R. H. Bayley.

Policlinico

Rome. Vol. 45. May 15 1938. (Sez. Chir.)

Plastic Reconstruction of Ligamentum Teres in Congenital Luxations and Subluxations of Hip—C. Arrigucci.
Effect of Spasmolysis on Nerve Resection on Renal Function—A. Cali.
Case of Carcinoma of Small Intestine involving Abdominal Wall—A. Calvi.
Diagnosis and Treatment of Gastrojejunocolic Fistula following Gastroenterostomy—M. Mari.

Ligamentum Teres—After describing the anatomical variations of the ligament Antonucci proposes in congenital luxations and subluxations of the hip to replace it by a band derived from fascia lata and the aponeurosis of the vastus externus. He tunnels the femoral head, neck and trochanter as well as the ilium. The operation in the cadaver is illustrated.

Public Health

London. Vol. 51. May 1938.

Hospital Policy in Relation to Preventive Medicine—A. M. Cox and J. Legge.

Hospital Policy—This is a review of recent alterations in the functions of the general hospital and the part it plays in relation to the health of the community. The passing of the voluntary hospital is commented upon and a policy of organizing hospital services upon a regional basis is adumbrated.

Radiology

St. Paul, Minnesota. Vol. 30. May 1938.

Transmission of X-Rays of Very Short Wavelength—W. D. Coolidge, Jr.
Calculation and Obliteration of Kidney Revised—Lilienfeld and Report of Cases—A. E. Goldstein and B. S. Abelow.
Roentgenological Study of Pineal Orientation—H. C. Comparini.
Graphic and Preferential Method in Proven Cases of Brain Tumour—W. W. Fray.
Study of Tuberculous Disease and Pulmonary Effect in Operable Cancer of Breast treated by Combination of Pre-operative Irradiation and Radical Mastectomy—E. F. Adair, E. L. Frazell and E. H. Quimby.
Physical Aspect of Calcification and Ossification in Various Body Tissues—B. P. Widmann, H. W. Ostrum and H. Freed.
Roentgen Therapy of Dupuytren's Contracture—S. R. Beatty.
Calculation of Percentage Depth Doses—C. Packard.
Importance of Statement of Tumour Dose in Radiotherapy—J. R. Nuttall.
The Fluoroscope. New Method for Examining Throat of Roentgen-ray Tube—E. K. Kelsey and L. F. Black.
Back-scatter and its Effect on Disease Measurement—R. S. Landauer.
Some Factors influencing Distribution of Radiation in Two-oblique Field Technique—M. C. Reinhard and F. Myers.
X-Ray Diagnosis of Thymus Gland in Children—H. A. Judson.

Dupuytren's Contracture—After briefly describing the aetiology and pathology of this condition the author relates his experience with x-ray treatment in ten cases. The following technique was used: 100 kV., 5 mA., 30 cm. f.s.d., filtration through 1 to 2 mm. of aluminium, single doses of 100 to 200 r (in air) given at weekly intervals for three to four weeks. Several such series may be given at intervals of six to eight weeks according to progress. Seven out of the ten cases improved under this treatment.

Enlarged Thymus—The author points out the difficulty and unreliability of the radiographic diagnosis of enlarged thymus in children. He questions the value of the radiotherapeutic test and in view of dangers from over exposure to x rays he advises moderate doses in the treatment of the condition. He also doubts the value of pre-operative radiographic examination for enlargement of the thymus in children.

Revue Française de Gynecologie et d Obstetrique

Paris vol 33 April 1938

Gonorrhoea in the Female: General Considerations—L. Pierra
Consulting room Diagnosis of Gonorrhoea—P. Barbellion
Laboratory Diagnosis of Gonococcal Infection in the Female—Ch. O. Guilhamin
Clinical Anatomical Study of Gonorrhoea in Women—J. Lucarelli and V. Donnett
Complications and After effects of Gonorrhoea in Women—L. M. Pierra and G. Farlande

Surgery

St. Louis vol 3 May 1938

Bacteriology of Spreading Peritonitis complicating Acute Perforative Appendicitis—J. Bower, J. Burns and H. Mengle
Calcified Faecalith in Appendix—H. Shelley
Surgical Treatment of Complicated Duodenal Ulcer—W. Wolfson and R. Rothenberg
Primary Carcinoma of Biliary System—R. D. Aunos, M. Ogden and B. Halpert
Experimental Study of Behaviour of Free Fat Transplants—C. Gurney
Method of Constant Suction applied to Levine Tube—C. Welch
Partial Gastrectomy in Treatment of Peptic Ulcer—F. Connell
*Haemangioma and its Treatment—W. Peyton and N. Leven
Operative Treatment of Hypospadias—C. Creevy
Treatment of Dislocation of Shoulder—H. Milch
Congenital and Developmental Coxa Vara—G. Duncan
Cancer of Breast in Male—J. Sarnoff
Model to Illustrate Mechanics of Respiration and Movements of Mediastinum with and without Various Kinds and Degree of Bronchial Stenosis—L. Eloesser and A. Freeman

Haemangioma—This is a comprehensive study of the capillary and cavernous forms of angioma with the many variations of each of these types. There are many methods of treatment such as excision, the injection of hot water or alcohol, vaccination for small lesions, irradiation and the injection of sodium morrhuate. These methods are discussed and the cases for which they are found most suitable are described.

Tubercle

London vol 19 May 1938

Critical Review: Modern Outlook on Tuberculin—H. J. Parish
*Aetiology of Bronchiectasis—W. E. Adams and L. Escudero
Desensitization in Treatment of Tuberculous Guinea-pigs—J. D. Thiver

Bronchiectasis—Experiments were carried out in dogs. Two factors were found necessary for the production of bronchiectasis—incomplete bronchial obstruction and contamination of the bronchial tree. Its development did not depend upon any particular organism: it was produced by both aerobic and anaerobic pyogenic organisms, by the tubercle bacillus and by distemper organisms. In no case did bronchiectasis develop if the obstruction of the bronchus was complete. Increased intrapleural negative pressure was important as a causative factor only in so far as the severity of the pathological changes was concerned: bronchiectasis developed to a somewhat more marked extent when an increased negative pressure was present.

Wiener Archiv fur Innere Medizin

Vienna vol 32 April 1938

*Objective Causes of Hunger and of Sensation of Satisfaction of Appetite—J. Mentzel
Hypophysis and Water Metabolism—P. Werner

Hunger and Appetite—Radiographic records of the motor activity of the stomach were compared with a blood sugar curve taken at the same time. Different types of patients were observed and there was a correlation between the blood sugar curve and the time when the stomach was emptied.

Zeitschrift fur Hygiene und Infektionskrankheiten

Berlin vol 120 June 1938

*Bactericidal Property of Raw Honey—Milan Jrica
Photographic Demonstration of Droplet Infection—F. Weyrauch and J. J. Rzymkowski
*Causes of Retraining Effect of Saliva on Growth of Capsulated Bacteria—A. Berk
Nomenclature of so-called Salmonella Group—Horst Habs
Observations on Scarlet Fever Epidemic in Pinneberg (1937): Certain Animal Experiments in Relation thereto—Otto Boyksen
Hygiene of Rural Workers' Dwellings—J. Mrugowsky
Further Vaccination Results with Small-pox Protective Lymph from Cultures on Allantois Membrane of Chicken Embryos—Walther Lehmann
Recent Tests of Efficacy of Diphtheria Anatoxin Precipitate: Single Injection—I. Farago
Epidemic Hepatitis in Dossenheim near Heidelberg—Herbert Deines
Investigation of W forms obtained by Passage of V type Typhus Bacilli through Chamberland Filters—Giulio Buonomini
Minimal Infection with Tubercle Bacilli—B. Lust

Raw Honey—Following the researches of Dold Du and Dzeto, who found an inhibitory factor (inhibine) in raw honey, the author shows that this property is not due to the normal acid content of natural honey and still less to its sugar concentration but to a secretion product of the bee. The substance is filterable, thermolabile, sensitive to increased acidity and almost insensitive to diffused daylight. It is strongly bactericidal to both Gram-positive and Gram-negative bacteria.

Saliva—The author follows up previous research by Dold and others (cited) upon an 'inhibine' in saliva. Dold's results in certain respects are confirmed. Activity is more marked when excess of bacteria is present: heating renders the saliva inactive and its properties are not regained by adding fresh saliva.

Zeitschrift fur Krebsforschung

Berlin vol 47 May 21 1938

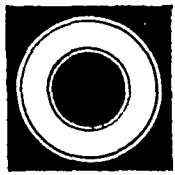
Shope Papilloma and Shope Carcinoma: Spontaneous and Experimental Transformation of Papilloma into Cancer—J. Horn
Experimental Investigations on Modification of Transplanted Tumours—Fr. R. Koch
Metaplastic Bone Formation associated with Epithelial Proliferation produced in Uterus of Rabbits by Follikulin—H. Pierson
*Production of Tumours in Rabbits by 1 2-benzpyrene—J. Klinke
*Production of Intramuscular Malignant Growths in Mice and Rat by 1 2-benzpyrene—J. Klinke
Further Investigations on Problem of Tumour Resistance—H. Auler and W. Schilling

Sarcomata from 1 2-benzpyrene—Klinke previously recorded the production of sarcomata in rabbits by injections of 1 2-benzpyrene. Three additional sarcomata have now developed after long latent periods. In the second paper Klinke describes similar experiments with rats and mice. Sarcomata resulted in a larger proportion of animals in shorter time and with smaller doses of benzpyrene than in rabbits. The tumours resulting from intramuscular injections did not originate from muscle cells. It is concluded that tumour production by highly carcinogenic substances requires a suitable animal species and a responsive tissue.

Zeitschrift fur Urologie

Leipzig vol 32 1938 Heft 5

Transitions from Hyperplastic Kidney to Variants in Configuration of Upper Collecting Calyx in Radiographs—K. Hutter
Renal Stasis associated with Dorsal Course of Ureter—F. May
Urinary Calculi Transparent to X Rays—H. Kunstmann
Balneology and Diseases of Urinary Organs—Adolf Czech
Polycystic Degeneration of Kidneys: Clinical Symptoms and Significance as a Hereditary Disease—O. Weidner
Plastic Operations on Renal Pelvis—W. Heyn
Source of Error in X Ray Examinations of Kidney—G. Pretorius
Carcinoma in Bladder Diverticulum with an Observation on Amyloid and Lipoid Formation in Kidney—B. Bibus



MENFORMON TABLETS

to reverse menopausal changes

"There are, of course, certain more severe sequelae of the menopause which demand much higher doses Pruritis, Kraurosis, Leukoplakia vulvae, fall into this class and, provided sufficiently high doses are given, the results are little short of miraculous"

PROC ROY SOC MED JULY 1936 p 1094

Tablets of 1 000 3 000 10 000 I U each

Samples and literature gladly sent on request

ORGANON LABORATORIES

Standardised biological products

77 NEWMAN STREET, LONDON, W I

Telegrams erfe mon Re h Le d n *Telephone* Museum 2857 (3 l nes)

I Ind a h.e scn Sen & Jc es (Ird a) Ltd P O Bo 258 B r ay

Austra a F H Feuld rg & Co Ltd

S Afr ca Heynes I a hew Ltd P O Box 242 Co,e Town

New Zeelard Dam n n De al Suppl es Ltd

This cookery book is based on the latest scientific standards Medical practitioners can particularly recommend it to those of their patients who have to get a full pennyworth of food value from every penny of their outlay

THE DOCTORS' COOKERY BOOK

21 Menus and 82 Recipes for Family Meals

21 PAGES OF PHOTOGRAPHS

PUBLISHED BY THE BRITISH MEDICAL ASSOCIATION

Obtainable from all booksellers, news agents, Smith's bookstalls, and Co-operative Societies

All inquiries to the B M A, Tavistock Square, London, W C 1

PRICE 4D

HEALTH BREAD
ROLLS
CRACKNELS
HYGIENIC PACKING
PROTEIN 42 00 CARBOHYDRATES 49 10

EDGO

REGD TRADE MARK

WIDELY USED IN DIETS FOR DIABETES, GASTRIC ULCER, INDIGESTION & OBESITY

Sample Diet Plans & Analysis Free on request

POLLEY AND COMPANY LIMITED (Dept B), PLYMOUTH RD, LONDON, E 16

℞

UNG. DERMASIL

(REEVE)

Prescribed by the Medical Profession in the treatment of all SKIN DISEASES

7/6 per lb

Sample sent on request without charge

Orders to wholesalers or to
REEVES REMEDIES LTD
Manufacturing Chemists Birmingham

BROCHURE, SKETCHES & ESTIMATES FREE
CANonbury 3077

NAMEPLATES
BRONZE · STAINLESS STEEL · BRASS

COOKE'S (FINSBURY) LTD.
FINSBURY PAVEMENT HOUSE,
MOORGATE, LONDON, E.C.2
Est. 1877

Addmeter Money ADDING MACHINES 77 6 pf
TAYLOR'S TYPEWRITERS
Desks Tables and Chairs

SELL HIRE HIRE PURCHASE, EXCHANGE BUY and REPAIR ALL MAKES of Typewriters Duplicators and Calculating Machines

Est 1884



THE QUIET BIJOU
The best portable Writer Complete in Travelling Case £14 14s

Write for Bargain List 32 or Phone—Holborn 3793
BUY A BIJOU FOR 15/ a Month
14 CHANCERY LANE (Holborn End) W C 2

FREQUENT MICTURITION

"ABWET" ABSORBENT BAGS
Male day pattern 35/
New Model Female day pattern 4
"DUPLEX" BAGS
Male or Female day and night 70
"SANITUBE"
For helpless bedridden patients 70

Our bags catch all leakage easing mind and bed Invisible under clothing and easily emptied Now worn world wide Special patterns for men and aviators

Diagrams etc on request from
HILLIARD 123 Douglas Street Glasgow C

A GENTLEMAN ALWAYS LOOKS WELL DRESSED IN SAVILE ROW CLOTHES



NEW LIGHT OVERCOATS LOUNGE DRESS SPORTS SUITS etc by all eminent tailors Scholte Lesley & Roberts Kilgo etc OUR PRICES 3 to 8 Gns

Alterations on Premises

REGENT DRESS CO
2nd Floor Piccadilly Mans 1 Shaftesbury Av Piccadilly Circ W 1 (Next Cafe Monico) GER 71
LADIES DEPT on 1st FLOOR

NAMEPLATES of character in Brass & Bronze

Send for Illustrated Brochure and Price List
F B HALL & CO 445 New Cross Rd S E 14 TIDeway 3818

NAME PLATES in Bronze and Enamel Stainless Steel Brass or Chromium
Actual Makers Quick Delivery Low Price
The WHITE BRONZE Co 196 London Rd CROYDON

NAME

IN BRONZE ENAMEL OR BRASS
Phone Clerkenwell 2441

Free Sketch and Booklet will be sent on receipt of details

S J & A Herd, 30 Clerkenwell Rd E C 1

PLATES

NAMEPLATES Brass Bronze Stainless Steel
REDUCED PRICES
Send for List 18 to the actual Makers
F OSBORNE & Co, Ltd Tel Euston 3
117, Gower Street, London, W C 1

PENSTANTON,
CHRISTCHURCH ROAD
Streatham Hill S.W.2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders. Certified Voluntary and Temporary Patients received. Large Mansion with 1½ acres of ground. (See Medical Directory, p. 1113.) Apply Resident Physician. Telephone: Tulse Hill 1581.

BAILBROOK HOUSE
BATH

For Sufferers from Nervous and Mental Disorders with or without certification.

The building is situated in its own grounds of 3 acres with magnificent views of the City and the Avon Valley. (See Medical Directory, p. 1113.)

For terms apply A. Cuthbert M.A., D.M., B.Ch., D.P.M., Resident Physician. Telephone: Bath 3189.

HEIGHAM HALL, NORWICH
A PRIVATE MENTAL HOME situated on high ground in its own well-timbered grounds of 20 acres. For Ladies and Gentlemen suffering from Nervous or Mental Illness. Voluntary Patients. Temporary Patients and Patients under Certificate are admitted for treatment. Fees from 4 guineas a week upwards according to requirements. A few vacancies exist for Ladies and Gentlemen desirous of receiving fees on the recommendation of the Patient's own Physician. Apply to Dr. J. A. Scott. Telephone: 50 Norwich. Telegrams: Small, 50 Norwich.

TYKEFORD ABBEY,
NEWPORT PAGNELL, BUCKS
FUNCTIONAL NERVOUS DISORDERS. MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest standing in 18 acres of garden and grounds and is situated 14 miles from Northampton and 1 miles from Bedford on the main London to Northampton Road, fifty miles from London. Both sexes are accommodated. Psychotherapeutic Treatment is used extensively in suitable cases. Radiant Heat, X-ray and Ultra Violet Light, Diathermy and Foam Baths. Billiards, Tennis, etc.

Apply Dr. D. E. M. DOUGLAS-MORRIS. Telephone: Newport Pagnell 111.

HILL END HOSPITAL AND CLINIC
FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS
(20 miles from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on modern lines as Voluntary, Temporary or Certified Private Patients at the Hill End Hospital. Convalescent or mild cases can be treated in delightful country surroundings with extensive grounds known as

HIGHFILLD HALL,

situate about a mile away from the Hospital. FEES: TWO TO THREE GUINEAS PER WEEK. For further particulars apply to the Medical Superintendent, W. J. T. KIMBER, L.R.C.P., D.P.M.

ST. ALBANS, HERTS

BARNWOOD
GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS. Within two miles of the G.W. Railway and L.M. & S. Railway Stations at Gloucester. The Hospital is easily accessible by rail from London and all parts of the United Kingdom. It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres. Voluntary Patients of both sexes are also received for treatment. Special accommodation for Lady Voluntary Patients is also provided at the MANOR HOUSE which has its own private grounds and is entirely separate from the Main Hospital. For particulars as to terms etc. apply to G. W. T. H. FLEMING, M.R.C.S., L.R.C.P., D.P.M., Medical Supt. Telephone: No. 6 07 Barnwood.

STRETTON HOUSE,
Church Stretton, Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness, including the allied disorders of Alcoholism and the Drug Habit. All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provisions of the Mental Treatment Act, 1930. Bracing hill country. See Medical Directory, p. 2358.—Apply to the Medical Superintendent, Phone 10 P.O. Church Stretton.

ST. ANDREW'S HOSPITAL
FOR MENTAL DISORDERS
NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

Patron: The Most Hon. the MARQUESS OF EXETER, C.M.G., M.D., D.C.

Medical Superintendent: DENIS TIMSIT, M.D., M.R.C.P., D.P.H., D.P.M.

The Recreation Hospital is situated in 100 acres of park and pleasure grounds. Voluntary patients are offering from incipient mental disorder or with insufficient recurrent attacks of mental illness; temporary patients and certified patients of both sexes are received for treatment. Careful clinical, laboratory, physical and pathological examinations are made with special reference to the history of the onset of the numerous mental disorders which are met with.

WANTAGE HOUSE

This is a Recreation Hospital in our 3rd bed grounds with a separate entrance which patients may be admitted. It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders. It has special departments for hydrotherapy, physiotherapy, including Turkish and Russian baths, the latest improvements in bath. Also Douche, Electrical bath, Plombieres treatment etc. There is an Operation Theatre, Dental Surgery, an X-ray room, an Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment. It has its own Laboratories for bacteriological and pathological research.

MOULTON PARK

Two miles from the Main Hospital there are other branch establishments and it is situated on a park and farm of 600 acres. Milk, meat, fruit and vegetables are supplied to the Hospital from the farm and garden and orchard of Moulton Park. Occupation therapy is a feature of this branch and patients are given every facility for occupying themselves in farming, gardening and fruit growing.

BRYN-Y-NEUADD HALL

The Recreation House of St. Andrew's Hospital is beautifully situated in a park of 100 acres. Golf, tennis, cricket, Fives courts, North West side of the Estate a mile from the farm forms the boundary. Patients may visit the Branch Hospital for a short period or for longer periods. The Hospital has its own private bathing house on the estate. There is trout fishing in the park.

At all the branches of the Hospital there are cricket grounds, football and hockey grounds, lawn tennis courts, fives and hard courts, croquet grounds, golf courses and bowling greens. Ladies and gentlemen have their own gardens and facilities are provided for handicrafts such as carpentry etc.

For terms and further particulars apply to the Medical Superintendent (Telephone No. 1 Boat and Northampton) who can be seen in London by appointment.

COURT HALL, KENTON, near EXETER,
for the treatment of eight Ladies, voluntary, temporary or certified patients. Large gardens and own dairy.

CLIFFDEN, TEIGNMOUTH for early and convalescent cases. A well appointed house with spacious balconies and extensive views of the South Devon coast. Sub-tropical gardens, own dairy in 25 acres. Private road to beach.

		Telephones
Resident Physicians	BERTHA M. MULES, M.D., B.S.	Starcross 39
	ANNE S. MULES, M.R.C.S., L.R.C.P.	Teignmouth 289

THE COPPICE, NOTTINGHAM
HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment. It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted. Occupational Therapy. Voluntary and Temporary Patients received.

Tel. 6411. *For terms etc. apply to the Medical Superintendent.*

HAYDOCK LODGE
NEWTON-LE-WILLOWS, LANCASHIRE

Telegrams: Street, Ashton-in-Makerfield. *Phone:* Ashton-in-Makerfield 71.

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases, either voluntary, temporarily or under Certificate. Patients are classified in separate buildings according to their mental condition.

Situated in park and grounds of 150 acres. Self supported by its own farm and gardens in which patients are encouraged to occupy themselves. Every facility for indoor and outdoor recreation. For terms, prospectus, etc., apply MEDICAL SUPERINTENDENT.

NORTHUMBERLAND HOUSE,
GREEN LANES, FINSBURY PARK, N.4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses. Conveniently situated and easy of access from all parts. Six acres of ground, highly situated facing Finsbury Park. Voluntary and Temporary Patients received without certification. Occupational Therapy, Psychotherapy and other modern forms of treatment.

Telephone: STAMFORD HILL 2688. Telegrams: SUBSIDIARY, LONDON.
Convalescent Home: KEARSNEY COURT, DOVER. For further particulars apply to the Medical Sup

The MUNDESLEY SANATORIUM

The central building makes the Mundesley Sanatorium the best equipped building in England for the cure of Tuberculosis All the bed rooms have hot and cold running water electric light and wireless headphones The public rooms are spacious and comfortable

Resident Physicians
S VERE PEARSON
M D (Cantab) M R C P (Lond),
E C WYNNE EDWARDS
M B (Cantab) F R C S (Edin)
GEORGE H DAY,
M D (Cantab)

For all information apply
The Secretary
THE SANATORIUM, MUNDESLEY
NORFOLK
Telephone *Mundesley* 94 *and* 95
(2 lines)

The buildings face S S W and are sheltered from the sea by a pine clad ridge The sunshine record and dry air complete a perfect site The medical equipment is of the latest kind and there is a day and night nursing staff

TERMS FROM 7½ GUINEAS WEEKLY

THE CORNISH RIVIERA SANATORIUM

ROSEHILL PENZANCE

For the treatment of patients suffering from tuberculosis

The Sanatorium stands in its own grounds of 13 acres of garden lawn and woodland and is well sheltered from cold winds The climate is mild in winter cool in summer Artificial pneumothorax and other modern forms of treatment are available Day and night nursing staff Electric light Wireless in all rooms

Medical Supt **Francis Chown** M B Lond D P H Consulting Physician (late Med Supt) Cornwall County Sanatorium
Terms 5 to 7 guineas weekly **'Phone Penzance 598**

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S S W sheltered from North and East elevation 800 feet Pure bracing air **Special Treatment by Artificial Pneumothorax** (X ray controlled) **Tuberculins and Ultra-violet Rays** are available when necessary without extra charge **X-ray plant** Fully equipped Dental Department Electric light Radiators, hot and cold basins and Wireless in all rooms Up to date main drainage

Full day and night Nursing Staff Terms 5 guineas to 7½ guineas a week inclusive
Med Supt GEOFFREY A HOFFMAN B Y M B I C D Dub *Asst Phys* MARGARET A HARRISON M B B S Lond *Tuberculist* EDGAR S DAVEY M B B Ch *Consult Laryngologist* CASSIDY DE W GIBB F R C S Edin *Consulting Dental Surg* GEORGE A SAUNDERS L D S R C S Lond Apply Secretary The Cotswold Sanatorium Cranham Gloucester 7 I St and S. Wincombe *Grams* HOFFMAN Birdlip



Full range of Hydropathic Treatment in Turkish Russian Bath Turkish and Russian Air and Vichy Douche Massage Manipulations Treatment Studio Clear Electric Installation for Bath and other Medical Purposes Diathermy Radiant Heat Infra-red Light Artificial Sunlight Ultra Violet Ray Exercises Diathermy Neuheim Bath Simple Russian Bath etc Certified milk from our farm Farm Dairy Cream Cheese Eggs Specially prepared for Invalid Nicely Attended in Own Qualified Male and Female Nurse Masseurs Attendant etc

Terms 13/ to 18/6 per day inclusive board
Illustrated Brochure M J on request

Resident Physicians
G C R [illegible] B A O (RUI) C M
Phone [illegible] *Matlock*

MONTANA HALL, Montana, Switzerland

OPEN ALL THE YEAR
THE ONLY SANATORIUM IN SWITZERLAND UNDER BRITISH OWNERSHIP AND CONTROL AND WITH A DAY AND NIGHT STAFF OF BRITISH TRAINED NURSING SISTERS
INCLUSIVE TERMS—from 7 guineas (sterling) per week

Med Supt HILARY ROCHE M D (Melb) M R C P (Lond) Tuberculosis Dis Dip (Wales)

PRIVATE NERVOUS AND MENTAL PATIENTS

LONDON COUNTY COUNCIL Accommodation for Male patients suffering from Nervous and mental disorder (voluntary temporary or certified) is provided in the private section of CLAYBURY HOSPITAL Woodford Bridge Essex Terms exclusive of clothing and special luxuries 49 a week for London cases 53 1 a week for others

For particulars apply to the Medical Superintendent at the Hospital or to the Chief Officer Mental Hospital Department Shell Mex House Strand W C

SPRINGFIELD HOUSE

Near BEDFORD ('Phone 3417)
For Mental Disorder with or without Certificates
Resident Physician CLDRIC W BOWER
Ordinary Terms Five Guineas per week
(Including Separate Bedrooms where suitable)
Interviews in London by Appointment

CITY OF LONDON MENTAL HOSPITAL DARTFORD, KENT

Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upwards

THE MAUDSLEY HOSPITAL,

DENMARK HILL S E 5
Telephone RODney 3841

A CLINIC instituted by the London County Council for treatment of Nervous and Early Mental Disorder Voluntary patients only received

New Out patients—MEN Mondays and Thursdays 2 p m WOMEN Tuesdays and Fridays 2 p m CHILDREN Mondays and Fridays 10 a m In patients (a) 235 beds (both sexes) in wards of separate rooms including 35 beds in a ward of King's College Hospital which is in use as a temporary annexe of the Maudsley Hospital (b) a special ward (including some private rooms) for those patients of each sex who are paying the full cost and are otherwise suitable TERMS £5 a week but in case of patients with a legal settlement in the County of London a less sum may be charged according to means

Terms include (with five exceptions) all forms of treatment for which there are exceptional facilities as there is a staff of Consultant Specialists and the Central Laboratories of London County Mental Hospitals is attached to the hospital Inquiries of EDWARD MAYOTHER M D F R C P F R C S Medical Superintendent

THE
HOTEL GREAT CENTRAL
Marylebone Road, N W 1

The Hotel Great Central is within a few minutes walk of the London Clinic and Harley Street
Special terms for friends visiting Nursing Homes in vicinity
Apply Manager Telephone Padd 1200

Preliminary Examinations

The COLLEGE OF PRECEPTORS holds Preliminary Examinations for Medical and Dental Students in London and at Provincial Centres in March June September and December Full Regulations apply to the Secretary College of Preceptors Bloomsbury Square London W C 1

Choose a Spa in

Czechoslovakia

The Spas and Health Resorts of Czechoslovakia with their centuries old tradition of healing reinforced by the experience and researches of local specialists invite your serious consideration

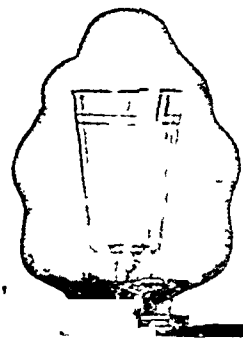
In addition to places of world wide repute such as

PISTANY (Piestany) **CARLSBAD** (Karlovy Vary) **MARIENBAD** (Marianske Lazne) **FRANZENSBAD** (Frantiskovy Lázne)

ST JOACHIMSTHAL (Jáchymov) **TEPLICE-SANOV** (Teplitz Schonau) **LUHACOVICE** **SLIAC** **TRENCIANSKE-TEPLICE**

with their medicinal springs and mud baths there are numerous smaller spas and health resorts admirably equipped for the treatment of many diseases including those in the following groups

Anaemia and Chlorosis Basedow's Disease Bronchial Catarrh Constitutional Diseases Scrofula Rickets Digestive Diseases Diseases of the Bladder and Urinary Organs Diseases of the Kidneys Diseases of the Nose and Throat Diseases of Women Disorders of Bones Muscles and Joints Disorders of the Heart. Disorders of Metabolism and Gout Gallstones Leucaemia Nervous Diseases and Post Hemiplegic Conditions Tuberculosis of the Lungs



The arrangements in the bath establishments are up to date in every way the cleanliness and neatness proverbial the service attentive and courteous

It is accepted that a spa cure to be fully beneficial should provide a complete change of surroundings and a break with the patient's normal everyday life

The Czechoslovak Spas fulfil this purpose admirably comfortable hotels first class orchestras and dance bands every facility for sport—tennis golf swimming riding fishing etc.

There are also numerous fully up to date homes for convalescence and rest cures

Further information from any office of
THOS COOK & SON, LTD.,
and other leading Tourist Agencies.

and at
CZECHOSLOVAK TOURIST INFORMATION OFFICES
in London 21 Regent Street S.W.1.

DOCTORS OWN SPA *for* RHEUMATISM

Sunny **Pistany**

VOLCANIC-SULPHURIC MUD SPRINGS
in delightful surroundings
21 DAYS
INCLUSIVE CURE
Special facilities for doctors and their wives
Second Class Fare with Sleeper £1 18 0 return.

Mud from Pistany in packs ready for home use. Simplest safest and most economical treatment may be entrusted to any patient. Cost 10s. for 10 treatments. Literature on request.

PISTANY AGENCY LTD., 10 Regent Street London W.1 Tel. [illegible] from 4214 or PISTANY SPA BUREAU 25 Cockspur Street S.W.1 (of Hitch [illegible])

About the Harrogate CURE

Harrogate specialises in the Treatment of :—Disorders of the Liver—cirrhosis jaundice chronic cholecystitis and hepatic liver. Also in Diseases of the Skin—eczema psoriasis the coccal infection of the skin etc. The Chronic Rheumatic Diseases—Arthritis Fibrositis Neuritis Gout Hyperpiesis Mucous Colitis Functional Disorders of the Heart Pelvic Disorders of Women Convalescence from acute illness

A wide range of Sulphur and Iron waters is available for dealing with the latter group of disorders amenable to Spa treatment. Prescribed diets to Spa patients can be obtained at hotels and boarding houses without extra charge. Complimentary and reduced price facilities for the Cure Accommodation and Amusements are available for Members of the Medical Profession

Full details of Harrogate for Cure and Holiday will be sent free upon application to Spa Manager Information Bureau Harrogate (State if a medical enquiry)

HARROGATE

IT'S QUICKER BY RAIL"

Cheap week-end return tickets to Harrogate from all stations. Any train any day.

THE CLINIC

20 Devonshire Place
London, W.1

Tel. Welbeck 1444 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns. to 18 gns. per week (Average—14 gns.)
8 Operating Theatres
150 State Registered Nurses—Resident Medical Officers (no extra charges)
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary



UNIVERSITY OF LONDON

BRITISH POSTGRADUATE MEDICAL SCHOOL (DEPARTMENT OF PATHOLOGY)

DIPLOMA IN CLINICAL PATHOLOGY

A COURSE OF STUDY in the academic year 1938-9 will be held for this Diploma commencing on October 3rd 1938. The Course will occupy twelve calendar months. The subjects embraced will be —

HAEMATOLOGY AND CLINICAL PATHOLOGY
PATHOLOGICAL CHEMISTRY
BACTERIOLOGY
MORBID ANATOMY AND HISTOLOGY

The Course will commence with Haematology and Clinical Pathology which will occupy about six weeks and will be followed by the Course in Pathological Chemistry which will occupy about the same time. The Courses in Bacteriology and Morbid Anatomy and Histology will run concurrently and occupy about six months. For the last three months of the Course students will be occupied in the practice of routine work in the laboratories of the Department and in revision work. The number of places in the Course is limited and students will be selected shortly before the Course is due to commence.

Fee forty guineas.

In addition to the full Course it will probably be possible to enrol a limited number of students for the subjects of Pathological Chemistry and Clinical Pathology and Haematology, separately. The Course in each subject lasting about six weeks. Fee for either Course nine guineas.

Further particulars may be obtained from the Dean, British Postgraduate Medical School, Ducane Road, Shepherd's Bush, London, W.12.

QUEEN CHARLOTTE'S MATERNITY HOSPITAL

MARYLEBONE ROAD, N.W.1

Medical Students and Qualified Practitioners admitted to the Practice of this Hospital. Unusual opportunities are afforded of seeing Obstetrical Complications and Operative Midwifery (about one-half of the total admissions being primiparous cases). Over 2,700 patients are admitted to the Wards annually and in the Ante-natal department there are over 20,000 attendances per annum. Clinical demonstrations are given by the Staff daily.

For rules, fees, etc., apply H. B. STOKES, Secretary-Superintendent.

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)

CITY ROAD, E.C.1

The Hospital offers facilities to POSTGRADUATES for observing the work of the Antenatal, Postnatal and Dental Clinics, and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) for two or four weeks Midwifery Course (Resident). Nearly 2,000 patients annually.

RALPH B. CANNINGS, Secretary.

TORQUAY

GRESHAM COURT HOTEL

RECENTLY OPENED. Luxurious comfort combined with an earnest desire to please.

The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure. M. TEL. 3658.

THE GRANGE,

near ROTHERHAM

A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental Disorders. Both certified and voluntary patients received. Approved for temporary Patients. This is a large country house with beautiful grounds and park, five miles from Sheffield. Tel. No. 40030 Ecclesfield. Res. Phys. GILBERT E. MOULD, L.R.C.P., M.R.C.S. *Station*: Grange Lane, L. & N.E. Rly.

HOME FOR EPILEPTICS

MAGHULL (near LIVERPOOL)

FARMING and OPEN AIR OCCUPATION for PATIENTS

A few vacancies in 1st and 2nd Class Houses. FEES: 1st Class (men only) from £3 p.w. up; wards 2nd Class (men and women) 32/- p.w.

For further particulars apply

C. EDGAR GRISEWOOD, A.C.A.,

Secretary, 20 Exchange Street East, Liverpool.

WYE HOUSE, BUXTON, AND CLINIC,

for the PREVENTION and TREATMENT of NERVOUS and MENTAL DISORDERS in both sexes. Large country House beautifully situated in its own grounds. Croquet, lawns, hard tennis court, billiards, wireless installation throughout. Every facility for specialised modern treatment including occupational therapy, ultra-violet rooms with special nurses. Temporary and Certified patients received.—For terms apply to the Medical Superintendent, HELEN S. L. MURRAY, M.D. Nat. Tel. 130.

HALLIFORD HOUSE, UPPER HALLIFORD, SHEPPERTON *Established in 1841*

This handsome secluded residence, standing in a park of 36 acres, situated 16 miles from London, is licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections.

Voluntary or certified cases received. Terms moderate. Patients are under the constant personal care of the Resident Medical Superintendent, Dr. R. A. Stewart, from whom full particulars can be obtained. Tel. Sunbury on Thames 70.

STAMMERING SPEECH DEFECTS

BEHNKE METHOD. Estab. 1880. Cases non-resident treated at 39, Earl's Court Sq., S.W.5, and in residence in the Summer holidays at Miss BEHNKE'S house on the Chilterns. The eminent success in education and treatment of stammering and other speech defect. — *Times*. Thoroughly physiological principles. — *Lancet*. The method is scientifically correct and perfectly effective. — *Guy's Hospital Gazette*.

Stammering, Cleft Palate Speech, Lisping, 3/3 of Miss BEHNKE, 39 Earl's Court Sq., S.W.5.

M.R.C.P. LONDON
M.R.C.P. EDINBURGH
F.R.F.P.S. GLASGOW

Short Intensive Oral and Postal Revision Courses in preparation for these qualifications.

Apply SECRETARY, Medical Correspondence College, 19 Welbeck Street, W.1.

Free booklet, The M.R.C.P. and How to Obtain It, on application.

GRAHAM SCHOLARSHIP IN PATHOLOGY

Applications are invited for the Graham Scholarship in Pathology, value £300 a year for two years, tenable at University College Hospital Medical School.

Applications must be received not later than the first post on Thursday, September 1st, 1938, by the Principal, the Senate House, University of London, W.C.1, from whom further particulars may be obtained.

Within 10 miles of London, yet in lovely and secluded surroundings.

Home for the Treatment of

WORRY AND NERVE STRAIN

(Under Medical Supervision)

Large airy rooms—Studied dietary—Expert cooking. Pleasant garden with tennis court—Friendly and cheery atmosphere—New emphasis on **Happiness in the Home**.

Terms from £5 5 0 per week

Apply to—D. H. C. GIVEN, M.D., D.P.H., D.T.M. & H., Surgeon Captain R.N. (ret.)
(Late Resident Medical Superintendent, Nayland Sanatorium, Beckenham)

"GLENROY,"
16 Sundridge Avenue, Bromley, Kent
Telephone Ravensbourne 4410

NORMANSFIELD

For Mental Defectives of either sex

Under private management

Apply to Dr Langdon Down

Normansfield, Teddington

LONDON HOSPITAL MEDICAL COLLEGE

PRIMARY FELLOWSHIP EXAMINATION

A SPECIAL COURSE OF INSTRUCTION for the above Examination will begin on Monday, September 12th.

The fee for the Course is 15 guineas.

Further particulars may be obtained from — DR. A. E. CLARK-KENNEDY, M.D., F.R.C.P., Dean, Turner Street, London, E.1.

LONDON HOSPITAL MEDICAL COLLEGE

F.R.C.S.

A Course of Instruction for the FINAL FELLOWSHIP EXAMINATION will begin on Thursday, September 1st, 1938. Fees (exclusive of Operative Surgery) 25 guineas. Operative Surgery 10 guineas.

Further particulars may be obtained from — DR. A. E. CLARK-KENNEDY, M.D., F.R.C.P., Dean, London Hospital Medical College, Turner Street, London, E.1.

F.R.C.S. (Edin.)

EDINBURGH POSTAL COURSES

Full details of above and Oral Classes — H. C. ORRIN, F.R.C.S., Surgeon's Hall, Edinburgh.

VALUABLE BOOK FREE!

Are you preparing for any MEDICAL, SURGICAL, or DENTAL EXAMINATION?

Send Coupon below for our valuable publication

"Guide to Medical Examinations"

PRINCIPAL CONTENTS

The Examination of the Conjoint Board
The M.B. and M.D. Degrees of all British Universities
How to pass the F.R.C.S. Exam.
The M.S. Lond. and other Higher Surgical Examinations
The M.R.C.P.
The D.P.H. and how to obtain it
The Diploma in Tropical Medicine
The Diploma in Psychological Medicine
The Diploma in Ophthalmology
The Diploma in Laryngology
The Mastery of Midwifery

Do not fail to get a copy of this Book before commencing preparation for any Examination. It contains a large amount of valuable information. Dental Examinations in special dental guide.

Send for your copy now!

The Secretary
MEDICAL CORRESPONDENCE COLLEGE,
19 Welbeck Street, Cavendish Square, London, W.1.

Sir,—Please send me a copy of your *Guide to Medical Examinations* by return.

Name .....

Address .....

.....

Examination in which interested .....

DIPLOMA IN PUBLIC HEALTH
The Royal Institute of Public Health and Hygiene

The Course of Instruction can be commenced at any time. Special provision is made for students who can give only part time to the work.

A prospectus and further particulars can be obtained from the Secretary

Telephone: Langham 2731/2.
8 Portland Place, London, W.1

BRITISH POSTGRADUATE MEDICAL SCHOOL

Applications are invited from fully qualified medical practitioners for the post of CASUALTY OFFICER to commence duty at the beginning of September 1938.

The appointment is for six months and non-resident. Salary at the rate of £150 per annum and the post is specially suited to candidates studying for higher qualifications.

Applications accompanied by copies of two testimonials should be addressed to the Dean, British Postgraduate Medical School, Ducane Road, Shepherd's Bush, London, W.12, to arrive not later than the first post on Tuesday, August 9th, 1938.

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17 RED LION SQ. LONDON, W.C.1

FOUNDED 1887
by H. S. WILKINSON, M.A. (Lond.)

VACATION CLASSES

will be held during August for 1st Conjoint and 2nd M.B., B.S. London examinations.

WEEKLY CLASSES

for Final Conjoint and Final M.B., B.S. London examinations commence August 8th.

Full particulars of these classes can be obtained from the Principal.

MEDICAL PROSPECTUS (47 pp.)

CONTENTS. The method and the cost of entering the Medical Profession. *Particulars of Medical Examinations.* Postal Courses and Oral Classes. Suggestions for the Higher Medical Examinations. Suggestions for the Higher Surgical Examination. Suggestions for the Special Diploma Examinations. Refresher Courses. Openings for Women. Hints for writing theses.

Medical Prospectus gratis, one with List of Tutors, etc., on application to the Principal, 17 Red Lion Sq., London, W.C.1. (Telephone: Holborn 0311.)

NEW ZEALAND GOVERNMENT

Applications are invited from registered and qualified medical men for appointment to the Mental Hospital Service. Salaries: Junior Assistant Medical Officers, 1st year £615, 2nd year £665, 3rd year £715. Senior Assistant Medical Officers, 1st year £765, 2nd year £815, 3rd year £900, plus an allowance of £50 if appointed Deputy Medical Superintendent. Medical Superintendents £1,000. In addition to salary quarters, fuel, and light are provided, and are estimated for superannuation purposes at £150 per annum. Medical Officers contribute to the Superannuation Fund. Commencing salaries in the instance will be determined by qualifications and previous experience. Appointees will receive free passage to New Zealand and half salary from date of embarkation.

Application, giving full particulars regarding career and qualifications, accompanied by copies of testimonials, should reach the High Commissioner for New Zealand, 415 Strand, London, W.C.2, not later than August 10th, 1938. Candidates must supply their full names, age, and nationality, and state whether they are married or single.

UNIVERSITY OF BRISTOL
DEPARTMENT OF PREVENTIVE MEDICINE

AMENDED

Applications are invited for a SENIOR BACTERIOLOGIST. Salary £700 to £800 per annum according to qualifications and experience. Appointment to date from October 1st, 1938. Candidates must be fully qualified and registered and have had considerable experience in a recognized Pathology department.

Applications should reach the undersigned from whom further particulars may be obtained on or before August 20th, 1938.

WINIFRED SHAPLAND,
Secretary and Registrar.

LONDON HOSPITAL MEDICAL COLLEGE AND DENTAL SCHOOL

THE WINTER SESSION will open on MONDAY, OCTOBER 3rd.

The London Hospital serves the East End of London and with eight hundred and ninety beds is the largest voluntary Hospital in England. The Out-patient Department which deals with a hundred thousand new patients per annum is extensively used for teaching.

The size of the Hospital necessitates a large number of resident medical officers. Every seventy resident house physicians and house surgeons and eighty salaried non-resident clinical assistants are appointed from among recently qualified students. The opportunities which these appointments offer for obtaining clinical experience are invaluable.

The Medical College is attached to the Hospital and is staffed by Professors of Anatomy, Physiology, Bacteriology, Chemical Pathology, Morbid Anatomy, and Medicine of the University of London.

Special Courses in Anatomy and Physiology for the Primary F.R.C.S. and advanced courses in Surgery for the Final F.R.C.S. Examination and in Medicine for the M.D. and M.R.C.P. Examinations are held twice a year.

Entrance Scholarships and prizes of the total value of £650 are awarded annually. Research Funds to the value of £113,000 permit of assistance being given to students and graduates engaged in medical research.

The Medical College contains a modern Museum of Pathology and a Library provided with all the current medical periodicals in charge of a full-time Librarian. There is also an Athenaeum Club and Dining Hall, a Gymnasium, a Fives Court, and two Squash Courts in the Students' Hostel. The Athletic Ground of 13 acres at Hale End is within easy distance of the Hospital.

The Hospital is only 9 minutes from Charing Cross and Baker Street Stations. For those who wish to live in immediate proximity to the Hospital there is accommodation for sixty students in the Student's Hostel.

Further details may be obtained from the Dean, Dr. A. E. Clark-Kennedy, M.D., F.R.C.P., Physician to the Hospital and Fellow of Corpus Christi College, Cambridge, who is always pleased to meet students wishing to see the Hospital and College and to whom application for admission should be made.

Turner Street, London, E.1.

COACHING personally or by post for final surgical examinations. Fees moderate.—Address, No. ..., BMA House, Tavistock Square, W.C.1.

THE KIRKDUNCANSON FELLOWSHIP FOR MEDICAL RESEARCH

The Council of the Royal College of Physicians of Edinburgh will shortly award a Fellowship to the candidate who in the opinion of the Council is deserving of the Fellowship and who furnishes satisfactory evidence of his ability for research. The Fellow will be required to devote his whole time to the tenure of the Fellowship and shall not, without the consent of the Council, hold any other Fellowship, Scholarship or Exhibition or hold any paid appointment or undertake any remunerative work.

The value of the Fellowship for the first year will be £300. The Council may renew the tenure of the Fellowship for a second or subsequent year or years at an increased emolument.

Applications must be lodged with the Secretary, Royal College of Physicians, Edinburgh, not later than August 10th, 1938.

July 6th, 1938.

COACHING

By M.D., M.R.C.P., F.R.C.S. in Surgery and Pathology for Conjoint, M.B., or Fellowship. Classes or individually. Address No. 7666, B.M.A. House, Tavistock Square, W.C.1, or Phone (mornings) KEN. 4450.

ROYAL BERKSHIRE HOSPITAL
Reading (385 Beds)

ASSISTANT RADIOLOGIST required for full-time duty. Salary £600-£700 p.a. according to qualifications. Candidates must be fully qualified Medical Practitioners and have had Hospital experience in Radiology and Deep Therapy, and possess the D.M.R.E. qualification.

Applications together with not less than three copies of testimonials to be sent to the undersigned on or before August 10th, 1938.

H. F. RYAN,
Secretary and House Governor.

[illegible]

COUNTY BOROUGH OF SOUTHPORT

DEPUTY MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER

The Council of the County Borough of Southport invite applications for the post of Deputy Medical Officer of Health and School Medical Officer from gentlemen duly qualified holding a Diploma of Public Health or a degree in State Medicine and not over 40 years of age

The salary will be at the rate of £700 per annum with two annual increments of £25 to a maximum of £750 per annum

The appointment will be subject to three months notice on either side The person appointed will not be allowed to engage in private practice

An allowance of £50 per annum will be made for the maintenance of a motor-car if used in the service of the Corporation

The person appointed will be required to pass a medical examination and to contribute to the Corporation's Superannuation Scheme

Experience in the diagnosis and treatment of external eye diseases and errors of refraction will be regarded as an additional qualification

Applications on the prescribed form obtainable from the Medical Officer of Health 2 Church Street Southport should be addressed to the undersigned endorsed Deputy Medical Officer of Health and delivered not later than August 12th 1938

Canvassing direct or indirect will disqualify

R EDGAR HERRINS
Town Clerk

Town Hall
Southport
July 25th 1938

CITY OF MANCHESTER EDUCATION COMMITTEE

ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from fully qualified medical practitioners for the post of Assistant School Medical Officer

Applicants must have been qualified for three year and will be required to devote their whole time to the duties of the office Preference will be given to those who have had special experience in refraction work

The salary is £600 per annum rising by annual increments of £25 to a maximum of £750 There is a yearly allowance of £10 for travelling expenses

Forms of application and conditions of appointment may be obtained from the undersigned and applications should be returned not later than Monday August 22nd 1938

W O LESTER SMITH
Director of Education

Education Offices
Deansgate
Manchester 3
July 8th 1938

COUNTY BOROUGH OF DERBY

DERBY CITY HOSPITAL

ASSISTANT RESIDENT MEDICAL OFFICER

Applications are invited for the post of Assistant Resident Medical Officer (male) at the above Hospital of 300 beds This Hospital provides treatment for acute medical and surgical cases obstetrics and children's diseases etc

Candidates must be registered in medicine and surgery

The appointment is for a period of six months two months notice of termination of duties may be given on either side The successful applicant will be required to commence duties on or about September 8th

Salary at the rate of £200 per annum with board and residence

Applications stating age experience and accompanied by three recent testimonials should be sent to the undersigned as soon as possible

GORDON LILICO
Medical Officer of Health

Public Health Department
1 Derwent Street
Derby

CITY OF BIRMINGHAM

SELLY OAK HOSPITAL (520 Beds)

JUNIOR MEDICAL OFFICERS (MALE)

Applications are invited from fully equipped Medical Practitioners for the whole time appointment of Junior Medical Officer (male) at the Selly Oak Hospital Birmingham The appointment will be for a period of six months in the first instance but may be extended at the end of that time for a further period of not exceeding six months

Salary at the rate of £200 per annum and full residential emoluments

Further particulars may be obtained from the Medical Superintendent at Selly Oak Hospital to whom applications stating age experience and qualifications with copies of recent testimonials should be forwarded not later than Saturday August 20th 1938

T H C WILTSHIRE
Town Clerk

The Council House
Birmingham July 1938

COUNTY BOROUGH OF WEST BROMWICH

ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from duly qualified and registered medical gentlemen for the above appointment Applicants must possess a Diploma in Public Health and have had three years experience since qualification with special experience in Diseases of Infants and Children and Infectious Diseases Knowledge of Tuberculosis Mental Deficiency or Ophthalmic work will be deemed additional qualifications Age not to exceed 35 years

The officer will be subject to and under the direction of the Medical Officer of Health

The person appointed will be required to devote the whole of his time to the duties assigned to him by the Council to live in the Borough and not to engage in private practice

Commencing salary £500 per annum rising by annual increments of £25 to £700 per annum

The engagement will be terminable by eight weeks notice on either side

The appointment is designated under the Local Government and Other Officers Superannuation Act 1937 and the successful candidate will be required to pass a medical examination

Applications stating age qualifications past and present appointments and experience together with copies of three recent testimonials should be forwarded to the undersigned not later than the first post on Wednesday August 10th 1938 and should be endorsed Assistant Medical Officer of Health

There are no special application forms

G T DARLOW
Town Clerk

Town Hall
West Bromwich
July 19th 1938

COUNTY BOROUGH OF DEWSBURY

ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from qualified and registered medical practitioners (men or women) for the post of Assistant Medical Officer of Health and Assistant School Medical Officer

Applicants should have had at least three years experience since qualification and possess the D P H Experience in eye work and refractions is desirable The duties are in connexion with School Medical work Child Welfare and Tuberculosis and there are also opportunities for experience in general Public Health work

The salary is £500 per annum rising by annual increments of £25 to £700 per annum The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination

Particulars of the duties and terms and conditions of the appointment together with application form may be obtained from Dr J F Gatteway Medical Officer of Health Municipal Buildings Halifax Road Dewsbury to whom applications accompanied by copies of not more than three recent testimonials should be delivered not later than Monday August 15th

Canvassing in any form will be a disqualification

HOLLAND BOOTH
Town Clerk

Town Hall
Dewsbury
July 26th 1938

COUNTY COUNCIL OF FIFE

DEPUTY MEDICAL OFFICER OF HEALTH

The County Council invite applications for the above post from registered male Medical Practitioners under 40 years of age Applicants must possess Diploma in Public Health and have previous experience Duties General Public Health Work Housing Water Supplies Drainage Infectious Diseases Food and Milk Supplies Salary £800 subject to deduction under Superannuation Act 1922

Applications stating age qualifications and experience together with copies of three recent testimonials should reach the undersigned not later than 11 a m on August 27th

J M MITCHELL
County Clerk

County Buildings
Cupar Fife
July 23rd 1938

CITY OF SALFORD

INFECTIOUS DISEASES HOSPITAL (300 Beds)

Applications are invited for the post of JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER (male) Salary £200 per annum plus board residence and laundry The appointment will be for one year

Form of application may be obtained from the Medical Officer of Health 143 Regent Road Salford 5 to whom it must be returned endorsed Junior Assistant Resident Medical Officer not later than August 6th 1938

H H TOMSON Town Clerk

[illegible]

CITY OF CARDIFF

ISOLATION HOSPITAL

APPOINTMENT OF ASSISTANT RESIDENT MEDICAL OFFICER (Male)

Applications are invited from duly qualified medical practitioners for the appointment of ASSISTANT RESIDENT MEDICAL OFFICER at the City Isolation Hospital Cardiff

The appointment will be for one year only and the salary will be £150 per annum with full board residence and laundry

The candidate appointed may be required when necessary to undertake general duties in the Public Health Department

Forms of application may be obtained from the Medical Officer of Health City Hall Cardiff by whom applications accompanied by copies of three recent testimonials and endorsed Resident Medical Officer must be received not later than August 6th 1938

D KENVYN REES
Town Clerk

City Hall
Cardiff
July 19th 1938

BOROUGH OF SHREWSBURY

TEMPORARY ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the above post for a period of six months

Preference will be given to applicants who have had previous experience more especially in School Medical Inspections Infant Welfare Work and administration of general anæsthetics Experience in Isolation Hospital work and the examination and certification of mentally defective children will be an additional recommendation

Remuneration will be at the rate of £10 10s per week

Forms of application may be obtained from the undersigned to whom applications should be returned in an envelope endorsed Temporary Assistant Medical Officer not later than August 15th 1938

R T PRIDEAUX
Town Clerk

Guildhall
Shrewsbury
July 25th 1938

CHESHIRE COUNTY COUNCIL

CLATTERBRIDGE (COUNTY) GENERAL HOSPITAL

(Nr Birkenhead) (300 Beds)

JUNIOR RESIDENT ASSISTANT MEDICAL OFFICER

Applications (male or female) are invited for the above appointment which falls vacant on August 8th

The appointment is for a period of six months at a salary of £150 per annum together with the usual residential allowances The appointment may be renewed for a further period of six months

There is a Non Resident Medical Superintendent a Resident Deputy Medical Superintendent and a Consulting Staff from Teaching Hospitals

Applications to be made on forms obtainable from the undersigned and returned not later than August 12th 1938

IAN MACKAY
County Medical Officer of Health

24 Nicholas Street
Chester

ROYAL NAVAL MEDICAL SERVICE.

Vacancies exist for Medical Officers in the Royal Navy and applications are invited for entry in September, 1938

Candidates below the age of 28 years are preferred, and they must be registered under the Medical Acts No examination in professional subjects will be held but candidates will be required to attend for interview by a Selection Board

Selected candidates will be entered for Service for a period of three years, which if desired is usually extended to five years at the discretion of the Admiralty

At the end of three years' service, officers may retire with a gratuity of £400, but those who serve for five years will receive £1 000

At the end of five years' Short Service, permanent commissions will be given to selected officers who wish to make the Naval Medical Service their permanent career Officers transferred to the permanent list will receive a gratuity of £1,000 (less Income Tax)

Full opportunities exist for transfer to the permanent list and periods of unemployed or half pay are very rare The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Opportunities are available for officers on the permanent list for post graduate study, to specialise to take higher examinations and to obtain further qualifications

Naval Medical Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers

Copies of the regulations for entry and conditions of service, including rates of pay, allowances and retired pay, may be obtained from the Medical Director General of the Navy, Admiralty, S W 1, and from the Deans of all Medical Schools

Applications for entry from intending candidates must be received not later than 31st August, 1938

Appointments for Medical Officers in the ROYAL AIR FORCE

Medical men are invited to apply for Short Service Commission in the Royal Air Force Candidates must be registered under the Medical Acts and be not more than 31 years of age on entry

The period of service is 3 years—extendible to 5 years A gratuity of £400 or £1 000 is payable at the termination of 3 or 5 years respectively Permanent commissions are awarded in a number of cases These offer a pensionable career with the opportunity of extra leave on full pay for specialised study Applicants who hold—or are likely to hold—post graduate appointments in civil hospitals may on joining the Royal Air Force be seconded until the termination of their appointments (for a period not exceeding one year) An interval of commission up to twelve months is allowed for appointments held at approved hospitals

Fuller information can be obtained from The Director of Medical Services Air Ministry, Kingsway London

CITY OF PORTSMOUTH

SAINT MARY'S MUNICIPAL HOSPITAL
(1 050 Beds)

Applications are invited for the appointment of a SENIOR ASSISTANT RESIDENT MEDICAL OFFICER for the Maternity Department of the above Hospital Applicants must be single gentlemen duly qualified and registered not exceeding 30 years and must have had at least one year's experience in a Maternity Hospital The Department has at present 800 births per annum and Ante-natal and Post-natal Clinics are conducted in connexion therewith There is a Resident Medical Superintendent at the Hospital and a Consultant Obstetrician attends regularly and is on call for emergencies The appointment is one of value to a medical man specializing in obstetrics who desires to take the M M or M C O G Diploma

The appointment includes service at any Institution belonging to the City Council that may be required and will be limited to a term not exceeding two years Salary for the first year £350 and for the second £375 with residential emoluments valued at £125 per annum and the appointment will be subject to one month's notice on either side

Application forms may be obtained from and must be returned to the Medical Officer of Health The Guildhall Portsmouth not later than Thursday August 18th 1938

Canvassing either directly or indirectly will be a disqualification

The Guildhall F J SPARKS
Portsmouth Town Clerk
July 22nd 1938

CITY OF PORTSMOUTH

SAINT MARY'S MUNICIPAL HOSPITAL
(1 050 Beds)

Applications are invited for the appointment of a JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER Applicants must be single gentlemen duly qualified and registered not exceeding 0 years and must have had at least one year's experience of hospital work Experience in anæsthetics will be an additional qualification The appointment is limited to a term of one year and the salary will be £250 per annum with residential emoluments valued at £125 per annum The appointment includes service at any institution belonging to the City Council and will be subject to termination by one month's notice on either side A resident Medical Superintendent is in attendance

Application forms may be obtained from and must be returned to the Medical Officer of Health The Guildhall Portsmouth not later than Thursday August 11th 1938

Canvassing either directly or indirectly will be deemed a disqualification

The Guildhall F J SPARKS
Portsmouth Town Clerk
July 18th 1938

LONDON COUNTY COUNCIL

Applications invited from Medical Practitioners of at least one year's standing to undermentioned positions Experience in a resident appointment in a general hospital for at least six months desirable Married quarters not available

Queen Mary's Hospital for Children Carshalton Surrey (1 2s4 beds) There are special departments for rheumatic and orthopædic conditions for congenital malformations and for nutritional diseases

ASSISTANT MEDICAL OFFICERS (Grade II) (two positions) Salary £250 a year together with board lodging and washing Appointment for one year only in first instance (renewable for a second year under certain conditions)

Application forms obtainable (stamped addressed foolscap envelope necessary) from Medical Officer of Health Staff Division 2A County Hall S E 1 returnable by August 15th

Canvassing disqualifies

LONDON COUNTY COUNCIL

Medical Practitioner required with appropriate qualifications for appointment as ASSISTANT PATHOLOGIST at Central Histological Laboratory Archway Hospital Archway Road N 19 Salary £650 by £25 to £800 Experience in morbid histology and post mortem work essential

Forms of application and further particulars (stamped addressed foolscap envelope necessary) from Medical Officer of Health (Staff Division 2a) County Hall Westminster Bridge S E 1 returnable by August 31st

Canvassing disqualifies

BECKENHAM HOSPITAL
Beckenham Kent

Applications are invited for the post of HOUSE OFFICER (male) Salary at the rate of £150 per annum with board residence and laundry *Appointment tenable for six months subject to* renewal

Applications stating age qualifications and experience with copies of recent testimonials to be addressed to the Secretary and to reach him not later than August 20th

STAFFORDSHIRE COUNTY COUNCIL

WORDSLEY PUBLIC ASSISTANCE INSTITUTION

RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners (male) for the post of Assistant Medical Officer (Resident) at Wordsley Public Assistance Institution near Stourbridge

Salary £300 per annum with board residence and laundry Candidates should be unmarried

The appointment will be in the first instance for a period of six months but the successful candidate will be eligible for reappointment for a further period of six months and if the engagement is so extended four weeks will be granted for holidays

The Institution is in process of conversion into a Hospital and facilities will be available for gaining experience in medicine surgery midwifery and diseases of children There will also be excellent opportunities for studying for higher qualification

Further details may be obtained on application to the County Medical Officer of Health

Applications stating age qualifications and experience with copies of testimonials should be sent to the undersigned not later than Thursday August 11th 1938

H L UNDERWOOD
Clerk of the County Council
County Buildings Stafford July 26th 1938

COUNTY BOROUGH OF READING

BATTLE HOSPITAL

APPOINTMENT OF RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the appointment of Resident Assistant Medical Officer (male) at the above Hospital at a salary of £ 00 per annum with board residence etc Candidates must be single and should not be more than 0 years of age The selected candidate will be required to work under the direction of the Medical Superintendent

The appointment (which will be determinable by one month's notice on either side) will be for a period of one year and preference will be given to candidates who are reading for higher qualification

Forms of application may be obtained from and must be returned duly completed to the undersigned with copies of three recent testimonials not later than Thursday 4th proximo Canvassing either directly or indirectly will disqualify

Town Hall C S JOHNSON
Reading Town Clerk
July 22nd 19 8

COUNTY BOROUGH OF ROCHDALE

PUBLIC HEALTH DEPARTMENT

The Health Committee invite applications from fully qualified registered Medical Practitioners (unmarried) for the appointment of JUNIOR RESIDENT MEDICAL OFFICER (male) at the Birch Hill Hospital (475 Beds—Medical Surgical Children and Maternity)

The appointment includes certain services at the adjoining Public Assistance Institution and will be for a period of six months in the first instance and for a further period of six months at the option of the Town Council but will not be renewable thereafter

Salary at the rate of £225 per annum together with board residence and laundry

Applications must be made on the prescribed form which may be obtained on application to the Medical Officer of Health and returned addressed to him at the Public Health Offices Baillie Street Rochdale not later than Tuesday August 9th 1938

Town Hall HARRY BANN
Rochdale Town Clerk
July 15th 1938

CITY OF LEEDS

PUBLIC HEALTH DEPARTMENT

ST MARY'S INFIRMARY
Armley Leeds 12

A RESIDENT MEDICAL OFFICER is required for St Mary's Infirmary Leeds (250 beds) The appointment is for twelve months Salary £250 per annum with the usual residential emoluments and one month's holiday Candidates must have had experience in midwifery subsequent to qualifying The duties of the Officer include lecturing to the Nursing Staff and instruction of Pupil Midwives

Applications stating age qualifications etc together with copies of three recent testimonials to be forwarded to the undersigned not later than 10 a m on Saturday August 13th 1938

J JOHNSTONE JERVIS
Medical Officer of Health
Public Health Department
12 Market Buildings
Vicar Lane Leeds 1

COUNTY OF HUNTINGDON

ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH AND MEDICAL OFFICER OF HEALTH

Applications are invited for the joint whole time appointment of an Assistant County Medical Officer of Health for the Administrative County of Huntingdon and Medical Officer of Health for the Borough of Godmanchester the Urban Districts of Old Fletton and Ramsey and the Rural District of Norman Cross in the said County at a salary of £800 per annum with a travelling allowance of £100 per annum The estimated total population of the Sanitary Districts named is 23 000

Applicants who should not be over 45 years of age must be duly qualified medical practitioners with whole time experience in Public Health duties and must hold the Diploma in Public Health or its equivalent The officer appointed will be required to reside at such place in the northern part of the County as shall be approved As regards the duties of an Assistant County Medical Officer of Health the officer will act under the control of the County Medical Officer of Health and will be required to perform such duties as may be from time to time prescribed As regards his duties as District Medical Officer of Health the officer will be the officer of the Local Sanitary Authorities

The joint appointment is subject to the approval of the Minister of Health and the Board of Education and also so far as the office of District Medical Officer of Health is concerned to the provisions of the Sanitary Officers (Outside London) Regulations 1935 The joint appointment will be one under the Local Government Superannuation Act 1937 and the selected candidate will be required to pass a medical examination

The joint appointment will be determinable by three months written notice on either side subject so far as the office of the District Medical Officer of Health is concerned to the consent of the Minister of Health

Forms of application together with a list of duties may be obtained from the undersigned and accompanied by copies of not more than three recent testimonials should be returned to him not later than August 5th 1938

J B KELLY
Clerk of the County Council
County Offices Huntingdon
July 19th 1938

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

SCOTTON BANKS SANATORIUM

APPOINTMENT OF SENIOR ASSISTANT MEDICAL OFFICER and DEPUTY MEDICAL SUPERINTENDENT

The County Council of the West Riding of Yorkshire invite applications from registered male medical practitioners for the appointment of Senior Assistant Medical Officer and Deputy Medical Superintendent (non resident) at the Scotton Banks Sanatorium near Knaresborough for women (100 beds) and children (100 beds)

Candidates should have previously held an appointment as House Physician or House Surgeon Experience in Pulmonary and Non Pulmonary Tuberculosis is essential and a knowledge of Anæsthetics will be an advantage

Salary £600 per annum rising by annual increments of £25 to £700 per annum

Further particulars and forms of application may be had from the undersigned and applications together with not more than three recent testimonial must be sent to me not later than Monday August 15th 1938

County Hall J CHARLES McGRATH
Wakefield Clerk of the County Council
July 19 8

DERBYSHIRE COUNTY COUNCIL

APPOINTMENT OF COUNTY BACTERIOLOGIST AND PATHOLOGIST

Applications are invited from registered medical practitioners for the appointment of County Bacteriologist and Pathologist at a commencing salary of £750 per annum rising by biennial increments of £50 to £937 10s per annum

Applicants must have had special experience in the bacteriology of water and milk and experience in a Pathological Laboratory

The officer appointed will be required to devote the whole of his time to the duties of the office and will be in charge of the work of the Bacteriological Laboratory under the administrative control of the County Medical Officer

The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination

Applications accompanied by copies of not more than three recent testimonials must reach the undersigned not later than Monday August 8th 1938

W M ASH
County Medical Officer
County Offices
St Mary's Gate Derby
July 20th 1938

THE CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE
Withington Manchester

Applications are invited for the post of RESIDENT MEDICAL OFFICER in the Hospital and Institute for work with the Radiotherapy Department to commence 1st October 1938. Appointment for 6 months with the possibility of renewal.

Salary at the rate of £150 per annum plus residence (or value if declined).

The appointment offers an excellent opportunity for gaining experience in Radium and X-ray Therapy.

Candidates must have had previous Medical and Surgical experience.

Applications stating age qualifications and previous experience to be received by the undersigned not later than September 6th.

PERCY N. GLASS
Superintendent

THE GUEST HOSPITAL DUDLEY
(General Hospital 190 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons.

Applications are invited from registered Medical Practitioners for the post of RESIDENT SURGICAL OFFICER (male). Duties to commence August 15th 1938. Salary at the rate of £160-£180 per annum, according to experience with free board and laundry. Candidates must have had experience in emergency surgery and preference will be given to those holding the qualification of F.R.C.S. or M.S.

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned.

H. RAYMOND HURST
July 23rd 1938 House Governor and Secretary

THE GUEST HOSPITAL DUDLEY
(General Hospital 190 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons.

TWO HOUSE SURGEONS (male) required. One to enter upon his duties immediately and the other to commence on August 15th 1938. Salary at the rate of £150 per annum with furnished apartment board and laundry. Candidates must be fully qualified and registered.

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned.

H. RAYMOND HURST
July 23rd 1938 House Governor and Secretary

THE DUCHESS OF YORK HOSPITAL FOR BABIES MANCHESTER
(30 Beds)

Applications are invited for the post of JUNIOR RESIDENT MEDICAL OFFICER for six months from October 1st 1938. Salary £75 per annum with board residence and laundry.

Applications together with copies of testimonials to be sent to the Secretary by August 15th 1938.

LOUISE BAILEY
Secretary

VICTORIA HOSPITAL WORKSOP
(95 Beds)

Application are invited for the post of JUNIOR HOUSE SURGEON (male).

The appointment is for six months from October 1st salary at the rate of £125 per annum with board residence etc.

Application with copies of three recent testimonials stating age qualifications and nationality should be sent to the undersigned.

P. E. DICKINSON
Secretary Superintendent

THE WINGFIELD-MORRIS ORTHOPAEDIC HOSPITAL HEADINGTON OXFORD

THE LORD NUFFIELD SCHOLARSHIP IN ORTHOPAEDIC SURGERY

MALE RESIDENT £200 per annum for two years followed by three months travel (£100). Residence to commence about November 1st. Some Orthopaedic experience essential.

Information can be obtained from and application before October 7th should be made to Professor G. R. Girdlestone.

THE GENERAL INFIRMARY AT LEEDS

Applications are invited for the post of SENIOR RESIDENT ANAESTHETIC OFFICER.

Salary £149 per annum with the usual residential allowances.

The appointment is for twelve months subject to renewal. Candidates must be fully qualified and registered. Applications with copies of testimonials to be sent in at once to the undersigned.

S. CLAYTON FRYERS
House Governor and Secretary

BIRMINGHAM AND MIDLAND EYE HOSPITAL. (114 Beds.)

Applications are invited from duly qualified Medical Practitioners for the post of RESIDENT SURGICAL OFFICER at the above Hospital. Salary £200 per annum and £10 laundry allowance. The Resident Staff consists of a Resident Surgical Officer and three House Surgeons, and it is the present function of the latter being promoted to the position of Resident Surgical Officer applicants will state whether they will be willing to accept appointment as House Surgeon at a salary of £120 from 1st at the end of six months at the rate of £140 per annum.

Applications with testimonials and evidence of registration must be received not later than Monday August 15th.

Church Street J. W. FEARCE
Birmingham 3 House Governor

KELLING SANATORIUM HOLT NORFOLK

The Committee of Management of the Kelling Sanatorium (Tuberculosis) desire applications from Medical Practitioners with suitable qualifications for the post of MEDICAL SUPERINTENDENT at Kelling Sanatorium, Holt, Norfolk (169 beds open). Preference will be given to applicants between the ages of thirty-five and fifty who have administrative experience and knowledge of modern methods of Sanatorium treatment and X-ray work. The position is open from 1st October 1938. Salary £650 per annum with excellent house in Sanatorium grounds. A Superannuation Scheme is in force.

Applications stating qualifications together with three recent testimonials should be sent to the Secretary, Kelling Sanatorium, Holt, Norfolk, by September 3rd 1938.

KENT AND SUSSEX HOSPITAL
Royal Tunbridge Wells (110 Beds)

Applications are invited for the appointment of HOUSE PHYSICIAN (male). Salary £120 per annum. Board residence and laundry in the Hospital.

The Hospital approved by the University of London for the purposes of M.B. examinations.

Successful candidate will be required to take up duty on September 1st 1938 and applications stating qualifications together with certificates of registration and copies of not more than three recent testimonials should be sent to the undersigned by August 6th.

TOM B. HARRISON
July 23rd 1938 Superintendent Secretary

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL.

Applications are invited from duly registered candidates (male and unmarried) for
a HOUSE SURGEON salary £140 per annum from August 1st
a HOUSE PHYSICIAN salary £125 per annum from July 1st.

The appointments are for six months and include apartments board and laundry. The House Surgeon must be an experienced anaesthetist.

All applications stating age etc with copies of testimonials to be sent to me at once.

FRANK H. TOONE.
9 Leicester Road Secretary
Loughborough

THE CHILDREN'S HOSPITAL SHEFFIELD
(150 Beds)

Application are invited for the post of HOUSE PHYSICIAN vacant September 1st 1938.

The appointment is for six months. Salary £100 per annum with board residence and laundry. Candidates (male and unmarried) who must possess registered qualification should forward applications stating age nationality etc together with copies of three recent testimonial to the undersigned.

T. H. G. GARTLAND
Superintendent and Secretary

ROYAL VICTORIA HOSPITAL
Belfast

RESIDENT MEDICAL OFFICER wanted for Gynaecological Ward (5 beds). Appointment for six months from September 1st. Salary at the rate of £100 per annum.

Applicants must have held a resident appointment for at least one year.

Application with three testimonials to reach Superintendent not later than August 6th.

(By Order) F. A. HERON Hon. Sec.

MANCHESTER ROYAL EYE HOSPITAL

JUNIOR HOUSE SURGEON required. Salary £100 per annum with residence board etc.

Applications (with copies of testimonials) endorsed "House Surgeon" to be addressed to the undermentioned.

H. R. NORTH
Gen. Supt. and Secretary

ROYAL BERKSHIRE HOSPITAL READING

The following resident appointment will become vacant on October 1st 1938.

RESIDENT MEDICAL OFFICER (male) at the Battle Branch Hospital and Assistant to the Physician (combined appointment). To reside at and have charge of 64 beds at Branch Hospital and to work as Assistant in the Pathological Department of the main Hospital. (Previous experience in Pathology not essential.)

The appointment is for six months and candidates must be fully qualified and registered.

Remuneration at the rate of £100 per annum with board residence and laundry.

Applications stating age and experience with copies of testimonials to be sent to the undersigned not later than Friday September 9th 1938.

H. E. RYAN
Secretary and House Governor

ROYAL BERKSHIRE HOSPITAL
Reading (138 Beds)

Applications are invited for the post of RESIDENT ANAESTHETIST (male) which will fall vacant on March 16th 1939.

The appointment is for a month in the first instance. Candidates must be fully qualified and registered and have had considerable experience in the administration of anaesthetics.

A salary of £200 per annum with board residence and laundry will be paid to the successful candidate possessing suitable qualifications for the post.

Applications stating age and experience with copies of not more than three recent testimonials to be sent to the undersigned as soon as possible.

H. E. RYAN
Secretary and House Governor

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (150 Beds and Resident Officers)
Hospital recognised by the Royal College of Surgeons England

HOUSE SURGEON

Applications are invited from fully qualified men for the above post to take up duties as soon as possible. Six months appointment. Salary £100 per annum with board residence and laundry.

Candidates who must be of British nationality to make application to the undersigned enclosing copies of three testimonials.

HERBERT MASLEN
July 15th 1938 Secretary

ROYAL SUSSEX COUNTY HOSPITAL
Brighton (250 Beds)

HOUSE SURGEON (male) required end of August 1938. Charge of beds. Salary £100 per annum with board residence and laundry.

Candidates must hold medical and surgical qualifications of the British Empire and be duly registered under the Medical Acts.

They must be unmarried and when elected under thirty years of age.

Applications with copies of testimonials should be sent to the undersigned as soon as possible.

E. L. W. LANCASTER-GAYE
Secretary Superintendent

ROTHERHAM HOSPITAL
(130 Beds)

CASUALTY HOUSE SURGEON

Applications are invited from qualified men for the post of Casualty House Surgeon. Duties to commence as soon as possible will include work in the Ear Nose and Throat Department. Excellent experience to be gained in the treatment of fractures. Salary £150 per annum with full board residence and laundry.

Applications with copies of recent testimonial should be sent to the Secretary, G. W. ROBERTS, 8 Moorgate Street, Rotherham, Yorks.

TORBAY HOSPITAL TORQUAY
(116 Beds)

HOUSE SURGEON (male) required for September 17th. Salary £175 per annum with board residence and laundry. Candidates must be fully qualified registered and unmarried.

Applications stating age, nationality qualifications and experience with copies of not more than three recent testimonial to be received by the undersigned not later than August 8th.

E. L. GRIST
July 16th 1938 Secretary

ROYAL CORNWALL INFIRMARY TRURO
(120 Beds)

HOUSE SURGEON (male) required with experience of Anaesthetics to commence duties on August 1st next. Salary £170 per annum, room board and washing.

Apply with copies of three recent testimonials to the Secretary of whom further particulars may be obtained.

Truro W. E. GRENFELL
July 4th 1938 Hon. Secretary

MANCHESTER ROYAL INFIRMARY

CHIEF ASSISTANT TO MEDICAL NEUROLOGICAL UNIT (Non resident)

The Board of Management invite applications for the above appointment

Applicants must be registered Medical Practitioners Higher qualifications desirable

The candidate will be required to attend on seven half sessions per week of which at least four will be morning sessions Duties will include work in the In patient and Out patient Departments and participation in teaching The candidate will be expected to engage in Research work for which facilities will be provided

Salary £300 per annum The appointment will be for one year in the first instance but may be renewed for two further periods of one year subject to the provisions of the By laws as to notice etc

Candidates should forward Fifteen Copies of their applications giving particulars of age experience etc together with copies of recent testimonials not later than 9 a m on Thursday August 4th 1938 to the undersigned from whom further information may be obtained

By Order
J J CABLE
General Supt and Secretary

July 18 1938

MANCHESTER ROYAL INFIRMARY

JUNIOR ASSISTANT MEDICAL OFFICER IN RADIOLOGICAL DEPARTMENT

The Board of Management invite applications for the above whole time appointment Applicants must be registered and hold a Medical and Surgical qualification and the D M R E or equivalent

The appointment (non resident) is for twelve months renewable for a further period of twelve months subject to the provisions of the By laws as to notice Salary is at the rate of £350 per annum Applicants must state age and send Fifteen Copies of their applications and testimonials to the undersigned by Thursday August 4th 1938

By Order
J J CABLE
General Supt and Secretary

July 18 1938

OXFORD COUNTY AND CITY MENTAL HOSPITAL

SECOND ASSISTANT MEDICAL OFFICER (MALE)

Applications are invited for the above mentioned position Applicants should be under 40 years of age have had some previous Mental Hospital experience and possess the Diploma in Psychological Medicine

The Officer appointed must be prepared to assist at the Clinics for the Out patient treatment of mental illness in the City of Oxford

Commencing salary £500 per annum (including £50 for D P M) rising by four annual increments of £25 to £600 per annum together with house light fuel and garden produce valued for superannuation purposes at £100 per annum

The appointment is subject to the provisions of the Asylums Officers Superannuation Act The successful candidate will be required to pass a medical examination

Applications accompanied by copies of not more than two recent testimonials should be sent to the Medical Superintendent Littlemore Hospital near Oxford before August 6th 1938

PRESTON AND COUNTY OF LANCASTER QUEEN VICTORIA ROYAL INFIRMARY

RESIDENT OBSTETRICAL OFFICER

The Board of Management invite applications from unmarried Medical Practitioners for the above post with duties in the Maternity Hospital (43 beds) under the direction of the Consulting Obstetrical Surgeon Candidates should have had experience in dealing with emergency cases and in conducting ante natal and post natal clinics Twelve months engagement from October 1st 1938 Salary £300 per annum with board residence and washing

Applications stating age qualifications and experience accompanied by copies of recent testimonials to be forwarded to the undersigned on or before August 15th 1938

JOHN GIBSON
Superintendent and Secretary

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL CHEETHAM
(Non Sectarian)—102 Beds

Applications are invited for the post of SUPERINTENDENT AND SECRETARY to the above Hospital Commencing salary £450 per annum Previous Hospital experience necessary and possession of the A H O A Certificate a recommendation

Applications stating age and experience to gether with copies of three recent testimonials to be forwarded to the Chairman of the Hospital

ANCOATS HOSPITAL MANCHESTER 4

HOUSE SURGEONS (Two) required (Lady or Gentleman) to commence duty on September 1st One for the Orthopædic Department and one for the combined post of House Surgeon to the Ear Nose and Throat Department and House Physician to one of the Honorary Physicians Salary at the rate of £100 per annum with board residence laundry etc Appointment for six months

Applications stating age qualifications experience if any and full particulars to be forwarded to the undersigned on or before Wednesday August 2nd with copies of three recent testimonials

By Order of the Board
HERBERT J DALTORNE
Gen Supt and Secretary

MANCHESTER EAR HOSPITAL
Crossenor Square All Saints

The Board invite applications for the following posts —

RESIDENT HOUSE SURGEON Salary at the rate of £120 per annum

NON RESIDENT HOUSE SURGEON Salary at the rate of £150 per annum and partial board

Appointments six months Thirty one beds

Candidates must be duly qualified and registered

Applications with four copies of recent testimonials to be forwarded to Mr Reginald S Milford (Hon Secretary Manchester Ear Hospital) c/o Mr W J Ellam 7 Brazenose Street Manchester 2

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(240 Surgical and Medical Beds)

HOUSE SURGEON to Ophthalmic and Ear Nose and Throat Departments

Applications are invited from fully qualified men for the above post

The appointment is for six month

Salary at the rate of £150 per annum

Applications stating age together with copies of three recent testimonials should be sent to the undersigned as soon as possible

M H BOONE
Superintendent and Secretary

July 18th 1938

KETTERING AND DISTRICT GENERAL HOSPITAL (108 Beds)

Applications are invited for the post of HOUSE PHYSICIAN

Salary £150 per annum with board residence and laundry Candidates must be fully qualified and registered and be free to commence duties on September 1st 1938

Applications stating age nationality and qualifications together with copies of three testimonials to be sent to the undersigned before August 2nd 1938

G W JACKSON
Secretary Superintendent

BUTE HOSPITAL LUTON

HOUSE SURGEON (male) wanted to commence duties as soon as possible Salary £150 per annum with board residence and laundry

Applications stating age nationality and experience together with copies of not more than three recent testimonial should be sent immediately to the Secretary of the Medical Advisory Committee at the Hospital

R F LINGARD
Secretary Bute Hospital

THE HARTLEPOOLS HOSPITAL
(95 Beds)

Applications are invited for the position of HOUSE SURGEON at a salary of £150 p a plus board residence and laundry

Appointment for six months subject to renewal and duties to commence immediately

Applications to be made to the undermentioned

NORMAN O DEANS
Secretary

BURTON ON TRENT GENERAL INFIRMARY

Applications are invited for the position of CASUALTY OFFICER AND HOUSE PHYSICIAN Salary at the rate of £150 per annum with board residence and laundry

Applications giving age qualifications and nationality together with copies of testimonials to be sent to E W THORNELEY Secretary

ECCLES AND PATRICROFT HOSPITAL
near Manchester

JUNIOR RESIDENT SURGEON required September 1st 1938 Appointment in first instance for six months Good surgical work Salary at rate of £125 plus usual emoluments Apply with references to Secretary

COSSHAM MEMORIAL HOSPITAL
Kingswood Bristol

Wanted an additional HONORARY SURGEON for general surgical work

Apply with full particulars to the Secretary

ROYAL BERKSHIRE HOSPITAL READING

The Board of Management invite applications for the post of ASSISTANT SURGICAL REGISTRAR

Candidates must be Fellows of one of the Royal Colleges of Surgeons of the British Empire or Surgical Graduate of one of the Universities of the British Empire and their names entered on the Medical Register

The elected Candidate will be appointed to the period ending on the first Tuesday in March 1939 and will be eligible for re election

Canvassing by or on behalf of a Candidate will disqualify

Applications with copies of not more than four testimonials must reach the Secretary not later than 9 a m on Friday September 2nd 1938

The Election will take place on Tuesday September 6th 1938

H F RYAN
Secretary and House Governor

THE BIRMINGHAM UNITED HOSPITAL

The QUEEN'S HOSPITAL Birmingham 15

REGISTRAR to the Ear Nose and Throat Department required part time non resident

The duties are in connection with the In patient and Out patient Departments

The appointment is for six months in the first instance

Candidates must be registered medical practitioners and for preference should hold higher degrees

Salary will be at the rate of £150 per annum

Application with copies of three testimonials should reach the undersigned not later than first post on August 31st 1938

P CROCKER
July 20th 1938 House Governor

THE BIRMINGHAM UNITED HOSPITAL

QUEEN'S HOSPITAL
(Medical School)

Applications are invited for the post of RESIDENT MEDICAL REGISTRAR vacant about September 20th 1938

Salary £200 per annum with full board etc

Candidates must send in their applications together with testimonial and evidence of registration to the undersigned (from whom all further particulars can be obtained) by Wednesday August 31st 1938

P CROCKER
July 20th 1938 House Governor

ROYAL EYE HOSPITAL
Paven es Road Eastbourne

NON RESIDENT HOUSE SURGEON required to commence duty in August The appointment will be for six months in the first instance

Salary £100 per annum and allowance in lieu of board residence £175 per annum

Applications stating age qualifications and ophthalmic experience together with recent testimonials should reach the undersigned as soon as possible

Before engagement candidate have to be interviewed by the Hon Surgeon from whom further particulars could be obtained in person

H BYGRAVE Hon Secretary

MANCHESTER NORTHERN HOSPITAL
Cheetham Hill Road Manchester 8
(General Hospital—113 Beds)

Applications are invited for the post of RESIDENT SURGICAL OFFICER commencing salary £150 per annum with board and residence The appointment is for twelve months from mid August 1938

Applications stating age qualifications and nationality with copies of not less than three recent testimonials to be sent to the Secretary Mr JAMES C DANIELS 35 Barton Arcade Manchester 3 as soon as possible

STROUD GENERAL HOSPITAL
Stroud Glos

RESIDENT MEDICAL OFFICER required Candidates must be fully qualified and registered Six months appointment duties to commence as soon as possible Salary £200 per annum with board and laundry

Applications stating age nationality etc together with copies of three recent testimonials to be sent to the undersigned from whom further particulars may be obtained

C FORD SPENCER Secretary

THE BUCHANAN HOSPITAL
St Leonards on Sea (103 Beds)

JUNIOR HOUSE SURGEON (female) required to commence duties September 1st 1938 Salary from £125 per annum according to experience

Candidates must be duly registered Medical Practitioners and applications which should include three copies of recent testimonials should be sent to the undersigned immediately

FRANK HART
Secretary

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association, B M A House, Tavistock Square, W C 1 (in the case of Scottish appointments, with the Scottish Secretary, 7, Drumsheugh Gardens, Edinburgh)

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—*(contd.)*	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY *(Medical Officer)*	MID RHONDDA MEDICAL AID SOCIETY *(Assistant Medical Officer)*	COUNTY OF ROXBURGH *Assistant Medical Officer of Health)*
BLAENAVON MEDICAL SOCIETY *(Chief Medical Officer)*	NEATH AND DISTRICT *(Medical Aid Association)*	**DISPENSARY APPOINTMENTS**
GILFACH GOCH GLAMORGAN *(Workmen's Medical Scheme)*	OGMORE VALLEY GLAMORGAN *(Llynfi Colliery Medical Society) (Workmen's Medical Scheme)*	LIMERICK CITY *(Whole-time Dispensary Medical Officers)*
LLWYNYPIA CLYDACH VALE PENYGRAIG GLAMORGAN *(Workmen's Medical Scheme)*	OAKDALE MON *(Medical Officer of Medical Aid Association)*	

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association, B M A House Tavistock Square, W C 1

Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch
NEW SOUTH WALES *(All Family Sickness Appointments)*	The Medical Secretary New South Wales Branch 135 Macquarie Street Sydney N S W	**VICTORIA** *(All Institution Medical Dispensaries)*	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria	**WESTERN AUSTRALIA** *(Country and Lee Practices)*	The Hon Sec Western Australian Branch British Medical Association Shell House 205 St Georges Terrace Perth Western Australia
QUEENSLAND *(Brisbane Associate Friendly Societies Institute)*	The Hon Sec Queensland Branch British Medical Association B M A House 25 Wickham Terrace Brisbane Q L				

July 27, 1938 By Order of the Council G C ANDERSON *Secretary*

LEICESTER ROYAL INFIRMARY
(90 Beds)
Staff 4 H S 3 H P 2 C O Res Anaesth 1 Res Rad

VACANCIES FOR OCTOBER 1 1938
HOUSE SURGEON

Salary £125 per annum Applicants must have held a Resident Hospital post or had similar experience of Hospital work
Unsuccessful candidates will be considered for Senior Casualty Officer if they so intimate

CASUALTY OFFICERS

Senior Casualty Officer Fellowship standard Salary £125 per annum
Junior Casualty Officer Salary £100 per annum

HOUSE PHYSICIANCIES (2)

Salary £125 per annum Applicant must have held a Resident Hospital post or had similar experience of Hospital work.

RESIDENT ANAESTHETIST

Salary at the rate of £150 per annum for first six months, £200 per annum for second six months £225 for third six months £250 fourth six months

Applications with copies of three recent testimonials to be forwarded to the House Governor and Secretary not later than August 13th
Appointment for six months will be made on August 24th
July 15th 1938

WEST KENT GENERAL HOSPITAL
(Incorporated) Maidstone
(135 Beds)

Applications are invited for the post of HOUSE SURGEON who must be a male of British nationality
Salary at the rate of £125 per annum with board apartments and laundry
Candidates must possess registered qualifications
Applications stating qualification and experience together with copies of testimonials should be sent to the undersigned immediately
EDWARD J GREGG
House Governor and Secretary

CARDIFF ROYAL INFIRMARY
(Associated with the Welsh National School of Medicine)

Applications are invited for the post of RESIDENT MEDICAL OFFICER
Duties will include case record keeping and teaching and Medical work under the direction of the Honorary Staff
Candidates must be Doctors of Medicine of a University of the United Kingdom or Fellows of one of the Royal Colleges of Physicians in the United Kingdom and must have previously held a Resident Hospital post
The salary will be at the rate of £100 per annum with board residence and laundry The appointment is for one year and the holder will be eligible to apply for reappointment and may retain office for three consecutive years
Further particulars may be obtained from the Medical Superintendent to whom application (endorsed R M O) with not more than three testimonials (copies) must be sent by noon on Wednesday August 31st 1938
By Order of the Council
R ARMSTRONG
Medical Superintendent

MERTHYR GENERAL HOSPITAL
(115 Beds)

RESIDENT HOUSE SURGEON required for a period of six months
Salary at the rate of £120 per annum with board and laundry Applications stating age nationality qualifications and accompanied by three (copies only) recent testimonials should be addressed to the Secretary of the Merthyr General Hospital

---

WEST CORNWALL MINERS' AND WOMEN'S HOSPITAL, REDRUTH

Wanted HOUSE SURGEON Lad September 1st or October 1st 90 Beds £120 per annum with board and laundry
Applications with testimonials to E POPE Hon Secretary

BURY INFIRMARY (LANCS)
(143 Beds)

APPOINTMENT OF TWO HOUSE SURGEONS

Vacancies as above arise on the Resident Medical Staff and applications are invited for the posts
The Resident Staff consists of an R S O a House Physician and two House Surgeons
The appointments are for a term of six months and salaries payable are at the rate of £120 per annum with board residence and laundry the salary being increased to £135 per annum in the event of reappointment to the same or some other office for a period of six months
The services of both House Surgeons will be required on or about August 8th
Applications stating age qualifications and nationality together with copies of three recent testimonials are to be forwarded to the undersigned as soon as possible endorsed House Surgeon
Full particulars of duties may be had on application
H WILKINSON
Superintendent

THE GENERAL INFIRMARY AT LEEDS
(673 Beds)

Applications are invited for the post of a full time DIRECTOR of the new X-ray Diagnostic Department
The commencing salary will be at the rate of £1 000 per annum
Candidates must be duly Registered Medical Practitioners with special experience in Radiological work and must hold the D M R E. qualification
Application accompanied by copies of recent testimonials stating age qualifications etc should be sent to the undersigned not later than August 29th 1938
S CLAYTON FRYERS
House Governor and Secretary

(Appointments continued on p 41)

CHARGES for ADVERTISEMENTS

CIRCULATION OF THIS ISSUE—41,000 COPIES

CLASSIFIED The *Minimum* charge is 9s., which covers up to 30 words Extra words are charged 1/6 for 5 or less

Example 33 words would be charged as for 35 Name and address should be included when counting words for cost

If *Box Number* is used, it should be reckoned as 5 words in the total

Replies should be addressed separately to each Box No care of this office

Advertisements, accompanied by remittance, should reach this office not later than NOON—TUESDAY, TO ENSURE INSERTION IN CURRENT ISSUE Please write CLEARLY

DISPLAYED Whole page £24, and pro rata to one-eighth page Special positions, dates and rates on application

Every effort is made to ensure the accuracy of advertisements appearing in the Journal No recommendation is implied by acceptance and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement

ADVERTISEMENT MANAGER, BRITISH MEDICAL JOURNAL, B M A HOUSE, TAVISTOCK SQUARE, W C.1

EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA TOBACCO GOOD SMOKES at a low price quality guaranteed Box of 50 for 25/ post free — Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"BIZIM" CIGARETTES THESE luxurious deliciously satisfying smokes 50 s or 100 s at 6/3 per 100 58/6 per 1 000 post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"SOLACE CIRCLES" TOBACCO THE finest combination ever discovered of Choice Natural Tobaccos Every pipeful an indescribable pleasure 12/6 per ½ lb tin post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

WANTED MEDICAL STUDENT WORKING for final wishes to reside in medical man's house in or near London as PAYING GUEST for two or three months —Address No 7628 B M A House Tavistock Square W C 1

FOR ALL INCOME TAX COMPLICATIONS or difficulties consult or communicate with Mr C G C KILNER (late H M Inspector of Taxes) 7 St James Street Piccadilly London S W 1 Telephone Whitehall 9278 for appointment

NATIONAL ADOPTION SOCIETY 4 BAKER STREET W 1 Telephone Welbeck 7211 OFFERS ASSISTANCE in the legal adoption of illegitimate and orphan babies into suitable family life Chairman THE LADY GWENETH CAVENDISH

OFFERED IN DEVONSHIRE FOR DELICATE child requiring individual care ACCOMMODATION in home of experienced medical psychologist Young family Educational facilities Lovely surroundings Terms by arrangement —Address No 7634 B M A House Tavistock Square W C 1

ADMINISTRATIVE COUNTY OF ESSEX

LABORATORY ARRANGEMENTS

The County Council of the Administrative County of Essex invite quotations from Laboratories undertaking the examination of pathological bacteriological and other specimens for the examination and submission of reports upon such specimens from Essex Quotations should be submitted for the carrying out of such examinations during a period of twelve months and it is desired that the arrangements should if possible commence on April 1st 1939

Details of the Council's requirements may be obtained from the undersigned and quotations should be addressed to him and delivered at the County Hall Chelmsford not later than 10 a m on Thursday September 8th 1938

County Hall E S HOLCROFT
Chelmsford Clerk of the County Council
July 25th 1938

TYPEWRITING DUPLICATING TRANSLATIONS —Experts in Medical work TESTIMONIALS THESES etc accurately copied in style that commands attention —WOBURN BUREAU Drayton House Gordon Street London W C 1 (close B M A House) EUSton 1775

TYPEWRITING —SPECIALISTS IN TYPING Medical and scientific papers lectures theses and books Shorthand typists always available Proof reading indexing — MARGARET WATSON LTD 16 Palace Chambers Bridge Street S W 1 WHitehall 3838

WHEN YOU COME TO LONDON STAY AT THE HAMPDEN RESIDENTIAL CLUB FOR GENTLEMEN Hampden Street N W 1 Close King's Cross and Euston 300 bedrooms 15/ to 22/6 p w includ baths attend and boot cleaning All meals à la carte in dining room Mod tariff Large club rms reading rm study for students Illus pros Sec Euston 2244/5

ASSISTANCIES

WANTED MALE ASSISTANT (BRITISH) from early September Country practice East Anglia Outdoor or indoor Salary £300 p a all found rising £25 annually Car allowance £60 —Address No 7605 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY MARRIED ASSISTANT (British) for South Wales colliery practice with early view 30-35 Salary £450 and car allowance or car provided with free unfurnished house —Apply with photograph Address No 7315 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY INDOOR AND Outdoor ASSISTANTS for Town and Country Practices with and without view to Partnership Good salaries offered State full particulars —BRITISH MEDICAL BUREAU 33 Cross Street Manchester 2

WANTED IMMEDIATELY OUTDOOR ASSISTANT for general practice near Birmingham Salary £450 p a plus £50 car allowance if own car Usual bond —Address No 7630 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY OUTDOOR male ASSISTANT for colliery practice in Co Durham to reside at branch Salary £350 all found (including board) plus £50 car allowance —Address No 7743 B M A House Tavistock Square W C 1

WANTED END OF AUGUST YOUNG male indoor ASSISTANT English or Scotch preferred for mixed practice in North London Time for reading Car provided Salary £300 —Address No 7307 B M A House Tavistock Square W C 1

WANTED AT END OF YEAR WELL qualified and experienced ASSISTANT with view to Partnership in good-class mixed practice 8 miles west of Marble Arch —Apply with full particulars Address No 7611 B M A House Tavistock Square W C 1

WANTED OUTDOOR ASSISTANT IN good-class Manchester suburb Scotch or English Salary £400 p a plus £50 car allowance Applicants should preferably have held hospital appointments Partnership later to suitable man —Address No 7618 B M A House Tavistock Square W C 1

WANTED ASSISTANT OUTDOOR MALE single English or Scotch for industrial and private practice Yorkshire Age under 30 Salary £300 and all found with car allowance —Address No 76[illegible] B M A House Tavistock Square W C 1

WANTED MALE ASSISTANT COUNTRY practice Shropshire Indoor (bachelor house che[illegible] Salary £300–[illegible] accordin[illegible] man keen on sport 7613 B M A House

WANTED ASSISTANT EXPERIENCED G P married Free unfurnished house £500 p a including car allowance English or Scotch Catholic preferred but not essential early view large mixed practice Cheshire —Address No 7526 B M A House Tavistock Square W C 1

WANTED EXPERIENCED ASSISTANT with a view to partnership in good-class suburban practice with good surgical opportunities in Cheshire To reside in and develop growing area Preference given to well-qualified Scot Good salary and car allowance until both are satisfied with partnership prospects —Address No 7309 B M A House Tavistock Square W C 1

WANTED OUTDOOR MALE ASSISTANT for panel and private practice by Scottish doctor in the Midlands Salary £400 per annum Usual bond —Address No 7552 B M A House Tavistock Square W C 1

ASSISTANT WANTED LONDON EASILY worked panel practice Salary £450 with separate house Partnership soon if suitable Energetic young English Irish or Scots doctor preferred —Address No 7616 B M A House Tavistock Square W C 1

ASSISTANT EITHER SEX UNDER 30 Lond with view wanted in large S Lond Practice Ent Gynæ or children's experience desirable not essential good prospects Send particulars photo to—Address No 7601 B M A House Tavistock Square W C 1

OUTDOOR ASSISTANT REQUIRED AT once preferably married salary £400 p a annum free house gas and electricity also £1 car allowance Newcastle on Tyne district —Address No 7638 B M A House Tavistock Square W C 1

WOMAN DOCTOR WOULD TAKE TWO surgeries per week Experienced —Address No 7741 B M A House Tavistock Square W C 1

LOCUMS

WANTED LOCUM WITH EXPERIENCE for Eye Ear and Throat Hospital London during September Hospital £5 5s 0d per week and private practice by arrangement Accommodation provided and all found—Apply Secretary Eye Ear and Throat Hospital Londonderry Northern Ireland

EXPERIENCED PRACTITIONER (SCOTSman) wants LOCUM with hospital for wife's surgery to work in September One or two years if required—Address No 611 BMA House Tavistock Square WC1

HOLIDAY LOCUMS AND ASSISTANTS—Experienced ladies and gentlemen available immediately or near future are invited to communicate with—THE MEDICAL AGENCY LTD 83 Southampton Street Strand WC2

HOSPITALITY LOCUM—DOCTOR WILLING to give full services in return for Loan of House in pleasant seaside place Second half of August first two or three weeks of September Personal approval Will provide cars and all other expenses English Hospital acquainted with practice Competent operator—Address No 576 BMA House Tavistock Square WC1

INDIAN DOCTOR QUALIFIED 1931 LRCP LRCS(Eng) requires London requires LOCUM or ASSISTANTSHIP CI experience industrial and colliery practice excellent testimonials—Address No 615 BMA House Tavistock Square WC1

LADY DOCTOR LRCP AND S LM DPH wishes sole charge and domestic experienced desires LOCUMS in London SW free August 15th—Phone Battersea 2617 (before 11 a.m.) or Address No 574 BMA House Tavistock Square WC1

LOCUM AUGUST NEAR NOTTINGHAM Seven guineas plus one guinea travelling allowance—Address No 561 BMA House Tavistock Square WC1

MEDICAL POSTS DISPENSERS

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request qualified and with practical experience in private practice and dispensary work also trained in Bacteriological Laboratories of the LONDON COLLEGE OF PHARMACY FOR WOMEN Preparations for Examination—Write wire or phone (Bayswater 0959) Secretary 7 Westbourne Park Road W2

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY and Secretary Dispensers can be supplied to Doctors Sessions January April and September—Apply Principals School of Pharmacy Drayton House Gordon Street WC1 Phone Euston 3930

CHAUFFEUR OR CHAUFFEUR SECRETARY over 20 years clean driving record garage work hon and electrical experience all running repairs bookkeeping typing correspondence skilled in photography unimpeachable references married—WALKER 20 Hastings Road Maidstone

DISPENSING CAREER FOR YOUNG LADIES FULL TRAINING for Apothecaries Hall Certificate Enrolments every three months—Apply The Principal Central School of Pharmacy 48 Moreton Street London SW1 Telephone Victoria 1641

DISPENSER (HALL) AGED 35 SEEKS POST with Doctor or Hospital Will make himself generally useful collected doctor's bill kept books Highest references character guaranteed by firm of solicitors—Address No 605 BMA House Tavistock Square WC1

DOCTORS REQUIRING QUALIFIED Dispensers Nurse-Dispensers Secretary Dispensers or Chauffeuse-Dispensers are invited to write wire or phone Temple Bar 5858 THE DISPENSERS BUREAU 3 Lindsay House 171 Shaftesbury Avenue London WC2

DOCTOR (LADY) REQUIRES SUPERIOR CARETAKER for surgery in good residential suburb near Birmingham Convenient modern house with accommodation for three adults Rent free for services—Address No 614 BMA House Tavistock Square WC1

LADY DISPENSER REQUIRES LOCUM WORK Experienced excellent references All bookkeeping and typewriting—Address No 607 BMA House Tavistock Square WC1

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION 5 Endsleigh Square SW1 (Telephone Victoria 2555) supplies qualified Dispensers Bookkeepers Laboratory Assistants Sanitary Visitors Male Nurses Mental and Special Treatment Orderlies Dental Clerk Orderlies Porters Caretakers etc without charge to prospective employers

PARTNERSHIPS

WANTED PARTNERSHIP IN PLEASANT country town with good connexion in midwifery and children's practice by keen energetic Scotsman age 30 private means Share by arrangement—Address No 613 BMA House Tavistock Square WC1

WANTED AFTER PRELIMINARY ASSISTANTSHIP PARTNERSHIP age thirty practice in East Anglia by MRCS LRCP married aged 1 Hospital experience years CP Medical preferred Address No 612 BMA House Tavistock Square WC1

WANTED BY OXFORD GRADUATE aged married PARTNERSHIP in better class practice in growing town Industrial districts not available—Address No 610 BMA House Tavistock Square WC1

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed

Applications should be separately enclosed and clearly addressed

Address No
B.M.A. House
Tavistock Square W.C.1

All communications are forwarded to advertisers immediately

WANTED BY CAMBRIDGE GRADUATE aged 1 married PARTNERSHIP in Country Town in Southern England Share to include £1 000 per annum Own capital available—Address No 608 BMA House Tavistock Square WC1

DEVON CITY — PARTNER WANTED About £1 000 all or 2 years purchase capital essential Adequate reason for proposal Physician aged about 35 preferred Panel about 1 300—Address No 609 BMA House Tavistock Square WC1

JUNIOR PARTNER ENGLISH SCOTCH Irish Protestant wanted in busy industrial partnership North London Life insurance preliminary Assistantship State essential particulars—Address No 609 BMA House Tavistock Square WC1

LONDON—HALF SHARE PARTNERSHIP IS offered in a non-dispensing practice situated residential locality Suit corner hse available Garden garage Receipts £1 000 £2 000 Small panel Premises and half-share £3 000 cash For further details apply THE MEDICAL AGENCY LTD 83 Southampton Street Strand WC2

PARTNERSHIP YIELDING £1 000 RISING offered after nine years preliminary assistantship in mixed practice in large Kentish town 9 miles from London modern house available for rent Applicants must be under 35 qualified and with good experience—Apply with full particulars and recent photograph Address No 603 BMA House Tavistock Square WC1

PARTNERSHIP WANTED 3 MONTHS preliminary Assistantship (indoor if possible) September Exams Orthopaedic Casualty Surgeon 11 yrs Mental Hospital appointment MB ChB (Glas) Catholic 30 yrs Surgical scope—Address No 613 BMA House Tavistock Square WC1

PARTNERSHIP OFFERED YIELDING £1 200 Two years purchase with increase later after short assistantship Mixed general practice South Coast Applicant must be experienced Begin October 1st—Address No 611 BMA House Tavistock Square WC1

SUSSEX—COUNTRY PARTNERSHIP AVERages over £3 000 income Profits 10 House to rent £60 Good neighbourhood and schools Premium two-fifths share (with increase later) 1 year purchase—Address No 606 BMA House Tavistock Square WC1

THIRD PARTNER REQUIRED AFTER A preliminary assistantship in very favourable established practice within 40 miles London Must have University degree in medicine (preferably Oxon or Cantab) and experience in pathology or radiology with diploma in both Other medical qualifications Modern hospital training—Address No 580 BMA House Tavistock Square WC1

THIRD PARTNER REQUIRED RAPIDLY increasing practice near Manchester Share on third £1 000 1 year purchase £1 500 including book debts Great North Lancs house and estates immediate Introductory Locum offered for week—Address No 602 BMA House Tavistock Square WC1

WEST LANCS COUNTRY TOWN PARTNERship in firm of three Senior retiring Mixed private panel £3 000 average receipts £5 000 Well-qualified physician required Possible staff appointment in infirmary Fifth quarter basis two years purchase including drugs book debts Central surgery apart from private residence—Address No 576 BMA House Tavistock Square WC1

PRACTICES

WANTED IMMEDIATELY PRACTICE, Location Income £1 000 upward Panel essential Ample capital No agent—Address No 608 BMA House Tavistock Square WC1

WANTED GENERAL PRACTICE IN London income about £2 000 per annum with a substantial panel Preferably NW W or SW Cash available—Address No 60 BMA House Tavistock Square WC1

WANTED PRACTICE £1 000 TO £1 500 IN South of England Middle class with panel Good garden Scholastic facilities essential Capital immediately available Strictly confidential—Address No 609 BMA House Tavistock Square WC1

WANTED IN LONDON OR PROVINCES PRACTICES with incomes £1 000 to £5 000 p.a. Many purchasers waiting and quick transactions for immediate cash—PEACOCK AND HADLEY LTD 6 7 Chandos Street Strand WC2

WANTED PRACTICE PRIVATE AND Panel April next Residential suburb of city North England South Scotland £1 000-£1 500 per annum (certified) Good house garden garage essential Cash available No agent—Address No 564 BMA House Tavistock Square WC1

ABERDEENSHIRE—GOOD GOING medical PRACTICE within easy distance of Aberdeen for sale Not necessary to purchase house The present house may be rented—For particulars apply to MESSRS HUNTER AND GORDON Advocates 2 Union Street Aberdeen

A NUMBER OF SMALL PRACTICES AT LOW premium Excellent opportunities for practitioners wishing to get a practice with Apply PEACOCK AND HADLEY LTD 6 7 Chandos Street Strand WC2

ESTABLISHED MEDICAL PRACTICE FOR Sale in Aberdeenshire with Modern House and Surgery Electricity Garage etc Good country panel—Particulars from J W STIRLING Solicitor 20 Douglas Street Dunfermline

FASHIONABLE SE COAST RESORT Present owner's hands 10 years £600 p.a. nett 2 years purchase. Six bedroomed house and garden Freehold £2,000 must be bought—Address No 6620 B.M.A. House Tavistock Square W.C.1

FOR SALE NORTHUMBERLAND OLD established country PRACTICE Average income £1,120 Panel nearly 700 Premium 1½ years Commodious house with grounds and fishing rights Sell or let with ultimate purchase Particulars—GARFORTH DRURY AND KNIGHTING Solicitors Newcastle upon Tyne 1

FOR SALE—WOMAN'S PRACTICE IN increasing (country) town within 30 miles of London Small Panel Educational Facilities Premium £1,500—Address No 7745 B.M.A. House Tavistock Square W.C.1

LANCS—OLD ESTABLISHED PRACTICE steadily increasing Panel 2,450 Gross receipts £2,100 Two good houses available Premium two years—Address No 7744 B.M.A. House Tavistock Square W.C.1

LONDON—UNOPPOSED PRACTICE FOR sale in growing western suburb Increasing panel of 730 Receipts for past year £540 Rent £75 p.a. Premium £810 cash—Address No 7620 B.M.A. House Tavistock Square W.C.1

NEAR HOLBORN W.C.—WELL ESTABlished PRACTICE Receipts average £1,000 p.a. panel 1,104 Splendid surgery accommodation only Long introduction Premium £2,000—Apply PEACOCK AND HADLEY LTD 67/68 Chandos Street Strand W.C.2

NEAR PUTNEY S.W.—DEATH VACANCY Old established PRACTICE Receipts about £2,000 p.a. including panel about 1,800 Nice surgery premises rental Offers—PEACOCK AND HADLEY LTD 67/68 Chandos Street Strand W.C.2

OLD ESTABLISHED COUNTRY PRACTICE for sale £600 p.a. good appointments and panel nice roomy house £60 and garden rates £15—Address No 7559 B.M.A. House Tavistock Square W.C.1

OPHTHALMIC IN IMPORTANT RESIDENtial and industrial city in South producing about £600 p.a. Considerable scope for expansion of PRACTICE Suit F.R.C.S. or D.O.M.S. Usual private consultation fees and appointments Premium £1,225—Address No 7615 B.M.A. House Tavistock Square W.C.1

PRACTICE (NORTH LONDON) ESTABLISHED over thirty years recently taken panel 400 Splendid scope for energetic able man Failing health Premium £600 or near—Address No 7612 B.M.A. House Tavistock Square W.C.1

WEST RIDING OLD ESTABLISHED PRACTICE averaging £1,400 Panel 2,200 increasing Ample scope Premium £2,500 Pleasant house tennis freehold £1,700—Address No 7621 B.M.A. House Tavistock Square W.C.1

HOUSES, CONSULTING ROOMS

For available

CONSULTING ROOMS, PROFESSIONAL HOUSES & FLATS

in Harley Street and the medical area generally including Mayfair

LEY CLARK & PARTNERS,

AUCTIONEERS SURVEYORS & VALUERS

3a Wimpole Street Cavendish Square W.1

Telephone Langham 1095 6-7

Represented at Cannes Nice and Monte Carlo

CONSULTING ROOMS WITH USE OF fully equipped x-ray room service heat electricity receptionist provided exclusive Mayfair position reasonable rent—Address No 7502 B.M.A. House Tavistock Square W.C.1

DEVONSHIRE STREET TWO DOORS FROM Harley Street an excellent CONSULTING SUITE of three good rooms in one of the finest professional houses Rent only £250 p.a. or single rooms may be had at £100 p.a. with plate on the door and all services Vacant Sept. 29th 1938—Address No 7610 B.M.A. House Tavistock Square W.C.1

HARLEY STREET AND MEDICAL DISTRICT

For all types of available accommodation

BERTRAM & CO., Surveyors and Estate Agents

59, Connaught Street, W.2 Paddington 1642-3

HARLEY STREET AND DISTRICT—A NUMber of excellent CONSULTING ROOMS are available for *full and part time* use at moderate rents Particulars on application—ELGOOD AND CO. 10 Henrietta Place Cavendish Square W.1 Lang. 2601

PARK LANE—ADVERTISER WISHES TO meet consultant with view to LETTING ROOM Use waiting and ladies room also small X-rays £155 p.a. Vacant June Referees—Address No 7632 B.M.A. House Tavistock Square W.C.1

QUEEN ANNE STREET—ONLY £40 P.A. secures exceptionally fine CONSULTING ROOM for use when required with attendance and all services Residential accommodation available—Address No 6355 B.M.A. House Tavistock Square W.C.1

ST. JAMES'S—LARGE LIGHT CONSULTING ROOM to let in good house Very moderate rent by arrangement Also others in all districts—Apply FAITH AND EASTMAN 23 Sackville Street W.1 Regent 7568

16, WELBECK STREET W.1—LUXURIously furnished SERVICE SUITES to let Large sitting double bedroom bathroom ground or first floor—Welbeck 6568 or write Manageress

WEST END MAIN DOOR FLAT AT bargain price—In best part of Western at 18 Glencairn Crescent Edinburgh contains 2 public rooms 3 bedrooms and maid's room 2 bathrooms kitchen pantry Being now reconstructed in modern manner and will be finished to purchaser's own taste—Address No 7508 B.M.A. House Tavistock Square W.C.1

SMALL ADVERTISEMENT FOR INSERTION IN BRITISH MEDICAL JOURNAL.

The MINIMUM charge is 9s. which covers up to 30 words. Extra words are charged 1s. 6d. for 5 or less. Example 33 words would be charged as for 35. Name and address should be included when counting words for cost.

If BOX NUMBER is used it should be reckoned as 5 words in the total.

PLEASE WRITE CLEARLY—ONE WORD IN EACH SPACE

1						
2						
3						
4						
5						
6					(30 words)	9/
7						10/6
8						12/
9						13/6
10						15/

To the Advertisement Manager BRITISH MEDICAL JOURNAL B.M.A. House, Tavistock Square, London, W.C.1

Please insert my advertisement in ..... issues Name .....

dated ..... Address .....

I enclose remittance value £ ..... Date .....

APPOINTMENTS VACATED FOR SCHOOL

Sleeping and living accommodation for 50 boys 60 baths Gymnasium open air swimming bath central heating STANDING IN APPROXIMATELY 17 ACRES playing fields and park and in centre of town Estimated cost £4000 freehold Inquiries and Offers Messrs WOOLLEY & WALLIS Solicitors Salisbury Tel 60

MEDICAL AREA

TO DENTAL MECHANICS OR FOR SALE Newly converted Consulting House BASEMENT ROOMS to let Low rental Apply Owner—Address No 604 BMA House Tavistock Square WC1

SALE OPENING—DENTAL PRACTICE Miscellaneous gilt edged recommendable SW district Surgery waiting room with bay window and electric fire in each room Established over 20 years Excellent chance—Address No 604 BMA House Tavistock Square WC1

MISCELLANEOUS SALES etc

IMPORTANT

to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE. Specially Cut Fitted and Moulded to each individual figure made from Finest Quality Materials and in the Best Possible Style cost no more than ready-made clothes

The invaluable Practical Experience and Advice of our 14 Expert West End Cutters and Fitters is always at your disposal

ALL HALLZONE Productions are HAND FINISHED IN EVERY ESSENTIAL DETAIL.

SPECIAL OFFER

JACKET & VEST (in black or grey) £3 3
Finest super all Wool Serges in Navy Blue
SOLID FANCY WORSTED TROUSERS £2 2
The Ideal Suit for Professional Business wear
LOUNGE SUITS to measure from £5 5
OVERCOATS " " £5 5
DINNER SUITS " " £8 8
DRESS SUITS " " £10 10
FULL FOUR SUITS " " £6 6
THE IDEAL Suit for Country Fishing Walking
GOLD MEDAL RIDING BREECHES from £2
RIDING HABITS £8 8
RIDING BOOTS £3 3
COSTUMES & LONG COATS " £6 6

UNSOLICITED APPRECIATION

I present all our medical friends with a suit each of your Hallzone Cloth and I have had from them nothing but praise I have been perfect in Fit Cut and Finish
(Signed) S J A M A MB FRCPS

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self measurement Form or Pattern Garments

Visits to London an order will follow Any specialty Patterns would thank but not necessary Fitting Clothes supplied without fitting

HARRY HALL, LTD

Governing Director Harry Hall

THE Cost Breed Habit and Costume Specialists

101 OXFORD ST., W.1 (2 doors CHEAPSIDE) Telephones

CERrard 4905 4906 and 4907 NATional 2690

Makers of Finest Quality Bespoke Civil Sporting and Hunting Clothes for Ladies and Gentlemen

Highest Award 12 Gold Medals

Estd 40 years

INCOME TAX

YOUR business is OUR business

Taxation is to the Medical Profession

HARDY & HARDY

43 CHANCERY LANE, LONDON W.C.2

Telephone Holborn 6651

Write to-day for free copy of "Advice on Income Tax"

APPOINTMENTS—Contd

ESSEX COUNTY HOSPITAL
Colchester (174 Beds)

Applications are invited from duly registered gentlemen for the post of HONORARY ASSISTANT SURGEON. Canvassing disqualifies but thirty copies of application and three recent testimonials may be sent not later than August 12th to the Secretary for circulation to the Selection Committee

SALFORD ROYAL HOSPITAL
(Beds)

Applications are invited from registered and duly qualified
RESIDENT SURGICAL OFFICER for twelve months from October 1st Salary £100 per annum
HOUSE PHYSICIAN
HOUSE SURGEONS (Three)
CASUALTY HOUSE SURGEON
for six months from October 1st Salary £125 per annum

Forms of application obtainable from the undersigned must be delivered on or before September 10th next

By Order of the Board
H B SHELSWELL
General Superintendent and Secretary

July 9th 1938

SALFORD ROYAL HOSPITAL
(Beds)

Applications are invited for a duly qualified part-time post of RADIOLOGIST to assist the Honorary Staff in the Department (Salary £150 per annum) Twelve months' appointment in the first instance which may be renewed Part-time work will be required in connection with some of the Honorary Physicians' Private Practice

Applications stating residential qualifications together with names of two persons to whom reference may be made should be sent to the undersigned from whom further particulars may be obtained

H B SHELSWELL
General Superintendent and Secretary

July 2nd 1938

THE LADY CHICHESTER HOSPITAL
Hove Brighton
FOR EPILEPSY AND NERVOUS DISEASE
(60 Beds)

SENIOR HOUSE PHYSICIAN (woman) required Six months' appointment £100 per annum all found Valuable experience for Diploma in Psychological Medicine

Also JUNIOR (woman) at £75 per annum Commence end of July

Application with testimonials to be sent to the Secretary Mr P F SPENCER 33 West Street Brighton

July 27th 1938

ROYAL SOUTH HANTS & SOUTHAMPTON HOSPITAL (196 Beds)

Applications are invited for the following appointment

One RESIDENT ANAESTHETIST for the period ending December 31st 1938 at a salary of £110 per annum with board lodging and laundry Candidates must be male and unmarried

Applications accompanied by not more than three testimonials should be sent to the undersigned immediately

S W PARNELL
House Governor and Secretary

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN
Brighton (100 Beds)

HOUSE PHYSICIAN (male) required Salary at the rate of £150 per annum with board lodging and laundry No canvassing allowed The Hospital is recognised for the D C H Diploma

Applications in writing accompanied by testimonials should be sent to Mr PERCY F SPENCER Secretary Dyke Road Brighton

July 27th 1938

WESTMORLAND COUNTY HOSPITAL
Kendal (85 Beds)

HOUSE SURGEON (female) required September 1st Appointment is for six months renewable for a further six months

Salary £100 per annum with board residence and laundry

Applications stating age and qualifications with copies of three recent testimonials to be addressed to the Hon Sec J M SOMERVELL not later than August 4th

ROYAL SOUTH HANTS & SOUTHAMPTON HOSPITAL (196 Beds)

Applications are invited for the post of CLINICAL ASSISTANT to the Honorary Anaesthetist Particulars of qualifications and experience should be sent to the House Governor and Secretary not later than August 13th from whom any further information may be obtained

ROCHDALE INFIRMARY AND DISPENSARY
(110 Beds Three Residents)

The Board of Management invites applications for the appointment of HOUSE PHYSICIAN (male) The salary attached to the appointment is at the rate of £150 per annum with board residence laundry The duties include work in the Out-Patient Aural Ophthalmic etc departments as well as in the wards The Hospital covers a large industrial area and affords excellent opportunity for experience

Applications stating nationality etc with three recent testimonials to be sent to the Secretary Rochdale Infirmary

Infirmary Office W WYNNE
Rochdale Secretary

THE NATIONAL SANATORIUM
Bournemouth Kent

The Council of the National Sanatorium Association invite applications for the post of HOUSE PHYSICIAN

Salary £150 per annum with board residence and laundry The appointment will be for the period of six months commencing September 1st

Candidates must be fully qualified and registered

Applications must be in the candidate's own handwriting and accompanied by copies of three recent testimonials should be sent to the undersigned not later than August 1st

C C LAWRENCE
Hon Secretary

4 West Drive
Cheam Surrey

WARNEFORD GENERAL HOSPITAL
Leamington Spa
(60 Beds)

RESIDENT CASUALTY OFFICER and HOUSE SURGEON to succeed the present Holders Surgeons required by August 10th Six months' appointment Salary £150 per annum with board and laundry

Applications from qualified registered Medical Practitioners should be sent together with three recent testimonials to the undersigned by August 10th 1938

EDWARD L WIRGMAN
House Governor and Secretary

July 5th 1938

WALSALL AND DISTRICT PEACE MEMORIAL HOSPITAL
(164 Beds)

Applications are invited for the following posts for a period of six months to commence as soon as possible

HOUSE SURGEON (female)

Salary at the rate of £150 per annum with board and laundry

Applications stating nationality and qualifications together with three testimonials to be forwarded to the undersigned forthwith

T H FLETCHER
Secretary

THE HOSPITAL FOR SICK CHILDREN
Newcastle upon Tyne

Applications are invited for the post of HOUSE PHYSICIAN and HOUSE SURGEONS (male or female) for six months as from August 1st 1938 Salary at the rate of £100 per annum together with board residence and laundry

Applications stating age and qualifications together with copies of testimonials to be sent to the Secretary Mr NEIL BRODIE 18 City Road Newcastle-upon-Tyne 1

THE HOSPITAL FOR SICK CHILDREN
Newcastle-upon-Tyne

The Board of Management has declared a vacancy for the post of HONORARY OPHTHALMIC SURGEON and invites applications for the appointment stating age and qualifications to be forwarded to the Secretary Mr Neil Brodie 18 City Road Newcastle-upon-Tyne 1 accompanied with copies of three recent testimonials

CHARING CROSS HOSPITAL

Applications are invited for the post of CLINICAL ASSISTANT in the X-ray and Electro-therapeutics Department Candidates should have by preference the qualification of D M R E

Applications together with copies of three recent testimonials should be sent to the undersigned not later than August 3rd 1938 Honorarium £60 per annum

Charing Cross Hospital GEORGE J JONES
London W C.2 Secretary

WORCESTER COUNTY AND CITY MENTAL HOSPITAL
Powick near Worcester

Applications are invited for the post of ASSISTANT MEDICAL OFFICER Applicants must be male single under thirty five years of age and duly qualified in medicine and surgery Commencing salary £350 rising by annual increments of £25 to a maximum salary of £450 per annum together with furnished apartments board laundry and attendance A further £50 per annum will be paid if the selected candidate holds or obtains a Diploma in Psychological Medicine Experience in Anæsthetics will be a recommendation The appointment is subject to the provisions of the Asylums Officers Superannuation Act 1909

Applications stating age and full particulars of qualifications and experience accompanied by copies of three recent testimonials to be forwarded to the Medical Superintendent not later than Wednesday August 10th 1938

ST PAUL'S HOSPITAL FOR UROLOGICAL AND SKIN DISEASES
Endell Street London W C 2

Applications are invited for the post of male HOUSE SURGEON Candidates must be qualified and registered Salary £100 per annum with board residence The appointment is for three months in the first instance and the holder will later be eligible for the post of Resident Medical Officer During his appointment as House Surgeon the duties involve work in the surgical ward and in the out patient department

Applications with copies of recent testimonials to be submitted not later than August 13th The successful candidate will be required to take up duty about September 14th

J P KEY CHISLETT Secretary

YORK CITY COUNCIL
PUBLIC ASSISTANCE COMMITTEE

Applications are invited for the appointment of a DISTRICT MEDICAL OFFICER for the North Medical Relief District of the city at an inclusive salary of £130 per annum The successful applicant must reside within the District as provided by the Public Assistance Order of 1930 Further particulars as to the extent of the district etc may be obtained at my offices

Applications must be received by me not later than September 12th 1938

1 Museum Street JAS W BARNES
York Public Assistance Officer
July 21st 1938

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road E 7 (104 Beds)

Applications are invited for the post of HOUSE PHYSICIAN (male) The appointment is for six months commencing September 1st

Salary at the rate of £150 per annum with board residence and laundry

Applications stating age nationality experience and full particulars together with copies of three testimonials should reach the undersigned by August 18th

REGINALD PERRY
Secretary

GOLDEN SQUARE THROAT NOSE AND EAR HOSPITAL
London W 1

HOUSE SURGEON (male) required to commence duties September 1st Salary £100 per annum with board residence and laundry

Applications stating age qualifications and experience together with copies of three testimonials should be sent to the undersigned on or before August 12th

F P CARROLL
Secretary Superintendent

KING'S COLLEGE HOSPITAL
London S E 5

BIOCHEMIST (male) required to commence on October 1st Salary £500 per annum with opportunities for Private Practice Candidates must be medically qualified and have had special experience in Chemistry

Applications should be sent by September 1st to the House Governor King's College Hospital Denmark Hill S E 5 from whom full particulars of the post may be obtained

BATTERSEA GENERAL HOSPITAL LONDON
S W 11 (85 Beds) Applications are invited for the post of HOUSE SURGEON (male or female) Salary £130 per annum To commence duties as soon as possible Other terms to be arranged on appointment Applications stating age qualifications and experience with copies of two recent testimonials should be sent to the undersigned G L BENNETT Secretary

ST MARY'S HOSPITAL LONDON W 2
EAR NOSE AND THROAT DEPARTMENT

Applications are invited for the post of HONORARY REGISTRAR to the Ear Nose and Throat Department

Candidates must be a Fellow of the Royal College of Surgeons or a Graduate in Surgery of a British University A copy of the regulations governing the post may be had on application

The appointment will be in the first instance for a period of twelve months but the holder will be eligible for reappointment for a second year

Applications for the post together with copies of three recent testimonials should be sent to the undersigned not later than August 12th

W PARKES
House Governor

THE QUEEN'S HOSPITAL FOR CHILDREN
Hackney Road London E 2
(160 Beds)

HOUSE SURGEON required September 1st 1938

TWO CASUALTY OFFICERS required September 1st 1938

Six months appointments Salary at the rate of £100 per year with board lodging and laundry in each case

Applications must be made on forms to be obtained from the undersigned and to be sent in with copies of not more than three testimonials on or before August 12th 1938

CHARLES H BESSELL
July 19th 1938 Secretary

WIMBLEDON HOSPITAL
Thurstan Road S W 19

Applications are invited for the post of RESIDENT MEDICAL OFFICER male unmarried Duties to commence on October 1st The appointment is for a period of six months The salary offered is at the rate of £150 per annum with board residence and laundry

Applications accompanied by copies of three recent testimonials should be sent to the Hon Secretary

A B WARD
Acting Hon Secretary

ST THOMAS'S HOSPITAL
VACANCY

The appointment of a PHYSICIAN and in the event of a Physician to Out Patients being promoted to the Wards the appointment of a Physician with charge of Out Patients Candidates must be Fellows or Members of the Royal College of Physicians

Applications with full details of academic career and copies of testimonials must be made on forms obtainable from the Clerk to the Governors and sent in to him not later than August 31st 1938 He will be pleased to give further information

ST JOHN'S HOSPITAL LEWISHAM S E 13

Applications are invited from registered medical practitioners to fill the office of CLINICAL ASSISTANT to the Medical Officer in Charge of the Electrical and Massage Department The successful applicant will be required to attend the hospital on three half days a week at an honorarium of 50 guineas per annum

Applications should be received by the undersigned who will be pleased to give further particulars

J C GILBERT
Secretary Superintendent

ST JOHN'S HOSPITAL LEWISHAM S E 13

Applications are invited for the resident appointment of CASUALTY OFFICER (male) tenable for six months from September 1st 1938 at a remuneration of £100 p a

Applications with copies of testimonials should reach the undersigned by August 20th 1938

J C GILBERT
Secretary Superintendent

THE PRINCE OF WALES'S GENERAL HOSPITAL LONDON N 15

Applications are invited for the appointment of HONORARY CLINICAL ASSISTANT with special Psychiatric experience

Applications should be sent to the undersigned on or before August 31st 1938

J C BURDETT
Director and House Governor

July 20th 1938

THE RADIUM INSTITUTE AND MOUNT VERNON HOSPITAL
ASSISTANT RADIOLOGIST

Applications are invited from fully qualified and registered Medical Practitioners for the post of whole time Radiologist in the Deep Therapy Department at the Mount Vernon Hospital Northwood

Candidates must possess a diploma in medical radiology

Salary to be arranged according to the qualifications of the successful candidate (minimum £400 per annum)

Applications together with full details of training and experience and accompanied by copies of not more than three testimonials should be received by the undersigned as soon as possible but not later than August 13th 1938

Details concerning the duties etc may be obtained on application

T A GARNER
1 Riding House Street Secretary
London W 1

THE RADIUM INSTITUTE AND MOUNT VERNON HOSPITAL
HONORARY NEUROLOGIST

Applications are invited for the post of Honorary Neurologist at the Mount Vernon Hospital Northwood

Candidates must be Fellows or Members of the Royal College of Physicians of London

Applications together with copies of not more than three testimonials should be received by the undersigned not later than September 1st 1938

T A GARNER
1 Riding House Street Secretary
London W 1

THE RADIUM INSTITUTE AND MOUNT VERNON HOSPITAL
1 Riding House Street London W 1

There will shortly be a vacancy for a HOUSE SURGEON at the Mount Vernon Hospital Northwood The appointment will be made for six months at a salary at the rate of £100 per annum with board and residence

Application should be sent to the Secretary at the above address

THE CENTURY INSURANCE COMPANY LTD
7 LEADENHALL STREET
LONDON E C 3

18 CHARLOTTE SQUARE
EDINBURGH

ASSISTS DOCTORS TO PURCHASE A PRACTICE OR PARTNERSHIP

NO GUARANTORS REQUIRED
REPAYMENTS ARRANGED BY EQUAL QUARTERLY INSTALMENTS WHICH DO NOT VARY WITH FLUCTUATIONS IN THE BANK RATE

PLEASE WRITE FOR PARTICULARS, STATING AGE NEXT BIRTHDAY

MENTION B M J

PERCIVAL TURNER LTD
MEDICAL AGENCY
ESTABLISHED 60 YEARS
25 MAIDEN LANE, STRAND W.C.2
(Corner of Bedford Street)
Telegrams: "Impromptu, London"
Phone: Temple Bar 9011 (3 lines)

After office hours: Waltons-on-Thames 1245

Assistants and Locums Provided without fee to Purchasers. Practices investigated. Book-keeping, Debt Collecting, etc.

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE (EXCLUSIVE OF HOUSE PROPERTY) £5. FULL TERMS ON REQUEST

FOR DISPOSAL

SUSSEX COAST—£1,500 P.A. NON-PANEL. Principal Fees £6,000. Premium for Good House (4 bed) if required. Freehold might be let.—1

LONDON, W.9—ABOUT £550 P.A. Panel 600. Assistant £250. Premium 3 years purchase. House 4 bed, etc., to rent.—

LONDON, N.W.—SHARE OF OVER £4,000 p.a. Part £6,000. Approx. over £1,000. Fees £5 to £10 10s. Premium 3 years purchase. Small panel. Share to be let.—3

SCOTLAND (N.)—COUNTRY OVER £1,000 p.a. in Panel. £1,600 p.a. Assistant £350. Premium 18 months' purchase. Offer invited. House for sale.—4

MIDDLESEX—SUBURB £1,000 P.A. Panel 600 increasing. PMS £100. Premium 3 years purchase. Comfortable House (4 bed.) to let.—5

SURREY SUBURB—HALF SHARE of £1,000 p.a. Old-established increasing. Modern house, garage and grounds. Premium £3,000.—6

DERBYSHIRE—COUNTRY PRACTICE. Net £770 p.a., good class select panel. Increasing and showing chance of house. Premium 1 year's purchase.—7

MIDDLESEX SUBURB — PARTNERSHIP. Share profits £450 p.a. to commence. Main financial Practice. Premium and purchase.—8

NORTHANTS — COUNTRY PRACTICE. Old-established. Assistant required. About £1,600 p.a., panel worth £910 p.a. 4 Acres. Nice house for sale. Premium 18 months' purchase.—9

HYDE PARK NEAR — PHYSICO-THERAPY PRACTICE about £1,600 p.a. Well established. Good class. Ample accommodation on rental. Premium £1,500.—10

LANCASTOWN—OLD ESTABLISHED INCREASING £1,100 p.a. Select panel of 1,000. Nice house, ample accommodation. Premium £1,000. Principal only. No surrender furniture.—11

KENT SUBURB—GOOD MIDDLE CLASS about £1,000 p.a. increasing. Present partner wishes to give up surgery. Nice Tudor house if required might be let. Premium 1 year's purchase.—12

SOUTH COAST—OLDEST NEARLY £1,000 p.a. increasing. Fair panel, mixed, could be much better class. Detached house, garage and garage for sale or might be let. Premium £2,500.—13

COUNTY TOWN WITHIN 100 MILES OF LONDON—PARTNERSHIP with early succession. ENT Practice about £1,500 p.a. and prospects at £2,000 p.a. 2 cars. Purchase. Partner should have F.R.C.S. Choice of house.—14

DEVON — UNOPPOSED COUNTRY. Over £1,100 p.a. increasing, partly worth £700 p.a. Approx. £600 p.a. Premium £1,500. Excellent house and 2 cottages, garden and garage for sale at £1,000. Mortgage arranged. Premium £1,000.—15

BIRMINGHAM NEAR — NEARLY £1,000 p.a., good scope, panel nearly 900, desirable area. House, garden, garage for sale at £3,000 or let at £75 6d. p.w. Premium £1,000.—16

HANTS — OLDEST AVERAGE £1,000 p.a. Part £1,000. Appts. about £150 p.a. Good family house, nice garden and garage to be sold with mutual mortgage arranged. Premium 18 months' purchase.—17

YORKSHIRE DALES—BEAUTIFUL Old-established £1,000 p.a. Large house and grounds rent only £60 p.a. Suit resident patents. Smaller house available. Panel worth £340 p.a. Premium £1,000.—18

NEAR VICTORIA, S.W.1—LOCK UP about £1,000 p.a. increasing, panel 750, good scope. Ample professional accommodation on rental at £70 p.a. Premium 1 years' purchase.—19

MIDDLESEX SUBURB — HALF SHARE of increasing Practice about £1,000 p.a. Panel 600, developing area. Choice of house. Premium 2 years' purchase.—20

MIDLANDS—OLD EST. NEAR IMPORTANT town, scope. Vendor retiring. About £1,000 p.a. Part £730. Present partner purchasing House if required. 6 bed, good garden, for sale or might be let.—21

NO CHARGE TO PURCHASERS
FINANCIAL ASSISTANCE ARRANGED

ASSISTANTS — VACANCIES IN Town and Country. Indoor and Outdoor. Introduction.

THE MEDICAL AGENCY, Ltd
DUDLEY HOUSE 36-38 SOUTHAMPTON ST., STRAND W.C.2
Telephone—Temple Bar 1044 1054 Established in 1833 by J. A. REASIDE.

LONDON, W.—PARTNERSHIP. Suburban C.P. practice. House if required. Receipts nearly £1,600. Panel approx. 4,000. One-fifth share. Later purchase with view to one-third share.

MIDDLESEX (W.)—C.I. growing residential locality. Excellent house with large practice and grounds. Receipts approx. £1,000. Panel 1,100. Fees £3,000 up. Premium 2 years' purchase. Freehold house and furniture £1,000.

WEST COUNTRY (Sea de)—PARTNERSHIP. House to rent on lease. Receipts £1,000. Panel 1,100. Fees £3,000 up. One-third share. 15 years' purchase.

LONDON, W.1.—Old-established C.P. mixed. Select and fashionable. Receipts approx. £1,000. Select panel 900. Premium 2 years' purchase. Negotiate at once.

LONDON, S.W.1.—Old-established miscellaneous C.P. Resident Principal. Large house, private garage. Receipts approx. £1,000. Select panel nearly 400. Fees £3,000 up. Premium 18 months' purchase or near offer.

HERTS (Border).—Middle-class PRACTICE. Residential locality. Corner house, garden, garage. Receipts nearly £1,000. Panel over 300. Fees £3,000 up. Premium 2 years' purchase or near offer.

LONDON, N.E.—Middle-class G.P. Receipts approx. £1,500. Panel 1,000. Premium 2 years' purchase or near offer.

MIDLANDS.—Middle-class G.P. Resident. Principal locality, near large town. Receipts over £2,000. Small panel. Fees £4,000 up. Suit house available. Premium £900 or near offer.

ESSEX.—Semi-rural PRACTICE offered for sale due to retirement. Receipts abt. £600. Panel 300. Fees £1,000 up. Principal. House to rent. From 10 years' purchase or near offer.

LONDON, N.—Middle-class G.P. Resident. Principal locality. Corner house. Separate surgery. Garden, garage. Receipts £1,100. Panel over 600. Several applicants. Premium 2 years' purchase.

MANY OTHERS FOR SALE

DETAILS ON REQUEST

THE WESTERN MEDICAL AGENCY
LONDON and BRISTOL
Dr. K. H. BENNETT and Dr. W. J. WHITE, who are personally attentive to every client.

Financial Assistance, Purchases and Sales of Medical Interests.

LOCUMS AND ASSISTANTS SUPPLIED WITHOUT CHARGE TO PRINCIPALS

Free Insurance Against Maximum Premium Limit to which Locums are otherwise liable, except by Private Practice.

WANTED TO PURCHASE

1. MIDLAND CITY.—Steadily Increasing PRACTICE in Suburb. Average £1,400 p.a. (£1,600 last year). Panel 1,100. Well-equipped House. Premium £5,500. House in excellent repair, price £7,000.
2. MIDLAND CITY.—Woman PRACTICE. This Practice cannot be amalgamated with the above and we are a Partnership if required. Receipts average £3,000 p.a. (£3,400 last year). Panel 900. Old-established. Good scope. Premium £1,000. House to rent.
3. SOMERSET COAST.—PARTNERSHIP in County town. Panel 1,400. Average £3,000 p.a. (£3,200 last year). Third share to commence. Premium for purchase. House for sale or rent.
4. DORSET COAST.—Unopposed Practice. PRACTICE. Panel 900. Average £1,000 p.a. House rent.
5. DEVON COAST.—Small PRACTICE with good scope in delightful part. Good reasons for sale. Recently established. Rapidly increasing. £400 last year. House in best part.
6. LONDON.—PRACTICE with INCOME required. Average £1,000 p.a. Panel 1,100. Years' purchase.

WOMAN'S PRACTICE. Bristol. Very desirable. Excellent scope for increase. Panel not required. Can be quickly increased. Over £1,000 p.a. Price £1,400. For Practice and Assistant's house.

5. COAST.—PRACTICE in popular town. Panel 1,000. Average £1,000 p.a. (£1,100 last year). Years' purchase. House rent.

22 CLARE STREET, BRISTOL 1
Telegrams Medicine Bristol *Telephone* Bristol 24
17 BEDFORD ST., STRAND W.C.2
Telephone Temple Bar 43

ESTABLISHED 1875
PEACOCK & HADLEY, Ltd,
MEDICAL TRANSFER AGENCY
67 68 Chandos St Bedford St Strand W.C.2
Telegrams Herbatia Lesquare London
Telephone Temple Bar 64

The old-established Agency negotiates the Sale of PRACTICES and PARTNERSHIPS in reasonable terms which can be obtained on application. LOCUM TENENS and ASSISTANTS supplied free of charge to principals.

CAVENDISH NURSES
★ MALE AND FEMALE
Head Office
31 BEAUMONT STREET LONDON W.1
Branches MANCHESTER 176 Oxford Road
GLASGOW 25 Windsor Terrace
DUBLIN 5 Upper Baggot St.
Telephones London 1— Welbeck (3 lines)
Manchester 3152 Ardwick
Dublin 6 006 Glas 4— Douglas
Telegrams Tactear London Surgical Glasgow
Tactear Manchester Tactear Dublin

Telephone Welbeck 7[illegible]
Telegrams ASSISTIT LONDON
NURSES
MALE OR FEMALE
TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES

Nurses reside on the premises and are available at urgent calls Day and Night.

THE NURSES ASSOCIATION
In conjunction with the MALE NURSES' ASSOCIATION
29 York St. Baker St., London W.1
Mrs. MILLICENT HICKS *Superintendent*
W. J. HICKS *Secretary*

INSURANCE
FOR
NATIONAL HEALTH
PRACTITIONERS

The Insurance Acts Committee of the British Medical Association, after protracted negotiation, secured for all Insurance Practitioners an opportunity of entering a

Pension and Insurance Scheme providing

(a) Pension at age 65
(b) Disablement Income
(c) Family Protection

at extraordinarily low rates which are available only until

September, 1942

Policies effected prior to that date will not be affected by any alteration made thereafter

The scheme was made available also to members of the Association not engaged in National Health Insurance practice

These policies are issued through the Medical Insurance Agency of B M A House, Tavistock Square, acting as agents of the Insurance Offices which adopted the scheme for the collection and receipt of quarterly premiums

All other insurances, Motor, Household, Educational, Life and Endowment etc, are also available at specially favourable rates

In this as in all else

THE M.I.A. EXISTS TO PROTECT YOUR INTERESTS AND SAVE YOUR MONEY.

Medical Insurance Agency Ltd.

BRITISH MEDICAL ASSOCIATION HOUSE
TAVISTOCK SQUARE, LONDON, W C 1

Telephone Euston 1871

BRITISH MEDICAL BUREAU

(The Scholastic, Clerical and Medical Association Ltd)

(FOUNDED 1880)

NORTHERN BRANCH

33, CROSS ST., MANCHESTER, 2.

Telephones {Manchester - Blackfriars 3925
{Manchester - Rusholme 2549 (*Night Calls*)

Telegrams "Locum Manchester"

Branch Offices at Leeds and Belfast

Recommended with every confidence to the profession by the BRITISH MEDICAL ASSOCIATION as a thoroughly trustworthy medium for the transaction of all Medical Agency business

TRANSFER OF PRACTICES AND PARTNERSHIPS INTRODUCTION OF RELIABLE ASSISTANTS AND LOCUM TENENS at Short Notice VALUATION and INVESTIGATION OF PRACTICES, Etc

Practices and Partnerships wanted Large list of bona fide purchasers with ample capital available Enquiries invited from prospective vendors All information treated in strict confidence

FOR DISPOSAL

Fuller details on application

NORTHUMBERLAND COAST.—Old-established mixed class PRACTICE in Seaside and Residential town; present hours 10 years. Cash receipts over £1400 p.a. Small panel £300. Excellent house 2 reception 5 bedrooms, 3 Professional rooms, garage and nice garden. Premium—1½ years purchase.—No. 1151.

NEAR MANCHESTER.—Very old-established middle and better working class PRACTICE. Cash receipts over £2,500 p.a. Panel 1,450. Excellent detached house, 2 reception 6 bed rooms, garage and garden with tennis court. Price £1,000. Premium—1½ years purchase.—No. 1105.

NORTH EAST COAST.—Old-established mixed Panel and Private PRACTICE. Cash receipts last year £1,160. Panel 220. Appointments (transferable) over £400 p.a. Good house 2 reception 3 bedrooms, 3 Professional rooms, garage and small garden. Price £1,000. Premium—1½ years purchase.—No. 1094.

YORKSHIRE (W.R.).—Old-established middle and better working class PRACTICE in large town. Cash receipts last year £1,762. Panel (two ends exceed) 550. Good house, reception 4 bedrooms, 3 Professional rooms, garage. For sale or may be rented. Premium—1½ years purchase.—No. 1141.

NEAR MANCHESTER.—PARTNERSHIP in old-established mixed class Practice owing to death of senior partner. Average cash receipts £2,446 p.a. increasing. Panel 2,330. Score first rate. Good house to rent, 2 reception 5 bedrooms, 3 Professional rooms, garage and small garden. Premium—one half share—1½ years purchase.—No. 1114.

NORTH WEST LANCS.—Old-established mixed Panel and Private PRACTICE in large town. Cash receipts last year £1,102. Panel over 1,000. Good house pleasantly situated 2 reception, 5 bedrooms, garage and small garden. Premium—Practice—11 years purchase.—No. 1105.

CHESHIRE TOWN near Manchester.—DEATH VACANCY.—Old-established mixed Panel and Private PRACTICE. Cash receipts last year £3,646. Panel 2,150. Superior detached house (in own grounds) reception room study 4 bedrooms. Professional rooms garage with servants' quarters and garden. For sale at valuation. Premium—Practice—best offer.—No. 1136.

CHESHIRE.—Old-established mixed Panel and Private PRACTICE in pleasant Country town. Average cash receipts £2,[illegible] p.a. Panel 1,592. Attractive house reception 5 bedrooms garage and large garden with tennis court. Premium—1 years purchase.—No. 1100.

SOUTH YORKSHIRE.—Small PRACTICE capable of great increase. Cash receipts £600. Panel 437. Good house with large garden. Rent £60 p.a. Premium—best offer.—No. 1013.

NORTH WEST COAST.—Medical Woman's PRACTICE. Long term lease. Cash receipts £1,[illegible]. Good house. Rent £[illegible] p.a. Premium—best offer.—No. 1115.

MANCHESTER.—Very old-established mixed middle class PRACTICE in suburbs over £1,000 cash receipts £1,300 p.a. Panel 858. Good detached house 8 bedrooms, 3 Professional rooms, garage etc. Premium—1½ years purchase or near offer.—No. 1150.

NORTH WALES COAST.—Good-class PRACTICE in decayed residential resort. Cash receipts last year £995. No Partnership. Old established house with large accommodation, garage and garden. Premium—Practice—2 years purchase.—No. 1152.

LANCS TOWN.—PARTNERSHIP in old-established Practice in semi-rural district. Cash receipts over £2,900. Panel 2,000 and appointments £150 p.a. Good house, reception 3 bedrooms, garage and garden. Price £650. Premium—one third share—£1,750 (to include house and both).—No. 114.

MIDLAND SPA.—PARTNERSHIP (after preliminary Assistantship) in old established Practice. Cash receipts last year £3,774. Panel 1,100. Income may further be increased. Position of Hospital appointment. Premium—¼ th share—2 years purchase.—Further share in three years.—No. 1069.

NEAR MANCHESTER.—Well-established middle and better working class PRACTICE in pleasant suburban district; present hours 8-15 years. Average cash receipts over £1,000 p.a. Panel 1,813. Good semi-detached house, reception 4 bedrooms. Professional rooms, garage and garden all. Business premises. Both may be rented or sold. Premium—1 years purchase.—No. 1135.

LIVERPOOL.—Steadily increasing mixed-class PRACTICE in suburbs. Cash receipts last year £[illegible]. Panel 650. Excellent detached house 2 reception 6 bedrooms, garage and garden. Premium—Practice—best offer.—No. 1036.

LINCOLNSHIRE.—Very old-established PRACTICE in pleasant country town. Cash receipts last year £[illegible]. Panel about 1,300. Cottage Hospital. Good house 5 bedrooms, small garden garage etc. Premium—Practice—£1,150 if quick sale.—No. 1132.

YORKSHIRE (W.R.).—Old-established mixed Panel and Private PRACTICE in better working class and rural district. Cash receipts last year £1,186. Panel 1,354. Score. Good house 2 reception 3 bedrooms, maid's room 3 Professional rooms (separate entrance) garden with tennis court. Rent £45 p.a. Garage rented. Premium—1½ years purchase.—No. 11[illegible].

MANCHESTER.—Sound old-established PRACTICE in industrial district. Cash receipts last year £[illegible],200. Panel 2,230. Score. House 4 bedrooms, 3 Professional rooms. Rent £50 p.a. Premium—best offer.—No. 1094.

MIDLANDS.—Increasing middle and working class PRACTICE in large town. Cash receipts last year £1,050. Panel over 1,000. Score. Excellent modern house reception 4 bedrooms garage and large garden. For sale Freehold. Premium—Practice—£[illegible],000.—No. 113.

— WANTED —

ASSISTANTS and LOCUMS

For Immediate Engagements

Apply with full particulars to above address

NEAR MANCHESTER.—Very old-established middle and working class PRACTICE in prosperous town. Very suitable for two friends in partnership or may be run by one man and an Assistant. Cash receipts last year £3,[illegible]. Panel 1,000. Nice modern house reception 4 bedrooms separate Professional rooms, garage and large garden. For sale at valuation. Premium—best offer.—No. 1137.

SHROPSHIRE.—Old-established unopposed County PRACTICE. Cash receipts last year £685. Panel 450. Modern house 2 reception, 5 bedrooms, 3 Professional rooms, garage and large garden. Electric light. Rent £[illegible] p.a. Premium—best offer.—No. 1056.

NORTH STAFFS.—Very old-established better working and middle-class PRACTICE. Cash receipts last year £[illegible],431. Panel 1,[illegible]25. Score. Assisted. Excellent house reception 4 bedrooms maid's room, separate larger premises, garage and garden. For sale. Freehold. Premium—Practice—[illegible] years purchase. near offer.—No. 11[illegible].

MANCHESTER.—Well-established mixed Panel and Private PRACTICE in east suburban district. Cash receipts approximate £1,100. Panel about 1,000. Excellent modern house 2 reception 4 bedrooms, maid's room, garage to rent. Freehold may be rented. Premium—[illegible] years purchase.—No. 1115.

NORTH MIDLANDS.—Old-established mixed Panel and Private PRACTICE in County district near large town. Average cash receipts £1,067 p.a. Panel 1,[illegible]0 and transferable appointments £[illegible]00 p.a. Excellent detached house reception 6 bedrooms. Professional rooms, garage and large garden. Price £1,[illegible]50.—Premium—11 years purchase.—No. 111.

NORTH LANCS—YORKSHIRE BORDER.—Old-established unopposed Country PRACTICE in present hands [illegible]0 years. Cash receipts £1,000 p.a. Panel and appointments approximately £4[illegible]0 p.a. Well built house with ample accommodation, central heating, electric light, garage and garden of 2 acres. Rent £[illegible]5 p.a. Premium—£1,500. Valuer's report.—No. 1119.

MONMOUTHSHIRE.—Old established County PRACTICE. Cash receipts last year £[illegible],[illegible]4[illegible] (which latter £[illegible],000 is from contract work. Excellent house, 2 reception 4 bedrooms, maid's room, garage for 2 cars, and garden. Rent £[illegible]5 p.a. or option to lease. Good prospects of increase in income. Premium—best offer.—No. 1134.

LANCS TOWN.—Very old-established mixed Panel and Private PRACTICE. Cash receipts last year £1,[illegible]. Panel 1,925. Score. Good house 2 reception, 3 bedrooms, 3 Professional rooms (separate entrance). Premium—Practice—11 years purchase.—No. 11[illegible].

DERBYSHIRE.—Old-established PRACTICE capable of great increase. Cash receipts last year £[illegible]0 (increasing). Panel 86[illegible]. Excellent house 2 reception, 4 bedrooms, 3 Professional rooms (separate entrance) garage and good garden. Premium—Practice and house £1,600.—No. 989.

NEAR LEEDS.—Old-established middle and working class PRACTICE. Cash receipts average £1,000 p.a. Panel 900. Excellent detached house reception 4 bedrooms Professional rooms (separate entrance) garage and garden. Price £1,000. Mortgage can be arranged. Premium—Practice—1 year purchase or near offer.—No. 1125.

All communications to be addressed to the Branch Manager BRITISH MEDICAL BUREAU 33 CROSS STREET MANCHESTER 2.

British Medical Bureau

(The SCHOLASTIC, CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1880)

Tele Address
Triform, Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1

Telephone Euston {1644 / 1645

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical Scholastic and Accountancy business and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult The Manager in all transactions requiring the services of a Medical Agent
Members of the British Medical Association may take advantage of a reduced scale of charges applicable to them

REDUCTION IN FEES

In cases where the Bureau are sole Agents the commission in respect of any sale of goodwill book debts, furniture drugs fittings and other effects (excluding sales of any freehold or leasehold property or of practices, effects etc outside Great Britain) is limited to a maximum fee of Fifty Pounds

FULL TERMS ON APPLICATION

Practices and Partnerships for Disposal — **Full Particulars sent free**

1 SURREY—PARTNERSHIP (after a preliminary Assistantship) in growing residential district about 10 miles from London Cash receipts average about £2 350 p a Panel 1 050 A three eighths share is for disposal at two years purchase

2 LONDON N 7—Increasing PRACTICE of nearly £1 200 p a in thickly populated district Panel 1 316 Premises to rent Premium £2 400

3 LONDON, N W—Medical Woman's PRACTICE over £800 p a in growing district Panel 740 House for sale or rent Premium 12 years purchase Appointments worth £250 p a additional possibly transferable

4 S E COAST—PARTNERSHIP (with succession) in non dispensing Practice about £2 000 p a Very small panel Attractive house for sale or rent Premium 7/10ths share two years purchase Hospital and possible vacancy for physician in two or three years

5 SURREY—PARTNERSHIP in Practice of about £3 000 p a in residential district Panel 630 Modern house (4 bedrooms) garage garden To rent Preference would be given to an F R C S One half share £3 000

6 E ANGLIA—PARTNERSHIP in country Practice of about £2,200 p a within easy distance of coast Panel 1 300 Well built house to rent One third share two years purchase with succession in five years

7 LONDON E C—PARTNERSHIP (with good scope for private practice in a specialty) in Practice mostly derived from valuable appointments Share of £800 to £1 000 at first at two years purchase Partner must possess the M D or M R C P or F R C S and preferably have City connections

8 S WALES COUNTY TOWN—PARTNERSHIP in Practice £2 800 p a Panel over 1,000 Visits 5/- to £1 1s medicine extra One half share on reasonable terms Partner must hold F R C S Eng Hospital and excellent opportunity for surgical scope and appointment on staff Preliminary Assistantship

9 ESSEX (Borders of Epping Forest)—PARTNERSHIP in steadily increasing Practice over £3 600 p a in growing residential district Panel 1 700 House obtainable One fourth share at two years purchase Cottage hospital Scope for anæsthetics

10 S E COAST—PARTNERSHIP in non dispensing Practice about £4 500 p a Panel 1 400 One fifth or one fourth share at two years purchase Preliminary Assistantship Scotsman preferred

11 LONDON N 12—Middle class increasing PRACTICE in growing district Receipts past year, £420 Panel 165 Modern house sharing house for sale or rent Premium £630

12 S WALES—Contract and small private panel PRACTICE over £1 900 p a in industrial district Panel over 2 100 House with surgery premises to rent Prospect of appointment Premium £3 500

13 S COAST HEALTH RESORT—OPHTHALMIC PRACTICE Receipts 1938 £1 600 House to rent Unlimited scope Premium one year's purchase

14 LONDON SW—ELECTRO-THERAPEUTICAL PRACTICE Receipts 1937 £1 727 Large consulting room and treatment room to rent Premium £1 600, plus apparatus valued about £750

15 LONDON N—LOCK-UP PRACTICE £390 p a run by medical woman Panel 327 Rent at surgery 25/- weekly Good scope Premium 14 years purchase

16 S COAST HEALTH RESORT—Non dispensing PRACTICE £1 250 p a No panel but ample scope Commodious house for sale Premium £2 500

17 DEATH VACANCY—ESSEX SUBURB—Receipts average £989 p a Panel 733 Well situated house for sale Scope

18 N WALES—Popular seaside resort Good class chiefly non dispensing PRACTICE averaging £870 p a No panel Excellently situated detached residence for sale Good scope Premium two years purchase

19 LONDON E—Cash and panel PRACTICE averaging £2 800 p a Panel 4 300 House (5 bedrooms) Rent £136 p a Scope Premium two and a half years purchase to include drugs etc

20 W MIDLANDS—PARTNERSHIP in Practice averaging £6 000 p a in market town Panel 3 500 One sixth share at first at two years purchase Incoming partner should be aged 28/30 and able to do general surgery and minor E N and T work Hospital Preliminary Assistantship

21 N MIDLANDS—PRACTICE in residential district near progressive town Receipts 1937 £770 Panel about 100 Choice of two houses for sale Good scope Premium £800

22 S OF ENGLAND—Well established SANATORIUM for the open air treatment Receipts at present at rate of about £3 000 p a Premium £1,000 to include furniture etc

23 LONDON, S E—PRACTICE averaging £800 p a in populous suburb Panel 800 Detached double fronted house Price of leasehold £1 250 Scope Premium £1 750

24 FRENCH RIVIERA—Old-established PRACTICE M D essential Vendor at present in England

25 S W ENGLAND—Country PRACTICE over £1 400 in beautiful part Panel about 1 100 Exceptionally nice modern house standing in own grounds for sale Hunting and shooting Scope Premium two years purchase

26 CENTRAL LONDON PRACTICE—Better class part of comfortable West End family flat Larger lock up branch 10 minutes distant Both increasing Panel 1 650 Receipts past year £1 698 (average £1 460) 2 years purchase

27 S E COAST—PARTNERSHIP in Practice averaging £4 100 p a, in growing resort Panel 1 350 Good house (4 bedrooms) to rent One fifth share at first at two years purchase

28 Consulting Ear Nose and Throat PRACTICE in industrial city Receipts average £1 350 p a (in addition appointments worth about £850 p a) Centrally situated house to rent Purchaser should hold F R C S and have specialist experience Premium two years purchase

29 KENT—PRACTICE in developing district 12 miles from London Receipts past year over £500 Panel about 465 House (5 bedrooms) to rent Ample scope Premium £750, to include drugs etc

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)
(Founded 1892)

Tele Address *Triform Westcent—London* — TAVISTOCK HOUSE SOUTH TAVISTOCK SQUARE W.C.1 — Telephone Euston 1641 1645

Practices and Partnerships for Disposal (continued)

20 BIRMINGHAM—Medical Woman's PRACTICE averaging £1,200 p.a. Panel nearly 900. Good house with garage and garden. Price £500 leasehold. Scope. Premium one and three quarter years purchase.

31 S. AFRICA—PARTNERSHIP in lucrative Practice in Natal. Share worth about £1,800 p.a. at first to one year's purchase. Applicant should be competent surgeon and preferably an F.R.C.S.

32 WEST END near Lord's Cricket Ground—PRACTICE averaging about £1,900 p.a. in ideal residential part. Panel about 1,500 with prospects of good increase. Well built detached double fronted house with garage and nice sized garden. Good introduction. Premium £3,...5

33 W. MIDLANDS—PARTNERSHIP in non dispensing Practice about £5,750 p.a. in county town. House to rent. One fourth share at two years purchase. Aged about 30 with F.R.C.S. preferred. Preliminary Assistantship.

34 MIDDLESEX—PARTNERSHIP in steadily increasing town Practice about £2,000 p.a. Panel 1,800. House to rent. Premium one half share two years purchase. Applicant should be English or Scottish.

35 SURREY—Medical Woman's PRACTICE over £300 p.a. in outlying suburban district. Panel 1,000. House for sale or rent. Scope. Premium £1,000.

36 S. AFRICA—Medical Woman holding D.O.M.S. required in Ophthalmic Practice. Experienced in operative work and not over 30 preferred. SHARE about £1,000 offered after ASSISTANTSHIP.

37 SUSSEX—PARTNERSHIP in good-class Practice nearly £2,000 in favourite market town. Panel about 1,200. House to rent. Share of £1,000 at two years purchase. Preliminary Assistantship.

38 S. COAST—PARTNERSHIP in Practice over £3,000 p.a. in seaside resort. Panel about 2,000. Semi-detached house (5 bedrooms) for sale or rent. Premium one half share £1,000. Excellent hospital and scope for surgery.

39 MIDLANDS—Country PRACTICE over £1,300 p.a. in hunting district. Panel 540. Good house (5 bedrooms) garage and wood garden. Main water and electricity. Price £1,400 freehold. Premium two years purchase.

40 N.E. ENGLAND—PARTNERSHIP in non panel Practice doing about £6,000 in one of the chief towns. House available. One sixth share at two years purchase. Partner should be surgically inclined.

41 S. COAST HEALTH RESORT—PARTNERSHIP in Practice about £1,500 p.a. Panel over 1,100. House to rent. Premium two fifths share £1,250 to include drugs etc.

42 N. OF ENGLAND INLAND SPA—PARTNERSHIP in Practice about £1,900 p.a. Panel 1,200. Excellent house for sale. Premium one half share £1,800.

43 S. COAST—PARTNERSHIP in non dispensing Practice over £5,000 p.a. in health resort. Panel about 600. Share worth about £900 at two years purchase.

44 WEST END OF LONDON—Good class non dispensing PRACTICE. House £1,150. No panel. Large house to rent. Premium lease and practice £3,000.

45 BUCKS—PRACTICE in growing town. Receipts last year £594. Panel about 700. House for sale. Well equipped hospital. Premium £1,500.

46 LONDON W.6—Non dispensing PRACTICE £1,000 p.a. Pleasant suburb. No panel. House (5 bedrooms) garage and garden. Premium house and practice £2,500.

47 ESSEX—Country PRACTICE about £700 p.a. Panel about 450. Very good house (5 bedrooms) garage and garden. Rent £65 p.a. Premium £500.

48 LONDON S.W.—Medical Woman's PRACTICE about £900 p.a. in outlying suburb. No panel. Suitable accommodation available. Premium £950.

49 SURREY—Medical Woman's PRACTICE about £500 in developing district. No panel. Rent of house £100 p.a. Scope. Premium £500.

50 PARTNERSHIP in increasing Ear Nose and Throat Practice in provincial town. Partner must hold F.R.C.S.

51 MIDDLESEX—FOURTH PARTNER required in Practice over £7,000 p.a. in residential district on the Thames. Panel 1,600. House (5 bedrooms) to rent. Scope. Premium (30ths share £3,100.

52 LONDON N.W.—PARTNERSHIP in Practice averaging about £5,200 p.a. Panel about 6,000. Maisonette (2 bedrooms etc.) to rent. One fifth share at first at two years purchase.

53 N.E. COAST—Middle and better working class PRACTICE over £1,150 p.a. in seaport town. No panel. Private residence for sale. Premium £750 to include furnishings etc. of consulting rooms or near offer.

54 LONDON W.9—PRACTICE doing between £900 £950 p.a. in residential district. Panel about 600 but plenty of scope. Rent of maisonette (5 bedrooms) £...00 p.a. Premium £1,000 or offer.

55 LONDON N.W.4—Middle class PRACTICE about £800 p.a. in developing part. Panel 300. House (3 bedrooms) for sale or rent. Scope. Premium £1,...50.

56 HOME COUNTY—FOURTH PARTNER required in Practice in growing town. Panel 3,000. Incoming partner must be energetic aged about 30 (married preferred) with a leaning towards medicine. Initial share about £1,250 p.a. Premium £3,000. Preliminary Assistantship.

COLONIES—Number of Colonial PRACTICES. Incomes range from about £750 p.a. upwards.

Purchasers can raise additional capital for the purchase of approved practices or shares. Particulars will be forwarded on application.

All communications to be addressed to The Manager

Manager W. M. SCOTT — *Telephone Edinburgh 3969*

SCOTTISH BRANCH, 21, Alva Street, Edinburgh, 2

FOR DISPOSAL

A. S. OF SCOTLAND—Country PRACTICE in lovely district. Receipts approximately £1,000. Panel 760. Exceptionally convenient house. Price £2,000. Premium for practice one and a half years purchase.

B. S. OF SCOTLAND—Country PRACTICE. Receipts approximately £1,600. Suitable house.

C. SCOTLAND—Old-established City PRACTICE. Receipts approximately £2,400. Panel 2,500. House price £900. Premium two years purchase or near offer.

D. YORKSHIRE—Country PRACTICE. Receipts £1,200. Panel 800. Excellent house with garage. Price £1,200 freehold. Premium one and three quarter years purchase.

E. E. OF SCOTLAND—Country town. Receipts last year £685 (appointments £112 panel 565). Excellent house with garage and garden. Price £1,450. Premium £1,000.

F. N. OF SCOTLAND—Country PRACTICE long established. Receipts approximately £1,000. Panel 275.

G. WALES—PARTNERSHIP in country town. Receipts £1,200. Panel over 1,000. Suitable house. Price £800. One half share at one year's purchase.

H. EDINBURGH—PRACTICE doing £450. House must be bought. Premium practice and house £1,650.

I. EDINBURGH—PRACTICE about £400. Suitable house to rent. Reasonable offer considered.

For further details apply The Manager 21 Alva Street Edinburgh.

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager to whom all communications should be addressed.

RELIABLE LOCUMS and ASSISTANTS are URGENTLY REQUIRED by ALL OFFICES of the BUREAU

INDEX TO ADVERTISEMENTS

PUBLISHERS
British Medical Association 3 24
Churchill J & A Ltd 2
Lewis H K & Co Ltd 2 3

ASSURANCE & INSURANCE
Century Insurance Co 42
Medical Defence Union Ltd Supp i
Medical Insurance Agency 44

BANKS & FINANCE
British Medical Finance Ltd 2

CHEMISTS
Bell & Croydon Ltd Supp iii
British Drug Houses Ltd 11 13
British Felsol Co Ltd Cover ii
Burroughs Wellcome & Co 21
Boots Pure Drug Co Ltd 14
Carnrick G W Co Cover iv
Coates & Cooper Ltd 9
Dinneford & Co Ltd 12
Eli Lilly & Co Ltd 19
Evans Sons Lescher & Webb Ltd 16
Fairchild Bros & Foster 9
Gedeon Richter Laboratories 11
Glaxo Laboratories Ltd 12
Iron Jelloid Co Ltd 8
Kaylene Ltd 16
Organon Laboratories 23
Parke Davis & Co 15
Pearson E T & Co Ltd 9
Peat Products Ltd 8
Reeves Remedies Ltd 24
Smith Martin H & Co 14
Wander A Ltd 10
Wright Layman & Umney Ltd Supp ii

FOODS, BEVERAGES
Borwick George & Sons Ltd 6
Genatosan Ltd 18
Hovis Ltd 48
Husband J K & Co Ltd 8
Polley & Co Ltd 24
Ryvita Co Ltd 17
Valentine's Meat Juice Co Cover ii
Wander A Ltd 13

MOTORS & ACCESSORIES
Brooklands Motor Supp i
Henlys 5
Lodge Plugs Ltd 2

NAME PLATES, etc
Cooke's Ltd 24
Hall F B & Co 24
Herd S J & A 24
Osborne F & Co Ltd 24
White Bronze Co 24

PRINTING, TYPEWRITERS, etc
Taylor's Typewriters 24

SURGICAL APPARATUS
Compri Vent Ltd 2
Curtis H E & Son Ltd Supp iii
Hanger J E & Co Ltd 7
Hilliard 24
Leslie's Ltd 6
Salt & Son Ltd Supp iv
Smith & Nephew T J Ltd 22

TAILORING & CLOTHING, etc
Regent Dress Co 24

TOBACCO & CIGARETTES
Wills's Three Castles 4

VACCINES & SERA
Allen & Hanburys Ltd 20
British Drug Houses Ltd 10

X-RAYS & ELECTRO-MEDICAL
Allen & Hanburys Ltd 6
Portable X Rays Ltd 2

HOMES & INSTITUTIONS
Pages 25 26 27 28 30

HOUSE AGENTS
Page 40

HOSPITALS & CLINICS
London Clinic 29
Ruthin Castle 27

SANATORIA
Cornish Riviera Sanatorium 28
Cotswold Sanatorium 28
Montana Hall 28
Mundesley Sanatorium 28

SPAS, HEALTH RESORTS, & HYDROS
Czechoslovakia 29
Harrogate 29
Pistany Spa 29
Smedley's Hydro 28

MEDICAL SCHOOLS, TUTORS, & LECTURERS
Pages 28 30 31

NURSING, etc
Page 3

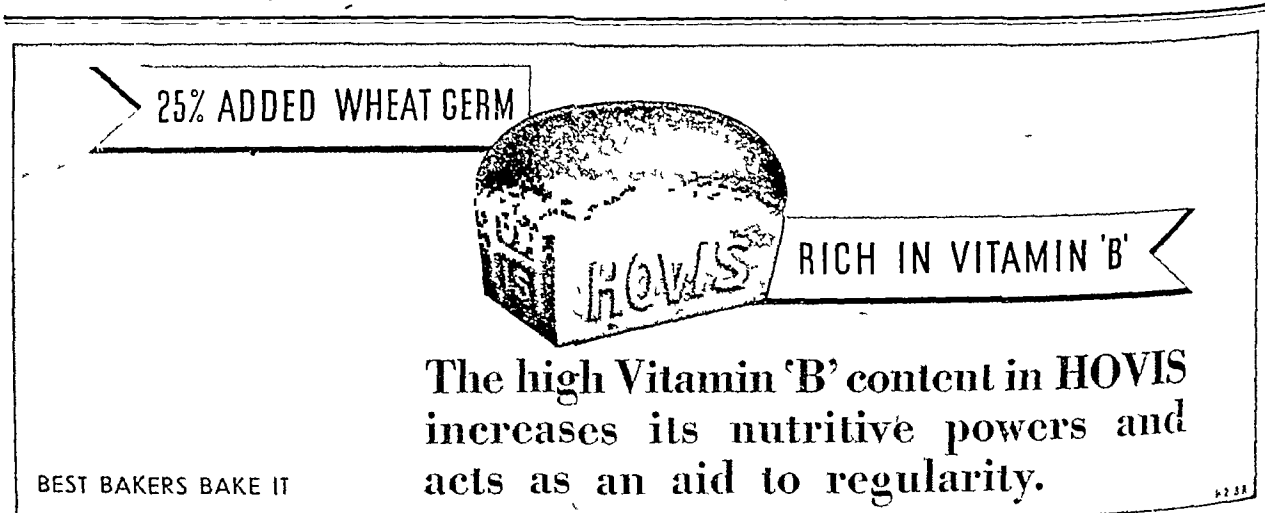
TRANSFER AGENTS
Bovril-Medical Agency Cover i
British Medical Bureau 45 46 4
Lee & Martin Ltd 43
Medical Agency Ltd 43
Peacock & Hadley Ltd 4
Turner P Ltd 4
Western Medical Agency 43

CONTRACT PRACTICE
Page 37

HOSPITAL VACANCIES, etc
Pages 31 32 33 34 35 36 37 41 4

CLASSIFIED ADVERTISEMENTS—(Wanted & Vacant)
Pages 38 39

GENERAL
British Electrical Dev Assn 4
White H Mfg Co Ltd 3



Published by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Eyre and Spottiswoode Limited East Harding St Fleet St, London E C 4 Printed in Great Britain Entered as Second Class at New York U S A Post Office

BOVRIL MEDICAL AGENCY, LTD.

ALDINE HOUSE

10 13 BEDFORD STREET, STRAND, LONDON W C 2

Telegrams BOVMEDICAL PICCY LONDON Telephone TEMPLE BAR 1616 (3 Lines)

Chairman and Managing Director, Dr J TILLYARD HALL.

The maximum commission payable on the sale of any Practice or Partnership in Great Britain placed exclusively in the hands of this Agency is £50 (fifty pounds), which sum covers goodwill drugs surgery fittings fixtures and furniture instruments and book debts but not house property Schedule of Terms will be forwarded on application

Accountancy and legal services furnished by the Agency where desired at moderate inclusive charges No charge is made to Principals for the introduction of Locum Tenens or Assistants

1 SOUTH [illegible] ...ired partner (after preliminary assistant [illegible] ...ished mixed-class Practice Share to produce ...ith ample scope for development Rent £90 p a Premium 2 years purchase Salary during preliminary assistantship at rate of £600 p a

2 COUNTY TOWN WITHIN 170 MILES WEST OF LONDON — PARTNERSHIP —A HALF SHARE in well-established good-class Practice producing approximately £2 500 p a including large panel Fees 2 6 to 15 Low expenses Purchaser can choose his own house as Practice is worked from central surgery Premium 1½ years purchase Ingoing partner should be experienced and under 30

3 SURREY —WITHIN 15 MILES OF LONDON —PARTNERSHIP — ONE HALF SHARE in very good mixed-class Practice situated in growing residential district Gross cash receipts approximately £3 000 p a with substantial panel Very nice house with all modern conveniences and beautiful garden (2 reception 4 bedrooms etc) Can be rented or purchased Premium 2 years purchase

4 LONDON S W —Well-established mixed-class PRACTICE producing for Last 12 months £450 including panel of 120 Flat can be rented at £75 p a Premium £1 250

5 LONDON EAST —Middle and working-class PRACTICE producing over £500 p a with good scope Panel of about 450 Fees from 2 Ten roomed semi-detached house Price for lease £1 500 Premises £400 to include drugs surgery fittings etc and ingoing furniture

6 ESSEX COAST —PARTNERSHIP —A retiring partner is required in well established Practice Suitable house available Premium 2 years purchase Further details upon application

7 DEVON COAST —POPULAR HOLIDAY RESORT —Well-established PRACTICE averaging for past 3 years £1 640 p a including panel of 400 Suitable house and accommodation Freehold £1 000 or part rent Premium £450

8 NORTH WALES COAST —Good middle-class non-panel PRACTICE averaging about £900 p a with good scope Detached house overlooking beautiful bay with private promenade South facing Good class practice Premium 2 years purchase Ill health reason for sale

9 LINCS —MARKET TOWN —Well-established PRACTICE in prosperous district producing present £500 p a including panel of 1 357 Well built house (4 reception 7 bedrooms) rent £75 p a Premium 1½ years purchase or may be offered on lease Good practice

10 NORTHUMBERLAND —Choice PRACTICE in picturesque sporting district producing about £1 550 p a Panel of 300 Very easily worked Suitable house Price £1 600 Premium 1½ years purchase

11 WEST MIDLANDS —PARTNERSHIP with success assured in 2 or 3 years Mixed-class Practice in attractive country town in very pleasant surroundings Average receipts for last 3 years £1 8[illegible] p a Panel of about 850 Old-established house available 3 reception, large lounge hall billiard room 5 bedrooms etc excellent Practice accommodation private garden garage Premium for half share £1 650

12 BEDS —PARTNERSHIP —ONE THIRD SHARE in well-established mixed-class Practice producing £1 675 p a Panel of 760 Suitable house easily obtainable Premium £1 000 Definite scope

13 WELSH COAST —Well-established good mixed PRACTICE producing over £1 000 p a, including panel of 1 450 Suitable house with ample accommodation, good garden and garage Rent £50 p a Premium £1 000 for quick sale

14 SURREY —RAPIDLY EXPANDING DISTRICT —PRACTICE at present produces about £700 p a but could be much increased Panel of 3 00 (to be secured) No midwifery Excellent house with all modern conveniences Premium for Practice and house £3 000

MIDLANDS —GOOD RESIDENTIAL COUNTRY DISTRICT —Compact PRACTICE producing £700 p a with good prospects Choice of 2 houses Moderate premium 11 health reason for sale

DEATH VACANCY —LONDON S W —Old-established PRACTICE producing about £1 600 p a panel 1 100 Suitable house on lease at £50 p a Premium 2 years purchase

SUSSEX —PARTNERSHIP with preliminary assistantship in excellent small good-class Practice Share to produce about £1 000 p a House on rental Partner to arrange rent to suitable applicant

S W ENGLAND —FAVOURITE COAST TOWN —HALF SHARE after preliminary assistantship in chief better-class Practice producing nearly £2 000 p a Small panel Choice of residence Must be experienced and preferably known to PATIENT Premium 2 years purchase part by arrangement

NORTHANTS —Old-established County PRACTICE averaging £1 600 p a Panel 1 500 Practically unopposed Premium 1½ years purchase Long partnership if satisfactory

LONDON S E.—Well-established PRACTICE, chiefly cash Receipts approximately about £1 050 p a with panel and club producing over £400 p a Can be run as a locum tenens Suitable premises available Premium 2 years purchase

LONDON —WESTERN DISTRICT —NEW ESTATE —Established about 12 months Receipts £500 p a Panel of 600 PMS 0 patients Temporary accommodation Purchaser can build own house It is believed there is considerable scope for increase

LONDON S W —RESIDENTIAL DISTRICT —Good middle-class PRACTICE producing about £1 400 p a including panel of 500 patients and appointment worth about £200 House on rental Good scope for energetic worker Premium 2 years purchase or near offer

SURREY —Well-established increasing PRACTICE situated in developing residential district Gross cash receipts for last 12 months about £900 including panel of about 500 Small compact freehold house Price £850 part on mortgage or would rent at £45 p a Premium £1 500 Ample scope for energetic worker

4 GROWING RESIDENTIAL DISTRICT WITHIN 10 MILES OF LONDON —Recently established upper and middle-class PRACTICE producing about £700 p a with definite scope for increase Selected panel of 22 Fees 5 guineas Prominent corner house with 2 reception 5 bedrooms Separate entrance to Professional rooms Well laid out garden House on rental Premium 1½ years purchase

5 SURREY —PARTNERSHIP —ONE HALF SHARE in developing middle and better working-class Practice in favourite residential hospital town Gross cash receipts for last 12 months £1 960 Panel of 900 Low expenses Well built house with 2 reception 4 bedrooms etc Rent £100 p a Ingoing partner should be experienced aged 25–30 and able to do some surgery Premium 1½ years purchase for quick sale

26 LONDON S W —WITHIN EASY REACH OF CITY AND WEST END — Well-established cheap middle and better-class PRACTICE with surgery scope producing about £1 450 p a Selected panel of 45 Fees 5 and 6 Good sized first floor flat with 3 entrances Purchaser should be able to do surgery and LRCS would be advantageous

27 LONDON W C —Well-established PRACTICE producing nearly £1 700 p a Average £1 440 Panel 1 640 Suitable accommodation available but surgery premises used as locum rental Premium 2 years purchase

2 LONDON —WESTERN DISTRICT —Old-established non-dispensing panel PRACTICE producing about £1 000 p a Capable of expansion especially if panel work undertaken Well situated corner house on main road with ample accommodation Premium 1 year purchase Practice would be sold apart from house if wished

29 SOUTH WALES —Old-established mixed PRACTICE producing last year £1 700 of which £1 050 is from private practice panel Suitable house available Future prospects are considered to be good as new works have recently been erected in the district Premium £3 500

30 LADY DOCTORS PRACTICE —BIRMINGHAM —Old-established PRACTICE producing last year over £1 400 p a including about £400 from panel Fees 5 guineas Mainly hospital Surgery about 120 cases p a Suitable house available Premium 1½ years purchase would take £1 000 cash for quick sale

31 KENT COAST —FAVOURITE SEASIDE RESORT —Old-established middle-class PRACTICE producing about £6 0 p a Small panel 200 patients Very good house in best part of the town with ample accommodation Freehold available Premium £1 200 Eminently suitable for retired army officer wishing to augment pension or for business for young man

32 SUSSEX —FAVOURITE COAST TOWN —Old established PRACTICE producing about £900 p a including panel which brings in about £150 p a Good house on two floors 2 reception 4 bedrooms etc Freehold for sale Premium 2 years purchase

33 SOUTH COAST SEAPORT —PARTNERSHIP —ONE THIRD SHARE available in old-established and rapidly increasing Practice which last year produced approximately £3 355 including a panel of over 1 600 patients Purchaser can choose his own residence Practice is conducted from central surgery and the expenses are not high

34 LADY DOCTORS PRACTICES —Several available Full details on application

35 NORTHANTS —ASSISTANTSHIP with view to Partnership in an old established country Practice with good future prospects Initial salary £400 p a, including car allowance the assistant to live out Full details on application

36 MIDLANDS — FAVOURITE COUNTY TOWN — SURGICAL OPENING —A QUARTER SHARE (after preliminary assistantship of 3 months) is offered in old-established increasing Practice producing approximately £3 000 p a Panel of about 1 500 One appointment worth about £1 5 p a Fees 5 to 30 No dispensing Suitable house with garage and garage Rent £65 p a Premium 2 years purchase part by arrangement Ingoing partner should be under 35 experienced and able to do some surgery

37 SOUTH OF ENGLAND —COAST TOWN —PARTNERSHIP —A HALF SHARE in good mixed-class Practice established over 100 years, averaging approximately £3 000 p a with substantial panel Appointments worth about £100 p a Suitable house on rental at £100 p a Premium 2 years purchase

38 MIDDLESEX —PARTNERSHIP —ONE HALF SHARE in increasing Practice producing approximately £1 000 p a Panel of 600 and increasing House with 2 reception 3 bedrooms etc Rent £100 p a Premium 2 years purchase

39 LONDON S E.—Old-established chiefly mid-class PRACTICE producing for last 12 months £1 284 p a Panel of 650 Suitable house on rental Premium 2 years purchase or near offer

40 SOUTH AFRICA —PARTNERSHIP —Good surgical opening Present receipts about £2 000 p a with ample scope for expansion with aid of suitable partner Full details on application

41 SOUTH WALES COAST —PARTNERSHIP —ONE HALF SHARE in old-established middle and working-class Practice producing over £1 000 p a. Panel of 2 300 Good house with ample accommodation Large garden Freehold for sale Premium £3 500 part by arrangement

42 [illegible] mixed-class PRACTICE producing receipts 3 6 to 10 6 Detached house with good [illegible]ht rent Premium £1 500

43 [illegible] NTRY DISTRICT —PARTNERSHIP — [illegible]stablished mixed-class Practice producing good scope Panel brings in about £700 p a Rent £50 p a Very reasonable premium for quick sale

44 SOUTH MIDLANDS —PARTNERSHIP —A HALF SHARE in old established good-class country Practice in beautiful district Gross cash receipts approximately £3 000 p a., including panel of about 2,000 Very nice house with garden and garage Freehold for sale Very good hunting shooting and other sport Premium 2 years purchase

The Agency has made arrangements for special facilities, on very favourable terms, to be afforded to approved purchasers for the advance of part of the premium for any suitable practice or partnership Full details on application.

THELESTRIN

OVARIAN FOLLICULAR HORMONE

A standardized preparation of the ovarian follicular hormone for intensive ovarian therapy by hypodermic injection.

Indicated in the treatment of scanty menstrual flow, amenorrhoea and the vasomotor and nervous symptoms of the menopause.

Boxes of 6 1-cc. ampoules. 2,000 international units in oil.

G. W. CARNRICK CO.
20 Mt. Pleasant Ave., Newark, N J., U S A

DISTRIBUTORS

BROOKS & WARBURTON, LTD
240 Vauxhall Bridge Road, London, S W. 1

BRITISH MEDICAL JOURNAL

JOURNAL OF THE

BRITISH MEDICAL ASSOCIATION



SATURDAY AUGUST 6 1938

PRINCIPAL CONTENTS

Physiological Approach to Fitness	p 273	Leading Articles	p 291
Skiagraphy of the Chest	276	Scientific Sections at Plymouth	301
Cl Welchii Infection following Abortion	279	Correspondence	315
Phases in Life History of the Polymorph Leucocyte	281	Surgery in General Practice. Forearm Bone Fractures	296
Chemotherapy in Gonorrhoea	283	Reviews	288
X-Ray Pelvimetry	284	Epidemic Situation in China	300
		Psychotherapy Congress	298

WITH SUPPLEMENT AND EPITOME

LONDON

BRITISH MEDICAL ASSOCIATION

TAVISTOCK SQUARE

No 4048 WEEKLY PRICE 1/3

Copyright

REGISTERED AS A NEWSPAPER

No 14b

'Elastoplast' in the treatment of varicose ulcers



THIS technique is one of many shown in detail in the sectionalised film, " The Use of 'Elastoplast' in Modern Surgery " If you would care to see it, please communicate with *T J Smith & Nephew, Ltd , Dept B* 12, *Hull*, for details of its exhibition

B M A BRANCH Secretaries are invited to write for available dates for projections

Elastoplast THE MODERN SURGICAL DRESSING

ELASTIC ADHESIVE BANDAGES, PLASTERS, DRESSINGS

BRITISH MEDICAL JOURNAL

AUGUST 6 1938

TABLE OF CONTENTS

ADDRESSES AND PAPERS

The Physiological Approach to Fitness E P CATHCART M D D Sc F R S 273

Skiagraphy of the Chest GEORGE JESSEL D M 276

Three Cases of Cerebral Infection following Abortion R Y DAWBARN M D and BRYAN WILLIAMS M D F R C S Ed 279

Phases in the Life-history of the Polymorph Leucocyte C J BOND F R C S 281

Chemotherapy in Gonorrhoea F J T BOWIE M B 283

X-Ray Pelvimetry A ORLEY M D 284

CLINICAL MEMORANDA

Pneumococcal Meningitis treated with Sulphanilamide Recovery FREIDA YOUNG M B 286

Polyneuritis with Oedema simulating Beriberi E B GARPETT M B 287

REVIEWS

Celsus Redivivus 288
Organic Chemistry 288
Necropsy on a Gorilla 288
Defence of the Ego 289
Diet and Blood Pressure 289
Gastro-intestinal Pain 289
Notes on Books 290

SURGICAL SERIES

Fractures of Shafts of Forearm Bones E W HEY GROVES M S F R C S 296

GENERAL ARTICLES AND NEWS

Psychotherapy Congress at Oxford 298
Epidemic Situation in China 300
Nova et Vetera
Annals of Medical History 301
PREPARATIONS AND APPLIANCES 290
MEDICAL NOTES IN PARLIAMENT 322
UNIVERSITIES AND COLLEGES 321
MEDICAL NEWS 320

LEADING ARTICLES

Pelvic Measurements 291
Quack Medicines and Obscurantism 292

ANNOTATIONS

Sociological Aspects of a Derelict Area 293
The Corpus Luteum 294
Chemotherapy in Gonorrhoea 294
Interdepartmental Committee on Abortion 295
Blood Change in Experimental Tuberculosis 295
E F Harrison and Gas Defence 295

SUPPLEMENT

PROCEEDINGS OF COUNCIL

Oversea Conference

Annual Meeting Notes

CORRESPONDENCE
POSTGRADUATE NEWS
DIARY OF SOCIETIES
MEETINGS OF DIVISIONS
NAVAL MILITARY AND AIR FORCE APPOINTMENTS
ASSOCIATION NOTICES VACANCIES AND APPOINTMENTS DIARY

THE SERVICES

Naval Medical Compassionate Fund 320
Deaths in the Services 320

LETTERS AND ANSWERS

Green Stools at 74 320
Finger prints of Twins 320
Syphilis in South Africa 320
The Medical Directory 320
Protest from Valhalla 320
Unilateral Nystagmus 320

EPIDEMIOLOGY SECTION

EPIDEMIOLOGICAL NOTES 328
TABLE OF INFECTIOUS DISEASES AND VITAL STATISTICS 29

CORRESPONDENCE

Abortion and the Law F M R WALSHE M D 315
Cancer of the Lung VERNON C THOMPSON F R C S 316
Injection Risks E W HAYWARD F R C S Ed 317
Sulphanilamide for Meningococcal Meningitis F J O MEARA D 317
Echo-pubic Osteochondritis G D F McFADDEN F R C S 317
Undescended Testicle DENIS BROWNE F R C S JOHN HOSFORD F R C S 318
Irradiation or Surgery for Cancer? E R G PASSE F R C S 318
Hormone Therapy in Mastitis and Breast Cancer V A LOESER L R C S 319
Placenta Praevia H R PEARSON M B 319
Psychosomatic Illness CHARLES BERG M D 319
Treatment of Carbuncles P K BANERJEE M B 320
Thrombocytopenic Purpura from Sedormid F E LOEWY M D 320
Effects of Smoking E SAKOSCHANSKY M R C S 320
Bridge Paul Pulsator ROBERT W PAUL M I E E 320

THE SECTIONS

Summary of Proceedings

Medicine 301
Surgery 302
Obstetrics with Public Health 303
Orthopaedics with Physical Medicine 304
Diseases of Children 305
Neurology and Psychological Medicine 306
Pathology and Bacteriology 307
Radiology 308
Pharmacology 310
Physiology and Biochemistry 311
Tuberculosis 312
Ophthalmology 313
Obstetrics 313

REPORTS OF SOCIETIES

ROYAL SOCIETY OF TROPICAL MEDICINE Nutritional Macrocytic Anaemia in Macedonia 314

A KEY TO CURRENT MEDICAL LITERATURE will be found at the end of the JOURNAL

WRIGHT'S PUBLICATIONS

EMERGENCY SURGERY.

By HAMILTON BAILEY F R C S (Eng) Third Edition Fully Revised Large 8vo 852 pp With 816 Illustrations a large number of which are in colour 30 net postage 8d

Forms a reliable guide and the author merits praise for the high standard which is consistently maintained —THE LANCET

DEMONSTRATIONS OF PHYSICAL SIGNS IN CLINICAL SURGERY.

By HAMILTON BAILEY F R C S (Eng) Sixth Edition Fully Revised 296 pp With 358 Illustrations some of which are in colour 21s net postage 6d

It fully maintains the very high standard of its predecessors —BRITISH JOURNAL OF SURGERY

THE SHIP SURGEON'S HANDBOOK

By BRUCE J MACAULAY M D Recently Published Fcap 8vo 66 pp 3s 6d net postage 2d

A very useful volume '—LLOYD'S LIST & SHIPPING GAZETTE

SYNOPSIS OF PHYSIOLOGY.

By A RENDLE SHORT M D B Sc and C J G PRATT M Sc M D Third Edition Fully Revised 325 pp Illustrated 10s 6d net postage 9d Interleaved for Notes 17s 6d net postage 6d

'There could be no better form of revision than reading through this book It is an exhaustive summary accurate in the main details and the subject is not simplified —THE LANCET

Bristol JOHN WRIGHT & SONS LTD London SIMPKIN MARSHALL LTD

JOHN BALE MEDICAL PUBLICATIONS LTD

MAJOR ENDOCRINE DISORDERS

By S LEVY SIMPSON, M D, M R C P

200 pp, 25 full pages of illustrations, bound in Sundour cloth, price

10s. 6d. postage 6d

85 GREAT TITCHFIELD STREET, W 1

Take THE BURBERRY *With You*



Then, if the bright morning does turn out to be a drenching afternoon, or the warm breeze change to a biting Nor'-east wind, you're certain of being dry and comfortable

Under its protective cover there is comforting warmth on cold days, complete security from penetrating rain, airylight freedom on the closest day

The Burberry, therefore, has the virtues of three coats in one —

DUST-COAT for hot dry
WEATHERPROOF for wet
OVERCOAT when it's cold

Patterns, prices and illustrated models on mention of the "British Medical Journal"

BURBERRYS LTD
HAYMARKET, LONDON, S W 1

H. K. LEWIS & Co. Ltd., Publishers and Booksellers

BOOKSELLING DEPARTMENT { TEXTBOOKS and Works in Medical, Surgical, and General Science FOREIGN BOOKS

PROMPT DELIVERY URGENT ORDERS BY TELEPHONE OR POST CAN BE DISPATCHED FROM STOCK IMMEDIATELY

Telephone EUSton 4282 (5 lines)

Books Advertised or Reviewed in this Journal supplied promptly from Stock or to order

STATIONERY DEPARTMENT Special Stock of Medical Stationery, Card Index Systems, Name Plates, etc
MODELS DEPARTMENT Anatomical Models, Charts, Osteology, etc

MEDICAL AND SCIENTIFIC LENDING LIBRARY
Annual Subscription from One Guinea Prospectus on application
SECOND-HAND BOOKS DEPARTMENT, 140, GOWER STREET, W C 1

LONDON H K LEWIS & Co Ltd, 136, GOWER STREET, W C 1 Telegrams PUBLICAVIT WESTCENT, LONDON

OXFORD MEDICAL PUBLICATIONS

Recent issues

COMMON HAPPENINGS IN CHILDHOOD

By SIR G FREDERIC STILL, K C V O

Pp 188 5s net

THE HISTORY OF BACTERIOLOGY

By WILLIAM BULLOCH M D F R S

Pp 430 36 Illustrations 16 Plates 10s 6d net

DYSMENORRHŒA

its Aetiology Pathology and Treatment

By ALBERT V DAVIS M D Ch M, F R C S

Pp 266 34 Illustrations 1 Colour Plate 12s 6d net

HEART DISEASE AND PREGNANCY

By CRIGHTON BRAMWELL M D F R C P and E V LONGSON M B, Ch B D P H

Pp 206 57 Illustrations 8s 6d net

TEXT-BOOK OF NUTRITION

By J A NIXON, C M G M D F R C P and D G C NIXON M B, B S

Pp 230 9 Illustrations 7s 6d net

A SURVEY OF CHRONIC RHEUMATIC DISEASES

By Thirty Contemporary Authorities

Pp 346 31 Illustrations 18s net

HENNING'S TEXT-BOOK OF GASTROSCOPY

Translated by HAROLD W RODGERS F R C S

Pp 90 26 Illustrations 7 Colour Plates 7s 6d net

THE SCIENTIFIC BASIS OF PHYSICAL EDUCATION

By F W W GRIFFIN, M D, B Ch

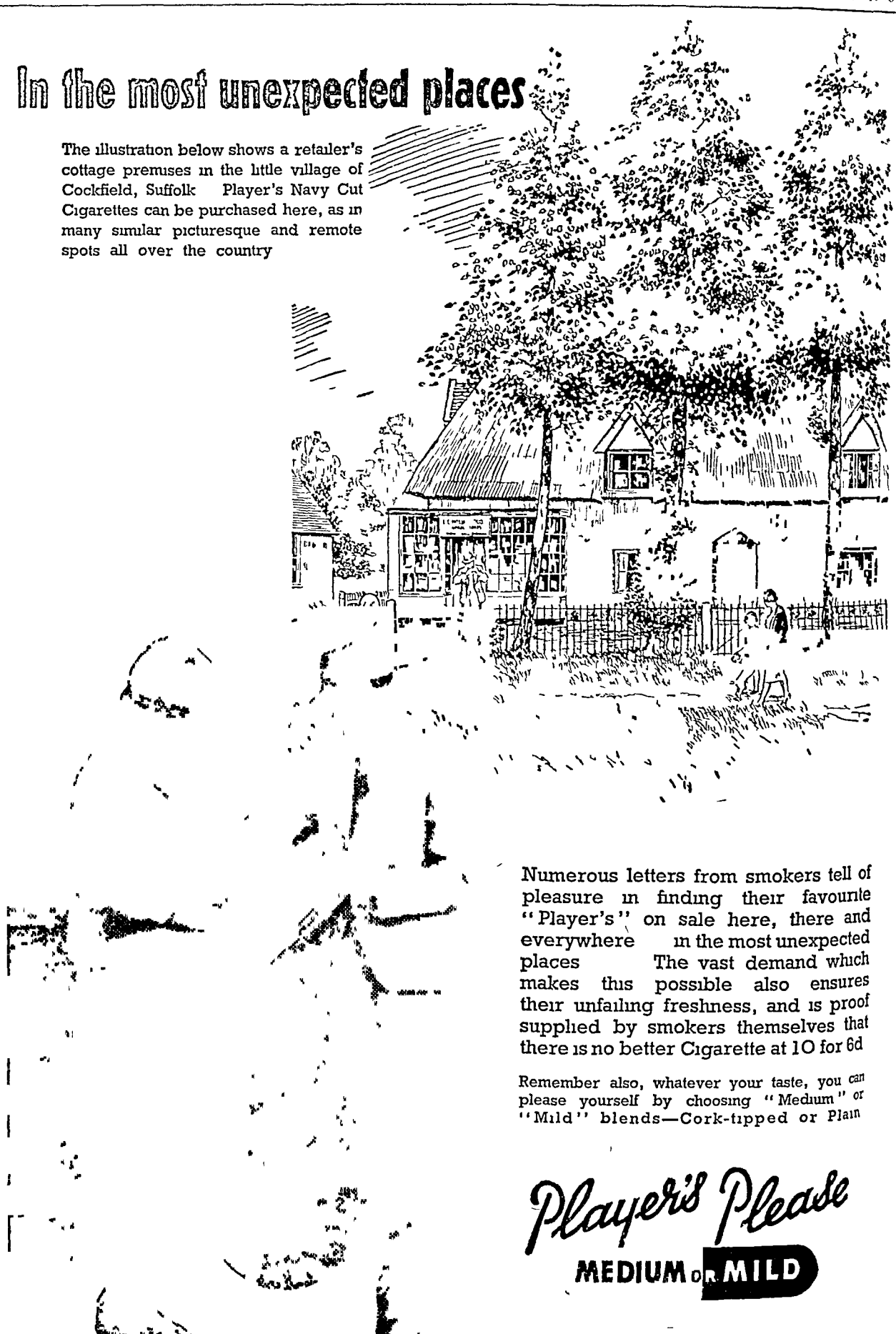
Pp 212 7 Illustrations 7s 6d net

Oxford University Press

AMEN HOUSE. WARWICK SQUARE. LONDON. E.C.4

In the most unexpected places

The illustration below shows a retailer's cottage premises in the little village of Cockfield, Suffolk Player's Navy Cut Cigarettes can be purchased here, as in many similar picturesque and remote spots all over the country



Numerous letters from smokers tell of pleasure in finding their favourite "Player's" on sale here, there and everywhere in the most unexpected places The vast demand which makes this possible also ensures their unfailing freshness, and is proof supplied by smokers themselves that there is no better Cigarette at 10 for 6d

Remember also, whatever your taste, you can please yourself by choosing "Medium" or "Mild" blends—Cork-tipped or Plain

Player's Please

MEDIUM OR MILD

PLAYER'S NAVY CUT CIGARETTES "MEDIUM" OR "MILD" PLAIN OR CORK-TIPPED • 10 FOR 6D 20 FOR 11D

N.C.C.431

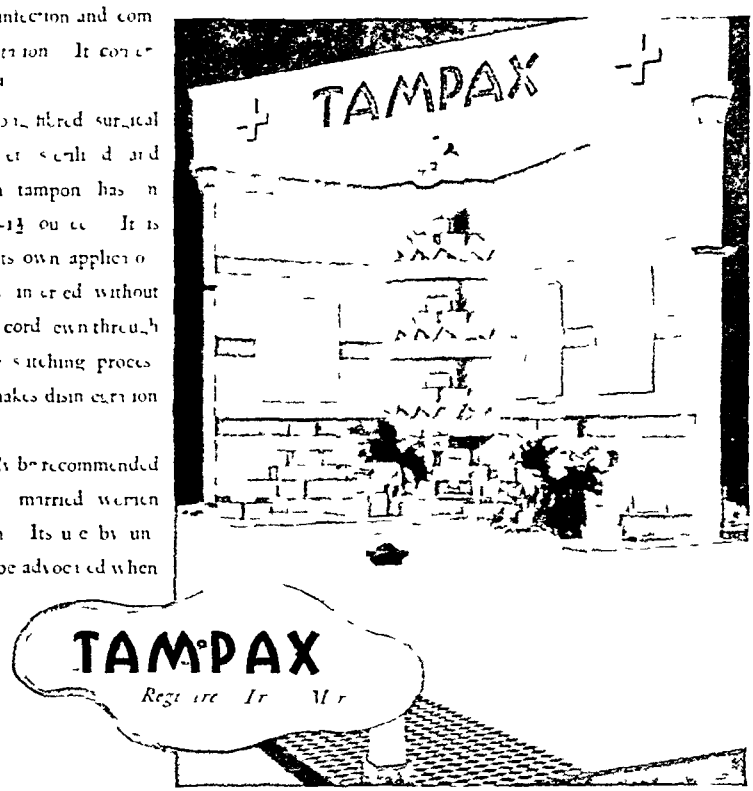
THE Tampax Stand AT THE BRITISH MEDICAL ASSOCIATION EXHIBITION

At the recent B.M.A. Exhibition great interest was aroused by the Tampax exhibit of the new method of sanitary protection. Doctors at once appreciated the significance of this adaptation of the vaginal tampon to menstrual hygiene. Dispensing with applicators Tampax minimises risk of infection and completely eliminates labial irritation. It confers freedom and peace of mind.

Tampax is made of long-fibred surgical cotton wool which has been scrupulously and highly compressed. Each tampon has an absorption capacity of 1—1½ ounces. It is individually sealed with its own applicator enabling it to be correctly inserted without contact with the hands. A cord sewn through the cotton by an exclusive stitching process ensures easy removal and makes disintegration impossible.

Tampax may confidently be recommended by physicians for use by married women during normal menstruation. Its use by unmarried women should not be advocated when the size of the hymenal aperture would cause difficulty in insertion and withdrawal.

We will be glad to send doctors a full-size package of Tampax, together with a leaflet giving more detailed information. Please write to Tampax Ltd. 10 Bolton Street London W.1



MAWMAWMAWM

OXYGEN AND NITROUS OXIDE

an important announcement

MEDICAL BOC SECTION

to physicians, anaesthetists and hospital authorities . . . .

OWING to the increasing demand for its Medical Gas Products, especially Oxygen and Nitrous Oxide, THE BRITISH OXYGEN COMPANY LTD has established a Medical Section which will control the distribution of Gases and Apparatus and the installation of Pipe Line Equipment throughout the United Kingdom

PRICES According to the consumption of the user and the size of cylinders prices have been established which are uniform throughout the country These prices in nearly all cases represent a considerable saving to Hospitals They are the same whether the Company's or privately owned cylinders are used Further saving can be effected by the use of larger cylinders Gases will be sold by "the cylinder" and not by the cubic foot

CYLINDERS Sizes are being standardised—the smaller and odd capacity cylinders are being withdrawn and large numbers of new 20 40 100 and 150 cu ft cylinders are being put into circulation All are being treated in enamel finish and fitted with new easy working Chromium Plated Valves The larger sizes for Oxygen Tent and Pipe Line use are fitted with self supporting ring bases

NO HIRE CHARGES In future no Hire Charges will be made on Medical Gas Cylinders Many thousands of new cylinders are needed to make this important innovation possible and the co-operation of customers is requested in the matter of the speedy return of empties

DELIVERY SERVICE Our fleet of vans has been considerably augmented so that almost every town in the Kingdom is covered by a Regular Guaranteed Delivery All gases are Delivered Free moreover intermediate requirements by Rail or Carrier are also (subject to certain conditions) delivered free Hospitals which already deal direct with the Company will receive automatically the benefits of the new conditions as from 1st July 1938 Others are invited to write for particulars

Allow the Medical Section to supply all your gas requirements—

OXYGEN OXYGEN + CO_2 CO_2 NITROUS OXIDE
GAUGES REGULATORS FLOWMETERS etc

GAS-AIR/GAS-OXYGEN ANALGESIA & ANÆSTHESIA APPARATUS
PIPE LINE INSTALLATIONS

THE MEDICAL SECTION

THE BRITISH OXYGEN COMPANY LTD.

Telephone ARNOLD 1234 (10 lines)

WEMBLEY, MIDDLESEX

Telegrams OXYGEN WEMBLEY

Testimony by members of the Medical Profession . . .

Read what a doctor says —

"I think 'Ty phoo' is wonderful for sufferers from Indigestion"

The above is one of many hundreds of testimonials received

Medical men and women, throughout the country, are recommending our pure "Ty phoo" tea as indicated by the daily despatch of hundreds of samples which doctors direct us to send to their patients

Delicious "Ty-phoo" TEA is so mild that it does not cause indigestion

Over 18 000 DOCTORS use "TY PHOO" in their own homes

Further, you save by using "Ty phoo," for being so rich in "leaf-edge" it "goes just half as far again" as coarse astringent tea

Write to **Sumner's Ty-phoo Tea Ltd., Birmingham, 5,** for a FREE sample

(This offer applies only to the British Isles We regret that we cannot send Ty phoo tea abroad)

BISMULAIT

(DUNCAN)

A uniform and palatable preparation of Bismuth, containing 5 grains of freshly precipitated Oxycarbonate of Bismuth in each fluid drachm It is readily diffusible and the Bismuth is presented in the minutest hydroamorphous condition Bismulait is of the utmost value as a sedative or antacid in gastro-intestinal troubles

Also the following Combinations

BISMULAIT c PEPSIN

Contains 2 grains of Pepsin in each fluid drachm An ideal preparation for the treatment of Dyspepsia

BISMULAIT c SALOL

Contains 5 grains of Salol in each fluid drachm For the treatment of Dyspepsia associated with fermentation

Packed in 4 oz, 8 oz and 16 oz bottles
Sample on application

DUNCAN, FLOCKHART & CO.

EDINBURGH and LONDON

104, Holyrood Road, 8 155, Farringdon Road, E C 1

A powerful tonic and anti-anæmic

HEPATEX WITH IRON



of particular value in the anæmias of Pregnancy or resultant upon Hæmorrhage.

Useful in most conditions where very active stimulation of the blood regenerating organs is desirable

Hepatex with Iron is highly potent One fluid drachm contains the haemopoetic principles of two ounces fresh liver

Issued in 2-oz bottles 8/6 *each*

Made at the Evans Biological Institute by

EVANS SONS LESCHER & WEBB LTD.

Liverpool and London

MARMITE

YEAST EXTRACT

for

VITAMIN B COMPLEX

"Vitamin B may be given as Marmite"

(British Medical Journal May 21 st 1938 p 1089)

Members of the medical profession are prescribing Marmite extensively for its high content of all the known vitamin B factors and for its anti-anaemic properties

Experience gained over many years has proved the value of the systematic administration of Marmite in preventive and curative medicine

A patient suffering from a vitamin B_1 deficiency *was advised to take Marmite 2 drachms daily made a gradual improvement and returned to work still takes Marmite 8 oz per week*

(Lancet May 7th 1938 p 1043)

THE MARMITE FOOD EXTRACT CO LTD

Walsingham House - Seething Lane - London, E C.3

Jars 1-oz 6d 2-oz 10d 4-oz 1s 6d 8-oz 2s 6d 16-oz 4s 6d
Special quotations for Marmite packed for use in hospitals and welfare centres

Sample and literature on request.

38 /1/H

TRADE MARK

'AMYTAL'

BRAND

Iso-amyl Ethyl Barbituric Acid

FOR SEDATION AND HYPNOSIS

The tranquil sleep of children is always the envy of less fortunate adults to whom at times this boon is denied because of sickness or other conditions which upset the psychic or emotional equilibrium

'Amytal' supplies the relaxation and sleep which are essential to recuperation of vital forces It may be prescribed wherever there is need to combat insomnia restlessness, or apprehension A noteworthy margin of safety is characteristic of 'Amytal,' and since destruction of the hypnotic within the body appears to be accomplished rapidly there is little tendency to unwelcome side-reactions or after depression

'Amytal' is supplied in ½-grain, ¾ grain and 1½ grain tablets in bottles of 40 and 500

Lilly

TRADE MARK

ELI LILLY AND COMPANY LIMITED

2, 3 & 4, Dean Street, London, W 1

Distributing Agent in Britain for ELI LILLY AND COMPANY, INDIANAPOLIS, U S A

WHEREVER and WHENEVER

MINERAL METABOLISM

is important,

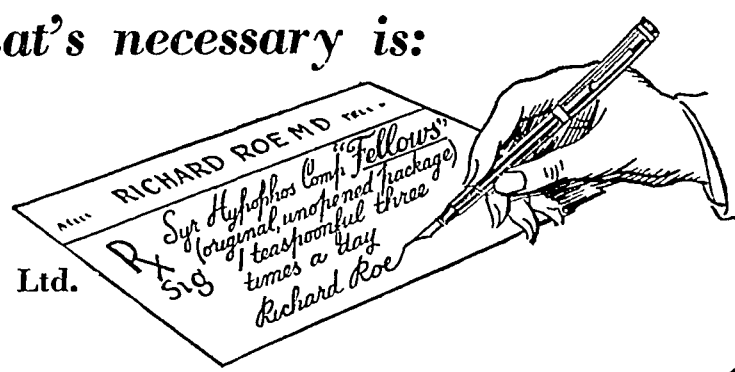
the hydrogen-ion balancing qualities of

Compound Syrup of Hypophosphites

TRADE "FELLOWS" MARK

have a distinct and important place.

All that's necessary is:



Samples on request

Fellows Medical Mfg. Co, Ltd.
286 St Paul Street West
Montreal, Canada

A Mucilaginous Laxative with a natural mechanical action...

'I-so-gel' GRANULES

Indicated in

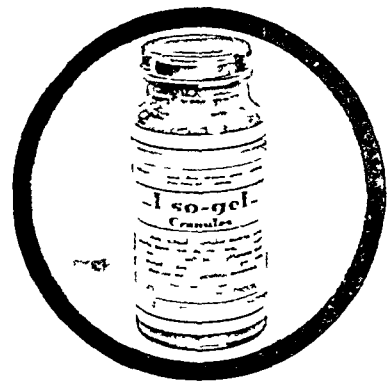
CHRONIC CONSTIPATION, COLITIS,

and allied gastro-intestinal disorders

"I so-gel is a natural vegetable material The granules absorb many times their volume of water and swell into a firm gelatinous mass which both stimulates natural intestinal movements and soothes inflamed intestinal mucous membrane Indicated in chronic constipation haemorrhoids, colitis, dysentery and allied gastro-intestinal disorders, and after colostomy Action purely mechanical Sugar free Ideal for diabetics.

In bottles at 3/ and 5/6 each

Descriptive literature sent post free on application.

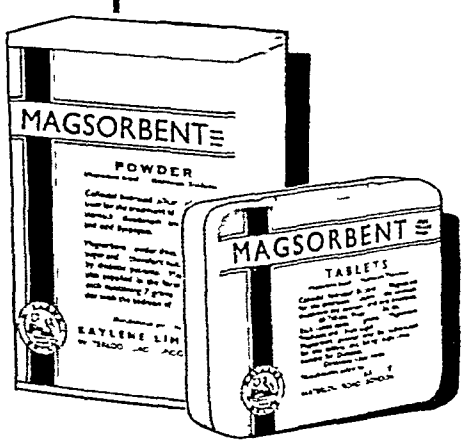


Telephone 3201 B shopsgate (12 lines) **Allen & Hanburys Ltd , London, E 2** Telegrams Greenburys Beth London

The Original and Standard Brand of Synthetic Hydrated Magnesium Trisilicate —

MAGSORBENT

The safe and effective **ANTACID** for the treatment of CHRONIC PEPTIC ULCER HYPERCHLORHYDRIC DYSPEPSIA and ACID FERMENTATION



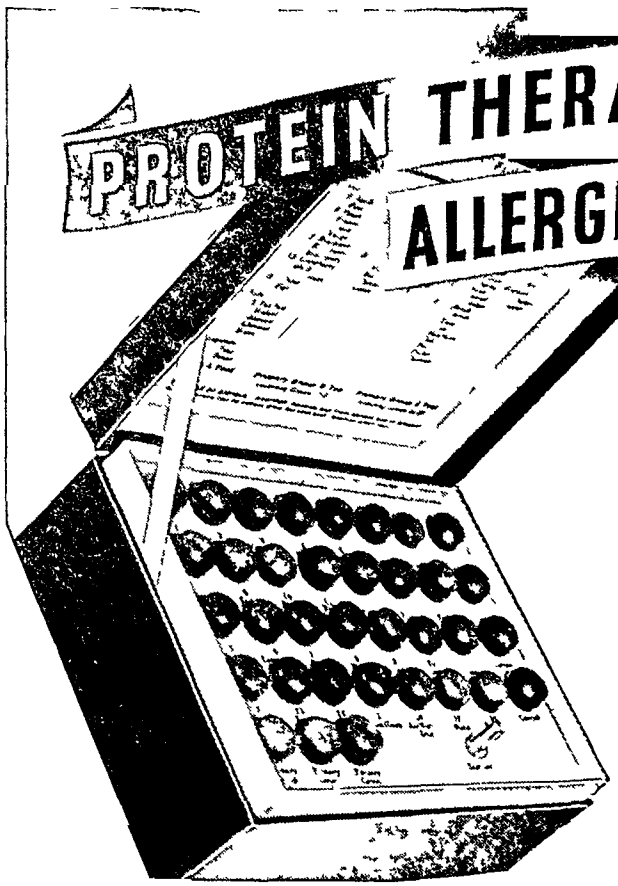
- ACIDITY—COMPLETE CONTROL
- NEUTRALISATION—SUSTAINED
- NO TOXIC ALKALOSIS
- CORRECT PHYSICO-CHEMICAL CONSTITUTION

Supplied in Powder and Tablet form—samples on request

Manufactured only by

KAYLENE, LTD WATERLOO RD N W 2

Sole Distributors ADSORBENTS LTD



PROTEIN THERAPY OF ALLERGIC CONDITIONS

Group Protein Test Outfit for the Diagnosis of

HAY FEVER

90 kinds of antigens available
Special tests and antigens to order

Descriptive booklet giving full particulars of outfits for diagnosis, prophylaxis and treatment will be sent on request

ALLEN & HANBURYS Ltd, London, E 2

West End House, 7 Vere Street W 1 — City House, 37 Lombard Street E C 3

ANNOUNCEMENT

PICKETT-THOMSON RESEARCH LABORATORY

Genatosan Limited wish to inform members of the Medical Profession that they will cease to distribute the Vaccine Products, prepared in the Pickett-Thomson Research Laboratory, after August 31st, 1938

These products will, in future, be marketed by RESEARCH PRODUCTS, LTD, NAN CLARKS LANE, LONDON, N W 7, together with other preparations manufactured in the Pickett-Thomson Research Laboratory

GENATOSAN LIMITED

Manufacturing Chemists • LOUGHBOROUGH, LEICESTERSHIRE

FOR EFFECTIVE CONTROL OF PAIN

AMONG the many and diverse analgesics which have been evolved by modern chemical research acetyl salicylic acid retains its reputation as one of the safest and most effective Its tendency to liberate salicylic acid—the irritant properties of which are well known to physicians—has however caused many to hesitate to employ it as widely as it deserves Exhaustive trial in hospital and private practice proves that Alasil definitely solves the problem of administering acetyl salicylic acid in an effective form being free from the risk of irritating the stomach or bowels or of causing general reactions

A supply for clinical trial with full descriptive literature sent free on request

In Alasil the desirable *therapeutic effects* of acetyl salicylic acid are well exhibited by its calcium acetyl salicylate moiety while the presence of Alocol (*Colloidal Hydroxide of Aluminium*) a powerful gastric sedative and antacid obviates any tendency to gastric irritation The superior absorbability of Alasil over ordinary salicylate compounds and its freedom from the risk of liberating free salicylic acid in the stomach have been well proved by careful experimentation Alasil can be prescribed with perfect safety to patients of all ages and in larger doses than ordinary salicylate compounds

A WANDER Ltd., Manufacturing Chemists
184 Queen's Gate London S W 7

Laboratories and Works KINGS LANGLEY HERTS

ALASIL

M 58

"ALOCOL"

Colloidal Hydroxide of Aluminium

Effective in Nervous Dyspepsia

WHATEVER be the fundamental cause of nervous dyspepsia it is acknowledged that alleviation of the gastric symptoms is an important part of effective treatment

Nervous dyspepsia connotes hypersecretion This causes flatulence sour stomach discomfort and perhaps pain Alocol provides the ideal gastric sedative since its action is prompt and lasting and entirely free from harmful effect

Alocol acts by adsorbing excess of free hydrochloric acid in the stomach forming a colloidal jelly which passes through into the intestines and is finally evacuated Alocol therefore actually removes from the system the causative radicle (Cl) instead of merely temporarily neutralizing it Alocol does not interfere with normal digestion nor does it determine any unpleasant secondary reactions It is issued in tablet and powder form



Complete clinical history of Alocol with convincing clinical reports and sufficient trial supplies to physicians on request

A WANDER LTD, Manufacturing Chemists,
184, Queen's Gate, London, S W 7

Works KINGS LANGLEY HERTFORDSHIRE

M263

BY APPOINTMENT

Schweppes

SUGAR-FREE GINGER ALE . . . .
SUGAR-FREE TONIC WATER. . .
SUGAR-FREE SPARKLING LIME

Approved by the Institute of Hygiene and the Diabetic Association

These beverages have been analysed by the Institute of Hygiene and found "free from sugar and metallic contaminants" The analyses shown have been accepted by the Medical Advisory Council of The Diabetic Association and recommended for diabetic and obese subjects

ANALYSIS SHOWED THE FOLLOWING RESULTS

	Schweppes Sugar-Free Dry Ginger Ale	*Ordinary Dry Ginger Ale*
Carbohydrates	absent	6 2%
Protein	absent	absent
Fat	absent	absent

	Schweppes Sugar-Free Tonic Water	*Ordinary Tonic Water*
Carbohydrates	absent	9 1%
Protein	absent	absent
Fat	absent	absent

	Schweppes Sugar-Free Sparkling Lime	*Ordinary Sparkling Lime*
Carbohydrates	absent	11 8%
Protein	absent	absent
Fat	absent	absent

FOR FREE SAMPLES WRITE TO MESSRS SCHWEPPES LTD , 1 CONNAUGHT PLACE, LONDON, W 2

The Treatment of ANÆMIA

Many cases of anaemia improve more rapidly upon a combination of liver and iron than on either alone

One tablespoonful represents ½ lb of whole liver and contains 2½ grains of iron, chiefly in the *ferrous* state Most patients like the taste

★SMALL DOSES PROVIDE ECONOMICAL LIVER & IRON THERAPY

8-oz. Bottles 11'6

Sample and literature on request from the British Distributors

Butler & Crispe,
89/84 Clerkenwell Road LONDON, E C 1

Solution

LIVER EXTRACT VALENTINE *with* IRON

★ Cream of Magnesia (Mistura Magnesii Hydroxidi B P U S P X) Pattinson's Brand consists of Magnesium Hydroxide in a state of almost perfect suspension in pure water

Cream of Magnesia

★ It is prepared by an improved and patented process that ensures an absolutely pure product of regular composition, whilst viscosity can be varied to suit customer's requirements

★ In addition to its virtues as an antacid Pattinson's Brand Cream of Magnesia can be used as a mild laxative it also makes an excellent mouth wash and liquid dentrifice

★ It is supplied in carboys and in one gallon bottles A 12-oz sample bottle will be sent free on request

PATTINSONS BRAND PRODUCTS

WASHINGTON CHEMICAL COMPANY
BRANCH OF TURNER & NEWALL LTD
Washington Station Co Durham
For Internal Use Only Cross Chemical Washington Station

NOVOCAIN
Brand Ethocain
The Original Preparation
English Trade Mark No 276477 (1905)

The Safest and most Reliable Local Anaesthetic for all Surgical Cases

The oldest and still the best

Cocaine Free Local Anaesthetic



Does not come under the restrictions of the Dangerous Drugs Act

Write for Literature

Sold under agreement

THE SACCHARIN CORPORATION LTD, 72, Oxford Street, London, W 1
Telegrams SACARINO RATH LONDON Telephone MUSEUM 8096
Australian Agents J L BROWN & CO 271 Moreland Road Moreland N 13 Melbourne
New Zealand Agents THE DENTAL & MEDICAL SUPPLY CO LTD 128 Wakefield Street Wellington

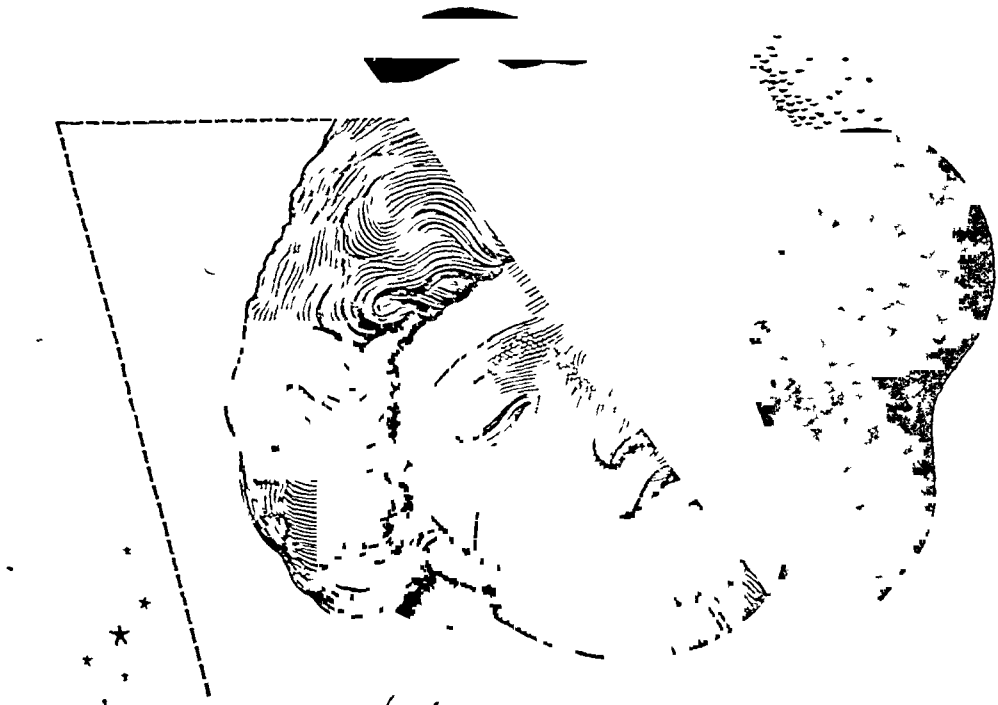


15th Century earthenware figure of PU-TI HO-SHANG — British Museum

'ELITYRAN' in OBESITY

Fifty Years of
1888 BAYER 1938
PHARMACEUTICAL PRODUCTS

BAYER PRODUCTS LTD.,
AFRICA HOUSE, KINGSWAY, LONDON, W.C.2
Northern Office BLACKFRIARS HOUSE, PARSONAGE, MANCHESTER 3
Dublin Office MOLESWORTH HOUSE, SOUTH FREDERICK STREET, DUBLIN



ONE-HALF *the dosage* / *the quantity of drug to be eliminated*

Administered orally rectally or in emergencies intravenously Nembutal exerts an extremely rapid but brief hypnotic and a pronounced sedative action from a dosage only about one-half that required with most other powerful barbiturates Thus small dosage reduces the recovery period also by about one-half and by lessening the amount of the drug to be eliminated makes Nembutal clinically one of the safest of the barbiturates ● Safety rapidity and brevity of action recommend Nembutal for use not only as a pre anæsthetic sedative in major and minor surgery but also in the treatment of insomnia hysteria sea sickness nausea from any cause eclampsia delirium tremens convulsions from strychnine or other poisoning and in obstetrics—with or without morphine and scopolamine Nembutal has also been used with much success as a supplement to morphine in controlling the pain of early cancer ● Nembutal is available through pharmacies in a wide variety of forms the most widely employed of which are the 1½ grain and 1½-grain capsule for oral use Literature and a trial sample of Nembutal 1½-grain Capsules will be sent upon request The coupon is for your convenience

ABBOTT LABORATORIES
(ENGLAND) LIMITED
Wadsworth Road Perivale Middlesex

Montreal Sydney Johannesburg Bombay Shanghai New York Chicago Mexico City Havana Rio de Janeiro Buenos Aires Manila

NEMBUTAL
SEDATIVE • HYPNOTIC



Send free trial sample of Nembutal 1½ grain Capsules to

NAME_____

ADDRESS_____

B M J—11

INDICATIONS FOR 'SANATOGEN' No 8

THE TREATMENT OF ANÆMIA

"A conditioned deficiency"

A distinguished physician, addressing the Exeter branch of the B M A, recently emphasised "the close relationship between anæmia and disturbances of gastro intestinal function, since abnormalities in food intake, digestion and absorption must result in a deficiency of hæmopoietic principles"

Nearly always, anæmia is secondary—a symptomatic manifestation of some primary disease The first procedure must obviously take the form of replacement therapy The administration either of iron or, in the case of pernicious anæmia, of a hæmopoietically active preparation of hog's stomach or liver is specific

But, generally, the digestive and absorptive faculties are deranged, and the nervous system is impaired Both these conditions call for treatment if the specific therapy is to be effective Here 'SANATOGEN' has been found of great value

'SANATOGEN', consisting of 95% Milk casein, with 5% Glycerophosphate of sodium, is rapidly absorbed and utilised It is non irritative, and, in addition to its high direct nutritive value, it stimulates gastric functioning, increases appetites, and promotes the digestion and absorption of other foods taken with it

I tried Sanatogen in a female patient with extreme nervous debility partly due to anæmia and excessive indulgence in tobacco after having previously used Nervine Sedatives The general tonic effect was satisfactory and sound sleep without the use of any other drugs was attained, a steady but slow return to normal health being rendered possible The preparation seems to fulfil all the desiderata of a good tonic food —M B, B Ch

I have to say that I have had most satisfactory results with the aid of Sanatogen in the treatment of anæmia and weakness in a case of a young girl of 15, suffering from epistaxis —M O H, L R C P & S I

The case of anæmia following the loss of a large amount of blood after an operation, recovered very well with the administration of Sanatogen only'—L R C P & S

'SANATOGEN'

(Trade Mark)

A brand of Casein and Sodium Glycerophosphate

Sold by all chemists price 2/3 to 19/9

DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants ½ teaspoonful added to each bottle feed

The word SANATOGEN is the Trade Mark of Genatosan Ltd and denotes their full name of Casein and Sodium Glycerophosphate A GENATOSAN product made by GENATOSAN Ltd Loughborough Leicestershire

Clinical samples and literature available on request to

GENATOSAN LTD., LOUGHBOROUGH, LEICESTERSHIRE

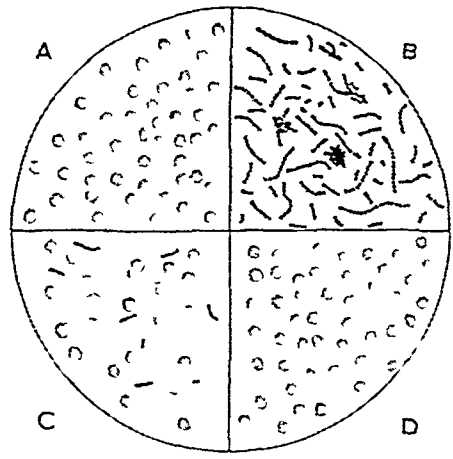
TRADE MARK **'TABLOID'** BRAND

SULPHONAMIDE-P

(SULPHANILAMIDE)

Action on Hæmolytic Streptococci in the Human Blood

At the B M A Exhibition at Plymouth, July, 1938, Burroughs Wellcome & Co demonstrated the effect of 'TABLOID' SULPHONAMIDE-P on Human Blood in hæmolytic infections Coloured reproductions of actual blood-smears under high magnification were shown



A Normal blood

B Twelve-hour growth of hæmolytic streptococci in blood broth inoculated from a plate culture Note complete hæmolysis of the blood

C Streptococci from same plate culture incubated for twelve hours and showing as many streptococci as B 'Tabloid' Sulphonamide-P (Sulphanilamide) added Smear examined five hours later shows only slight hæmolysis, a few streptococci only and some in course of destruction (Gram-negative)

D Smear from same specimen twenty-four hours after addition of 'Tabloid' Sulphonamide-P shows almost complete destruction of streptococci and absence of hæmolysis

Literature and details of packings on request

BURROUGHS WELLCOME & CO, LONDON

Address for communications SNOW HILL BUILDINGS E C 1

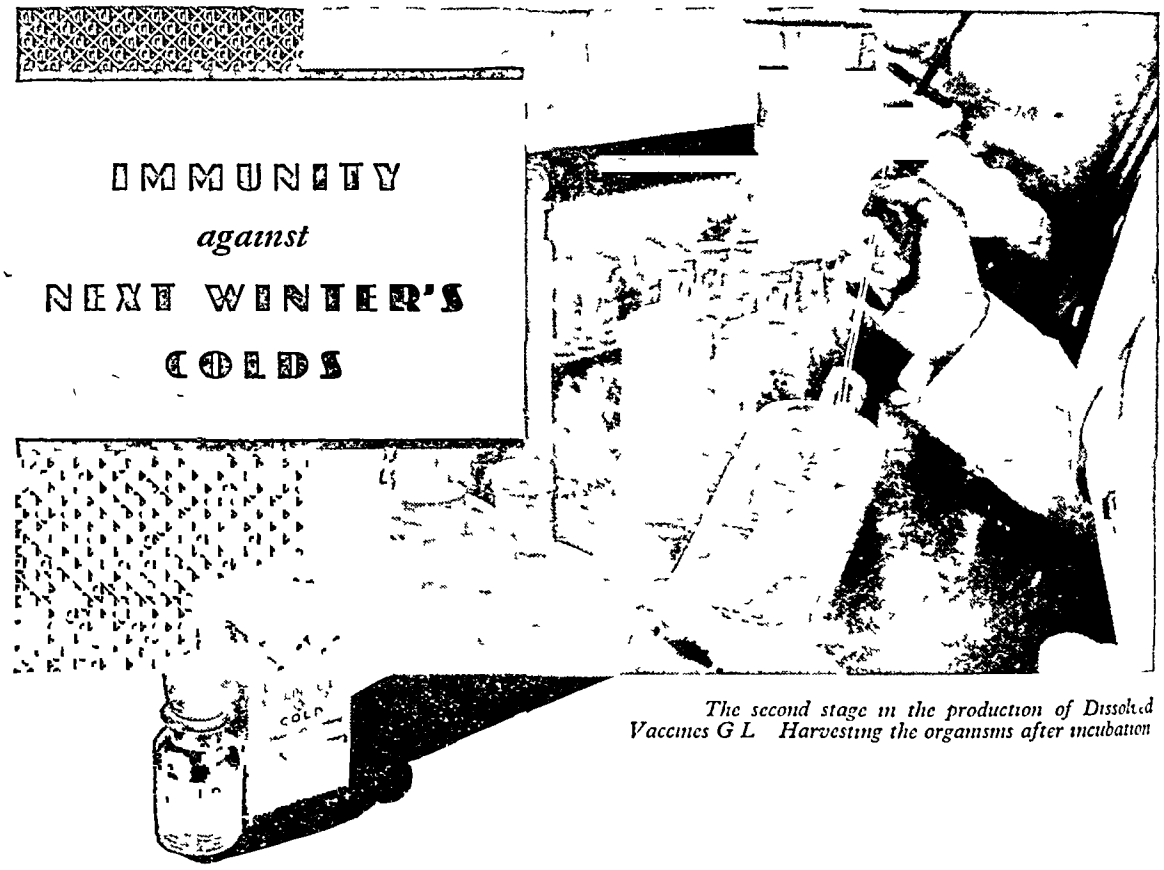
Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W 1

Associated Houses

NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

H 3637 COPYRIGHT

IMMUNITY *against* NEXT WINTER'S COLDS



The second stage in the production of Dissolved Vaccines G L Harvesting the organisms after incubation

The new principles of vaccine therapy established by Dissolved Vaccines G L bring to Cold prophylaxis the assurance of majority success For although the primary infecting agent in the common cold still remains a subject for research, enough has been discovered about the secondary invaders to produce an effective vaccine for prophylaxis and treatment

★ Inoculation with Cold Dissolved Vaccine G L releases, for immediate utilisation, the antigens of those organisms which are responsible for the acute secondary stage of the cold The retention of full antigenic power excites a rapid and potent response from the body's defence mechanism

★ Moreover, detoxication (which is simultaneously effected by the solvent—sodium lauryl sulphate) enables a maximum dose (½—1cc) to be given from the first without fear of undesirable reactions Immunity is developed rapidly, three injections at intervals of a week usually being sufficient for the whole of the winter The injections should be started in the early autumn Finally, with the Dissolved Vaccine G L, antibody production is sufficiently speedy to shorten an actual attack if injections are started when the first symptoms appear

COMPOSITION of Cold Dissolved Vaccine G L Each cc contains in solution and detoxicated the antigens of

	million
B pneumoniæ (Friedlander)	25
M catarrhalis	25
Pneumococcus	150
Streptococcus (respiratory)	150
Staphylococcus	100
C coryzæ	25
H influenzæ	100

COLD DISSOLVED VACCINE GL

In rubber-capped bottles 5 cc, 7/6 10 cc, 10/9, 25 cc, 17/6 *Less usual professional discount*

GLAXO LABORATORIES LTD, GREENFORD, MIDDLESEX BYRon 3434

GLD GL354

BRITISH MEDICAL JOURNAL

LONDON SATURDAY AUGUST 6 1938

THE PHYSIOLOGICAL APPROACH TO FITNESS*

BY

E P CATHCART, C B E, F R S

Regius Professor of Physiology University of Glasgow

The question which I have been asked to approach from the physiological point of view is one of fundamental importance—the basis of national fitness I suppose most of us will have our own ideas as to the exact connotation of the word fitness The exact meaning we attach to the phrase will largely be conditioned by the question Fitness for what? Obviously a man may be perfectly fit to carry on some occupation and yet be unfit physically or psychically for some other trade occupation or profession Are we to confine our interpretation to mere physical fitness? Or is the word fitness as it well may be used simply as a synonym for perfect health? Or as a variant to connote a state of well being or of good nutrition or eutrophy? What are we looking for? What are we trying to attain? Personally my own reaction to and interpretation of the phrase national fitness is the building up of healthy human beings well balanced physically and mentally and emotionally who will be capable of all necessary adjustments to their immediate environment be it of work or play

The approach to this state of fitness which at the moment seems to be most in the public eye is that of physical training of some kind The fact is there is no single line of attack Many factors besides physical activity are concerned The provision of a diet adequate in both quantity and quality is of course one of the essentials but again diet alone no matter how perfect will not achieve the desired end Other factors such as an adequate supply of fresh air opportunities for sufficient sleep and for recreation contentment of spirit all play important parts I shall confine my attention to the physical activity and dietary aspects of the problem

The Aim of the Present Campaign

The aim I believe of the present campaign for physical fitness is to develop and perfect the potentialities which exist in all for the integration of the several bodily systems As a result of this integration it is hoped to achieve a harmony of motion a grace of carriage a pride of body a mental concentration and quickness of reaction and a happiness and contentment which characterize the really fit

And this training as it has to take place in the leisure time of all those over school age must be attractive it must truly give a sense of *re* creation It it were only concerned with physical *re* creation it might be regarded as a relatively simple problem but the need of rebuilding for the morrow may be as much psychical as physical In fact it might be said to day that with the ever increasing elimination of heavy manual work from industry and the ever increasing specialization of men to single operations the need for the *re* creation of the spirit is greater than that for the body Further I do not think it is emphasized sufficiently in these days when the sense of rights seems to transcend the sense of duty that physical training and indeed many forms of recreation properly carried out develop a true sense of discipline

When we realize that inevitably a very large proportion of those who will be trained or are being trained will enter on industrial work it is obvious that it is our duty to think in terms of alleviation It is probably true that the man or woman who had well developed muscles and who could use them was in greatest demand not so long ago To day when machine minding becomes ever more prominent we realize that although man may not yet have become and we hope never will the machine tickling aphid envisaged by Butler in *Erewhon* something more is required than mere brute force The qualities on which there is a premium to day are quickness alertness quick reaction time intelligence

No Short Cut to Perfection

There is no short cut to this desirable state of physical and mental perfection To attain it no amount of help no amount of direction no amount of guidance will suffice unless the willing co operation of the trainee is obtained People must want to be fit They must be prepared to pay the price The price that so many are unwilling to pay is steadfastness and discipline It is relatively easy to get Tom Dick and Harry and still more easy to attract Mary Jane and Ann to start but it is difficult to get them to continue in well doing So many want the final result without the necessary effort They want the balance of posture the perfection of rhythm without the labour which goes to the building up of smooth reflex movement The only exercises in the end which will be of value in retaining the performers are those which are creative which either allow the performer to express something innate by way of limb movements or give rise to the real belief that the systematic practice is creating a new body a new control The difficulty is to devise a suitable system Of one thing we may be certain—that no one system will suffice for all There must be exercises for the immature and the mature for the vigorous and the non vigorous alike So far as the children are concerned I am satisfied that the system carried out under the Board of Education is sound But

* Read in opening a discussion in the Section of Physical Medicine and Physical Education at the Annual Meeting of the British Medical Association Plymouth 1938

what have we to offer the adolescent and the adult of all ages? Recently the Board of Education has issued two suggestive handbooks Obviously the many exercises contained therein must be chosen with care by leaders, courses must be suitably adjusted from them This demands skilled and discerning leaders It is perhaps not within my province to discuss the nature of the exercises, but I should say that free standing exercises with a fair amount of apparatus work would be best for the male from post-school age to, say, 30 or 35, the amount of apparatus work being reduced for the majority as age advances In the case of young women, unless they so desire—and a certain number do exhibit a preference for apparatus work—the exercises should be all of the free-standing and floor-agility type For both sexes after the age of 30 to 35 the exercises should be confined to the free-standing type Generally speaking, I would endorse the classification of Lindhard as a guide to training, particularly of the 'keep-fit' type His classification is

1 Exercises the chief object of which is to discipline, to rouse, to educate in the general sense of the word

(i) Order exercises

(ii) Exercises of deportment

(iii) Walking exercises

2 Exercises the chief object of which is a systematic training of muscles and joints

Corrective exercises Head and neck, trunk, arm, and leg exercises

3 Exercises the chief object of which is the development of nervous co ordination Balance exercises

4 Exercises that aim in the first place at developing strength, endurance and resolution

Marching running, jumping, games, and sports

Lindhard's Scheme as a Basis

I feel convinced myself that if this scheme of Lindhard be adopted as a basis, the necessary choice of exercises being made from the books issued by the Board of Education and adapted to the age and the vigour of the pupil whether of 16 or 60, a course could be developed which in a relatively short time might simply transform the appearance of the average citizen I would lay special stress on the corrective exercises It falls to the lot of very few to carry out their several avocations in such a way as not to distort to some degree their physical frame Keeping fit does not merely mean the retention of health and vigour in any kind of framework The ideal is to get the frame, as well as the organs it contains and the muscles which bind it, as nearly balanced as possible The child at school, despite the provision of anatomically correct equipment, tends to adopt bad posture, the clerk at his desk, the worker at his machine, the labourer in the field, everywhere we turn—often, from the very necessity of the case, even the fact that the majority are right handed and not ambidextrous encourages wrong position—bad posture and unilateral development are the rule The bad posture tends to become permanent Surely one of the main purposes of the whole "keep fit' and physical training movement is to correct by suitable exercises such faulty developments and to restore to the frame whilst still pliable the resiliency and the beauty that are its right and proper heritage

Posture and Carriage

There is no question about the physiological gain to be obtained by the healthy organism from muscular activity, but I do not propose to deal with its effects in detail These may be found in, for example, Bainbridge's *Physiology of Muscular Exercise* Very few of our complicated muscular movements are inborn, they are the result of practice We assume too often that we have good control of our muscles until we try some new form of activity Most have passed through the humiliations of golf When we see a master of the game play it all looks so effortless and easy—till we try it We realize the same is true of any game, any art—for example, singing piano playing, or even of dealing cards at bridge—which demands exact co-ordination of muscle The obvious gain from constant exercise of muscles is a greater range of rhythmic movement, of better balance, of more accurate judgment, a greater resiliency of the body as a whole, a better carriage, better posture Our initial judgment of our fellow men is most often by their posture or carriage To quote from Lindhard's book on the *Theory of Gymnastics* "It seems as if on seeing a person with a good carriage we do not expect to find in him good physical qualities merely, but also good psychical ones bravery, courage, energy, firmness, well proven a noble mind It is as if it shows us the free man as opposed to the cowed bent slave' And on the whole I think it true to say that we do find some, if not all, of these extra attributes in individuals with good carriage

It should be emphasized, however, that there is no standard posture for all ages and both sexes The style of normal posture varies with the change in body build from babyhood to old age Still, there is a type of male posture at rest which should be aimed at where the whole figure, while not being stiff and rigid, should 'bear the stamp of controlled force' In the case of women the stance should be lighter but well poised and should suggest repose in oneself Far too many of the attitudes assumed as correct posture contain too much of the costly static effort In everyday life in common with all our other bodily activities our posture and movements are subject to emotional control We do recognize that "the ringing step of confidence, the halting pace of fear, the expansiveness of joy, the drooping air of grief serve to remind us of the pervasive quality of emotion

Physiological Effect of Muscle Activity

But muscular exercise does more than build up the nerve muscle control Probably the majority of the capillaries which exist in our tissues are only, so to speak, potential capillaries which open up to full activity when, for instance, the muscles are used Krogh has given a dramatic example of this state of affairs As he pointed out, in a piece of muscle no thicker than a pin there are some 700 capillaries and 200 muscle fibres When the muscle is at rest there is, however, comparatively little blood flowing through it, there are few patent capillaries, but as soon as it is active the latent or potential capillaries come into action to meet the enhanced needs The increased metabolism of active muscle demands an increased oxygen supply, and at the same time there is the need for more rapid removal of waste materials, including increased heat loss Moreover, with the increase in skeletal muscle activity there is, as a necessary result, increased cardiac activity, increased respiratory rate It comes to this that even a most limited form of exercise brings about a flushing and refreshing of the whole organism

It is perhaps not commonly appreciated that in almost all forms of muscular activity three separate phases of effort may be recognized positive, negative, and static

each differing in energy cost to the organism When we for example throw up an arm we perform positive work against gravity when we let it fall again back to our side this is negative work If we cease movement say in the upward swing and hold out the arm steadily from the body this is called static effort It is the degree to which the static component enters into all types of muscle effort which determines its severity in regard to the organism as a whole Hence it follows that any type of muscle work can be made more easy or more severe according to the amount of the static effort permitted to enter in It on the other hand however the static element be reduced too much rhythmic exercises for example may degenerate into mere dangling of the limbs Also the severity can be increased or diminished according to whether the displacement of the centre of gravity of the body as a whole is marked or not

Medical Supervision

There is no question in my mind about the propriety of medical supervision in some form But what are the standards to be since the type of physical exercises available are so very variable? Apart from gross lesions how are we to decide whether an individual should or should not participate in some form of exercise? There is the further difficulty that if a formal medical overhaul is made a *sine qua non* before permission to participate even in the relatively simple keep fit exercises this may act as a deterrent—so many people fear a medical overhaul If a medical examination were instituted the ultimate value might be even greater than that which accrued direct from the actual physical training There would be the further advantage that as the result of such a medical examination some indication might be given to the examinee regarding the type of more strenuous exercise for which he would be fitted It a single test of fitness has to be adopted it seems to me that some form of the heart tolerance test would be the best We are far too apt to assume that the average pulse rate and blood pressure are normal rates and pressures and that they play no part in or afford no guidance to the type of exercise for which an individual is suited According to the potentialities of a particular physique for particular exercises there seems so to speak to be the appropriate cardiovascular equipment In a study of Olympic athletes made by Bramwell and Ellis these differences (average values) are very clearly especially with regard to the pulse rate demonstrated in the case of runners

Type	Age	Weight (kilos)	Pulse	Blood Pressure		Pulse Pressure
				Systolic	Diastolic	
Sprints	22	64–65	66	116–119	75–81	38–40
Mid distance	23		63			
Long distance	24		61			
Marathon	27	60	53	103	3	45

As in other forms of long sustained strenuous effort so in marathon races the younger men seem to lack the necessary stamina for feats of endurance

The cardiovascular equipment of weight lifters was interesting Nine out of fifteen examined had resting pulse rates of over 80 per minute They had high systolic pressures five out of fifteen had diastolic pressures of over 100 (the average for the whole group was 90) and six had pulse pressures of 60 and over

The Question of Athletics for Girls and Young Women

Reference must I feel be made to the constantly debated question as to the extent to which girls and young women should be encouraged or permitted to take part in the more athletic types of exercise either in the gymnasium or in the sports field especially in forms of exercise which involve more or less heavy landing on their feet A great many opinions have been expressed but very little if any real evidence has been produced to show that such activities do give rise to uterine displacements So far as I am aware the best paper on the subject is that of McClov The conclusion reached by this writer is that the anatomical evidence would point to there being no real reason why girls or women *whose pelvic floors are uninjured and who have no pelvic infection* should not jump The shock of landing is for the pelvic organs negligible Obviously physical education departments should see that those taking part in such activities are adequately supervised

This question as to whether or no girls and young women should be permitted to jump is quite apart from the question as to whether they should participate in athletic exercise during the menstrual period Here of course opinions have been many and varied—from the recommendation that no abstention from sport should take place to the recommendation that no form of activity should be indulged in throughout the period Probably the *via media* of abstention during the first day of the flow is to be preferred It is a question which it is impossible to dogmatize about as the effect of the period varies so greatly in different individuals Too often it seems to be forgotten that menstruation is a normal physiological process Such evidence as exists would point to the view that the influence of normal menstruation is not greater than other influences of an accidental nature which might have affected the performance of the various tests at other times It is well to make it clear however that in some women the menstrual period may apparently bring about greater efficiency—a result probably of purely psychological origin

The Dietary Aspect

I shall now turn to a very brief consideration of the dietary aspect of this problem of fitness The spotlight is focused at the moment on diet not altogether to its advantage Too many seem to imagine that if only this or that be added to the diet all will be well that the root cause of malnutrition is poverty and lack of proper food No doubt these are potent factors but they are certainly not the only ones Emerson who has made a most intensive study of the problem of malnutrition in children cites in his book *Nutrition and Growth in Children* the causal factors in their order of importance They are (1) physical defects especially nasopharyngeal obstructions (2) lack of home controls (3) overfatigue (4) improper diet and faulty food habits (5) faulty health habits It will be noted that in Emerson's opinion diet occupies only the fourth place in order of importance

IS MEAT ESSENTIAL?

Of course it is perfectly true and perfectly obvious that anyone who is going to reap the full benefit of training must be adequately fed But adequate feeding does not mean elaborate feeding So far as our knowledge goes at the moment a diet consisting of brown bread milk butter cheese fresh fruit and salad could provide all the essentials As however we are in part at least concerned

with physical training the inevitable question arises as to whether meat is an essential constituent There is no scientific evidence to show that meat is essential The breakdown of the protein containing tissues particularly of muscle, during the performance of muscle work, provided there is an adequate supply of fat and carbohydrate or, in other words, of the energy-giving foodstuffs, is negligible Yet if one examines the great majority of training diets meat is a prominent constituent Practically all of the athletes at the Berlin Olympic games were large consumers of meat Evidently the appetite or tradition or a real pica demands the presence of meat Why this demand if there be no marked breakdown of muscle to repair? The explanation may in part lie in the fact that the extractives of meat are stimulating and have a definite and to many an attractive flavour The presence of the flavour may help in the consumption of larger amounts of the, on the whole, flavourless fats and carbohydrates which are required for energy production On the other hand, it must not be forgotten that strict vegetarians have shown themselves to be record-breakers in sport and to be capable of immense endurance I think the conclusion to be reached must be that the presence of meat is not essential

FATS AND CARBOHYDRATES

The protein problem has, it is true, aroused most discussion, but some very interesting facts are available regarding the consumption of fat As long ago as 1866 Frankland had noted that men engaged in really laborious work consumed for preference fat-rich diets "thick slices of bread surmounted with massive blocks of bacon in which mere streaks of lean were visible' Lavonius, who studied the food intake of professional Finnish wrestlers, found that calories derived from fat formed about 45 per cent of the total intake, whereas those from protein only accounted for about 17 per cent It has also been noted that in the diets of lumbermen and others engaged in hard work under severe environmental conditions the consumption of fat is high If other lines regarding the need for fat be followed it is becoming increasingly evident that fat, or at least certain fatty acids, play a more important part than mere sources of energy

There is no question about carbohydrate being the most readily available source of energy for the performance of muscle work But, contrary to general belief, the recent work of Krogh *et al* shows that there is no evidence during an hour's observation that glucose given during work, although it may cause a prompt rise in the blood-sugar level, well above resting level, is utilized Apparently the carbohydrate has first to be converted into glycogen Thus these authors maintain that in sporting events there ought to be about two days' rest before the contest, "to secure a complete filling up of the glycogen stores, and it appears that this cannot be done by taking large amounts of carbohydrate just prior to work"

I have cited some of the work relating to protein, fat, and carbohydrate simply as examples of the profundity of our ignorance of the whys and wherefores of somatic chemistry If we know relatively little about the fundamental problem of the three energy-giving materials which have been intensively studied for many decades, we know considerably less, both quantitatively and qualitatively, about the action of mineral salts and vitamins

Diet Not the Only Factor in Malnutrition

It may be thought that I am overstressing the negative side of the importance of food, that I am not giving it the importance which it so manifestly demands If that be so I desire most categorically to deny the interpretation that I under-estimate its value I have worked far too long at the problem But I do most emphatically desire to bring home the point of view that diet alone is not the only factor involved in malnutrition Far too many people take the path of least resistance Seizing on the very fact that diet is important, they shut their eyes to all other possible factors or, if they do not wholly ignore them, they belittle them or do not explore their potentialities There would possibly be no harm done if they stopped at the proclamation of their appreciation of an adequate dietary, but when they go on to promise all sorts of miracles which will happen if and when the average diet is altered in this way or that a very real danger arises The majority of these miracles cannot and will not happen The faith of the "man in the-street"—the man we all wish to help—in science and the scientific worker will be undermined

Conclusion

We require to keep a broad and open mind on the problem of how best to achieve fitness Just as there is no one cause of unfitness, so there is no one solution It is a problem of many facets with as many lines of attack It will not be achieved merely by the satisfaction of the somatic needs Malnutrition of the spirit is quite as common as malnutrition of the body The one reacts upon the other In these days when the raucous enunciation of rights threatens to extinguish the still small voice of duty, it should not be forgotten that fitness demands discipline Discipline is essential for right living Right living means health As Amiel said 'Health is the first of all liberties, and happiness gives us the energy which is the basis of health"

SKIAGRAPHY OF THE CHEST*

BY

GEORGE JESSEL, M A, D M., D P H

Consultant Tuberculosis Officer Lancashire County Council Visiting Medical Superintendent Peel Hall Pulmonary Hospital

The use of skiagrams as an aid to diagnosis may well be regarded as the greatest advance in medicine during the present century, worthy to rank with the discovery of antiseptics and anaesthetics Skiagraphy of the chest has become a most important and, indeed an indispensable adjunct in diagnosis Its routine application has often enabled a diagnosis of pulmonary disease to be made, even when the symptoms were referred to some other organ—for example, cases of so-called indigestion and gastritis or suspected appendicitis

In the training of medical students it has long been customary to emphasize the importance of a careful examination of patients, based upon history, symptoms, and the routine use of the standard methods of physical examination By such means the careful and experienced practitioner can accurately diagnose a fair proportion of the diseases of the chest from which his patients are suffering, while the consultant's wider experience of particular conditions will raise the standard of diagnosis still further Indeed, some experienced physicians have in the past, by clinical methods alone, achieved a remarkable degree of accuracy in diagnosis Their clinical instinct

* Read in opening a discussion in the Section of Tuberculosis at the Annual Meeting of the British Medical Association Plymouth 1938

which we now know to be closely related to a thorough and careful detailed examination of each patient coupled with an exceptional facility in recalling similar or related cases has sometimes been little short of uncanny Unfortunately the number of such gifted men at any one time is relatively few

Value of the Older Methods

It is well known that more mistakes in diagnosis are due to failure to make a thorough examination of the patient than to lack of knowledge The increasing popularity of skiagraphy, based on a growing appreciation of its value in the elucidation of difficult cases ought not to permit any relaxation in the thoroughness with which the older methods of examination are employed It is well known as Sampson and Lawrason Brown (1931) and others have shown that radiographs frequently reveal the existence of pulmonary disease in the apparent absence of any physical signs even when the patient is carefully examined by an experienced physician but there are likewise many cases where skiagraphic examination alone in the absence of information derived from a careful history and physical examination may provide information that is equivocal or misleading Accurate diagnosis depends upon a careful appraisement of all the available evidence including history and clinical laboratory and radiological examinations Skiagraphy should be regarded as an additional weapon in our diagnostic armoury but we cannot afford to ignore the information derived from interrogation eye hand and ear As Sir Arthur MacNalty (1937) has recently said pulmonary tuberculosis still reveals itself by physical signs and symptoms in other words inspection palpation percussion and auscultation are not displaced but reinforced by a skiagram of the chest

The Development of Skiagraphy

The National Health Insurance Act had as one of its objects the encouragement of insured persons to consult a doctor at an early stage of their illness and thus overcome the natural tendency of the sick to defer medical examination until symptoms became too obvious or painful to be further ignored The vast increase in the amount of work thus thrown upon the busy doctor has not infrequently rendered a thorough and detailed examination impossible Furthermore recent advances in medical knowledge have placed increasing responsibilities upon the overworked practitioner Often some method was needed that would furnish greater precision in diagnosis than could be provided by ordinary physical examination alone and at the same time introduce some objective means of checking conclusions previously reached The development of skiagraphy was thus timely In particular its use in doubtful chest conditions especially in the diagnosis of pulmonary tuberculosis has been of incalculable value It is unfortunately true that progress has been slow and uneven Indeed until well after the great war the use of skiagrams even by the enlightened was irregular and spasmodic in large centres patients were sometimes sent to radiologists attached to general hospitals but elsewhere little or nothing in this direction was practicable Those were the days when an x ray diagnosis of hilum tuberculosis or peribronchial fibrosis was fashionable Improvements in technique and increased experience have resulted in a reliable standard of diagnosis by competent radiologists and ample facilities for the production of first class skiagrams of the chest have existed in many areas for a number of years Unfortunately however outside the big centres and especially in the smaller urban and rural districts these facilities are still patchy and irregular It is the duty of the councils of counties and county boroughs to make provision for the specialist diagnosis of tuberculosis available for the whole population but some local authorities are still laggards in this respect It is thus not surprising that even in 1937 pleas were still being made for an increase in the use of skiagrams in the diagnosis of chest diseases in general and of tuberculosis in particular (Davies 1937) On the other hand although there is good reason to believe that a steadily increasing number of medical practitioners realize the value and importance of skiagraphy there are still far too many who fail to make enough use of the facilities now available

Its Use in Diagnosis of Pulmonary Tuberculosis

It is arguable that skiagraphy of the chest need only be employed on occasions more or less frequent depending upon the personal factor when the physician finds that ordinary clinical methods are insufficient to enable him to make a firm diagnosis There are it is true a number of well marked cases of pulmonary tuberculosis with tubercle bacilli in the sputum, where x ray examination is unnecessary On the other hand there are a large number of cases where owing to the failure to make use of skiagraphy early tuberculosis has been missed until the disease has become evident even to the laity

In 1933 I wrote as follows (Jessel 1933)

> Diagnosis has of recent years become much more precise as the result of the intelligent use of good x ray apparatus In cases of suspected fracture failure to use such facilities ranks as negligence and I think the time is not far distant when a similar view will be taken in cases where there are reasonable grounds for suspecting tuberculosis

This view has received striking confirmation by a recent decision of the Court of Appeal (Connolly v Rubra) *According to the reports of the case Lord Justice Greer* (1937) remarked

> Tuberculosis is one of many diseases with which a general practitioner commonly has to deal If the doctor has any doubt whether or no there are signs of tuberculosis it is his obvious duty to make further examination to resolve that doubt and to make it clear that nothing further could be done for the patient A doctor who is not over confident of his own judgment will when he finds himself in a difficulty call an expert and decide according to the expert's advice To enable the expert's opinion to be of value it is not enough to do what Dr Rubra did at a later date—namely to take one specimen of sputum and be content with that if the result is negative he must take many specimens of sputum and in addition he ought to have an x ray examination and to watch the patient to see whether he is progressing or going back as time goes on

The disadvantages resulting from delay in the use of skiagraphy are (1) the longer time that is usually needed to reach a diagnosis and (2) the tendency to play for safety and to diagnose a non existent tuberculosis I refer specifically to tuberculosis because being an infectious disease it is most important that it should be diagnosed as early as possible in order that remedial and preventive measures may be taken without delay Pulmonary tuberculosis should be regarded as at least a possibility and skiagraphy be employed in the following circumstances

1 In cases provisionally diagnosed as bronchitis or bronchial catarrh which do not clear up within four weeks

2 Where patients complain of indigestion and dyspepsia Many so called gastric or duodenal ulcers are really manifestations of tuberculous toxæmia

3 In cases of alleged haemoptysis
4 In young persons with symptoms of debility or anaemia
5 In cases of chronic hoarseness
6 In cases of ischio rectal abscess
7 In all cases where there is a clear history of tuberculosis in some member of the immediate family or household
8 Where there is a history of some other close association with a case of pulmonary tuberculosis—for example friend or workmate in office or factory
9 Where a case of tuberculous meningitis or other form of non pulmonary tuberculosis is found attention should be directed to adult members of the household, even if stated to be in good health in order to discover a possible source of infection

When a diagnosis of pulmonary tuberculosis has been made skiagraphy is often of great value

1 To determine the extent and nature of the disease—for example unilateral or bilateral, presence of cavities fibrosis calcification etc The information thereby obtained is often of great assistance in deciding the nature of treatment
2 During the course of treatment serial skiagraphy is essential in artificial pneumothorax and whenever surgical measures are contemplated—for example phrenic operations division of adhesions and thoracoplasty
3 Serial skiagraphy also gives great service in enabling the progress of the disease to be readily ascertained, as well as in providing opportunities for the study of living pathology

Skiagraphy in Differential Diagnosis

Apart from the question of tuberculosis, skiagraphy of the chest is important in the differentiation of pulmonary disease Assuming that tuberculosis can be definitely excluded, skiagraphy may clearly indicate or suggest chronic bronchitis, bronchiectasis (especially when used in conjunction with lipiodol), pleurisy, pneumonias abscess, malignant disease, silicosis Unsuspected morbus cordis may likewise be discovered Caution must, however, be exercised in the interpretation of skiagrams, as the appearances—for example, in cancer, tuberculosis or silicosis—may at times be indistinguishable An opacity may be due to fluid thickened pleura, consolidation atelectasis, abscess, or underlying new growth Consistently accurate diagnosis is only possible when skiagraphy is correlated with clinical evidence It demands judgment and experience Indeed, skiagraphy may easily lead to misunderstanding and confusion shadows of bronchi and blood vessels seen in their various aspects and angles may be misinterpreted as evidence of disease It is not impossible by skiagraphy, as by older methods of clinical examination to diagnose non existent tuberculosis which is almost as serious as failing to detect tuberculosis when it is present

Skiagraphy of the chest is a specialty within a specialty The taking of a good skiagram and its interpretation are by no means easy The well to do are in general, adequately catered for in this respect by radiologists, and there are also a few consultants and general practitioners who can produce excellent skiagrams The cost, however, is undoubtedly a deterrent, but fortunately skiagraphy is obtainable at or in connexion with many tuberculosis dispensaries and the chest clinics attached to some large hospitals This provision needs to be extended so as to make chest skiagraphy readily available for every citizen The presence of x ray apparatus at or in close association with a tuberculosis dispensary or chest clinic affords an ideal solution of the problem

Routine in a Lancashire Area

This is not the occasion to deal with technical details, which are mainly of interest to those practising radiology It is, however, desirable to illustrate what has been said above by a brief description of what obtains in the Lancashire area with which I am associated The population of the area is about 370,000, and is mainly urban in character It contains five tuberculosis dispensaries, as well as a small hospital of fifty seven beds for adult male pulmonary cases The medical staff consists of three tuberculosis officers working as a team one of whom (in this case myself) acts as radiologist at the central dispensary, where the x-ray apparatus is situated Early in 1923 I used a gas tube apparatus but since 1932 an all British single valve unit that has given complete satisfaction Exposures of one tenth of a second at four feet distance have been found to give good results Two afternoon sessions are held weekly Nearly all the patients, who are referred to the dispensaries or are seen at home in consultation with the insurance practitioner or private doctor, attend one of these sessions by appointment Bed cases, if not too ill are brought by ambulance, and by this means acute non-tuberculous conditions can be identified and studied On the same afternoons an artificial pneumothorax refill clinic is held elsewhere in the building by another tuberculosis officer, and these patients are screened at the beginning of the session Screenings for diagnosis are seldom done, as the information to be derived from them is regarded as of far less value than a skiagram which provides a permanent record to be examined and discussed at any subsequent time In difficult cases oblique and lateral, also postero anterior flat films are regularly taken Non-pulmonary as well as pulmonary cases are dealt with, and the total volume of work done may be gauged by the fact that 1,339 skiagrams were taken and 557 screenings done during 1937 It is necessary to emphasize the point that the skiagrams are all taken at a tuberculosis officer who has before him the clinical notes made by himself or by one of his two colleagues During each x-ray session two medical officers work in conjunction, one is a clinician radiologist, the other gives useful help in chest throat, and other examinations Cases definitely tuberculous are dealt with at once the patient interviewed and the necessary treatment arranged Other patients are referred to the dispensary nearest their homes for re-examination at a later date, but most cases are definitely diagnosable by this combined clinico radiological method within a fortnight On the morning following each x-ray session the three tuberculosis officers meet as a board to examine the films together with the clinical dossier of each case The position is analogous to that of a bench of magistrates weighing the whole of the available evidence derived from various forms of examination, including skiagraphy and reaching a conclusion based upon the different findings taken separately and in conjunction It is obviously advantageous to be able to bring the clinician and the radiologist so close together, especially when it is noted that even expert whole-time radiologists admit that by skiagraphy alone the differential diagnosis of pulmonary conditions is often impossible indeed, the number of such cases has been placed as high as 40 per cent Moreover a radiologist who has no clinical experience or is not regularly engaged in clinical work is often greatly handicapped in endeavouring to interpret what he sees This disadvantage can however be overcome to some extent if the radiologist and clinician actually meet and discuss cases of special difficulty or interest

Finally as soon as a diagnosis is made a report is sent to the patient's doctor, and, if of sufficient interest, a few days later a reduced print of the skiagram There is reason to believe that these prints are appreciated and

help to encourage the use of our radiological clinic This in brief illustrates the procedure I have adopted for over fifteen years

Conclusion

Medical practitioners are gradually recognizing the help that chest skiagraphy can give but they sometimes have difficulty in obtaining a patient's consent to undergo examination This reluctance is usually related to the popular idea that tuberculosis is necessarily incurable The wise and tactful practitioner will explain that the object of skiagraphy is to make sure that the patient is all right or at least only suffering from disease in an early stage Driving and other tests are becoming more common among the general public and a few minutes simple explanation will often reassure a timid patient

Skiagraphy of the chest is so important for accurate diagnosis that it can seldom be omitted with safety It is the most valuable single factor in the diagnosis of pulmonary disease

REFERENCES

Davies G Ivor (1937) *Tubercle* 18 No 11 482
Fraser Lord Justice (1937) *Lancet* 1 1067
Jessel G (1937) Lancs County Council Annual Report of Central Tuberculosis Officer p 88
McNalty Sir Arthur (1937) *Brit J Tuberc* 31 126
Simpson H L and Brown L (1911) *Amer J Roentg* 1 25 209

THREE CASES OF CL WELCHII INFECTION FOLLOWING ABORTION

BY

R Y DAWBARN, M D,

Pathologist Walton Hospital

AND

BRYAN WILLIAMS M D, M C O G, F R C S Ed

Senior Assistant Medical Officer Walton Hospital

This condition appears to be uncommon or at any rate infrequently recognized, and we hope therefore that it may be of value to record three more cases In his very thorough review of the whole question of post abortal and puerperal gas gangrene Hill (1936) was able to find only eighty four cases described in the literature to which he added a further series of thirty cases of his own

The interest to us has been twofold first as regards the differential diagnosis and secondly by reason of the rapidly fatal course of the illness In both of the cases septicaemia the onset was so sudden and the manifestations were so dramatic that chemical poisoning was suspected These suspicions were strengthened by the fact that both patients had been taking large doses of pills presumably with the object of procuring abortion We record the more recent of these two cases first because the diagnosis was confirmed bacteriologically The other case occurred in 1934 and though we feel sure now of the diagnosis bacteriological confirmation is lacking The third case also ran a fulminating course although the clinical picture was different and the diagnosis was made soon after the admission of the patient to hospital

Case I

A married woman aged 30 was admitted to Walton Hospital at 2.30 p m on December 13 1937 Her three previous pregnancies had been normal Her last menstrual period was on October 20 During the previous week she had been taking pills of iron and aloes twenty in all At 2 a m on the day of admission she was seized with severe lower abdominal pain and vomiting At 11 a m there was considerable vaginal bleeding

On admission the patient showed signs of severe shock and her pulse was feeble Her temperature was 97 pulse 96 and respirations 26 The lower abdomen was extremely tender and rigid There was slight vaginal bleeding and on examination the cervix was closed and the uterus enlarged to about the size of a sixteen weeks pregnancy There was general pelvic tenderness A provisional diagnosis of either septic abortion with pelvic peritonitis or of ectopic pregnancy was made

At 6 p m her general condition appeared to have improved slightly The lower abdomen and face had become flushed About 2 c cm of thick dark brown urine was withdrawn by a catheter microscopically this showed no intact red blood cell By 8 p m however her condition had become much worse There was now an extensive bluish flush on the abdomen and face On vaginal examination the uterus seemed to be larger Further catheterization produced only a few drops of almost black urine Blood taken from a vein showed evidence of haemolysis the plasma being the colour of burgundy Death occurred at 9.10 p m or within seven hours of admission and just over nineteen hours after the illness began Shortly before death a crackling sensation was elicited on palpation of the lower abdomen

POST MORTEM EXAMINATION

The surface of the body showed a dusky bronzed hue most marked on the face and abdomen The deeper parts were very dark and slight crepitation was noticed on cutting through the tissues of the neck and uterus The lungs were very congested There was haemolytic staining of the blood vessels and endocardium The kidneys weighing 6 and 6½ oz. were almost black The spleen was about twice the normal size and was tense and nearly black Frothy fluid exuded from the cut surface The liver showed cloudy swelling with a little gas under the capsule The stomach revealed no sign of chemical poisoning The intestines were pink and were not ulcerated The uterus was greyish black 4½ by 3½ inches and very slightly crepitant A little blood and necrotic material was found in the uterus and was kept for section No evidence of mechanical injury was found The peritoneum contained dark-coloured fluid A corpus luteum was present in the right ovary

Films made directly from the peritoneal fluid and splenic pulp showed great number of Gram positive bacilli resembling *Cl welchii* Cultures were made from the spleen anaerobically and a good growth of *Cl welchii* was obtained which gave a characteristic stormy reaction in milk after incubation overnight

Sections were cut of the uterus and its contents the liver and kidney and were stained by haemalum and eosin and by Gram's method The uterine contents consisted of necrotic decidua blood many Gram positive bacilli and other organisms No placental villi were found The uterine wall showed evidence of infection and there were many dilated vessels containing infected clot The muscle took the stain badly and parts appeared to be almost necrotic Numerous Gram positive bacilli were seen throughout especially in the blood vessels The appearance of the kidney was suggestive of advanced post mortem change although the necropsy was performed well within twenty four hours of death In some areas the nuclei remained quite unstained and there was marked degeneration of the glomeruli and cells lining the tubules In addition to this many of the tubules were filled with brownish material which was evidently derived from the blood as a result of the haemolysis The liver cells showed extreme degeneration in many parts amounting to necrosis The stain for organisms showed Gram positive bacilli in both liver and kidney

Case II

The following notes are taken from the records of Walton Hospital One of us saw this patient before she died and

also reported on pieces of tissue removed at necropsy for histological examination

A married woman aged 23 was admitted to Walton Hospital at 5.20 a.m. on August 25, 1934. She had had two previous pregnancies. Her last menstrual period was on June 24. The patient admitted having taken pills to bring on an abortion but denied the use of any other method. Vaginal bleeding had begun at 5 p.m. the previous day, followed by abdominal pain at 11 p.m. On admission she complained of constant and severe lower abdominal pain. The abdominal wall was held rigid. Her temperature was 101°, pulse 96 and respirations 28. On vaginal examination some bleeding was noted, and the uterus seemed enlarged to about the size of a ten weeks pregnancy but was difficult to feel. On catheterization about 1 drachm of very dark urine was obtained. This contained albumin and haemoglobin but no red blood cells. Increasing jaundice and cyanosis were noted up to the time of death which occurred at 1.50 p.m. or eight and a half hours after admission and less than twenty one hours after the beginning of symptoms. It was then thought that death might have been due to some chemical poisoning producing haemolysis, such as potassium chlorate.

POST-MORTEM EXAMINATION

The surface of the body showed a dusky red colour with many small red spots mainly on the face and the backs of the arms and legs. The pleural, pericardial and peritoneal cavities contained dark blood stained fluid. The external appearance of the liver was normal but the cut surface showed a yellowish brown colour. The kidneys were both of normal size but were intensely congested and cyanosed so that they looked almost uniformly black. The spleen was of normal size and consistency but was darker than normal. The pelvic retroperitoneal tissues were deeply blood stained but there was no haematoma. The uterus was about the size of an eight weeks pregnancy. There were no signs of injury to the vagina or cervix, the latter was slightly open. There was no foetus in the uterus but a well marked decidual reaction was noted. The right ovary contained a corpus luteum. The alimentary canal showed no evidence of corrosive poisoning. Samples of various organs were sent to the Liverpool City analyst to be examined for poisons.

In the sections of the kidneys the tubules and Bowman's capsules were choked with haemolysed blood. The liver showed cloudy swelling and Gram's stain revealed a few Gram positive bacilli. In the uterus no placental villi were to be seen, there was evidence of infection and many dilated blood spaces. Examination for organisms showed many Gram positive bacilli, some being inside the blood vessels.

Unfortunately the bacteriological report on the blood culture which was taken during life is incomplete. It merely states that Gram positive spore-bearing bacilli were grown and the culture was not an anaerobic one.

The Liverpool City analyst found no evidence of chemical poisoning, and the only diagnosis that could be made at the time was that the patient had died from some haemolytic toxin of unknown nature. Although the matter was left doubtful the possibility of anaerobic septicaemia was considered when the histological sections were being examined. Owing to the fact that no gas was noticed in the liver or other tissues at the necropsy it was thought then that the presence of Gram-positive bacilli in the sections was a post mortem phenomenon and the spore-bearing bacilli in the blood culture were looked upon as contaminants. The last assumption may have been correct in any case it is unlikely that the organisms in the blood culture were true *Cl. welchii*.

On the other hand in spite of the lack of bacteriological evidence on looking back we are convinced that this was also a case of anaerobic septicaemia, and we base our diagnosis on the following facts: (1) the sudden onset of the illness in association with an abortion, the abdominal pain, the ictero-cyanosis, and the haemolysis *in vivo* are typical of an acute "anaerobic septicaemia" as described by Hill, (2) the lack of evidence of chemical poisoning, (3) the striking similarity of this case with the first one, (4) the presence of Gram-positive bacilli in the post-mortem sections. The absence of gas from the tissues had originally appeared to provide a reason against the diagnosis of "anaerobic septicaemia," but this now appears to be invalid, as in Hill's series of cases it was unusual to detect gas in the tissues before death.

Case III

A widow aged 27 was admitted to Walton Hospital at 10.30 a.m. on April 1, 1938. Her two previous pregnancies had been normal. Her last menstrual period was on November 6, 1937. She denied that any interference had been carried out but admitted having taken salts by mouth. Two days before admission vaginal bleeding followed by abdominal pain had started and a small foetus had apparently been passed shortly before admission. The patient was very collapsed when admitted, her pulse was 65, her temperature 96°, and respirations 20. The blood pressure could not be registered. On abdominal examination the fundus had almost the height and feel of a full time fundus after delivery. A small cord was seen at the vulva. On pressure on the fundus a slight offensive loss of dark blood together with gas was observed which at once raised the suspicion of a *Cl. welchii* infection. A direct smear of this showed coliform bacilli, streptococci and large Gram positive bacilli similar in appearance to *Cl. welchii*. After intravenous gum glucose saline her condition improved slightly. There was no further bleeding. At 8 p.m. the same evening however she became much worse and crepitation of the fundus was now felt. The advisability of hysterectomy was considered but this operation was held to be unjustifiable owing to her poor condition. It was thought however that removal of the placenta might improve her chance of recovery by emptying the uterine cavity of dead tissue and by decreasing the absorption of toxins and organisms. This was therefore carried out under anaesthesia. The placenta was adherent but there was no undue bleeding. In spite however of blood transfusion and the injection of prontosil soluble and gas gangrene serum the patient died at 3.10 a.m. the following day or within seventeen hours of admission and three days after the start of the abortion. Blood culture before death showed *B. coli* only but *Cl. welchii* was cultured from the lochial discharge.

POST-MORTEM EXAMINATION

Post-mortem examination revealed some blood stained fluid in the peritoneal cavity. The uterus was large for the stage of pregnancy and was dark red and covered with lymph. Its walls crackled owing to the presence of gas. No signs of any injury of the vagina or cervix were seen. There were some bubbles of gas in the retroperitoneal tissues but otherwise no gas was noted in the liver or elsewhere. Apart from some slight staining of the aorta with blood pigment there were no other gross changes or signs of haemolysis. Sections of the placenta and uterine wall showed many Gram positive bacilli resembling *Cl. welchii*.

This third case presents some points of contrast with the other two cases, although its course while under observation in hospital was almost as fulminating. The diagnosis was more obvious during life owing to the presence of gas in the vaginal loss and the finding in smears, of organisms morphologically similar to *Cl. welchii*. In addition however, the previous occurrence of the first of these three cases had directed our attention to this kind of infection. Moreover, the infection was at first localized to the uterus as shown by the absence of *Cl. welchii* from blood cultures taken during life and haemolysis was found to be almost completely absent at the post-mortem examination. Strains of *Cl. welchii* vary

in their capacity to produce haemolytic and other toxins In the first two cases the rapidity of the haemolysis was such as to suggest chemical poisoning whereas in the third the production of gas was the most obvious feature and more readily suggested the diagnosis

In the two cases of septicaemia the infection was of a particularly fulminating nature the patients dying nineteen and twenty one hours respectively from the onset of symptoms Hill describes one case in which death occurred within sixteen hours after interference but in most of his cases the duration of life in those that were fatal was considerably longer It seems probable from our experience that in some of these fatal cases the correct diagnosis is not made and that some other factor such as shock or chemical poisoning is held responsible for the patient's condition

In none of the three cases was the mode of infection determined In every instance the pregnancy was an unwanted one and all patients admitted having taken drugs with the object of procuring abortion so that it seems probable that instrumental interference had also been attempted

The treatment of this type of infection has been discussed in some detail by Hill but it seems unlikely that any method would have been successful in these fulminating cases at the time they first came under observation

Summary

Three fatal cases of infection with *Cl welchii* following abortion are described In two of these the infection was a fulminating one in which the main feature was the occurrence of haemolysis and a correct diagnosis was not made before death the condition being attributed to chemical poisoning The third case was one of a rapidly fatal infection of the uterus

We should like to express our thanks to Dr H H MacWilliam medical superintendent of Walton Hospital and Mr St George Wilson consulting obstetrician and gynaecologist for permission to record these cases

REFERENCE

Hill Arthur M (1936) *J Obstet Gynaec Brit Emp* 43 201

The eighth conference of military medicine and pharmacy in Luxemburg was distinguished by a very detailed discussion of systematic radioscopy in land forces inaugurated by the Belgian French and Swiss delegates. It was decided that the administration of the International Committee of the Congresses of Aviation and Health should henceforth pass into the control of the conference of military medicine and pharmacy With regard to the statutes of the permanent committee of the congress it was apparent that now that the sixteenth International Red Cross Conference was to discuss the revision of the Conventions of Geneva and The Hague in respect of the sick and wounded of armies in the field and that the proposals of the International Committee of Military Medicine and Pharmacy had been referred to diplomatic discussion these two objectives had been achieved This success which was announced with great enthusiasm would now permit the International Committee to devote its activities to its primary purpose—namely the science of military medicine The commission of medical jurisprudence might have been accordingly dissolved its work having thus been crowned with success *But the problem of the protection of civil* populations was still the focal point of discussion throughout the world and it was agreed that this subject might still preferably occupy the attention of the commission independently of the International Committee

ON CERTAIN PHASES IN THE LIFE HISTORY OF THE POLYMORPH LEUCOCYTE

THE INFLUENCE OF CELL ACTIVITY ON THE NUMBER AND ARRANGEMENT OF THE NUCLEAR LOBES

BY

C J BOND, C M G, F R C S

Arneth (1904) Schilling (1929) and other observers have attributed the multilobular condition of the polymorph nucleus to increasing age of the cell while others—for example Price Jones (1933)—have not accepted this conclusion In the following communication I shall hope to show *that previous activity on the part of the cell* as represented by amoeboid movement and phagocytosis may be an important factor in determining the number of nuclear lobes or in other words the shift to the right in the Arneth count

Chart I

This curve gives a count of *the total number of nuclear* lobes in 100 polymorph leucocytes taken from the blood of the same individual at the same time but under different conditions (*a*) the normal blood film (*b*) the same blood after incubation (*c*) the same polymorph cells when re-incubated after standing at room temperature for six hours

In film (*a*) the total number of lobes per 100 cells was 271
(*b*) 303
(*c*) 394

This rise in the number of nuclear lobes in 100 cells represents a considerable shift of the Arneth count to the right It suggests that the increased work done by the incubated cells over that of the resting blood cells and the still greater activity of the reincubated cells after a period of rest are responsible for the rise in the number of nuclear lobes in the activated and reactivated cells

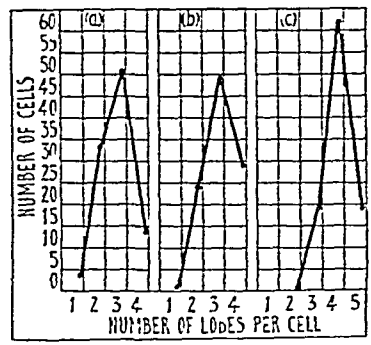


CHART I.—(*a*) Normal blood film 271 lobes in 100 cell (*b*) Incubated blood film 03 lobes in 100 cell (*c*) Re incubated blood film 394 lobes in 100 cells

Chart II

This gives the total number of nuclear lobes in 100 polymorph cells in two cases of pernicious anaemia In Case 1 the polymorphs constituted 31 per cent and haemoglobin 55 per cent and in Case 2 they were 50 per cent and 72 per cent respectively Marked leucopenia was present in both cases The number of nuclear lobes per 100 cells was 472 in Case 1 and 455 in Case 2 —In both cases this marked increase in the number of nuclear

lobes per cell coexisted with a considerable reduction in the total leucocyte blood count

The question arises whether this shift to the right in the Arneth count was due to the greater demand on the activity of the reduced number of cells or whether it depended on the circumstance that fewer young polymorphs—that is, cells with the average number of two or three lobes—were being discharged into the blood stream from the bone marrow It is a significant fact that in both cases of the disease a number of cells contained as many as six or seven nuclear lobes

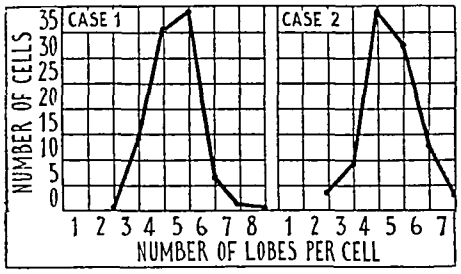


CHART II—Pernicious anaemia Case 1 polymorphs 31 per cent haemoglobin 55 per cent 472 lobes in 100 cells Case 2 polymorphs 50 per cent haemoglobin 72 per cent, 455 lobes in 100 cells

Chart III

This chart gives the total number of nuclear lobes in 100 polymorph cells in (*a*) a blood film (*b*) an incubated pus film, (*c*) a reincubated pus film The films were all taken from a patient with cerebrospinal meningitis, and the pus was obtained from the cerebrospinal fluid by puncture

Film (*a*) gives a total of	273 lobes in 100 cells
(*b*)	335
(*c*)	422

Here again the film from the pus cells—that is, cells which have emigrated from the blood vessels into the cerebrospinal fluid—shows a greater number of nuclear lobes than the corresponding cells circulating in the blood stream while the reincubated pus cells after standing at room temperature show a still greater increase in the number of lobes

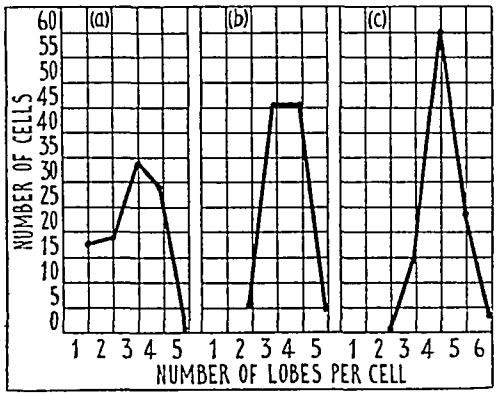


CHART III—Cerebrospinal meningitis (*a*) Blood smear 273 lobes in 100 cells (*b*) Pus smear 335 lobes in 100 cells (*c*) Pus reincubated 422 lobes in 100 cells

Cell Emigration

Now the living pus cell is a polymorph leucocyte which has passed through the capillary wall into the tissue spaces or into a serous cavity or on to the surface of a granulating wound or as in this case into the cerebrospinal fluid To enable it to carry out this migratory journey the cell must become plastic The nuclear mass which in the resting cell consists of two or three lobes aggregated together in the centre of the cell, undergoes marked changes in shape The nuclear lobes become thinner and more widely separated, like a string of sausages when pulled apart, within the common enveloping skin In some actively moving cells the fine strand of chromatin, or nuclear material connecting one lobe with another, may break, and one lobe may thus become disconnected from its fellow, though still enveloped by the same cytoplasmic covering Metchnikoff (1893) has drawn attention to the segmental character of the polymorph nucleus as an aid to diapedesis and emigration

It is also historically interesting to note that T Wharton Jones (1853, 1884, 1887) strenuously rejected the emigration theory put forward by Cohnheim, both in his writings and in his lectures, one of which, given at University College, London, in 1878, I attended Wharton Jones regarded the nucleus of the polymorph cell as composed of a single mass, and he looked upon the multilobular form—which, for instance, is revealed by treatment of the cell with diluted acetic acid—as an artefact Probably this misconception in regard to the shape of the normal polymorph nucleus may have made it difficult for Wharton Jones to accept the possibility of diapedesis and emigration through the capillary wall

The changes in shape of the nucleus which occur during emigration in the living body can also be demonstrated experimentally as taking place outside the body (C J Bond, 1924) Thus, if a drop or two of blood drawn from the finger be incubated in a Ponder's chamber, the cells which emigrate from the red clot and settle on the glass floor will show similar changes in shape of the nucleus If, further, these activated cells are allowed to stand in the closed chamber at room temperature for a short time the string of nuclear lobes tends to aggregate, or even in some cases to fuse into two or three lobes and the cell resumes the rounded shape of the "resting cell But it must be remembered that not only the *resting* but the *dead* polymorph are both *round cells* The latter like the dead pus cell, can, however, be distinguished from the living resting cell by their reluctance to take up stains like Janus green and by inability to reassume amoeboid movement or phagocytosis when stimulated

REFERENCES

Arneth J (1904) *Die neutrophilen weissen Blutkorperchen* Jena
Bond, C J (1924) *The Leucocyte in Health and Disease* London
Jones, T Wharton (1853) *Med Chir Trans* London 36, 191
—— (1884) *Lancet* 2, 630
—— (1887) Ibid, 1, 164
Metchnikoff E (1893) *The Comparative Pathology of Inflammation* Eng trans, p 185 London
Price Jones C (1933) *Blood Pictures An Introduction to Clinical Haematology* Bristol
Schilling, V (1929) *The Blood Picture and its Clinical Significance* Eng trans, London

---

E Grevelink (*These Paris* 1938 No 24) who records two cases in unmarried women, aged 32 and 38 with a review of the literature states that feverish attacks which may be called ovarian fever occur in the female sex between puberty and the menopause The most frequent are premenstrual in which the evening temperature hardly ever exceeds 100° or 100·6° F The commonest symptoms are asthenia, cardio vascular disturbances, and various nervous or psychical troubles The attacks cease with the natural or artificial menopause The patients must be examined for the presence of a hyperfolliculin syndrome which often occurs and justifies treatment by a hormone which neutralizes the excess of folliculin especially an extract of the corpus luteum or mammary gland or a testicular extract In one of Grevelink's cases the fever was dispelled by stimulation of the ovaries or mammary gland by diathermy

CHEMOTHERAPY IN GONORRHOEA

A PRELIMINARY REPORT ON THE USE OF 2-(*p*-AMINOBENZENESULPHONAMIDO)PYRIDINE M & B 693

BY

F. J. T. BOWIE, M.B., Ch.B., D.P.H.

Chief Venereal Diseases Officer, Public Health Department, Aberdeen

One of the most intriguing characteristics of medical research work lies in the possibility that overnight a remedy of unbelievable therapeutic potency may be produced and that the millennium of gonorrhoea control may be close at hand. Thus writes Parran (1937) in respect of what may emerge from sulphanilamide in the control of gonorrhoea.

The introduction of 2 (*p* aminobenzenesulphonamido) pyridine M. and B. 693 is an event which bids fair to produce a notable advance in the attack on the gonococcus. Reference has already been made to some of its results in experimental work in mice by Whitby (1938) in pneumonia by Telling and Oliver (1938) and Evans and Gaisford (1938a, 1938b) and in the treatment of gonorrhoea by Lloyd, Erskine and Johnson (1938). The following report, essentially of a preliminary character, supports the findings published at a similar stage of experimental treatment by Lloyd *et al.* and is of considerable interest in its clinical bearings.

Analysis of Cases Treated

Through the courtesy of Messrs. May and Baker, Ltd., who are kindly maintaining a supply of M. and B. 693, it is now possible to give some details of thirty-one cases of gonorrhoea treated orally by the drug, thirty being male patients and one a female case of gonococcal ophthalmia neonatorum. Of the thirty male cases twenty-seven were of acute anterior urethritis and three of urethritis and prostatitis, twenty-three of the anterior and one of the prostatic types were fresh untreated cases, the other four and two respectively having resisted previous treatment by urethral lavage, benzyl sulphanilamide and or sulphanilamide and in one case by gonococcus antitoxin.

Taking the fresh cases first (twenty-three of acute urethritis and one of additional prostatitis) the results were as follows: six cases were gonococcus-negative in one day, ten in two days, six in three days, one in eight days. One patient showed gonococci up to the seventeenth day, but in his case there was reason to believe that he was not taking his M. and B. 693 regularly. Of the six previously treated (four of urethritis and two of prostatitis) five were gonococcus-negative in two days and one in three days. Thus of thirty cases six were negative in one day, fifteen in two days, seven in three days, one in eight days, and one in seventeen days. (These figures err if anything in favour of the gonococcus, if such an expression may be used, as the seven cases given as being negative in three days were not seen till that period of treatment had elapsed and may have been negative before, but for purposes of these notes are given as three-day results.) The cases were controlled by direct staining and/or culture of pus and urethral secretion at or up to the periods stated. If such pus or secretion was not available, as occurred in a number of cases very rapidly, a centrifuged urinary deposit was investigated by similar methods. Gonococcus-negative means the absence of gonococci by any of these methods of examination.

While these negative results were observed and while most patients when asked would answer that their discharge had disappeared in one day or two days, varying degrees of muco-pus or mucus from the urethra and threads in the urine were noted for periods differing from three to even eighteen days and showing pus cells up to that time. In most cases however it was with difficulty that any urethral discharge or secretion could be found after a week. Though final tests of cure have not yet been applied, none of the thirty cases has shown either clinical or bacteriological signs of relapse in the two to four weeks during which they have been under observation since cessation of treatment. It is worthy of note that so far as could be ascertained not one of the anterior cases has developed any invasion of the posterior urethra. The prostatic cases likewise did not result in further complications.

The Dosage Used

The dosage of M. and B. 693 in twenty-three patients was 3 grammes daily for four to seven days, then 1·5 grammes daily for a similar period in most cases. At first a few were treated for a longer period, probably quite unnecessarily. A trial of 1·5 grammes daily from the commencement of treatment was made in seven cases. Of these five were gonococcus-negative in two days, one in eight days, and one not till the seventeenth day. The total dosage varied actually from 4·2 to 14 grammes. The average amount necessary is yet undecided, but it would appear that anything from 15 to 25 grammes suffices, and the suggestion is made that the initial dose should not be less than 3 grammes daily. The following dosage is to be tried in uncomplicated cases of urethritis: first day 4 grammes, second and third days 3 grammes per day, fourth to seventh day inclusive 1·5 grammes daily. Urethral lavage (potassium permanganate 1 in 8,000) was given to twenty-four cases mainly for psychological reasons, but of six patients who did not have anything other than M. and B. 693 five were gonococcus-negative in two days and one in three days. The duration of infection—which varied from thirteen weeks to one day—prior to treatment did not seem to have any influence on the result of M. and B. 693.

Toxic results were noted in seven of the thirty patients: nausea in two, dizziness in two, headache and lassitude in one, drowsiness in one, and breathlessness in one. All were slight. The last mentioned showed some methaemoglobinaemia, and in this patient only was it deemed advisable to withdraw the drug when his breathlessness promptly ceased. By this time however the desired effect upon his infection had been accomplished. Cyanosis was not seen in any case.

A Case of Gonococcal Ophthalmia Neonatorum

A case of gonococcal ophthalmia neonatorum remains to be mentioned, and for permission to include it thanks are due to Dr. Michie, senior resident medical officer at the City Hospital, Aberdeen. A female infant infected in one eye had been treated actively with boric lavage and silver nitrate and had also received prontosil. At the end of seventeen days the notes read: Making very slow progress; needs intensive treatment. She was then given 0·25 gramme M. and B. 693 thrice daily for three days. The notes then read: Sudden almost dramatic improvement. Conjunctiva clear and only minimal pus. This occurred in forty-eight hours. A culture and smear examined one day after the cessation

of treatment were free from gonococci and from pus cells The child was discharged three days later

Comment

It is not intended to make any comment meantime other than that, of three preparations—benzyl-sulphanilamide, sulphanilamide, and M and B 693 the first and second having been tried extensively in the Aberdeen clinic—the last is the swiftest in action So far it would appear to be a highly efficient and comparatively safe drug in the doses which apparently suffice to deal with the gonococcus But out of this very efficiency there may arise the necessity, for obvious reasons of strict control in the sale and distribution of such a preparation It is hoped that at some future date a more detailed report may be made on the use of M and B 693 in the treatment of gonorrhoea

REFERENCES

Evans G M and Gunsford W F (1938a) *Lancet* 1 1305
—— —— (1938b) Ibid, 2 14
Lloyd V E Erskine D and Johnson A G (1938) Ibid 1 1305
Parran T (1937) *Amer J Syph* 21 475
Telling M and Oliver W A (1938) *Lancet* 1 1391
Whitby L E H (1938) Ibid 1 1210

X-RAY PELVIMETRY

A SIMPLE METHOD FOR MEASURING THE PELVIC BRIM

BY

A. ORLEY, M.D., F.B.A.R.

External pelvimetry is still practised by obstetricians and general practitioners, but probably more as a matter of routine than from the conviction that an accurate knowledge of the internal pelvic measurements will be gained Even internal pelvimetry is unreliable Besides, it is not easy to apply, and it is often painful or disagreeable to the patient

In a recent article on the true conjugate and pelvimetry J Howkins (1938) arrives at the conclusion that the clinical measurement of the true conjugate is either impossible in practice or inaccurate when measured in all but cases of severe pelvic contraction, that a genuine attempt to measure it in a primipara demands a full anaesthetic that the location of the sacral promontory requires practice and skill, and is valueless unless performed by one familiar with pelvic examination and that the measurement, when truthfully obtained, is open to considerable experimental error, in addition to errors due to the particular anatomy of a given patient such as the depth and inclination of the symphysis pubis

It is mainly for the above reasons that radiologists have striven since the early days of the x ray era to make use of radiography for measuring the pelvic brim The first radiography of the pelvis (of a corpse) was performed in 1896 by Varnier and Chappuis and required an exposure of three hours In 1897, at the twelfth International Congress of Medicine in Moscow, Professor Budin showed an excellent radiograph of an oblique pelvis of Naegele this required an exposure of three-quarters of an hour At the same congress Professors Pinard and Varnier reported results of the radiological investigations of the female pelvis It is possible, they said accurately to diagnose in doubtful cases the symmetry or asymmetry of the pelvis the site and degree of the asymmetry, the presence or absence of atrophy of the sacrum or of sacro iliac ankylosis ' They estimated the various diameters of the pelvic brim by comparing the obtained radiograph with standard radiographs of dried pelves

Since then the evolution of x ray pelvimetry has followed a very devious and complicated path (Orley, 1933) Most ingenious devices and methods for measuring the pelvic brim have been invented, and then discarded because they were too complicated, too expensive, or unreliable This paper deals with one method of x ray pelvimetry only—namely, that which was originally suggested in 1897 by Albert, was rediscovered thirty years later by R E Roberts (1927) of Liverpool and simplified by H Thoms

Description of Method

The technique described later differs somewhat from that suggested by Thoms The principle, however, is the same Briefly speaking, the method consists in placing the patient on the radiographic couch in such a way as to bring the plane of the pelvic brim parallel to the plane of the radiographic film For this purpose the tip of the fourth lumbar spine is marked on the skin with a dermographic pencil or by a strip of adhesive plaster The patient is then seated on the x-ray couch in a semi reclining position, so adjusted that the tip of the spine of the fourth lumbar vertebra is at the same horizontal level as the upper border of the symphysis pubis This is carried out in the following way one leg of a pair of callipers is placed on the top of the x ray couch in front of the symphysis pubis between the patient's thighs and the callipers are spread until the tip of the other leg of the calliper is at the level of the upper border of the symphysis pubis The inclination of the patient's spine is then so adjusted that the distance between the top of the couch and the skin mark corresponding to the tip of the fourth lumbar spine is equal to the spread of the callipers

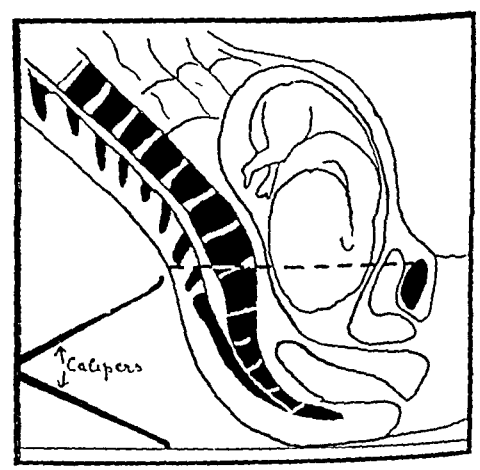


FIG. 1—Diagram showing that when the tip of the spine of the fourth lumbar vertebra is at the same horizontal level as the upper border of the symphysis pubis the line which joins the two passes through the promontory

Some workers dispense altogether with the marking of the tip of the fourth lumbar spine and instead measure only the distance of the upper border of the symphysis pubis to the top of the table, placing the patient in such a way that her spine forms an angle of 57 degrees with the plane of the x-ray couch The pelvic brim

should then be parallel with the top of the x ray couch A radiograph of the pelvis taken in this position shows the projection of the pelvic brim slightly larger than natural size

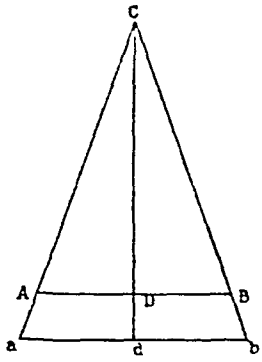


Fig 2 —Diagrammatic representation of the antero posterior diameter of the pelvic brim AB of its radiographic projection ab and of the central ray Cd

The radiographic projection ab of the true conjugate diameter is larger than the actual diameter AB owing to the distortion of the radiographic image caused by the spread of the x ray beam It is obvious that any object placed in the imaginary plane of the pelvic brim would undergo the same degree of radiographic distortion as the brim itself Therefore if after having radiographed the pelvic brim we remove the patient from the x ray couch and leaving the tube in the same position substitute for the imaginary plane of the pelvic brim a perforated sheet of lead supported on two adjustable supports and give a flash exposure we shall obtain on the x ray film a number of black dots corresponding to the perforations in the sheet of lead If these perforations were 1 cm apart the distance between each two adjoining dots on the film would correspond to 1 cm — in other words the distance between two adjoining dots on the film corresponds to a corrected centimetre and any pelvic diameter can be read directly on the film by counting the number of corrected centimetres corresponding to this diameter

The perforated lead sheet can be made at home A sheet of lead 12 by 12 inches and 2 mm thick is ruled out in square centimetres and fine perforations are drilled at each intersection of the transverse and vertical lines The sheet is then mounted on a piece of plywood in order to keep it firm A flash exposure given through it results in a number of small black dots on the film

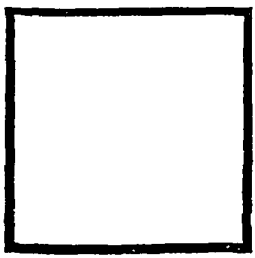


Fig 3 —The perforated sheet of lead

For measuring the distance between the tip of the fourth lumbar spine (or of the upper border of the symphysis pubis) and the top of the x ray couch a pair of ordinary internal callipers are used These can be obtained from any ironmonger for a few shillings

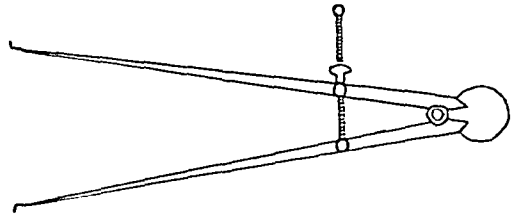


Fig 4 —The callipers

The adjustable supports on which the perforated lead sheet rests can also be easily made by a local mechanic Roughly speaking each support consists of an iron base 3 by 4 inches and about half an inch thick from the centre of which rises an iron rod about 8 inches long On this rod a horizontally placed piece of angle iron slides by means of a collar provided with a set screw

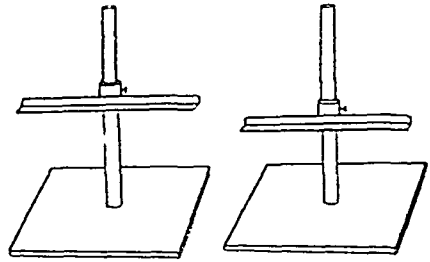


Fig 5 — Adjustable supports for the sheet of lead

After the pelvis has been exposed the distance between the horizontal piece of angle iron of each support and the top of the table is adjusted to correspond to the spread of the callipers and the perforated sheet of lead is placed on the horizontal angle irons in the imaginary plane of the pelvic brim By using a focus film distance of 110 cm and by centring the tube over the inner border of the symphysis pubis the maximum possible error in the measurements is reduced to about 3 mm for true conjugates of over 10 cm wide For smaller diameters the error is still smaller

Commentary

The method is extremely simple and can be carried out even with small x ray plants as radiographic speed is not essential a Potter Bucky diaphragm however is indispensable The output of the plant may be as low as 10 mA and provided the penetration is adequate (somewhere in the neighbourhood of 90 kV) serviceable radiographs can be obtained with exposures of thirty to forty seconds In advanced pregnancy longer exposures may be required

As with the patient sitting the thickness of the tissues is much greater behind than in front of the abdomen the region of the pubis tends to be too dark on the radiograph This can easily be remedied by shielding during part of the exposure the anterior half of the abdomen by means of a sheet of lead which is kept slightly moving in order to prevent it casting a sharp shadow on the film

X-ray pelvimetry can be carried out even during actual labour Where the head is in the pelvic brim the radiograph also shows the relative sizes of the head and brim A number of obstetricians apply x-ray pelvimetry as a routine in all primiparae The expense and trouble are small in comparison with the saving of lives which might otherwise be lost through unnecessary or too-long-delayed Caesarean section in cases of suspected contracted pelvis, which constitutes the most important and most frequent indication for Caesarean section

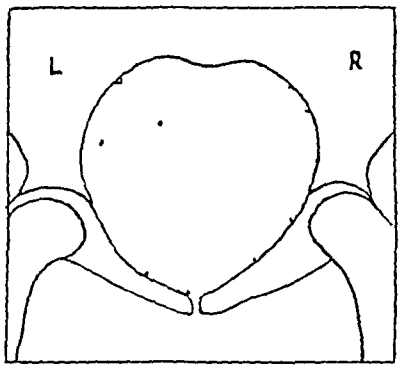


FIG 6—Mrs M aged 28 Had Pott s disease of spine at age of 16 A flat pelvis was diagnosed and first child was delivered by Caesarean section Now wants another child but not unless it were possible *per vias naturales* X-ray pelvimetry shows A-P diameter 12 cm transverse diameter 12½ cm slight asymmetry of pelvis She was advised that there would be no need for Caesarean section for the next child

The mortality from this operation according to a statistical analysis based on 3,686 cases (Banister, 1935) is 6 6 per cent, as compared with a gross puerperal mortality of 0 45 per cent In other words, the mortality from Caesarean section is roughly fifteen times greater than the average mortality following childbirth But, apart from this, x ray pelvimetry, carried out as a routine, brings in an element of reassurance to both patient and doctor, a factor of no small importance in primiparae

BIBLIOGRAPHY

Banister J B (1935) *British Medical Journal* 2 1143
Hawkins J (1938) Ibid 1 278
Jarcho J (1931) *Gynecological Roentgenology* Hoeber, New York
Orley A (1933) *Brit J Radiol* N S, 6 345 (Includes extensive bibliography)
Roberts R E (1927) Ibid 32 11
Thoms H (1935) *Obstetric Pelvis* Wood Baltimore

R Debre M Lamy M Mignon and J J Welti (*Presse méd* 1938 **46** 1011) who record two illustrative cases in a boy aged 11 and a girl aged 8, state that whooping-cough is not merely characterized by a slight catarrh of the upper respiratory tract but is accompanied by a pulmonary lesion In other words whooping cough is a disease of the lungs and runs a subacute course more often than is generally supposed The pulmonary lesions explain the frequency of certain findings even in the mildest attacks especially the presence of fever certain auscultatory signs and the long duration of the disease as well as the frequency and importance of radiological changes in the lung On the right side the usual appearance is that of a roughly triangular shadow in the sub hilar region while on the left the cardiac shadow is blurred These changes which are frequent in mild attacks and almost constant in severe whooping cough may be mistaken for tuberculosis or abscess of the lung and diagnosis may not be possible without the assistance of lipiodol

Clinical Memoranda

Pneumococcal Meningitis treated with Sulphanilamide: Recovery

The number of recorded cases of pneumococcal meningitis which have recovered is still so small that the following case in which recovery followed treatment with sulphanilamide appears worth reporting

CASE RECORD

A boy aged 5 years was admitted to the Royal Hospital Wolverhampton, on April 1, 1938, complaining of right sided earache for one week there was no history of previous ear disease An acute otitis media was found Myringotomy was performed, and this was followed by a profuse discharge of pus The condition subsided, and the child was discharged on April 9

He was readmitted on April 14, complaining of severe frontal headache for two days and vomiting the previous d On examination he was pale, listless, and very drowsy temperature 101° F pulse 130 There was slight neck stiffness, Kernig s sign was positive, and photophobia was present The right ear drum was retracted there was no ear discharge and no mastoid tenderness The left ear was apparently normal

Lumbar puncture was performed and 20 c cm of turbid fluid withdrawn, in the absence of a bacteriological diagnosis 10 c cm of anti-meningococcal serum was given intrathecally, laboratory examination revealed a purulent fluid films showed abundant pus cells and Gram positive diplococci Cultures yielded a pure growth of pneumococci Globulin was found in excess, protein amounted to 0 24 per cent, chlorides to 0 66 per cent and sugar to 0 018 per cent Oral treatment with sulphanilamide was immediately started, one tablet being given four-hourly Lumbar puncture was repeated once daily on the 15th, 16th, and 17th On each occasion pneumococci were grown on culture from the cerebrospinal fluid but the turbidity appeared to be decreasing Cell counts were not made because of clot formation in the cerebrospinal fluid

On the 16th—that is the third day of treatment—the temperature fell by crisis to 97 6° F The child was no longer drowsy and was playing with his toys On the 18th eruption was just becoming evident and the sulphanilamide was discontinued Dosage to this point was twenty one tablets (10 5 grammes) The temperature rose sharply to 101 5 F on the 20th, with recurrence of neck stiffness and drowsiness Lumbar puncture yielded a clear fluid which was sterile on culture The sulphanilamide was restarted—one tablet being given four-hourly for three days, to the total of twelve tablets (6 grammes)—stopped as the cyanosis had become intense and then after an interval of two days given for a further three days to a total for the last course of thirteen tablets (6 5 grammes)

The laboratory reports on the cerebrospinal fluids obtained by subsequent lumbar punctures are as follows

April 24—Clear colourless fluid cells 5 per c mm Films show lymphocytes only, globulin in excess, protein, 0 07 per cent chlorides 0 73 per cent, sugar, 0 043 per cent No growth on culture

April 27—Clear colourless fluid cells 2 per c mm globulin in excess no growth on culture

April 29—Clear colourless fluid, cells 2 per c mm globulin in excess no growth on culture

May 5—Clear colourless fluid cells, 2 per c mm all lymphocytes no excess of globulin, no growth on culture

The temperature fell on the 21st after discontinuance of the sulphanilamide and except for an occasional rise to 99 F thereafter remained normal In retrospect it appears that the

rise of temperature on the 20th was probably reactionary and due to the drug that actually by that time the infection had been successfully combated and that the further courses of sulphanilamide were not really necessary From the 28th onwards the temperature remained normal and the pulse rate fell rapidly

SUMMARY

1 A case of pneumococcal meningitis is described from which the organism was recovered on four different occasions

2 Complete recovery followed treatment with sulphanilamide

3 A total dosage of 23 grammes was given in thirteen days with two rest periods It is probable that infection was successfully combated by the first course of 10 5 grammes

I am indebted to Mr W Hallchurch F R C S for permission to publish the notes of this case and to Dr S C Dyke F R C P., director of the pathological department of the hospital for much valuable help and advice

FREIDA YOUNG M B
Late Assistant Pathologist and Resident Medical Officer
Royal Hospital Wolverhampton

Polyneuritis with Oedema simulating Beriberi

Several unusual points occurring in this case make it I think worth putting on record

CASE RECORD

The patient is a girl aged 4 one of four children in a good middle-class family having a normal mixed diet unlikely to cause a vitamin B deficiency Previous medical history includes whooping-cough chicken pox and measles with pneumonia all in the previous twelve months but before September 19 7

Last December she suffered from an acute attack of bronchitis Her temperature varied between 101 and 103 F with a pulse rate of 120 for six days The mucous membrane of her mouth was inflamed but there was no sore throat The quantity of muco purulent expectoration was extraordinary for a child of 4 Occasionally the sputum was blood stained When she had been up two days she complained of pain in her thighs and it was then found that she could not walk properly On examination she was unable to raise her legs from the bed but could move her ankles and toes She could not turn over in bed Knee jerks and ankle reflexes were absent and the plantar reflexes were doubtful extensor Both legs were affected There was a slight evening temperature Her appetite remained good

After a week in bed the use began to return in her legs although she still complained of some pain in them and in her hands. I considered her case to be one of toxic neuritis following the acute pulmonary infection of three weeks before After another week in bed it was noticed that her face was oedematous more so on one side than the other The first thought was of nephritis but the urine contained no blood casts or albumin Injections of adrenaline were tried in case it should prove to be an angioneurotic oedema but without effect The oedema spread to her legs abdomen back and arm It was a hard oedema which pitted slightly after steady pressure There was a morbilliform rash on her hands and face Although her temperature did not rise over 99 F her pulse rate remained above 140 Retino copy showed exudate in both retinae similar to albuminuric retinitis Urine excretion was reduced to about 15 oz in the twenty four hours Rectal feeding had to be carried out for two days as swallowing became difficult No paralysis of the diaphragm was noticed The blood pressure was 90/60 A blood count showed over 5 000 000 red cells per c mm and a leucocytosis of 19 000 with 79 per cent polymorphs Blood cultures were sterile and the blood urea 20 mg per 100 c cm

Parenteral vitamin B_1 (betaxan) 4 mg daily was started on January 29 1938 Four days later the urine excreted was only 11 oz with a measured fluid intake of 20 oz so two small doses of salvrgan were given resulting in a temporary increase of urine to 20 oz in the twelve hours following each injection During these days her evening temperature rose to 102 and her pulse rate to over 150 After eight days of the vitamin treatment there was definite reduction in the oedema in her face and legs Her temperature gradually came down but the pulse rate remained above 150 The vitamin was reduced to 2 mg daily

On the eleventh day the urine excretion suddenly went up to over 30 oz although the intake was still reduced As the pulse rate did not drop in spite of the temperature being normal three daily injections of 10 mg of vitamin B_1 were given This treatment was followed on the day of the third injection by a drop in the pulse rate to an average of 108 She was now able to move her legs and arms but the reflexes were still absent The oedema had gradually got less in the same order as it appeared Unfortunately measurement of the limbs was not thought of until the face and legs appeared normal The forearm then measured 9½ inches Six days later the forearm measured 8¾ inches and one month later—that is two months after the vitamin treatment was begun—only 6¼ inches no trace of the oedema being observed

Recovery was uneventful until March 10 when she contracted a cold from another member of the family She became gravely ill with pyrexia of 103 F pulse rate over 150 and a respiration rate over 50 Again the sputum was excessive There were fine crepitations at both bases and pneumonia was diagnosed On the sixth day she had the crisis with rigors and cyanosis From this time progress has been steady The knee jerks returned and the plantar response became flexor Now six months after the beginning of the illness her pulse rate averages 84 she can walk well and she is putting on weight In all 74 mg of vitamin B were given intramuscularly and since stopping the injections she has had the vitamin by mouth in the form of ryzamin B

COMMENTARY

Apart from beriberi I can find very little in the literature that resembles this case Mackay (1932) describes a case of peripheral neuritis as a complication of angioneurotic oedema while Boyd Campbell and Allison (1932) describe a case of polyneuritis with urticaria Ford (1937) gives an account of acute febrile polyneuritis following acute pulmonary infection which closely resembles this case except that oedema is not mentioned Price (1938) reports a case of alcoholic beriberi with polyneuritis and oedema

In comparing the results of vitamin B_1 treatment in this case with the results in beriberi as described by Strauss (1938) and Hawes Monteiro and Smith (1937) the most marked differences are the delay in the reduction in the pulse rate and the delay in the diuresis These may have been due to inadequate dosage although this compares favourably It is for this reason that I doubt if the present case can be considered to be due to a vitamin deficiency

I wish to thank Dr J V C Braithwaite and Professor L Parsons for their advice and for their interest in this case

E B GARRETT M B B S
Leicester

REFERENCES

Campbell S B Boyd and Allison R S (1932) *Lancet* 2 259
Ford F R (1937) *Diseases of the Nervous System in Infancy Childhood and Adolescence* Springfield Illinois
Hawes R B Monteiro E S and Smith C E (1937) *J Malaya Branch B M A* 1 87
Mackay W (1932) *Lancet* 1 777
Price N L (1938) Ibid 1 831
Strauss M B (1938) *J Amer med Ass* 110 953

Reviews

CELSUS REDIVIVUS

De Medicina By Celsus Volumes II and III With an English Translation by W G Spencer, M S, F R C S The Loeb Classical Library (Pp 649 (both volumes) 10s net each volume (leather 12s 6d net) 2 50 dollars each volume (leather 3 50 dollars)) London W Heinemann, Cambridge, Mass Harvard University Press 1938

Celsus is coming into his own again From 1815 to 1858 he was known and hated by every medical apprentice in England His treatise *De Medicina* was used by the Society of Apothecaries to test the knowledge of Latin in the examination for the L S A The examiners on the Court—like the Wheelers and the Rivingtons—were scholars, and little mercy was shown to the more ignorant candidates Various translations came into use, the best known being that by Dr G F Collier of the Academy of Leyden and of Magdalen Hall, Oxford These English versions, however, were of the nature of "cribs," designed to facilitate the passing of an ill-educated boy They are now finally superseded by the scholarly translation made by Mr W G Spencer, consulting surgeon to Westminster Hospital, and published in the Loeb Classical Series The Latin and English are printed on opposite pages, and it is thus easy to compare the translation with the original Mr Spencer has been successful, his version is crisp, accurate, idiomatic, and being himself a surgeon he has been able to elucidate various technical points The two volumes recently published complete the work They deal with Books V to VIII—that is to say, with drugs, external and internal remedies, and what may be called folk medicine Books VII and VIII treat of surgery, and tell of the operations in more common use in Rome in the first century of the Christian era, and of the treatment of fractures and dislocations Read with intelligence and with a recognition of the limits of the time it shows that classical surgeons knew and ventured much more than they are usually given credit for In his second volume Mr Spencer gives a list of the remedies used by his author, and of the drugs, herbs, and other ingredients of his prescriptions—not a mere list but an account of each In the third volume there is an appendix on the meaning of the word "cancer" in Celsus and his reference to malignant disease, a list of parallel passages in Hippocrates and Celsus, and a satisfactory index to the three volumes

Mr Spencer is to be congratulated very heartily on having brought several years of work to so successful an issue It shows that in England the cultured surgeon is no more dead than the learned physician

D A P

ORGANIC CHEMISTRY

Principles of Organic Chemistry By H P Starck, M A Cantab (Pp 664 58 figures 7 tables 12s 6d net) London and Glasgow Blackie and Son 1938

Starck's *Principles of Organic Chemistry* is well designed for the requirements of a beginner in the study of the subject In his preface the author remarks that the difficulty of mastering the first principles is increased by the introduction of complex compounds at an early stage before their methods of preparation and characteristic properties have been described This is a fact of outstanding importance and is one that has received scant recognition by writers of textbooks on organic chemistry Starck has followed the aim which he has set up and has produced a book in which the principles are taught by reference to compounds of the simplest constitution He has recognized further that the best foundation for a knowledge of principles is only to be obtained by practice in the methods of production of compounds, for only by this means can the properties of the compounds be realistically revealed He has accordingly included exercises in practical work which are suitably chosen and described in sufficient detail to enable the student to accomplish them successfully And further to enliven the student's interest, and to induce him to exercise constructive thought, he has appended to each chapter a series of questions, the answers to which will call for attentive consideration of what he has read Nothing seems to be omitted from the book that is required to give the student a comprehensive grasp of the subject It also includes important matters of a novel character, such as a description of the Svedberg ultracentrifuge, which by its high speed of 65,000 revolutions per minute has been used successfully to sort out particles of almost molecular magnitude

NECROPSY ON A GORILLA

Bericht uber das Ergebnis der Obduktion des Gorilla Bobby des Zoologischen Gartens zu Berlin By Dr Walter Koch (Pp 36, 17 figures RM 2 50) Jena Gustav Fischer 1937

Dr Walter Koch's report on the post-mortem findings of the gorilla "Bobby" of the Zoological Gardens of Berlin consists of two parts The first is a very careful and thorough report on the necropsy of the ape, including exact measurements of different parts of the body as well as the weight and size of all important internal organs The second part deals with the problem of the actual cause of death of this remarkable animal, which reached in ten and a half years a weight of 266 kg (=585 lb, or approximately 42 stone) and a height of about 5 ft 8 in

Necropsy revealed an appendicitis, oedema of the lungs calcification of renal epithelia, and extreme obesity At first it was impossible to decide which of these findings was responsible for the death Numerous bacteriological tests were carried out with material taken from the nasal cavities, pharynx, tonsils, trachea, bronchi, lungs, spleen and various parts of the intestinal tract, but the result was practically negative The lungs showed slight adhesions on the right upper lobe There was no fluid in the pleural cavity Most of the tissue of the lungs, especially the upper lobes, was full of air but oedematous Apart from the oedema, the blood in the arteries and veins of the lungs contained a very great amount of leucocytes and agglomerations of leucocytes in thrombi An actual lobar pneumonia, however, did not exist, but some early foci of consolidation were found No pathogenic bacteria or cocci were found, but putrefactive germs were numerous The author therefore comes to the conclusion that the condition of the lungs is to be interpreted as a terminal aspiration pneumonia which lasted probably only one or two days

The condition of the appendix was very similar to that in the case of human appendicitis the processus vermiformis was bent and adhered to the peritoneum of the abdominal wall near the spine The peritoneum was here thicker than the normal and covered an abscess of the size of a large bean Inside the abscess was fibrous tissue extending into the submucosa of the appendix, indicating with great probability a previous ulcerating process The kidneys showed slight signs of nephrotic degeneration and the already-mentioned calcification of renal tubuli The

examination of the kidneys with regard to metallic poison (corrosive sublimate) was negative

The testicles which had a weight of only 10·5 grammes (=about 1/3 oz) were distinctly hypoplastic There was no spermatogenesis In connexion with the fact that the epiphyses were not completely ossified and that the hypophysis showed no intermediate lobe but a persisting cystic cavity separating the neuro and adeno hypophysis Dr Koch circumstantially discusses the problem whether the hypoplasia of the testes etc was primary or conditional upon the alleged delayed development of the hypophysis

DEFENCE OF THE EGO

The Ego and the Mechanisms of Defence By Anna Freud Translated from the German by Cecil Baines The International Psycho Analytical Library Edited by Ernest Jones M D (Pp 196 9 net) London Hogarth Press 1937

There can be no question but that psycho analysis is becoming more intelligible to the ordinary reader Whether this is because the ordinary reader is becoming better educated in respect to psycho analytic thought or because psycho analysis is becoming less esoteric it is difficult to say In any case the present volume will repay the study of a large public who owe no allegiance to the psycho analytic school

The ego has got to defend itself against the id—that is the instinctual drives which demand direct and perhaps crude and conflicting expression Protection may be needed because these instincts are inconvenient or because they are too strong and threaten to overwhelm the ego altogether Or the defence may be required against the outside world though this may in the last analysis be the same as the first since these outside objects serve as stimuli to the instincts which are within the personality Thirdly defence may be needed against the tyranny of the superego—the system of laws and ideals established within the personality largely as a result of the dictates and examples of the child's parents and elders In the present volume the mechanisms of such defence are admirably described with illuminating clinical examples Still however the pansexualism is apt to strike a jarring note One wonders how the headmistress of a girls' school devoted to athletics would receive the statement that a girl set herself to excel in drill and gymnastics as a substitute for the acrobatics of her brother's genitals It may be said that if she was thoroughly up to date the headmistress would accept this as a simple statement of fact but the reviewer would regard the outraged susceptibilities of the old fashioned mistress with a certain degree of sympathy

DIET AND BLOOD PRESSURE

High Blood Pressure By I Harris M D in collaboration with C N Aldred M D J T Ireland B Sc and G V James M Sc (Pp 132 22 figures 10 6d net) London Humphrey Milford Oxford University Press 1937

In this monograph Dr I Harris describes his researches into the causation of hypertension These have been concerned with bodily metabolism and relate largely to the changes found in the blood and urine in high blood pressure The first chapter reviews the results of experiments designed to correlate blood pressure with the intake of protein in the diet Non protein nitrogen and urea values in the blood under high and low protein diets are considered in the second chapter while the third deals with the corresponding urinary variations Further sections are devoted to analyses of metabolic exchanges and discussions of the results of these biochemical studies Dr Harris infers from them that the lower the protein intake the lower the arterial pressure and that it is the quantity and not the nature of the protein that matters On a fixed protein intake he has found that the elimination of nitrogenous end products of metabolism takes place more quickly when the blood pressure is higher Further in hypertension the non protein nitrogen was found to be within normal limits except in very advanced cases while urea clearance was retarded A diet rich in protein was observed not only to increase the blood pressure but also to augment the calcium and potassium content of the blood

These and many other observations in this work are of considerable interest and they demonstrate the important part played by diet and particularly protein foods in the bodily metabolism and in influencing blood pressure No one would dispute that there must be other contributory causes of high blood pressure since many people who take a high protein diet preserve normal blood pressures, while vegetarians are not immune from hypertension In this as in other departments of medicine a broad view must be taken when pathogenesis is under consideration As for hypertension familial taint and endocrine imbalance are undoubtedly important in addition to diet while it is difficult not to suspect that some disturbance of the renal function underlies even so called essential hypertension Dr Harris's book deserves the attention of all who are interested in the problem of high blood pressure

GASTRO-INTESTINAL PAIN

Digestive Tract Pain Diagnosis and Treatment Experimental Observations By Chester M Jones M D (Pp 152 5 figures 10 6d net) New York and London The Macmillan Company 1938

Dr Chester Jones has investigated digestive tract pain both experimentally and clinically he has confirmed some old observations and made some new ones which are both interesting and important He recalls the original work of Ross (1887) which suggested that unexplained sensations from a diseased viscus would be perceived by the individual as cutaneous or subcutaneous sensations These observations laid the foundation for the modern conception of referred pain but in addition he recognized the existence of deep visceral pain Sir James Mackenzie and Sir Henry Head (1893) subsequently elaborated these views (though we think Dr Chester Jones does rather scant justice to the latter's contribution) but while both believed that the sympathetic did not carry painful sensations Head did not deny the existence of direct visceral sensation The author quotes with approval J C White's views (1935) that the large medullated fibres scantily present in the sympathetic did unlike the non medullated ones convey sensation but surely this had already been advocated more than forty years ago by Edgeworth working under Gaskell's direction and was accepted as a satisfactory reconciliation of the discrepant views The matter took a fresh turn when Sir Arthur Hurst (1911) explained that the observations on the comparative insensibility of visceral structures were due to the application of an inappropriate stimulus For tubes containing plain muscle he maintained the effective stimulus was tension Thus the riddle was resolved of the causation of agonizing pain in structures that could hardly appreciate the clean cut of a scalpel In the research before us the balloon method of expanding different portions of the alimentary tract was employed and not only was Hurst's explanation confirmed but extensive studies in localization were carried out, and it was found that

subjective localization of the pain was most accurate where the structure involved was most fixed—for example, in the intestine over the appendix or at the hepatic and splenic flexures A very interesting study of the sensation of heartburn" showed that it depended almost entirely on the degree of tension developed in the oesophagus and not on the acidity or temperature of its contents

Head regarded the cutaneous pain or hyperaesthesia referred from a visceral lesion as due to the ordinary stream of sensations from the skin falling into a segment of the spinal cord already irritated through its splanchnic supply Dr Chester Jones has confirmed this in an ingenious way He injected novocain into the skin area and found that this abolished the superficial pain while leaving the deeper pain unaltered His study of gastro-intestinal pain in "functional disease" is of much interest Every clinician knows that such pain may apparently be as great as in any organic disease and, indeed, that serious organic disease may evoke singularly little pain It is all a question of the 'effective stimulus' a loss of balance between the sympathetic and parasympathetic is capable of causing tensions which excite severe pain and which are demonstrable by x rays Dr F C Eve has written convincingly of such functional conditions under the engaging title of 'the blunders of plain muscle," though we might suggest that if 'someone had blundered' it was the autonomic nervous system and not the unfortunate and suffering muscle!

No one can read this stimulating book without gaining a fresher and more intelligent appreciation of a subject of real practical importance

Notes on Books

The second series of signed articles on the Management of Some Major Medical Disorders, which had appeared week by week in these columns in 1935–6, were republished in book form by Messrs H K Lewis and Co as Volume II of *Treatment in General Practice* The fifty chapters were grouped under diseases of the nervous system, diseases of the digestive system, diseases of the blood and blood-forming organs, rheumatic diseases, metabolic diseases, and diseases of the kidney A second edition has now been called for and is published at the same price (10s 6d), each chapter having been submitted to its author for revision, except that by the late Dr Kinnier Wilson, which is revised by Dr Macdonald Critchley The new edition of Volume I of *Treatment in General Practice* (H K Lewis and Co, 8s 6d) was announced in our issue of July 16

No great prescience is required to realize that the future progress of bacteriology lies mainly on biochemical lines Students of the science are bound to see more and more biochemistry introduced into their subject and they will therefore find it a boon to have available the assistance of Dr C G ANDERSON'S excellent little textbook, *An Introduction to Bacteriological Chemistry* obviously the work of an able teacher The specialized biochemistry of bacteria, yeasts, and moulds, comprising their nutritional requirements, metabolism, and by-products, is arranged to follow introductory chapters on underlying physico-chemical conceptions such as *p*H, oxidation-reduction potentials and the like Detailed attention is paid to alcoholic fermentation and to the basis of other industrial processes for which micro-organisms are used The author has a keen eye for the recognition of what is important in the applied sense as well as in the academic and never fails to add where possible a point of special practical importance He concludes with a review of the fundamentals of immunological chemistry, rendered with that same clarity which is manifest throughout the previous sections The volume constitutes an excellent introduction to the larger works on the subject, such as that of Buchanan and Fulmer It is published by E and S Livingstone of Edinburgh at 10s 6d (postage 6d)

The second volume of the first series of the *New International Clinic* (J B Lippincott Company, four vols 50s) contains fifteen original articles, including papers on epidemic encephalitis, heart surgery, brucellosis in Pennsylvania, tuberculosis of the prostate, lymphogranuloma venereum, and a new treatment for acute infections (anthinco therapy), six clinical lectures devoted respectively to anaemias, cortical adrenal tumours, Bright's disease, bilateral renal carbuncles, spontaneous hypoglycaemia, and surgical cases, and a review of regional ileitis

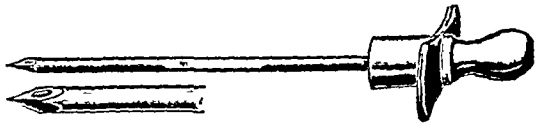
Preparations and Appliances

A SIMPLE ARTIFICIAL PNEUMOTHORAX INDUCTION NEEDLE

Dr F G CHANDLER F R C P, senior physician to the London Chest Hospital and physician to St Bartholomew's Hospital writes

In 1925 I described[1] an improved artificial pneumothorax refill needle with a trocar end which was made according to my instructions by Messrs Allen and Hanburys This was subsequently modified by Dr Andrew Morland, who had a slit made instead of a round aperture at the side of the needle This had the advantage of allowing air to pass more quickly and a freer oscillation in the manometer, with an even smaller diameter needle These advantages are often nullified however by the slit filling with blood which practically never happens with the original needle with the small round hole at the side The use of this type of needle is limited to cases *where a definite pneumothorax exists*

Later I asked the Genito Urinary Company to make a needle with the hole in one of the facets of the trocar, as illustrated the idea being that immediately the point of the trocar was



through the parietal pleura the opening of the needle would be there also A swing of the manometer would occur and the admission of air could be allowed straight away

For about ten years I have tested this needle and am convinced of its value It can make the induction of a pneumothorax in many cases as easy as a refill The lumen may be blocked with blood and this is the reason why it is not successful in all cases To take the needle out, wash it through and dry it may seem to take too much time (though in reality it takes only a few moments) it is desirable therefore to have one or two spare needles in reserve If the method fails other types of refill needle may be employed I used to call it the lucky dip method but now I am convinced that it is far more than a lucky dip'

There is hardly need to describe the technique, it is so absolutely simple After anaesthetizing the skin and the parietal pleura—noting the distance of the parietal pleura from the skin by passing the needle slowly and gently through the insensitive intercostal muscle until the patient just begins to feel the needle—the induction needle described is pushed gently through this anaesthetized track until oscillation occurs in the manometer There is no need for any of the numerous manipulations that are so frequently demanded by the trocar and cannula type of induction needle

[1] *Lancet* August 22 1925

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY AUGUST 6 1938

ARE PELVIC MEASUREMENTS WORTH TAKING?

The dimensions of the pelvis and the means of their determination have for generations been regarded as the fundamentals of obstetric knowledge It is therefore remarkable that simultaneously with the development of precise methods of mensuration many obstetricians are now to be found who ignore the inch rule and insist that the intelligent use of the fingers in palpation and the exercise of the clinical sense' are the only safe guides in foretelling the outcome of labour One evidence of this tendency is the increasing use now made of 'trial labour' in the treatment of supposed disproportion between foetus and pelvis Premature induction of labour in the primigravid woman for contracted pelvis has been completely abandoned in many clinics patients with grave pelvic contraction are treated by Caesarean section while those showing minor degrees of pelvic contraction are allowed to go into spontaneous labour and only if evidence accumulates that the natural forces are unable to overcome obstruction is a lower-segment Caesarean section undertaken There is a twofold advantage in this policy on the one hand numerous inductions of labour are avoided with consequent improvement in sepsis and infant mortality rates and on the other hand the Caesarean operation itself is more rarely performed because the forces of labour so often prove successful in overcoming supposed pelvic obstruction There is however another side to this question It is sometimes very difficult to say whether a foetal head which is still barely engaged in the pelvic brim after several hours of "trial of labour" will in fact pass through the remainder of the pelvis —and pass in undamaged condition Great responsibility is thus thrown on the medical attendant and there is an unfortunate tendency for the important decision to be postponed from hour to hour with the result that Caesarean section should this finally become necessary, is a more dangerous operation than it would have been if performed at the time of election The humanitarian aspects also demand attention It is no triumph of medical art to subject a woman to a prolonged test of physical and mental endurance in order that it may be proved to her beyond any doubt that her pelvis can or cannot accommodate a foetus of such and such a size

This subject has been vigorously discussed of late in the pages of the *Lancet* Its wider aspects need not concern us here but the fact that such discussion can now take place is a clear proof of a change of heart in obstetricians Gone are the days in which the treatment of contracted pelvis was governed by rigid rules concerning the indications for Caesarean section and the induction of premature labour There is no doubt that the present position has been reached because of the comparative failure of clinical measurements of the pelvis as hitherto obtained to provide a means of foretelling the ease or difficulty of the pending labour More and more the truth of Barbour's dictum is being recognized— The foetal head is the best pelvimeter This is to the good but the pelvimeter whether it be the callipers or the foetal head itself cannot indicate the manner in which the presenting part will engage nor forecast the frequency and strength of uterine contractions Least of all can it measure the patient's mental make up the colonel's lady and Judy O Grady' may be sisters under the skin but this family resemblance has a tendency to fade as the hands of the labour ward clock make their slow repeated round Here then are reasons for the distrust of precise measurements and the reliance on 'clinical sense' But sound judgment is given to few and only as the reward of many years of patient observation The experienced obstetrician may instinctively recognize the feel of a disproportionately small pelvis and be able to sense the difficulty which is likely to ensue but the younger worker must perforce seek more tangible evidence of pelvic and foetal abnormality in order that he may deal intelligently with his patient On both scientific and practical grounds there is we believe good reason to continue to employ the more reliable of the methods of pelvimetry and cephalometry

External pelvimetry has its uses in showing certain deviations from the normal type of pelvis but as a means of accurately determining the internal diameters it has long been discredited Serious contraction of the true conjugate may be present with a normal external measurement of Baudelocque and conversely small external measurements are no certain indication of a corresponding diminution of pelvic capacity Internal palpation of the pelvis is of great value and the determination of the diagonal conjugate (from which the true conjugate may be estimated) is generally regarded as the most useful single pelvic measurement which can be taken at the patient's bedside But even this long-established obstetrical

procedure has not escaped criticism Mr J Howkins[1] has declared that it is only in cases of extreme rarity that the promontory of the sacrum can be reached by the examining finger and he describes many errors which the inexperienced worker may make His conclusion that "the clinical measurement of the true conjugate is either impossible in practice or is inaccurate when measured, in all but cases of severe pelvic contraction, and a genuine attempt to measure it demands in the primipara a full anaesthetic" may be surprising, but it is also perhaps significant that no reader has yet replied to this challenging statement No doubt the ease with which the promontory is reached depends to a large extent on the length of the obstetrician's fingers, but equally important is the method of examination, for it is certain that unless the perineum is well depressed by the knuckles the tip of the middle finger will seldom reach the promontory Moreover, adequate pelvic examination is not possible till the later weeks of pregnancy for only then does the vagina become sufficiently soft and elastic to yield to the examining finger The statement that a promontory which is easily palpated is an indication of a contracted pelvis will meet with general approval, but the implication that measurement of the diagonal conjugate is in general beset with so many difficulties that the attempt to take it need scarcely be made may well form a topic for further discussion

In our present issue there appears at page 284 a paper on the merits of x-ray pelvimetry by Dr A Orley There is no question that several of the modern methods of radiological examination of the pelvis give exceedingly accurate information and for some of them it is claimed that the diameters of the brim can be estimated to within 0 2 cm of the true measurement Dr Orley's method is to superimpose the shadow of a lead plate perforated at 1-cm intervals on to the shadow of the patient's pelvis It is a modification of the methods used by Jarcho and Thoms in America and by Roberts and Rowden in this country it has the merit of simplicity and does not require elaborate apparatus Measurement of the foetal head is not discussed by Dr Orley but this equally necessary information can be readily obtained by various well-known procedures notably by Reece's technique[2] or by lateral pelvimetry as recently advocated by Thoms[3] Generations of obstetricians have sought a perfect method of pelvic and foetal mensuration, and it is fair to say that radiologists can now make good claim to have answered the call How useful are these new methods? Time alone can tell Meanwhile, thorough and patient trial is necessary Extreme opinions are too often expressed on this subject The statement that every woman who is about to be married ought to have her pelvis radiographed and the measurements engraved on her wedding ring gives as false an impression as does the statement that the proper place for obstetrical callipers is in the medical museum Both opinions stress one aspect only of a very complex problem, and both are equally misleading

QUACK MEDICINES AND OBSCURANTISM

Lord Horder added another to his many services as a public man by his speech in the House of Lords on quack medicines, summarized in last week's issue of the *Journal* and fully reported in our Parliamentary Notes this week The speech was characteristically courageous and outspoken While admitting that some of the profusely advertised preparations are useful, and the claims made for some reasonable, when he went on to say that most did little good or harm but were sold at fantastic prices and some were fraudulent Lord Horder said what is known to every student of the problem The most telling part of his speech was devoted to the incongruous position of a Government which makes no effort to regulate this traffic while spending money and energy in advocating greater national fitness The Government spokesman, Lord Gage, was obviously uncomfortable when he replied, as he might well be There was the usual admission of many of the evils of the traffic, with the usual suggestion that the Government was helpless Lord Gage threw the main blame on the individuals who were so foolish as to be gulled by quack advertisements This really will not do in face of the vast amount of legislation designed to protect the ignorant and unwary against those who prey on them Of course Lord Gage promised to consider any suggestions made for dealing with the problem, and hinted that Lord Horder might try his hand at a Bill We should doubt if Lord Horder will be tempted to take all the trouble involved in such a step when he recollects the fate of the very modest Bill debated in the House of Commons on March 27, 1936,[1] and talked out with no protest on behalf of the Government With all the evidence in the possession of the Ministry of Health, including the damnatory report of the Select Committee of 1914 together with Lord Horder's recent figures and the able summary of the present position

British Medical Journal 1938 1 278
[2] Reece L N (1935) *Proc roy Soc Med* 28 489
[3] Thoms H, and Wilson H M (1938) *Yale J biol Med* 10 437

[1] See *British Medical Journal* April 4 1936 p 7-6

Professor A J Clark's little book[1] the Ministry cannot escape this dilemma It must either proceed to action with full Government support or continue to labour under the suspicion that it is afraid of the enormous vested interests concerned in this traffic

In his Conway Memorial Lecture three months ago Lord Horder discussed obscurantism in some of its many forms[2] He noted that in matters of health and disease the influence of obscurantism has been and still is marked We have only quite recently become interested in health as distinct from disease Tracing the emergence of organized medicine of to-day from the trammels of magic and theology he showed how man the sufferer lags far behind medicine and its exponent the doctor The mysterious which is the obscurant often makes a greater appeal than does the plain statement of how the high road of physiological rectitude has been departed from and how to regain it What is the secret of the quack's success? In reply to this question Lord Horder said that the argument such as it is runs thus in the mind of the patient He is not trained and he is not recognized by law how clever he must be by nature therefore to be able to cure people! His power is a direct and supernatural gift a power which on that account must clearly be superior to even the highest skill which comes from a long and painstaking study on the part of the registered practitioner The same holds good of the quack's indirect appeal to credulity through the artifices of advertisement experts in frightening and persuading the public by means of the printed word An obscurant according to the dictionary is one who opposes inquiry enlightenment and reform The Ministry of Health cannot be charged with opposing inquiry and enlightenment But will it passively obstruct reform of the law in relation to quack remedies? Or will Dr Walter Elliot summon up courage and with his Department behind him insist on a Government Bill in the near future?

SOCIOLOGICAL ASPECTS OF A DERELICT AREA

An interesting and unusual feature of the Section of Medical Sociology at the Annual Meeting at Plymouth was an exposition by the local schoolmaster of sociological changes in a derelict mining area in Cornwall followed the next day by a visit paid by members of the Section and others to the centre in question The derelict village is St Day in the parish of Gwennap two miles from Redruth with a population of between 1 100 and 1,500 a little pocket of people typical of at least twelve pockets in the old Cornish mining country This was formerly a copper-mining district with an industrial history going back into the Middle Ages Its greatest prosperity was during the first half of the last century In 1801 the population of the district was 4 000 by 1841 it had become 11 000 now it is back at 4 000 again The mining industry came to an end with the closing of the last mine which had employed 3 000 persons in 1870 The effects of the ensuing depression however were not felt immediately because successive emigrations from the parish took place the emigrations of course taking away the more adventurous independent and fearless of the stock Therefore although the industrial disaster occurred finally in 1870 these emigrations and later the demand for war service masked the decay and the full harvest of poverty has not been reaped until the third generation

The schoolmaster Mr R R Blewett gave a vivid picture of a community where water is still carried through the streets and sold from a cart where street lighting was unknown until four years ago where over 30 per cent of the insured workers are unemployed where fewer than ten houses have been built in the last fifty years where free milk is given to more than one half of the school children (as compared with a quarter of the school children in Merthyr Tydfil) where more than half the 268 men employed work in surrounding towns and villages travelling 370 000 workers miles in the year and where the Methodist chapels with their accommodation for many hundreds speak of a flourishing past and with their handful of members of a very thin present Mr Blewett mentioned that in 1927 the school medical inspector reported the presence in St Day of an unusual number of subnormals In the boys' school there were found seventeen serious cases and twenty cases less serious the former showing a retardation of from four to seven years and the latter a retardation of from two to four years Of the total of 105 children who might be described as educationally defective thirty three lived in a very bad environment thirty nine in a poor environment and twenty seven in an environment which was good Mr Blewett had also endeavoured to study the intelligence and character of the parents of these particular children The parents of 18 per cent of them appeared to be normal not enough was known of 19 per cent to form any judgment and one or both of the parents of 63 per cent appeared deficient or backward In his school 136 families were represented These families included in all 551 children an average of 4 05 per family Twenty one families had seven or more children with a total of 195 and an average of 9 3 per family At the other end of the scale there were forty four families with only one or two children The fathers of fifty three of the families whose members attended his school were unemployed and their children at school numbered 127 He had found no relation between the unemployment of the father and the intelligence or backwardness of the children Some children from the smallest families were the lowest in intelligence Among the bigger families the intelligence level did not appear to be so low As to physical characteristics for what they were worth

[1] *Patent Medicines* By A J Clark, M D F R S Fact Monthly Monograph No 14 19 Garrick Street W C 2 Price 6d See *British Medical Journal* June 4 1938 p 1213

[2] *Obscurantism* By Lord Horder London Watts and Co 2s

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

FRACTURES OF THE SHAFTS OF THE FOREARM BONES

BY

E. W. HEY GROVES, M.S., F.R.C.S.

General Considerations

In no class of fracture is it more important to be able to recognize the distinction between the simple case in which mere reposition and splinting will give a good result and the difficult case in which a special kind of traction must be applied or a well-planned operation performed. This is because the integrity of the forearm bones is essential for the skilled movements of the hand. Recognition of the difficult case requiring special treatment should be made early—that is within a week of the injury—because if once malunion or non-union has taken place it will be a much harder problem to restore the limb to usefulness, and operative treatment will be a much more difficult and uncertain remedy. To re-establish perfect function it is necessary not only to obtain correct length and proper alignment of both bones, but also to restore the outward bowing of the radius. This outward curve of the radius is necessary to enable the bone to be rotated round the ulna in the movements of supination and pronation. The fact that the supination muscles, of which the biceps is of much the most consequence, are all attached to the upper part of the radius makes it important to put up the forearm either in full supination or midway between pronation and supination. This is because the upper part of the radius will always be held in a supinated position by the biceps, and it is therefore necessary to bring the lower part of the bone into the same position of rotation. Throughout the whole stage of fixation the joints proximal and distal to the arm should be immobilized, but the muscle should be regularly and systematically exercised daily. The fingers and thumb must be left free, and also the shoulder. The digits must be exercised by active grasping movements and the shoulder by abduction and rotation.

Careful supervision is necessary during the period of immobilization. While it is true that in easy cases in young patients consolidation may take place within four weeks it often happens that when there has been gross displacement originally and especially in older patients, bony union is slow, and if the retentive cast is left off at the end of a month angulation and pronation may recur. Therefore it is wise to keep some form of retentive splint for a further period. After the first five or six weeks the complete plaster cast may be removed and replaced by a single slab of plaster extending from the palm of the hand up to the level of the deltoid, on the flexor aspect of the limb. This is removed daily for active movements of flexion and extension of the elbow and rotation of the forearm. It will be worn for a further period of about six weeks.

Greenstick Fractures in Children

In these fractures there is angulation of both bones, which are broken at the same level about the mid-point of the shafts, but there is no actual separation of the fragments, which are held together by the envelope of periosteum. Treatment consists in manual straightening of the forearm and in applying two plaster slabs (1) from the knuckles to the mid-point of the upper arm on the extensor aspect, and (2) from the palm of the hand to the mid point of the upper arm on the flexor aspect. The plaster slabs are united by the turns of a roller plaster bandage. The elbow is flexed at a right angle, and the hand is midway between pronation and supination and is slightly dorsiflexed. The fingers and shoulder are exercised daily, and the plaster is removed in one month.

Fracture of Both Shafts without Much Displacement

In the typical case the ulna is broken in its lower third and the radius in its upper third, or if the forearm has been broken by direct violence both fractures are at the same level, about the middle. However obvious the fracture may be, a radiograph should be taken to show the exact relation of the fragments and the existence of any comminution. If for any reason the final manipulation and fixation cannot be done at once, a temporary splint should be applied. This is conveniently made by a piece of Cramer wire splint bent to a right angle and extending from the insertion of the deltoid to the palm of the hand, the elbow being at a right angle and the forearm supinated. Merely hanging the forearm in a sling across the chest is apt to increase the displacement. A general anaesthetic should be given when the fracture is put up. Local anaesthesia is not easy in this fracture because the bones lie deep in the soft parts and the solution will be diffused along the connective tissue planes. The method of reduction and fixation consists in traction on the hand and the application of a plaster cast. It is most useful to have a portable x-ray viewing box, with which it can be seen in what position the bones assume the best line and also whether the upper and lower fragments of the radius are locked sufficiently to move together when the hand is rotated. Counter-traction is made on the bent elbow by one assistant while another pulls on the hand, which is held almost completely supinated. Two slabs of plaster are prepared so as to lie one along the flexor and one along the extensor aspect of the arm and long enough to reach from the palm of the hand or the knuckles to the insertion of the deltoid. These are applied direct to the skin without any padding and then joined together by circular turns of plaster bandages. A gap of about a quarter of an inch should be left between the outer margin of the slabs so as to facilitate the splitting of the cast. For the first twenty-four hours a careful watch should be kept for any evidence of swelling or ischaemia. For this reason the patient ought to remain in hospital or certainly be seen again within twelve hours. Evidence of interference with the circulation will be given by coldness or discoloration of the fingers or by increasing pain. On the first appearance of either of these signs there should be no hesitation in splitting the plaster. After the cast is comfortably settled, the patient should be instructed to carry out regular movements of the fingers and thumb and the shoulder. The cast is removed at the end of six weeks or rather less if the position is good.

Typical Mid-shaft Fractures with Gross Displacement

These are fractures which may exercise the patience and resource of the surgeon to the utmost The traction needed for reduction will have to be much more powerful and be sustained for a longer time than in the first type considered and it may have to be supplemented by some other form of corrective force to keep the two bones from sagging together Patience and perseverance are more essential to success than any feat of legerdemain The portable x-ray viewing box will be of the greatest use Traction may be applied in various ways but it is essential that it should be maintained for a considerable period not only in order to overcome the muscular resistance but also to keep the arm in good position while the plaster is being applied and is setting The lower part of the arm above the elbow is protected by a surrounding cuff of adhesive felt four inches wide A long strip of four inch webbing is passed round the felt cuff and the two ends are fixed to a staple in the wall or to the post at the head of the bed A wooden spreader is placed between the two limbs of this band so as to leave

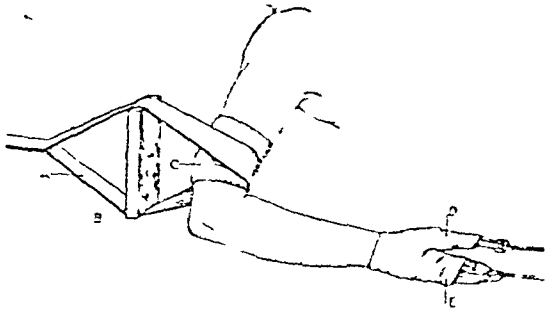


FIG 1—Traction applied to forearm before applying the plaster cast A = Webbing band surrounding the arm above the elbow and attached to a fixed point B = Wooden spreader to keep the back of the arm free C = Adhesive felt cuff round the arm D = Traction band attached to thumb and index finger E = Traction band attached to the three inner fingers

the back of the arm free this provides for fixed counter-traction Traction on the hand should be arranged by applying strips of adhesive plaster along the back and front of the hand and digits one strip doubled over U fashion taking the thumb and index finger and another strip taking the other three fingers These strips extend about one inch above the wrist and are fixed by circular turns of adhesive plaster The ends of the longitudinal strips form projecting loops beyond the fingertips each loop affords an efficient form of traction and moreover the amount of traction on the radius and the ulna can be controlled by having separate traction bands on the outer and inner parts of the forearm Now that both traction and counter traction are provided for it only remains to apply these forces Either immediate traction may be made under an anaesthetic or continuous traction may be applied through the attachment of weights When the fluorescent screen shows that the full length and proper position have been obtained the traction bands on the fingers are tied by cords in the loops to a post at the bottom of the operation table and the arm and forearm are encased in plaster If continuous traction is used the patient is kept in bed with the arm abducted at the shoulder and the elbow bent to a right angle Traction is made on the forearm by weights and cords running over pulleys At least 10 lb will be necessary in the case of an adult—about 6 lb on the radial and 4 lb on the ulnar side of the arm

This continuous traction is kept up for about twenty four hours after which the plaster is applied When this is in position the wrist must be kept in some dorsiflexion and the back of the hand is protected from pressure by a pad of adhesive felt The whole plaster cast is applied before the traction or counter traction is removed This removal is effected by cutting off the webbing above the elbow and the adhesive plaster from the fingers If there is a decided tendency for two bones to sag towards one another this may sometimes be corrected by pressure between the middle of the shafts of the bones The effectiveness of this can be observed by means of the fluorescent screen using at first the tips of the fingers and thumb to produce the separation of the bone and then after the plaster slabs have been applied placing longitudinal wooden rods about four inches in length and one third of an inch wide along the long axis of the plaster back and front pressing them in and fixing them by circular turns of a plaster bandage (Bohler)

If the forearm has been pulled out for the full length and the hand kept in almost full supination with dorsiflexion of the wrist a very useful limb will probably result even though the radiographs show some irregularity at the site of fracture It may happen however that secondary displacement occurs a few days after the

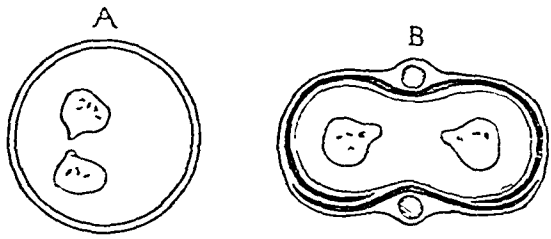


FIG 2—A Diagrammatic section of forearm surrounded by a constricting bandage which has pressed the two bones together B Forearm fracture with plaster slab on flexor and extensor aspects the bones have been separated from one another and this position maintained by placing two wooden rods front and back in the groove between the bones and fixing these by the turns of a bandage

fracture has been put up This is due to shrinkage of the limb allowing of retraction within the plaster Under these circumstances the plaster case has to be removed and traction reapplied two stout Kirschner's wires must then be used to transfix two points (1) the ulna just below the olecranon and (2) the lower ends of the radius and ulna The plaster case is now reapplied incorporating the transfixion wires which are then cut short

I have thought it well to indicate the possibilities of efficient treatment of difficult cases without operation but I think it should be strongly urged that cases be sent to a fracture clinic of repute if they should prove refractory In these cases timely open operation by an expert is often the simplest and best solution of the difficulty if it be done at an early date Sometimes it is only necessary to make a simple exposure of the bone ends when they can be accurately interlocked otherwise plating wiring or pegging will be satisfactory when done by an expert

Fracture of Shaft of Ulna Only

As a rule this causes no difficulty as the displacement is so slight It should be treated by traction and the application of a plaster cast the forearm being put up in a position of mid rotation But if it is complicated by a simultaneous dislocation of the head of the radius at the elbow the matter is entirely different This fracture

dislocation requires to be treated on the same lines as the fracture of both bones with displacement—that is, by a special form of traction with double transfixion I am very doubtful whether it is ever justifiable to allow such a case to be treated by closed methods, especially if the patient is a skilled manual worker The ideal method, in my opinion, is first to reduce the fracture and dislocation by traction and then to operate, uniting the ulna by a plate or wire, and following on by exposing the head of the radius and repairing the torn orbicular ligament If conservative methods are used it is important to check the position by weekly *x*-ray examination, because of the great liability to secondary displacement

Fractures of the Radial Shaft Alone

In many cases these present no special difficulty and the arm should be put up in a plaster case following traction But three special conditions require careful consideration They are

(*a*) *Fractures Above the Middle of the Shaft*—These must be put up in full supination, because the upper fragment will be supinated by the biceps and the lower fragment must therefore also be supinated to be in correct rotary orientation

(*b*) *Fractures at the mid-shaft* are very liable to non-union because the tendon of the pronator radii teres slips between the fragments If, therefore, after apparent reduction and splinting the radiograph (in two planes) shows there is a persistent gap between the ends of the radius the case ought to be submitted to an open operation before bone sclerosis takes place

(*c*) *In fractures at the junction of the middle and lower thirds* there is a great tendency for the lower fragment to be pulled over towards the ulna by the action of the pronator quadratus and the thumb muscles An attempt may be made to correct the displacement by pulling on the thumb and forefinger and by lateral deviation of the wrist towards the ulnar side But if this does not succeed it is far better to operate without undue delay At an early stage, open reduction and fixation by a peg, plate, or wire is very simple and satisfactory

Open Fractures of the Forearm

In cases where there is only a slight wound this should be immediately excised and sutured and the fracture treated as above described In cases of severe crushing, such as when the arm has been caught in machinery, immediate and efficient treatment will be required if the limb is to be saved If it is practicable to transport the patient to a reliable fracture clinic within a few hours this should be done The only circumstance which demands immediate treatment is haemorrhage, but this is unusual in the ordinary type of machinery accident Bleeding must be stopped and 500 units of anti-tetanic serum injected and the decision then made as to whether the case is to be treated on the spot or be sent elsewhere If the latter is impossible the wound toilet must be made It is unnecessary to give details of this The essentials are the toilet should be performed within six hours of the injury, all contaminated surfaces, including an eighth of an inch of the skin edges and all dirt and foreign bodies should be removed swabbing over the surface with 1 in 1,000 flavine solution and immediate suture of the skin edges with interrupted stitches of silkworm-gut The arm is placed in a plaster cast after as accurate a reposition of the fractures as is possible, and windows are cut in the plaster over the wound

The most important consideration is the indication for amputation In general terms, no arm, hand, or finger should be amputated if the circulation is sufficient to maintain life Only if the main vessel has been divided and the distal part of the limb is cold and pulseless should immediate amputation be done The occurrence of gas gangrene, indicated by swelling, crepitation, and a characteristic odour, may require amputation one or two days after the accident

PSYCHOTHERAPY CONGRESS AT OXFORD

The tenth International Medical Congress for Psychotherapy was held at Oxford from July 29 to August 2 On the first evening H M Government held a reception of delegates in Christ Church Hall, with Mr Robert Bernays, M P, as host The congress sessions were held in the Taylorian Institution

Presidential Address

Professor C G JUNG, the President, opened the proceedings on July 30 with an address in which he explained the "fourteen points" of agreement between the various conflicting schools which had been reached by the efforts of the Swiss branch of the congress The motive behind this enterprise was, he said, to lay a basis for practical work and to abandon futile discussion of theory The points were first, that psychotherapy used medical technique for diagnosis it used a relation by the patient of his difficulties, together with a study of his symptoms Forms of illness were observed which had nothing to do with bodily disturbances, but were only intelligible in terms of the psyche This method of diagnosis therefore focused on the general psychic disposition of the patient It considered all possible means of expression associations, fantasies, dreams, symptoms and demeanour It found an aetiology reaching down into the depths of the personality below the conscious mind Investigation led first to the discovery of unconscious fixations on situations and persons significant in the patient's childhood These fixations had both a causal and a purposive aspect and set tasks for future fulfilment One of the tasks of psychotherapy was to illuminate the factors out of which the illness developed and continued, and its method was the analysis and interpretation of all forms of expression The therapeutic development of the patient depended on his relationship with the physician, and this was the basis of his relationship with society It took the form of a transference neurosis—the projection of unconscious contents This neurosis was laid down in the unconscious fixations of childhood, behind which collective unconscious fixations were assumed The new contents must be realized as parts of the personality because only so could the patient feel his responsibility towards them

Psychological Mechanisms in Childhood

Dr A GROENEVELD (Amsterdam), in a paper on early childhood and some of its mechanisms, pointed out the two extremes in the psychic reality of the child an appreciation of concrete realities and a tendency towards unbounded and diffuse fantasy The child showed too easy acceptance of empiric reality, magic reactions such as premature deification of banal facts, and a tendency to homogenize a world of conflicts and thus to escape from unbearable reality He searched for increase of potentiality in excitement and explosive relief He was inclined to catastrophe and sudden transition he was handicapped by canons such as the craving for symmetry, perfection, and constancy The formulae of homogeneity and canonotropism might be valuable in the understanding of adult neurosis

Dr F KUNKEL (Germany) introduced the basic concept of "We" as a suggested solution of educational difficulties The child was born into a 'We' conditioned environment in which he could not distinguish himself from the mother but every unfavourable experience of adult behaviour broke

this original We state The psychotherapist should therefore adopt a We -centred attitude and draw the child into it educating him in the same attitude and then through him modifying the egocentric attitude of the mother The new attitude of the child to the group he called the maturing We which included and accepted differences in its members

Dr H NEUCARTEN (Germany) considered that this concept could not offer a complete solution unless it gave full weight to the development of the individual and allowed him to realize his essential difference from the We In the last resort the concept broke down when the group met another with which it could not be reconciled Dr J H VAN DER HOOP (Holland) feared that the idea might make psychotherapy seem over simple and avoid the distinct problems presented by the many Wes —sexual social and spiritual

Play Therapy

Dr MARGARET LOWENFELD dealing with the theory and use of play in the psychotherapy of childhood said that the child's mind contained at first a totality of mechanisms which could not be analysed a primary system and that this must be expressed by any non verbal means which proved suitable It was *incommunicable in a codified* set of symbols His secondary cognitive system grew up alongside it and could express itself to others. The primary system had a structure but it was different from that of the cognitive It contained a mass of combined material combined rationally but according to the bodily experience of the combiner If the child be given play material which would enable him to externalize his primary system and then incorporate it again into himself he would get well and pass on to a proper centre of gravity in his secondary system

Dr C BOENHEIM who also spoke on the scope of child psychotherapy said that therapy depended on the exact analysis of structure The changes resulting from development demanded reserve in considering the treatment and confidence in the curative powers of nature Many nervous disorders were connected with physiological development—for example anorexia and enuresis—or associated with disorders of mental development which should be treated by educational methods Suggestibility and plasticity *should be used consciously instead* of unconsciously The child depended on his environment and so his surroundings must be investigated and modified if necessary The parents might have to be treated Approaches varied the object being to make unconscious contents conscious Play therapy word therapy drawing and dream interpretation had useful application

Dr C L C BURNS (Birmingham) *spoke of the value of* play therapy as a communication between unconscious and conscious the children spoke in the old language of fable parable and dream Dr W FÜRSTENHEIM (Frankfort) said that it was often difficult to distinguish between neurotic and neglected children Long patience with play methods would usually be rewarded

The Development of Personalities

Dr J H VAN DER HOOP gave an address on analytic and synthetic processes in the different phases of life He said that in the phases of stability analysis was called for but in a phase of flexibility a synthetic technique was necessary to complete the work as for example with childish patients and those with a psychopathic personality or genius Special forms of synthesis and equilibrium were propagated by ideals Spiritual ideals expressed the total meaning of life Objectivity in treating synthetic problems of puberty or a crisis involving spiritual ideals meant an ability to see the value of different social forms and of different solutions of major problems The creation of a synthetic psychology describing the meaning of different ideal values was necessary for treating problems involving the formation of new ideals

Professor H C RÜMKE (Holland) expressed a caution against analysis with a view to partial disintegration even for patients in a well integrated phase In the latent period of middle life case was particularly necessary to ascertain whether the symptoms were those of neurosis or negation for analysis of the latter might be harmful Dr H SCHULTZ HENCKE (*Germany*) *pleaded for the retention* of the term analysis for real dissection of psychic contents which formed only a small part of practical psychotherapy It was indiscriminately applied also to the act of drawing the patient's attention to the significance of his material and pointing out faults of attitude—both essentially synthetic processes It was an ancillary process—a medium between science and synthesis Dr IRA WILE (New York) considered that every analytical situation was a synthetic situation and vice versa and to separate them was a neurotic procedure

Dr J M ROMBOUTS (Holland) spoke of psychotherapy and the development of personality He showed how weakness and retardation were at the basis of many mental adaptation The psychic content of the organism followed an undulant line it represented the synthetic vital impersonal side and always strove towards over compensation The mental content was personal detached and analytical striving along a straight line to an imagined object with as little adaptation as possible *The two principles inevitably conflicted* sometimes until apparent failure and breakdown but even then the psyche continued to work In the first part of life the task of psychotherapy was to prepare the individual for life with all its difficulties and possibilities to strengthen the courage and show the possibilities of fresh growth inherent in every disappointment In the second part of life the patient should be helped to realize his membership of the whole of mankind and the universe

Neuro'ogical Study of Hysteria

Dr F POLLAK (Czechoslovakia) speaking on a neurological study of hysteria said that psychosomatic disturbance might show itself in the ocular mechanism The eye was a valve so to speak through which psychosomatic forces passed from one level to another Hysterical disturbances of sight could be explained in anatomical and functional terms Hysterical disturbances of sensibility did not follow anatomical rules and the distribution of the lesions bore no relation to the spinal innervation Focal disorders sometime produced ocular symptoms similar to those which had habitually been *ascribed to hysteria but with no suspicion of wish fulfilment* This hypothesis partly explained the symptom of auto copy Barbitone poisoning could produce quasi hysterical symptom The physical and psychic mechanisms were separated so to speak by a membrane like that which separated the blood from the cerebrospinal fluid The permeability had a certain normal value for the maintenance of balance but in disease it might be much decreased or increased In most psychoneurose such as obsession it was decreased in hysteria it allowed free mingling of the psychic and physical contents Hysteria followed the rules of general organic neurology in *the symptoms which were produced* by the resulting releases of energy Dr Pollak related the case of a country girl who suffered from a typical hysterical anaesthesia of the right side after an affray on her farm Organic causation was eliminated A few weeks later she showed a fully established syringomyelia of the right side of which the hysterical symptom had been a prediction

Dr E WITTKOWER gave an account of some personal studies in ulcerative colitis on forty-one unselected patients Sufferers from this disease he said frequently referred it to worry and seemed obviously mentally abnormal His patients could be classified into several groups *but, except for the* common factor of gross emotional disturbance of onset in more than half and of long standing psychological abnormalities and disorders in nearly all there was no constant aetiology

Problems of the Mature Personality

On July 31 Dr WILLIAM BROWN spoke on psychological problems of the mature personality He said that the age of maturity for his purposes was the man who was happily married Marriage with its need for responsibility and the binocular view of life might give rise to disturbances affecting feeling and outlook The great danger at every stage of mature life was retrogression to a previously occupied

position Deep mental analysis helped the individual to gain an insight into the persisting effects of his earlier experiences The danger of narcissism or self-admiration or self pity was ever present It was often subtly continued by making the marriage into a mutual admiration society, or forcing the children into being parts of the parents personality A man less often chose a profession than was chosen by it, and in mature life he might turn back to earlier and more primitive ambitions with disastrous results Sublimation was one of the most fundamental problems of the mature personality a movement forward to the fuller development of the personality The individual must consent finally to the surrender of some personal ambitions for himself and find a philosophy to meet the needs of his advancing years Much help could be given here by analysis in the building up of a supratemporal and duly co ordinated system of values and a serene and courageous spiritual outlook The central problem was ethical

Dr H VON HATTINGBERG (Berlin) remarked that the literature gave the impression that there was no problem of will This was wrong The good analyst in practice, taught the patient how to will The study of will was necessary to bring analysis into relation to the remainder of psychotherapy Dr BROWN answered that analysis gave great insight into the nature and control of will He declared vigorously that the study of values through philosophy was of the greatest importance to the psychotherapist

Dr A REPOND (Switzerland) delivered an address on "Le Demon de Midi —psychological troubles of the fourth decade of life such as outbursts of emotion, irregular love affairs and religious conversions He had found that crises of this kind occurred nearly always in persons with a certain abnormal youthfulness of temperament and body, and sought for an explanation in factors which had hindered the normal sexual development of puberty According to the epigenetic theory, the ovum contained primary centres of organization which induced the development of secondary centres Growth was thereafter the work of a series of relays, coming into operation successively Their potentialities might be varied by factors of inhibition or excitation Dr Repond drew an analogy in the development of the psycho sexual function when this was inhibited energy might be stored up, to be released much later in life and to produce the functions they should have produced much earlier, to the disturbance of the patient s social adaptation

Professor RUMKE remarked that many of these persons would accurately picture their whole emotional life history in the changes of mood which they underwent in four weeks He thought these patterns had little or nothing to do with endocrine changes

Infantile Anxiety

Dr KARIN STEPHEN took as her subject the development of infantile anxiety in relation to frustration, aggression, and fear This disorder she said was the outcome of an internal deadlock in which desire rage, and fear became involved in a vicious circle each augmenting the other and inhibiting its discharge Projection on to the environment merely perpetuated the vicious circle If the circle were broken by reversing the flight reaction fear, rage and self-frustration might be reduced and a real solution of the problem achieved

Dr THEODORE FAITHFUL declared that the subject was of primary importance to the work of the whole conference Rage and hate were part of the male personality anxiety was a female reaction and most often due to the masculinity of the mother or nurse It was unless fixated a normal expression of the feminine side of the self

(To be concluded)

On the occasion of the centenary celebration of Dalhousie University Halifax Nova Scotia, the honorary degree of LL D is to be bestowed on August 17 upon three representatives from Great Britain Lord Macmillan, Sir Walter Langdon Brown, and Professor Ernest Barker

THE EPIDEMIC SITUATION IN CHINA

That the continuation of hostilities in China would have extensive epidemiological repercussions was anticipated when the League of Nations Units—referred to in an article in the *British Medical Journal* of July 2, 1938, p 33—were dispatched from Europe The mass movements of refugees and of troops on an unprecedented scale, the flooding that followed the breaking of the dykes of the Yellow River, and the lowered resistance of a large section of the population, together with the great strain put on the local administration in many districts, have resulted as was expected, in a widespread epidemic of cholera, affecting particularly the central and south western parts of the country To deal with this emergency the Chinese Government made great efforts, particularly in the direction of preparing cholera vaccine, but in view of the urgency and the enormous quantities required it was compelled to seek help from outside

Control of Cholera by Vaccine

The Government therefore applied to the League for assistance in obtaining as soon as possible six million doses of cholera vaccine In these circumstances the League, after placing an order for immediate delivery of one million doses of vaccine at the nearest bacteriological institute, invited the collaboration of national institutes of countries participating in the work of the League s Eastern Bureau at Singapore as well as those of Europe and the United States To date the Eastern Bureau reports gifts of half a million doses each from Australia and Ceylon, and one million from the Philippines (Red Cross), the Pasteur Institute at Hanoi having previously given 250,000 doses From Europe the State Serum Institute of Copenhagen is sending 130,000 doses the Cantacuzene Institute of Bucarest one million doses the School of Hygiene at Zagreb half a million doses, and the Ministry of Public Health of Turkey one million doses The Egyptian Ministry of Health have dispatched 180,000 doses From South America the National Institute of Bacteriology Buenos Aires offered 200 000 doses The United States Government has informed the League that the American Red Cross are shipping immediately three million doses to China

It is this work in connexion with the control of cholera which is the immediate preoccupation of the three League Units attached to Chinese Health Units, one of which is working over areas relatively close to the Yellow River in North China with headquarters at Sian, one is in Central China with headquarters at Changsha, and one in South West China with headquarters at Nanning In the last few months large quantities of material have been sent out for the provision of laboratories equipped both for diagnosis and the preparation of vaccine, saline apparatus, and syringes for inoculations

General Measures against Infectious Diseases

Though in face of the existing conditions the work of the League Units is concerned for the time being chiefly with cholera control, the work already done in connexion with public health generally and epidemiology is very considerable This has been directed particularly to achieving practical lasting results, and among the principal of these is the encouragement given to the Chinese Government in the extremely difficult work of protecting the health of the civil population The Government has created no fewer than one hundred health units to serve particularly in rural districts as well as three large anti epidemic units each consisting of five 150 to 250 doctors and nurses to deal with epidemic problems in the Northern Central and Southern areas of the country In addition to these units and their equipment and supplies the National Government has granted 160 000 dollars to the League of Nations Epidemic Commission for its present activities

Small-pox, Typhus, Malaria

In regard to the more directly technical work of the League Units mention should be made of the great care

of small pox vaccination carried out by all three units in which large quantities of both wet vaccine made locally and dry vaccine from Java have been utilized The control of typhus has been done on an extensive scale particularly by the unit in the North through the use of vaccine as well as by the establishment of delousing stations the general supervision of the sanitary conditions of refugee camps and the institution of hospital for infectious diseases Malaria work has been undertaken on a wide scale especially in the Central and Southern part of China no less than two tons of quinine having been sent out by the League for this purpose

Syphilis among the refugees has called for special work as well as urgent nutritional conditions Considerable quantities of rabies vaccine have been prepared in the laboratory of the Northern Unit and distributed widely to hospitals and mission stations Finally the personnel have extensively engaged in surveys in connexion with particular problems such as plague or general public health conditions especially in the refugee camps

The reports received invariably emphasize the increasing need for medical work generally and particularly for the epidemic work on which the League Units are engaged The Chinese Government has recently applied to the League for the continuation of this collaboration for another financial year (1939) in order to consolidate the work of which the League Units have already built the foundations

Nova et Vetera

ANNALS OF MEDICAL HISTORY

The May number of the *Annals of Medical History*[1] opens with a biographical sketch of Linnaeus physician and botanist by Dr H Larsson of Detroit who dedicates it to the memory of that brave group of his countrymen who in the year 1638 founded the Swedish settlement on the Delaware The frontispiece which like the portrait on the cover is different in each instalment is that of Johannes L Bausch (1605 65) a distinguished physician who suffered from major trigeminal neuralgia and according to Dr Lewis was the first authentic case on record for what the Arabian school described was really facial paralysis the error being due to mistranslation Dr C Elgood formerly of Teheran now of London presents the earliest account of syphilis in the East given in 1501 by a little known author whose only work was *The Quintessence of Experience* That the author of eleven hundred pages on physiology who used the southern alligator for his experiments should be so forgotten that the date of his death somewhere between 1866 and 1879 is unknown must be exceptional but this is the sad case of Bennett Dowler who according to Dr Meek was a controversialist not unaware of his own peculiar merit Edna and Theo von Storch reproduce the description given of epilepsy in the thirteenth century by Arnold of Villanova The history of medicine in Southern California from a very early date in the sixth century is begun by Dr Shuman of Los Angeles

Sir Philip Crampton Smyly who is credited with the introduction of the laryngoscope to Ireland in 1860 was born one hundred years ago He was President of the Royal College of Surgeons in Ireland and in musical circles he was honoured with the presidency of the Hibernian Catch Club in Dublin He died in 1904

[1] *Annals of Medical History* N.S Vol X No 3 May 1938 Edited by Francis R Packard M D New York Paul B Hoeber Inc London Medical Book Department Harper and Brothers Illustrated Subscription for six numbers annually 10 dollars single numbers 2 50 dollars

ONE HUNDRED AND SIXTH ANNUAL MEETING

of the

British Medical Association

HELD IN PLYMOUTH, JULY, 1938

THE SECTIONS

SUMMARY OF PROCEEDINGS

During the next few months there will be published in the BRITISH MEDICAL JOURNAL *the opening papers communicated to the Scientific Sections of the Annual Meeting at Plymouth The reports of discussions continued from last week (p 250) are intended to give members who were not present a general idea of the proceedings*

SECTION OF MEDICINE

Thursday July 21

Anxiety States

With Dr DONALD HUNTER in the chair Dr T A ROSS opened a discussion on anxiety states in general and industrial medicine Dr Ross's paper was published in the *Journal* of July 30 (p 209)

Sir HENRY BASHFORD continuing the discussion with a paper on the anxiety factor in industry spoke of his personal observations over a period of thirty years as Chief Medical Officer to the Post Office The employees in this industry numbered 270 000 In some respects they were a selected group as they were admitted only after initial medical examination moreover the prospect of a pension and the sick pay available for fixed periods conduced to a sense of security among these workers As an example of an anxiety state among Post Office employees he mentioned telegraphists cramp in a very large proportion of these patients apprehension of error and distrust of the unseen critic contributed to the trouble This disturbance had practically been abolished since the discontinuance of Morse and the introduction of teleprinters and other machines On the basis of sickness certificates the speaker computed that among men only one twenty third of the total sick absence was due to nerves neurasthenia neurosis or similar states The proportion among women was approximately double Retirements through sickness were more frequent among women this disparity being due to the fact that the disturbances of the menopause frequently coincided with the assumption of new or more serious responsibilities in their employment The chief of a department might exercise great influence on the health of his subordinates an exigent or self pitying attitude readily inducing invalidism in the staff Sir Henry employed an initial thorough insurance type of examination in such an investigation anxieties or clashes of temperament were frequently brought to light This often indicated the line of treatment or management most likely to help Regarding the frequency of neurosis he thought that the figures often given in the medical or lay press were too high In a group of fifty five applicants for Post Office appointments a psychological examination had been made one third were said to have serious psychological symptoms but some years later when their records were reviewed it was found that all except one had normal sickness records and their character reports were excellent

Dr K SHIRLEY SMITH spoke on the cardiac aspects of the anxiety states In a series of sixty two patients suspected of heart disease due to or aggravated by accident or strain he

found that approximately two thirds must have had cardiovascular disease before the accident In the remaining third disability was due to symptoms such as palpitation breathlessness nervousness left mammary pain, and insomnia, but no evidence of organic disease could be found The symptoms in the great majority were undoubtedly genuine, and he regarded them as expressions of disorder in the autonomic nervous system At first at any rate, these symptoms were nothing to do with anxiety and the use of the term compensation neurosis' was often a grave injustice Exactly comparable conditions occurred after illnesses or accidents in which no question of compensation could arise At a later stage anxiety and compensation might colour the picture These patients usually became permanently unfitted for strenuous work contrary to frequent assertions, little, if any, benefit accrued from conclusion of litigation He would like to see a concerted effort made to rehabilitate these men, who were so often judged capable only of light work which in practice did not exist in the labour market Dr Shirley Smith considered that the cardiac neuroses formed a very important proportion of cardiological practice Treatment must be founded upon a basis of moral support and reassurance, long periods of rest in bed undue solicitude continued medication and frequent examinations were all undesirable

Dr ELIZABETH CASSON (Bristol) emphasized the great value of occupational therapy Where rehabilitation centres had been organized they were producing very good results She felt it was important that the doctor's advice should be obtained as to the type of work or craft best suited to the individual patient Schemes of this kind could be of great assistance to the psychologist

Dr H F BELL WALKER (Balfour, S Africa) said that he came from a part of the world where neurosis scarcely existed The multiplicity of sensory impressions received in the course of life in a populous community must lead to continued 'sense repression' This, and the limitation of occupation to some small field, must play a part in the production of neuroses He thought it was difficult to be mentally normal when living in a crowd

Dr MARGARET MARTIN commented on the frequency of neurosis in women at middle age Very often a woman, after bringing up a family, felt at a loose end and that she was of little value to the community In consequence she was liable to concentrate upon trivial symptoms An interest outside the home in some occupation or craft was often extremely beneficial

Dr J D SIMPSON (Cambridge) referred to a case in which an anginal attack had been succeeded by an anxiety state, with the result that attacks of pain recurred thirty or forty times in the day He had never seen cardiac damage result from rowing except in one case in which the antra had subsequently been found to contain pus Contrary to general belief, anxiety and its consequences were very common among athletes

Dr F A ROPER (Exeter) agreed that it was undesirable to speak of a 'weak heart' to a patient with a cardiac neurosis He advocated that an explanation should be made in terms of nervous regulation of the heart Dr W S MACDONALD (Leeds) spoke of the causation of anxiety states by head injuries and described two cases to illustrate this relationship He had noticed that the blood pressure was frequently low in patients with cardiac neurosis and inquired whether this was a general finding Dr ELLIS MURTHY (Brisbane Queensland) regarded discussions of this sort as very valuable to those who worked in outlying parts He did not agree that anxiety states did not exist in sparsely populated areas Boundary riders and others who might make no contact with humanity for three to six weeks at a time were prone to develop these disorders He emphasized the importance of distinguishing between primary anxiety states and those neuroses engrafted upon organic disease Dr W E LISHMAN (Plymouth) thought that Dr Ross had placed the incidence of neurosis too high On the other hand Sir Henry Bashford's figures were too low, partly because they concerned picked lives who had the additional advantage of a sense of security He believed that the problem should be tackled in the earlier years and advocated the extension of child guidance The decay of religion was in part responsible for the increasing frequency of nervous disorders

Dr DONALD HUNTER held that the outlook from the standpoint of medical education in these matters was not so bad as Dr Ross feared There were only a few teachers in the hospitals who were failing to teach these aspects of general medicine The student undoubtedly imbibed a proper method of psychological approach from many with whom he came into contact, including teachers, residents, and sisters

Dr ROSS concluded the debate with a reference to Dr Halliday's work in Scotland In this investigation examination by specialists of 1,000 cases of certified organic disease among workers revealed the fact that 33 per cent were actually free from organic disease He thought that this consideration reduced the value of Sir Henry Bashford's figures, since these depended upon certification of the same kind He agreed that child guidance helped in making the best of poor material and in aiding the better

SECTION OF SURGERY

Thursday July 21

Cancer of the Breast

With Professor JOHN MORLEY (Manchester) Vice President of the Section, in the chair, Mr G GORDON TAYLOR opened a discussion on cancer of the breast

Mr Gordon-Taylor spoke as one who had eschewed except for a very short time, the method of post operative irradiation as a supplement to radical operation in cases now commonly classified as Group I, in which the disease is clinically apparently confined to the breast, and Group II in which the only clinically apparent spread is to the axillary glands He had always regarded radical surgery as the method of choice in almost every patient belonging to these two categories, but paid a tribute to his radiological colleagues for their help with the Group III or advanced cases From 1908 to 1938 he had performed the radical operation in 600 instances and had been successful in tracing the after result in all but seven of these patients Of Group I cases operated upon up to 1928, 113 in number, ninety five (84 1 per cent) had survived ten years of 204 Group II cases in the same period there were sixty ten-year survivals (29 4 per cent) of the forty-six Group III cases only three (6 5 per cent) had survived In another statistical table embracing patients operated upon up to 1933, the figures in the three groups for five or more years survival were 85 9 per cent, 39 9 per cent and 9 8 per cent respectively He had had 155 patients who had survived for more than ten years after radical mastectomy, thirty three had lived for between fifteen and twenty years six had survived for between twenty and twenty five years, and eight had survived for twenty five years The actual operative mortality had been 1 3 per cent

In an attempt to ascertain the value of pre and post operative irradiation Mr Gordon Taylor said he had sent out a questionary to seventy two British colleagues regarding their practice in Group I and Group II cases Of the surgeons interrogated 25 per cent made no use of irradiation as a supplement to radical operation 44 per cent used some form of irradiation for every radical mastectomy, 29 per cent used irradiation in Group II cases after radical operation and 2 per cent employed irradiation alone without radical removal There was undoubtedly a trend towards the supplementary use of irradiation, but there were no figures published to support the belief in its value He thought that it was impossible to draw any fair conclusions between the various treatments unless they were applied in parallel series of cases graded on a histological basis

Mr GEOFFREY KEYNES said he had wished to dispense with so radical and mutilating an operation as Halsted's was, but he asserted that excellent results were to be obtained by local operation reinforced by efficient radiological treatment, or by

radiological treatment alone He did not think it necessary to remove the whole breast and pectoral muscles nor did he think it essential to dissect the axilla While the size of the primary tumour might limit the value of radium so that local excision was necessary the axilla could be satisfactorily irradiated by means of interstitial needles His five year survival rates were 71 1 per cent 30 5 per cent and 19 4 per cent in the three groups respectively These figures compared very favourably with previously published statistics of radical operations but were not so good as Mr Gordon Taylor's in Group I Mr Gordon Taylor however represented the best in the exposition of breast surgery Certainly others had fallen below his high standard Mr Keynes claimed no finality for the particular method of interstitial irradiation he employed It might be that improved deep x ray therapy would in time supplant it While x rays could be made to cover a wide area radium could be applied with greater local intensity From the psychological point of view his conservative methods were of great value The actual preservation of the breast was not the only thing to be considered in this connexion fear of the radical operation made many women averse from examination before the disease had spread widely

Mr CECIL ROWNTREE suggested that both Mr Gordon Taylor and Mr Keynes laid themselves open to criticism by urging standard treatments for a disease so varied in its symptomatology and so protean in its pathological manifestations He thought that in the class of case regarded as operable a number of patients by reason of intercurrent disease such as diabetes or tuberculosis were unfit for major surgery Again the incidence of recurrence in young women was so high that there was no point in submitting a woman under 30 to the radical operation In all these cases he employed interstitial radium In the very old metastasis was so slow that local excision was sufficient The site of the growth was of importance Growths at the extreme upper limit of the breast or at the sternal margin necessitated awkward and difficult surgery and had a bad prognosis These cases also were best treated by interstitial radium Regarding the remaining cases—the great majority—he thought the condition of the axillary glands was the guide as to what should be done Where these were heavily involved he followed Mr Keynes's technique In all other cases he divided the sternal portion of the pectoralis major at an early stage in a proposed radical operation If then he found involvement of the axillary glands clinically not apparent or at least not very advanced of such a degree that meticulous scraping of the upper axilla would be required he completed the operation in a minor key dealing with the axilla by irradiation otherwise the case was dealt with by the radical operation

Dr J H DOUGLAS WEBSTER said that at the Middlesex Hospital one half to two thirds of all patients with primary cancer of the breast were already in an inoperable stage of the disease when first medically examined The numbers treated by radiotherapy alone were increasing yearly Advances in radiotherapeutic methods and technique were so great as compared with five or ten years ago that as yet the results at five years could not be properly compared with surgical figures He emphasized the value of pre and post operative irradiation because of its influence on the outlying clinically undetectable cancer cells In Group I there would be 100 per cent of cures by operation and no necessity for irradiation if it were possible to group the cases on a pathological basis instead of on clinical grounds

Mr W SAMPSON HANDLEY thought that Mr Gordon Taylor's figures had settled the argument at least for the time being, in favour of radical operation In his opinion the internal mammary glands were involved just as rapidly as the axillary nodes He considered it dangerous to rely on irradiation alone in the treatment of the axilla and thought that interstitial radium was suitable only in inoperable cases and for growths situated peripherally In addition operation facilitated the task of post operative irradiation Mr D C L FITZWILLIAMS considered himself more unorthodox even than Mr Keynes in his conservatism He thought it was possible to diagnose the disease while it was still local but only by transillumination Mr CECIL JOLL wished to urge that good as Mr Gordon Taylor's results were following radical operation there was room for improvement especially in Groups II and III The results obtained at the Royal Cancer Hospital seemed to point to the advantages of combined methods over surgery alone

The Chairman Professor MORLEY was afraid that the discussion had left a vaguene s as to the place of various methods He thought that other methods were only complementary to surgery and that there was a tendency to turn away from radium to post operative x ray therapy He had seen severe neuritis following interstitial radiation He was not moved by Mr Keyness plea for preservation of the breast on psychological grounds the ultimate result was the all important thing

At the conclusion of this discussion Mr H C EDWARDS (London) gave a lantern slide demonstration on gastroscopy

COMBINED SECTIONS OF OBSTETRICS AND PUBLIC HEALTH

Thursday July 21

Prevention and Control of Puerperal Sepsis

With Dr W ALLEN DAILY *President of the Section of Public Health* and Hygiene in the chair a discussion on the prevention and control of puerperal sepsis including the medico legal aspects was opened by Profes or R W JOHNSTONE (Edinburgh) followed by Dr ETHEL CASSIE (Birmingham) Dr A MASSEY (Coventry) and Dr R M FRY (London) whose papers will be published in next week's *Journal*

Dr R W DURAND who followed with a paper on the legal aspects of puerperal sepsis said that the legal responsibilities in regard to puerperal sepsis did not differ greatly from those in other diseases In every case whatever the disease the doctor was required by law to exercise reasonable care and skill To-day it was the exception and not the rule for practitioners to wear masks and gloves when attending confinements a doctor would not necessarily be considered negligent because he did not do so It might well be however that in five or ten years time the common practice would have so changed that to attend a confinement without wearing a mask and gloves would be considered an act of negligence If a doctor had not exercised that amount of care and skill which might reasonably be expected of him having regard to existing practice in similar circumstances he might be charged with malpractice If it was shown that it was or should have been within his knowledge that potentially he might be carrying infection and had not taken sufficient precaution against transmitting it then it was certainly possible that he might be held to have acted negligently Dr Durand pointed out that doctors employed by a hospital or other authority were in the same position as private practitioners It was the duty of a doctor in administrative charge of an institution to see that the conditions were such that safe midwifery could be carried out there If advisable he must close the hospital or certain wards until such time as danger of infection had passed and should acquaint other doctors concerned with the facts A medical officer of health who had issued specific instructions to a midwife could not be held responsible if she failed to carry them out but adequate supervision must be exercised Nurses and midwives were within the scope of their training responsible for their actions

Dr I GREENWOOD WILSON (Cardiff) described the procedure adopted in the Municipal Hospital Cardiff There were two labour wards one for clear and normal cases and one for suspected cases of infection Both in the hospital and in domiciliary practice masks were worn All municipal midwives were insured against legal damages in respect of acts of omission or commission

Dr W C W NIXON referring to the subject of masks asked why the anaesthetist should be privileged not to wear

one and why with the delivery of the placenta the nurse should immediately remove her mask He referred to the value of dettol in the form of a 30 per cent cream for the hands and vulva, and said that his experience in the Far East confirmed the validity of Colebrook's reports of the reduction in the incidence of infections due to haemolytic streptococci He commented on the myth that haemolytic streptococci were not found in the Tropics and recorded that in 1936 the incidence of puerperal infections with these organisms in the Hong Kong University Obstetric Clinic was almost the same as that found at Queen Charlotte's Hospital

Sir EWEN MACLEAN (Cardiff) referred to the help the medical officer of health could give to the practising obstetrician He said that local authorities could have in large measure that reduction in maternal mortality which they were willing to pay for Dame LOUISE MCILROY agreed with Professor Johnstone's views regarding the importance of raising the resistance of the patient, and emphasized the need for early and efficient ante natal supervision Too much stress was at times laid on pelvic measurements and not enough on the general condition of the patient herself Her experience was that the incidence of puerperal infection was not high in hospital practice Mr L CARNAC RIVETT said that every doctor attending an infectious case or dealing with cases of whitlow or otorrhoea should wear a mask and gloves In his opinion dental caries did not cause puerperal sepsis but pyorrhoea and gingivitis were of more importance than was generally realized

Mr JAMES W G H RIDDELL (Plymouth) declared that small wards of one or two beds were safer than large wards He pointed out that in osteomyelitis if the bone was trephined a positive blood culture could be obtained in a few minutes Therefore, in maternity cases requiring instrumental or manual delivery or Caesarean section sulphanilamide should be given before operation so that at the moment of delivery this drug was circulating in the blood Dr LETITIA FAIRFIELD considered that the statistics for normal booked cases should be shown separately from those for suspected emergency cases, otherwise the records might be misleading She emphasized the importance of removing every case of puerperal pyrexia from the maternity ward, as other patients might contract infection in the first few hours She considered that in the small hospitals an experienced doctor should be responsible for the control of cases of puerperal pyrexia or sepsis It should not be left to the matron to deal with the problem Dr J PRESTON MAXWELL (Pekin) said that for twenty years all maternity patients at the Peiping Union Medical College had had a stand up or shower bath on admission Tub baths were prohibited for three weeks before labour on account of the danger of septic fluid entering the vagina He agreed with Dame Louise McIlroy that ante natal work should begin when pregnancy started Dr F E CAMPS (Chelmsford) commented on the danger in small country hospitals of the hospital "runner" carrying streptococcal infections from the medical or surgical ward to the maternity ward, and advised against the interchange of nurses between these wards

Dr MABEL RAMSEY (Plymouth), Dr F MCLAUCHLIN and Dr E LEWIS LILLEY (Leicester) also took part in the discussion

---

COMBINED SECTIONS OF ORTHOPAEDICS AND PHYSICAL MEDICINE

Thursday, July 21

Rheumatoid Arthritis

With Mr W W RENTOUL (Truro) in the chair, Dr WILFRID EDELCOMBE (Harrogate) opened a discussion on rheumatoid arthritis by saying that in the B M A report of five years ago rheumatoid arthritis was classified as primary or secondary, yet the only real distinction appeared to be whether or not a focus of infection was discovered The infective origin of the condition was not proved and bacteria their toxins allergy, and the virus were still all incriminated Both the seed and the soil were necessary, in his view for the onset of the condition He stressed the value of the sedimentation rate and the need for standardization of the methods of carrying it out A hyperthyroidic factor was unlikely, but the effect of ovarian secretion was more possibly causative In treatment vaccines were tending to fall into disrepute but the value of gold was becoming more and more recognized Spa treatment was of great value, more because of the presence of all facilities for treatment—including specialist medical service—in one place rather than on account of the specific effect of the particular "water"

Mr NORMAN CAPENER (Exeter) pointed out the value of an orthopaedic hospital as a treatment centre for rheumatoid arthritis, and then proceeded to explain the position of physiological rest for various joints, giving a detailed scheme for charting deformity and progress He advocated the use of plaster immobilization *with padding*, and described a method of correcting flexion deformity of the knee by cutting the back and sides of the plaster at the level of the knee joint and inserting wedges posteriorly to increase extension

Dr K R COLLIS HALLOWES (Torquay) described two chronic cases in which there was dramatic recovery after operation for acute abdominal emergency (gall bladder and appendix) although previously there had been no evidence of intra abdominal disease While deprecating the value of vaccines, he strongly advocated gold therapy not only in rheumatoid arthritis but when this condition was coupled with osteo-arthritis He made a plea for accuracy in the prescription of physiotherapy and also for early expert treatment, if only for a short time in order to start the patient along the right lines He did not believe that a warm climate was prejudicial to treatment, but that rest in cheerful surroundings was essential

Dr G D KERSLEY (Bath) drew attention to the value of plaster immobilization as an adjunct to physiotherapy hydrotherapy in the treatment of rheumatoid arthritis The plaster had to be light strong, and capable of being removed and replaced for treatment For the wrist short slabs were used, and for the knee the whole leg hip to foot was encased the plaster being divided and removed for half an hour daily During this time mud packs were applied massage was given for the muscles above and below the joint and movement was carried out for a few times only, through its full range, in a hot pool Corrective serial plasters he said, were applied in the best position obtainable if deformity was already present They were removed daily for manipulation in the hot pool Many knees could be straightened that had been flexed for years and this method appeared to give results superior to those of continuous traction

Mr W D COLTART made a plea for the earlier application of orthopaedic principles, and also stressed the need for full co operation on the part of the patient, who should have the programme of treatment explained to him beforehand He stressed the difficulty of carrying out manipulation when an active focus or raised sedimentation rate was present The shoulder was a particularly 'difficult' joint, and where extreme pain was present any attempt at regaining abduction had to be postponed In some cases both weight extension and manipulation, followed by plaster, had to be employed It was surprising how much could be done for the finger when deformity had arisen The use of support in the form of a calliper and insoles was often invaluable

Miss FORRESTER BROWN (Bath) mentioned the importance of occupational therapy in improving muscular control of the joints, and also reminded the meeting that Sir Robert Jones many years ago, was the originator of serial plasters Mr H J SEDDON likened the problem of rheumatoid arthritis to that of infantile paralysis and tuberculosis and thought that it should be a notifiable disease and that local authorities should contribute to the expense of its treatment Mr C M KENNEDY (Plymouth) supported Mr Seddon in his plea for help from local authorities He also drew attention to gonorrhoea as of aetiological importance in cases resembling rheumatoid arthritis Mr K H PRIDIE (*Bristol*) held that gonorrhoeal cases could be recognized by x ray exam-

tion and also drew attention to the value of starvation and colonic lavage in treatment. Dr. W. S. C. COLEMAN felt that the tendency was for the treatment of rheumatism to become more orthopædic but that from the orthopædic side the interest was still principally concentrated on the end result and on operative surgery rather than the earlier stages. Medical orthopædics was the outlook required by everybody who treated this group of diseases. It was the only way in which rational treatment would become possible on an organized scale. He stressed the importance of follow up treatment. Dr. A. R. NELIGAN (Droitwich) spoke of the pre-rheumatic state characterized by circulatory and sensory changes in the extremities, abnormalities in the sweating mechanism, wasting of muscles and fatigue and advised that such cases should be watched carefully. Mr. S. T. IRWIN (Belfast) mentioned the difficulty of regaining good quadriceps function after removal of the patella and advocated active rather than passive movement to aid maintenance of muscle function. Mr. W. W. RENTOUL (Truro) doubted whether any infective factor existed in menopausal arthritis and also agreed with Mr. Capener about the need for padding in plasters.

Dr. WILFRID FOLCOMBE, replying, said he thought there was a tendency to temporary improvement in rheumatoid arthritis when pregnancy ensued. Many patients benefited by a change in diet with reduction in starch and increase in protein, as many had suffered an unnecessary and harmful restriction of the latter.

SECTION OF DISEASES OF CHILDREN

Thursday, July 21

Some Nutritional Problems of Childhood

At a meeting of the Section of Diseases of Children on July 21, with the President, Dr. F. M. B. ALLEN (Belfast), in the chair, *Professor L. G. PARSONS (Birmingham)* delivered the Dawson Williams Memorial Lecture, which was entitled "Investigations into some Nutritional Problems of Childhood."

Professor Parsons dealt principally with work on coeliac disease carried out in Birmingham by himself and an enthusiastic band of colleagues, and pointed out how many deficiency diseases might arise in the course of coeliac disease such as rickets, tetany, cataract, scurvy, night blindness, pyodermia, xerophthalmia, atrophic tongue, beriberi, microcytic and macrocytic anæmia, dental hypoplasia and stunting of growth. Soon after the war he continued, in the course of treating a child with coeliac disease he found that the patient developed rickets which was successfully cured by ultra-violet irradiation. A subsequent investigation of the effectiveness of the sunlight available in Birmingham showed that the period of healing rays was limited to about twenty-eight weeks in the year. Another deficiency disorder met with in coeliac disease was anæmia, and this was commonly the result of a straightforward deficiency in iron. Professor Parsons explained that some of the rarer types of blood changes indicated that the earliest phase in the iron deficiency state was actually an increase in the number of the red cells but a decrease in their size. Calcium deficiency appeared to play some indirect part in the anæmia of coeliac disease. It was clear from the work which had been done that there was poor absorption not only of fat but also of carbohydrate in coeliac disease. It was found that sugar tolerance could be greatly improved by the administration of certain liver extracts either by mouth or by injection. Vitamin B_1 (as marmite) was also now given as a routine measure in view of further work that had been done on carbohydrate tolerance in coeliac disease.

Empyema

Miss GERTRUDE M. A. HERZFELD (Edinburgh), Vice-President of the Section, then took the chair when Dr. H. L. WALLACE (Edinburgh) opened a discussion on the treatment of empyema in children. He pointed out that this was essentially a disease in which there should be close co-operation between physician and surgeon. To avoid personal preferences he based his remarks upon a general review of the treatment of empyema as practised at the Royal Edinburgh Hospital for Sick Children during the past fifteen years: this comprised 363 cases of which fifteen dying within forty-eight hours of admission were excluded. Dr. Wallace then reviewed the mortality rates and length of time in hospital for three age groups—under 2 years, 2 to 5 years, and 5 to 12 years—for each of the following methods of treatment: repeated aspiration, drainage by cannula aspiration, drainage by closed suction thoracotomy and open drainage, drainage by resection of rib (closed and open). Regarding the first three as conservative measures and the last two as radical, Dr. Wallace showed that both as regard mortality and length of stay in hospital the outlook was better for those children treated radically, the general mortality being less than half that of those treated by conservative measures. Such measures were of value as a preliminary to more radical intervention, but except when the amount of the pus was very small the attempt to cure empyema by repeated aspiration alone for example merely prolonged the illness and might even endanger life. The immediate results of treatment were not significantly influenced by the nature of the infecting organism in his series.

Mr. K. C. BROCK criticized the results brought forward by Dr. Wallace on the ground that they did not appear to take into consideration the varying mortality from the disease at different periods. Defining empyema as a localized collection of pus in the pleura, he pointed out that the condition must be carefully differentiated from diffuse intrapleural suppuration often part of a general infection. In Dr. Wallace's series he continued it appeared that a high proportion of the deaths were in fact associated with general disease. He particularly wished to deal with the assessment of the correct time to drain. Other aspects of treatment included the provision of adequate drainage and the decision when to stop it. Among the factors which made for caution as regards drainage Mr. Brock considered were the type of organism (streptococcal cases calling for more delay before radical measures), the history of previous illness, the evidence of general blood infection, the general condition of the patient, and the exact duration of the empyema as distinct from other parts of the whole infective process. Early aspiration was desirable but intercostal drainage in general was better postponed for a full three weeks after the end of the antecedent pneumonic process. An empyema was never an emergency calling for immediate operation. If a child was acutely ill with an empyema it was likely that some general infection or other area of suppuration was the cause of this rather than the empyema, and hence delay in radical local measures was undesirable. The temperature chart must be carefully studied, and intercostal drainage only be formed when it had definitely changed from the early form associated with pneumonia to the swinging form of septic infection. The character of the pus—that is, the thick type—was also a useful guide as to when the time had arrived for drainage. Mr. Brock was rather distrustful of the too early use of the intercostal catheter and employed it only as a stop-gap for two to three days. In his view resection of a rib for the provision of adequate drainage was essential in most cases eventually, but should never be part of the early treatment in young children.

Dr. A. BRIAN TAYLOR (Birmingham) dealt more especially with the prevention of chronic empyemata and associated disorders such as bronchiectasis, chronic sinuses and postural defects. He suggested that instead of repeated aspirations in the earlier phases of the disease it was better for the empyema, and kinder for the child to, insert early on an intercostal self-retained catheter leading to under-water drainage: this allowed the toxic fluid to drain away as it formed and encouraged expansion of the lung. This procedure could be carried out in even very ill children in their beds. After about a week, there was less toxæmia, the pus thickened and rib resection could be carried out still with a water seal since this avoided frequent dressings and permitted gentle irrigation. The time to remove the tube was when the cavity in the pleura was obliterated, not when drainage ceased, and in determining this point the use of lipiodol and x-rays was most valuable. Dr. Brian Taylor considered that the best position for drainage

was in the axillary line about the fifth or sixth space since this was the physiological point of election and most comfortable for the child Breathing exercises of the inspiratory and postural type should be begun as soon as temperature and toxæmia had subsided

Dr LINDSAY A DEY (Sydney) thought that bacteriological study of the pus was of the greatest importance he was loath to drain early in cases of streptococcal origin But he agreed that delay in drainage might be responsible for poor ultimate results

Dr F M B ALLEN (Belfast) said that in tackling empyema he first satisfied himself as to the presence of pus in the chest and then determined the organism present The general condition of the child must also be most carefully considered, since empyema might be part of a general pyæmic state

Mr OFFICER BROWN (Melbourne) from an extensive review of empyema in childhood showed that the mortality over 2 years of age was much lower than under that age and was about the same as for adults He thought this was explained by the large number of streptococcal cases in young infants and the complication of empyema in measles and whooping cough in which a septicæmia was probably present In treating by the method of closed drainage he favoured the maintenance of a high negative pressure Cellulitis of the chest wall was an occasional cause of death and was possibly due to the use of too many sutures

Professor L G PARSONS (Birmingham) thought that the use of the terms 'synpneumonic and metapneumonic' empyema was questionable, as this focused attention too much on the possible pneumonia and not enough on the fact that the very ill child with empyema was probably suffering from a septicæmia which explained the high mortality in young infants

Dr BURTON WOOD presumed that the list of considerations fulfilled by Mr Brock meant the use of the needle until operation appeared safe He thought that intercostal tube drainage was definitely valuable in the early stages although it was possible that the tube in some cases might lead to erosion of the ribs above and below and cause osteomyelitis

SECTION OF NEUROLOGY AND PSYCHOLOGICAL MEDICINE

Thursday July 21

States of Mental Depression

With Dr W RUSSELL BRAIN Vice President of the Section, in the chair Dr AUBREY J LEWIS opened the discussion upon states of depression their clinical and aetiological differentiation Devoting his attention mainly to the problem of classification he inquired how far a separation of the depressed states could be based upon genetic factors on the one hand and clinical factors on the other The distinction between hereditary and environmental influences was purely theoretical and could not in practice be maintained There was no reliable evidence as to the heredity of so called psychogenic depression and nothing had been proved for the other varieties On the other hand it appeared that all the tables and classifications in terms of symptoms were little more than attempts to distinguish between the acute and chronic the mild and severe The danger of the classification into manic depressive and psychogenic types lay in the assumption that there was nothing to be done for the former and that psychotherapy was alone effective for the latter Dr Lewis emphasized the importance of ascertaining whether a depression might be due to organic disease or to hysterical obsessional or other psychopathic trends Classifications should therefore be avoided

Dr DESMOND CURRAN welcomed the views expressed by Dr Lewis because they demonstrated the dangers of false simplification The application of fundamental psychiatric principles liberated clinicians from diagnostic straitjackets, and represented an advance from the attitude adopted up to within the previous few years The term depressive syndrome' was more elastic than the old conception of rigid and sharply defined disease entities The typical manic depressive existed, but was rarely met in practice while patients exhibiting symptoms characteristic of two different entities were often encountered Dr Curran submitted that physical mental and constitutional factors were inevitably operative in everyone, not excluding patients The interaction of these factors was such that the chief one could neither be found nor reasonably be inferred Therefore the general position advocated by Dr Lewis appeared indisputable Yet it might be argued that for practical purposes the neuroses could and should be differentiated from the psychoses Such a sharp distinction was not possible, and an attempt to make it was harmful if it was combined with equally rigid and untenable views on aetiology, prognosis, and treatment

Dr E A BENNET drew attention to the association of depression with early malignant disease, and emphasized the importance of repeated physical examination of depressives of the middle and later decades He agreed with Dr Lewis that states of depression were clinically separable on a quantitative estimation into acute or chronic, mild or severe But a qualitative concept of depressiveness was also required, and until the nature of depression was investigated clinicians were not in a position to assert that all depressive states were of similar quality—in other words, that they had a similar aetiology The clinical findings, however afforded no clinical basis for such a distinction and the only method at present available for obtaining knowledge of the aetiology was some form of analysis Psychoanalysts were agreed that states of depression differed quantitatively but not qualitatively Their view left unexplained the periodic swing of mood and this Dr Bennet suggested, was the crux of the matter This change of phase in mood was present in all men and in the manic depressive group exhibited a morbid intensification In the psychoneurotics there was also depression of a secondary non-periodic type which might be called psychoneurotic depression Psychoneurotic depression differed from the endogenous depression of the manic depressive both in the absence of periodicity and qualitatively Dr Bennet therefore dissented from the conclusions of Dr Lewis and Dr Curran that depressive states differed merely in degree He emphasized the distinction between the natural periodicity of mood that became morbidly intensified in endogenous depressive states and psychoneurotic depression the qualities and aetiology of which were not known

Dr R G GORDON (Bath) speaking of the neurological aspects of depression suggested that they might arise from changes in the cortico thalamic hypothalamic system The change might be imposed from above in the psychogenic group, or from below in cases in which toxic or endocrinological factors were manifest Thus Meyer had described cerebral neuritis in the deep layers of the cortex in involutional melancholia Again, depression might be profound in cases of Parkinsonism and in disseminated sclerosis Dr A E A CARVER (Nuneaton) agreed with Dr Bennet in stressing the importance of the periodic factor Alcoholics and drug addicts when treated continued to exhibit phases of depression, and on analysis, showed evidence of both endogenous and neurotic factors The same thesis was elaborated by Dr R EAGER (Exeter), who reminded the meeting that the old word lunatic" expressed the idea of periodicity

Vertigo

At the afternoon session, with Professor HENRY COHEN Vice President of the Section, in the chair, Dr RUSSELL BRAIN opened a discussion on vertigo, its neurological, otological circulatory, and surgical aspects He defined the condition as the consciousness of disordered orientation of the body in space Disorders in normal orientation might arise at various different levels in the nervous system from the cortex downwards A corresponding classification of vertiginous states could accordingly be made He directed special attention to Ménière's syndrome, and emphasized the impor-

of seeking for focal infections in this condition The efficiency of dehydration as a form of treatment was doubtful although in the light of the recent observations of Cairns and Hallpike water retention might well be a contributory factor

Mr W M Mollison spoke of vertigo as a symptom to be cured by destruction of the labyrinth Vertigo resulted from a disturbance of the balance between the two labyrinth Causes of such disturbance lay in the middle ear in the internal ear or in the vestibular nerve and its centres Middle ear vertigo was common and might be due to changes in pressure in the fluid in the internal ear brought about by changes in the position of the stapes in the oval window In practice it resulted from middle-ear catarrh secondary to Eustachian obstruction In all cases of vertigo with one-sided deafness inflation of the tube was essential to exclude obstruction as the cause Occasionally vertigo was caused by wax in contact with the membrane but since vertigo in these circumstances was rare it was evident that some predisposing cause must be present Hallpike's recent histological observations suggested that changes in the internal ear might sometimes accompany middle ear catarrh and be responsible for vertigo Although Mr Mollison had in a number of cases injected alcohol into the internal ear with good results in 76 per cent he recommended section of the vestibular root at the internal auditory meatus as the operation of choice since decree of hearing might then be preserved

Dr A Hope Gosse analysed a series of fifty unselected cases of cardio vascular disease with giddiness as a symptom The maximum age incidence was between 60 and 70 years and men were affected nearly twice as often as women The blood pressure was abnormally high in 22 per cent Heart disease based on atheroma accounted for two-thirds of the whole group It was of interest that excessive smoking was recorded in only 8 per cent Dr H G Garland (Leeds) expressed doubt whether vertigo was caused by either local sepsis or tobacco He inquired whether giving up smoking had relieved symptoms in any instance

Mr Geoffrey Jefferson (Manchester) said that he had not been impressed with the results of dehydration treatment perhaps he had expected too much In this connexion the histological observations of Cairns and Hallpike were of the greatest importance In both of their cases however cerebral oedema had been present and Mr Jefferson thought that their observation of hydrops vestibuli should be controlled in this respect His approach to the operative treatment of labyrinthine vertigo was conservative because in many instances the attacks tended to subside He advocated division of the cephalad fibres of the vestibular portion of the nerve but doubted whether this operation would ever completely replace the alcohol injection method described by Mr Mollison The latter was more suited to those who by reason of age or infirmity were unfit for the severer operation

Professor H Olivecrona (Stockholm) divided examples of Menière's disease into (1) true cases with tinnitus unilateral deafness and recurrent vertigo these had no certain anatomical basis (2) Similar cases with an obvious cause such as a tumour in the posterior fossa or middle-ear disease (3) Dandy's pseudo Menière's disease in which the disorder tended to disappear and in which therefore conservative treatment should be adopted In some examples of the first class spontaneous recovery also tended to occur But when attacks were incapacitating and frequent Professor Olivecrona advocated division of the vestibular nerve He had operated in about forty cases and most of the patients had done well

Dr H V Dicks found evidence from the opening paper that physicians and neurologists in particular recognized the importance of the psychological aspects of disorders of adjustment to the environment Of all cases of consciousness of disordered orientation in space the neurotic were the most common In the life of the unconscious as studied in the dream and in hallucinations and delusions there was a different space sense from that which normally governed man's relation to the outer world These distortions of reality sense might rise to consciousness under the stimulus of anxiety and this provided a background for the neurotic type of vertigo

Dr V F A Carver (Nuneaton) asked for information about the nature of the rhythmic pulsation perceived in the ear by many sufferers from vertigo Professor Henry Cohen said that such a pulsating tinnitus could sometimes be heard by an observer auscultating over the mastoid of the patient He had also found that attacks of vertigo might synchronize with attacks of paroxysmal tachycardia The true character of such labyrinthine circulatory disorders was however unknown He had convinced himself of the value of chloretone in Menière's disease but had been surprised to find that no good resulted from intravenous hypertonic saline or glucose

Dr Russell Brain in reply said that it was undoubtedly true that the discovery and treatment of focal sepsis in vertigo had sometimes resulted in cure Auscultation of the skull should always form part of the routine examination since this might lead to the recognition of an arterio-venous aneurysm

SECTION OF PATHOLOGY, BACTERIOLOGY, AND IMMUNOLOGY

Thursday July 21

Typhoid Paratyphoid Vaccination

With the President Dr M H Gordon in the chair Brevet Lieutenant-Colonel J S K Boyd R A M C read a paper on recent advances in the preparation of prophylactic typhoid paratyphoid vaccine as used in the British Army He said that the original vaccine used in the Army was prepared from the Rawlings strain of *Bact typhosum* of low virulence Late doubts were raised regarding the stability of this strain and Grinnell showed that vaccines prepared from recently isolated smooth strains were more effective in protecting mice from test doses of living organisms Perry Findlay and Bensted confirmed Grinnell's findings and by working on the changes produced in *Bact typhosum* by mouse passage were able to produce a strain of Rawlings which possessed the same virulence as the highly virulent strains of recent origin Further it was found that several strains of *Bact typhosum* originating from different cases in an outbreak when used as vaccines afforded a degree of protection corresponding directly to their virulence Virulence in *Bact typhosum* had been shown by Felix and his colleagues to be attributable to the possession of the virulence or Vi antigen and the criticism had been made that vaccines killed and preserved in the usual way must lose any Vi antigen they possessed so that no advantage was to be gained by the use of virulent strains In practice this criticism was not substantiated Experimental inoculations in volunteers had shown that the reaction caused by vaccines of virulent strains was no more severe than that given by the old vaccine A vaccine of *Bact typhosum* *Bact paratyphosum* A and *Bact paratyphosum* B of proved and tested virulence was therefore brought into general use in the British Army in 1935 The results of this measure could best be studied by following the incidence of typhoid fever in the British Army in India where 50 000 to 60 000 men were scattered through a country in which enteric fevers were endemic among the civil population The curve of incidence showed an upward trend until 1929 The vaccine used was then changed to embody 50 per cent of a smooth and recently isolated strain of considerable virulence From 1929 a decline in incidence occurred which was sharply accentuated in 1934 following the introduction of the new vaccine It was worthy of note that there had been no corresponding decline in the incidence of other intestinal diseases which seemed to show that the improvement in the enteric figures could not be solely attributed to an improvement in general sanitation Prior to 1934 most cases of enteric fever occurred in young soldiers of less than one year's service in India Since 1934 the distribution of such cases had been more evenly spread out over the different years of service and the new arrival seemed to possess an immunity equal to that of his more seasoned comrade It seemed probable that this was attributable to the more effective vaccine

Dr E GRASSET (Johannesburg) in a paper on typhoid endotoxoid vaccine, gave a review of the results of preventive inoculation against typhoid fever in an inoculated population of 400 000 He said that typhoid endotoxoid vaccine consisted of the derivatives obtained by treating endotoxin with formalin at incubator temperature the endotoxin was derived from killed emulsions of Vi typhoid (or paratyphoid) strains by a process of repeated freezings The atoxic product retained the antigenic properties of the original emulsion and conferred a high protection, as evidenced by mouse tests Large scale immunization of a mixed population had shown that endotoxoid could be injected with safety and in considerably higher doses than suspension vaccines The preliminary application of the method took place in 1933 and rapidly spread Information from various sources had testified to the high immunizing properties of endotoxoid—a considerable reduction in the incidence and mortality rates following its introduction as compared with the statistics of previous years during which T A B and oral immunization were employed Dr Grasset then gave a number of statistical examples in support of this contention Continuing he said that serological investigations had shown that H and O ' agglutinins to an average titre of 1/800 and 1/220 respectively were produced in 90 per cent of the subjects in the month following endotoxoid inoculation It had been ascertained that a single injection of endotoxoid of high antigenic power was sufficient to produce agglutinin titres of 1/10,000 H ' and 1/500 O ' in man Work on an insoluble alum precipitated endotoxoid showed that the protection conferred was equal to that given by the original endotoxoid By alcohol precipitation a purified antigen was obtained which, redissolved and injected into mice and rabbits, conferred a high degree of immunity and agglutination titre equal to that given by the original endotoxoid With regard to the duration of immunity appreciable H and O agglutinins were present one year after administration of endotoxoid and a comparable degree of protective immunity persisted at the end of two years

Dr H H BROWN (Worthing) suggested that the action of T A B vaccine was due to lysis of the bacteria at the site of injection, liberating endotoxoid which subsequently reached the reticulo endothelial system If any of the bacteria were destroyed by phagocytosis this portion would not contribute to the effect Thus endotoxin given subcutaneously or bacterial suspension intravenously might produce a more lasting effect than suspension subcutaneously

Dr E WORDLEY (Plymouth) questioned the accuracy of incidence rates in typhoid statistics and referred to the difficulty in diagnosing or even suspecting the mild cases that must so often occur in inoculated persons Dr W LEWIN (Johannesburg) asked whether when the new vaccine was introduced in India any controls were inoculated with the old Rawlings vaccine and the incidence rates compared Referring to Dr Brown's remarks he suggested that experience with alum precipitated toxoid in diphtheria prophylaxis, in which alum acted by delaying absorption were any guide, it might be better to inoculate whole bacterial bodies together with substances that delayed absorption rather than to use rapidly absorbed endotoxoid Dr D S SUTHERLAND (Manchester) questioned Colonel Boyd's comparison of figures from the South African and great wars and pointed out the differing sanitary conditions in the two cases Colonel E C HODGSON (Paignton) asked whether the comparison between T A B vaccine and endotoxoid in Dr Grasset's work was between the new virulent T A B or the old Rawlings vaccine

Colonel BOYD in reply said he was fully aware of the fallacies of great war statistics but did not think that diagnosis was either more or less efficient in the great war than in the South African War This fallacy was therefore a constant He thought that sanitary conditions during the great war were probably better than in the South African War but pointed out the big fall in typhoid incidence in the French Army in the great war following the introduction of typhoid vaccine There had not been much decrease in India in the mortality rate in recent years among those who did contract enteric This suggested that during the great war mild undiagnosed cases were probably not the result of prophylactic inoculation It had not been possible to compare at the same time persons inoculated with the new and with the old vaccines With regard to Dr Grasset's work he thought that until they were certain that a part of the antigenic complex of *B coli typhosum* was the equal of the whole for prophylaxis they would continue the use of suspension vaccines in the British Army

Dr GRASSET in reply to Colonel Hodgson, said that the T A B vaccine used before introduction of endotoxoid was prepared from a smooth recently isolated *Bact typhosum* In reply to Colonel Boyd, he said that comparative mouse immunization experiments with typhoid suspension vaccine and endotoxoid from the same strain showed a similar degree of protection when tested with a Vi typhoid strain

Glucose Tolerance in Obesity

Dr D EMBLETON, in a paper on glucose tolerance curves in 500 obese patients (242 males and 258 females) said that although the subjects were definitely obese no cases of gross endocrine disturbance were included The series probably did not represent a fair sampling of the obese population of the country, but all obese cases examined during the past fifteen years had been included about whom sufficient details were available The cases were mainly derived from the better-off classes A relatively small proportion only came because sugar had been found in the urine High glucose-tolerance curves were obtained in 73 per cent obese males but only in 35 per cent obese females at all ages The difference between males and females was still more marked when the percentages of high curves were charted for the various decades Superimposed high glucose tolerance curves of obese males showed that there was no marked difference between those with or without symptoms of diabetes The percentage of 'overweightness' did not appear to make any difference to the percentage of high glucose tolerance curves obtained in either sex

Dr S SILVERMAN (Birmingham) asked whether anything was known as to the nature of the disturbance of the fat metabolism in these cases Was there any constitutional tendency to obesity, and was it possible to treat such cases simply by controlling the calorie intake?

Dr EMBLETON in reply, said that fat metabolism was obviously bound up with the question, but he was not able to say exactly how The patients had a limited ability to deal with carbohydrate There was undoubtedly a constitutional factor, and some endocrine disturbance, possibly involving insulin production Anyone could reduce weight by starvation By putting them on a high protein diet and cutting out carbohydrate patients with a high tolerance curve could be reduced in weight

---

SECTION OF RADIOLOGY

Thursday, July 21

Treatment of Uterine Haemorrhage

With Dr RALSTON PATERSON (Manchester) the President of the Section in the chair, Mr B W WINDEYER in the absence of Mr C S Lane Roberts opened a discussion on the treatment of uterine haemorrhage

Mr Windeyer stressed the importance of preliminary diagnosis in cases of abnormal uterine haemorrhage emphasizing the necessity for pelvic examination to exclude malignant disease It was generally agreed that the action of rays in the treatment of non malignant uterine haemorrhage was confined to the ovaries in which the more mature follicles were highly radio sensitive In young subjects, in whom most of the follicles were immature higher dosage was required There was some evidence that radium in the uterus also had action on the endometrium In practice dosage received by the ovaries—between 500 and 1,000 r in most cases

should be sufficient to cause sterilization and this dosage was in fact usually followed by menopausal symptoms In cases of irregular haemorrhage at or about the menopause all the evidence showed that radiotherapy was the treatment of choice Preliminary dilatation and curettage were essential The mortality in a series of 7 000 cases quoted by Leonard Phillips was 0 25 per cent and the convalescent period was negligible The only contraindications were associated prolapse or cervical laceration and pelvic inflammation The former could be cured at the same time as the radiotherapy was carried out and the latter could be avoided by care in irradiation treatment Of fifty nine cases treated by him at a hospital Mr Windeyer said fifty seven were cured Fifty four of these were treated by radium in the form of a 50 mc tube with a screen of 1 5 mm of platinum for forty-eight hours The only complication of note was a watery uterine discharge due no doubt to local destruction of the endometrium by reason of the close contact of the radium tube As regards choice of method he was in favour of x radiation because of absence of complications because pelvic inflammation was not so dangerous and because it was possible in cases where anaesthesia was contraindicated In England the dosage was usually such as he had outlined In the U S A it was less and in France irradiation was given through the lateral vaginal fornices In the case of x rays many successful techniques had been described Mr Windeyer said that he used 200 kilovolts with a thoraeus filter and a focal skin distance of 50 cm Three fields 10 by 15 cm were treated and 300 *r* were given to each field on three occasions resulting in a dose of 700 to 900 *r* to the ovaries Menopausal symptoms did not differ from the natural or surgically produced climacteric In cases of fibroids radiotherapy was indicated in patients over 40 but contraindicated in young women unless the risks of surgery were too great The presence of pressure symptoms or of evidence of degeneration was also a contraindication In the case of menorrhagia in women under 35 hysterectomy had in the past been regarded as the method of choice There was however evidence to suggest that normal menstruation could be restored in a high percentage of cases and that the danger of abnormal children and monsters was small Treatment by *x* rays seemed the better method because of the absence of effect on the endometrium

Dr W M LEVITT read Mr Lane Roberts's paper Excessive uterine haemorrhage might be due to local pelvic causes to general causes to endocrine dysfunction or to over active ovarian function It could be dealt with by hormone therapy medication x rays and radium or by surgery In dealing with treatment by x rays and radium a very complete survey had been provided in 1933 and in 1938 by the discussions of the Radiological Section of the Royal Society of Medicine Thorough general examination should be carried out including blood count, bimanual examination and dilatation and curettage The advantages of x rays over radium were that the risk was *nil* there were no complications the results were better and there was no danger in cases of pelvic inflammation In addition hospitalization was not necessary and no anaesthetic need be given in cases where it was contraindicated Radium on the other hand was more suitable in cases where the red blood count was low cessation of haemorrhage was quicker and there was probably less destruction of ovarian tissue It was also cheaper and simpler and could be inserted on the occasion of dilatation and curettage Cases not suitable for irradiation required surgical treatment by either the abdominal or the vaginal route although the latter had a definite mortality Most fibroids called for surgical treatment but irradiation should be given to cases in which anaesthesia was contraindicated to patients over 40 in whom there were no signs of pressure and when the symptoms were mainly menorrhagia or irregular haemorrhage In cases of endometrioma irradiation might be the method of choice and should be given in castration dosage after exploratory laparotomy had confirmed the diagnosis Endometriomata in the recto vaginal septum—25 per cent of Dougal's cases occurred at this site—should be treated by irradiation Intractable menorrhagia in young women should only be treated by irradiation after hormone therapy and curettage had failed 150 to 200 mc hours should be given followed in three to six months by 500 mg hours In one series of cases normal menstruation had been restored in 88 per cent of cases

Miss BEATRICE M WILLMOTT (Birmingham) said that she performed abdominal hysterectomy in cases with pronounced chronic cervicitis with large fibroids causing symptoms or with submucous fibroids Curettage and medical treatment were indicated in women who desired children In all other cases she used radium x rays not being available A recent questionary sent to 226 patients treated for uterine haemorrhage at the Birmingham and Midland Hospital for Women showed that after radium treatment 94 per cent had complete amenorrhoea Only two patients complained of discharge under the heading Ill effects of treatment though 115 had some discharge for varying periods 7 per cent had pain lasting in some cases for three months Seventeen patients had menopausal symptoms three noticed increase in weight seven had headaches and fifteen complained of weakness and nerves Complete satisfaction with the result of treatment was expressed by 92 5 per cent The dosage in the 6 cases had been in the region of 2 000 mc hours with a screen of 1 mm of platinum the treatment period being from twenty four to forty eight hours Of 411 cases treated during the past four years there was no death due to radium treatment and the results had been very satisfactory

Dr F ELLIS (Sheffield) analysed the replies received from patients treated for uterine haemorrhage at the Jessop Hospital for Women Cases were classified into six groups the largest being those of benign uterine haemorrhage in which curettage had failed to reveal a cause and metropathia haemorrhagica Of seventy five patients who replied and who had had more than 1 800 mc hours all had amenorrhoea Of eight patients who had had less than 750 mg hours there were two failures both in women between 40 and 50 The dangers of preconceptional irradiation had not so far been adequately assessed Useful information might be acquired if uniform doses could be given to the whole endometrium without inactivating the ovaries In such circumstances menopausal symptoms might not occur

Dr LEVITT thought that the sterilization doses quoted by Mr Windeyer were higher than were necessary The large number of preliminary investigations advised by Mr Lane Roberts were he thought unnecessary in most cases He thought that pelvic sepsis could be lighted up by x rays He agreed with Mr Windeyer that even very large fibroids were in the absence of symptoms suitable for x ray treatment Sterilization should be carried out in cases of endometrioma Dr F ELLIS agreed with Dr Levitt that dosage lower than that urged by Mr Windeyer was sufficient

Dr R BOULTON MYLES (Worthing) said that it was often uneconomic to treat patients by x rays on nine consecutive days and he would be glad of a scheme whereby they could be treated on two or three days a week for two or three weeks

Dr R S MACHARDY (Southsea) said that occasional failures in the treatment of uterine haemorrhage were due he thought to varying positions of the ovaries He had usually spread x ray treatment over a period of three weeks and had found this better from the patient's point of view

Dr A CRAIG MOONEY (Plymouth) said that he had to treat patients in a single day because many of them travelled long distances and could not come daily He thought it possible that in cases of fibroids there was some irradiation effect on the uterus itself

Dr RALSTON PATERSON (Manchester) showed figures demonstrating the probable cause of failure in the treatment of nineteen out of 139 cases of uterine haemorrhage In three of these it seemed due to the low age of the patient in one to low dosage in five to overdosage and subsequent telangiectasia in two to intercurrent complications and in four to the fact that vaginal irradiation only was employed In two of the cases the diagnosis was doubtful and in two malignancy was discovered later

Mr WINDEYER in reply said that it was possible that he had been using higher dosage than was necessary but there had

been no ill effects He thought that the action of radiation was confined to the ovaries in cases of fibroids

Dr RALSTON PATERSON said that in the treatment of menopausal haemorrhage irradiation methods were evidently the best There was sometimes a difference of opinion about the efficacy of irradiation as against endocrine therapy Surely radiotherapy was in effect endocrinological in the sense that it acted on the ovaries and thus induced changes in the endocrine system In the treatment of uterine haemorrhage under the age of 40 and of fibroids however, the choice was between irradiation and surgery and depended on many factors of which the blood count and the results of curettage were the most important

SECTION OF PHARMACOLOGY

Thursday July 21

Teaching of Anaesthesia

With the President Professor A J CLARK (Edinburgh) in the chair Dr E FALKNER HILL (Manchester) opened a discussion on the teaching of anaesthesia

Dr Hill said that the student should be taught the fundamental principles upon which safe anaesthesia was based Administration of chloroform was valuable for instructional purposes because it required of the student concentrated attention and appreciation of slight changes in the patient's colour The interests of the student and the patient did not always coincide If the patient possessed a limited field of cardiac reserve the student's interests must be ignored and the safety of the patient made the anaesthetist's first concern He had safely administered light chloroform anaesthesia to 4,000 cases in an atmosphere rich in oxygen after premedication with atropine It had been shown that oxygen to a great extent protected the liver of animals anaesthetized with chloroform divinyl ether and diethyl ether and the breathing of an atmosphere containing only 15 per cent of oxygen was sufficient to induce degenerative hepatic changes

Dr J GILLIES (Edinburgh) said that advances in surgery had demanded increased mechanization of methods and increased skill on the part of the administrator There had been no commensurate increase however, in the facilities for the teaching of students The whole teaching of anaesthesia was at present inadequate and steps should be taken by the various medical schools to give more and detailed instruction and far more practice Co ordination between the pharmacologist research worker and clinician must be the basis of any wider schemes of instruction which might be formulated

Dr J URBAN HUMAN referring to the stages of anaesthesia stated that the third stage, in which operations were undertaken could be divided into four planes and 99 per cent of all operations could be performed in the first two planes This stage could also be regarded as consisting of an upper zone of muscular tone and a lower zone of muscular relaxation The character of respiration was a useful guide to the depth of anaesthesia but it did not help to distinguish between the upper and lower zones When the patient entered the third stage the pupils were contracted to almost pin point dimensions but they gradually dilated as anaesthesia proceeded The roving eyeball consisting either of a flickering lateral or a downward movement indicated that the patient was in the zone of muscular relaxation The corneal reflex should only be used in an emergency, but the chin reflex consisting of a downward movement of the thyroid cartilage and chin with each inspiration served to demarcate the zone of muscular tone from that of muscular relaxation

Dr J T HUNTER stated that a student should be taught to administer anaesthetics by the open method before graduating to more complicated methods In view of the exigencies of the operating theatre it was difficult for the practising anaesthetist to carry out research Mr JAMES RUSSELL (Glasgow) emphasized that the teaching of anaesthesia was largely a post operative problem He believed that the anaesthetist should be called into consultation before the anaesthetic Dr J K HASLER said that if the student was taught simple methods he would be able to teach himself more advanced ones His experience was that even advanced anaesthetists were often inexpert in simpler anaesthetic technique

In reply Dr HILL deprecated the use of cocaine in a nasopharyngeal spray preparatory to the introduction of an intratracheal tube, while Dr HUMAN stated that it was easy to pass the tube without the aid of local anaesthesia

Carbohydrate Metabolism in Anaesthesia

Dr C L G PRATT (Oxford) said that the administration of ether or chloroform was accompanied by various metabolic changes of which certain aspects of carbohydrate metabolism had lately received experimental attention The most striking of these was the hyperglycaemia produced by ether, acetylene ethylene and nitrous oxide all raised the blood sugar level to a lesser extent but in general the barbiturates and avertin were without effect in this connexion Many explanations had been offered as to the mechanism involved in the production of hyperglycaemia among them partial asphyxia augmentation in the release of adrenaline direct action upon the liver, and influence upon the action of insulin It was generally agreed that carbohydrate oxidation was the only oxidative metabolism carried on by nervous tissue, and this peculiarity rendered nervous tissue especially susceptible to any agent interfering with carbohydrate metabolism One hypothesis was that anaesthetic drugs produced anaesthesia by diminishing the amount of available acetylcholine as a result of cessation or diminution of carbohydrate oxidation, and so preventing the transmission of impulses at synapses in the central nervous system

The PRESIDENT remarked that if acetylcholine was concerned in anaesthesia one would expect atropine to be a good anaesthetic agent

Anaesthesia in Cardiac Surgery

Dr J K HASLER described the methods he employed to produce anaesthesia for operations designed to relieve cardiac ischaemia by attachment of omental grafts to the cardiac muscle The evening before the operation a draught of chloral and bromide was given, and one and a half hours before the operation an injection of omnopon and scopolamine Half an hour later 1½ grains of nembutal was administered and this was repeated after half an hour if the patient was not asleep General anaesthesia was induced with an ethyl chloride-ether sequence on an open mask and later this was replaced by a Tiegal Henle apparatus which administered a mixture of ether and oxygen The expired gases were conveyed to a tube dipping into water so that the desired degree of positive pressure could be secured Dr Hasler had not found it necessary to introduce an endotracheal tube It was unnecessary to use positive pressure until the pleural cavity was opened and the left lung collapsed when the metal tube was lowered into water for 5 or 6 c.m It was usually maintained in this position until the operation was completed but the pressure was increased during closure of the chest wall During the operation the patient was supplied with the maximum quantity of oxygen and the left lung was thus prevented from collapsing Occasionally gas would pass into the stomach, but this might be avoided by pressure upon the oesophagus

Dr FALKNER HILL said that Dr Hasler's paper illustrated the importance of avoiding anoxaemia He used morphine and atropine in preference to omnopon and scopolamine because the former combination was less depressant to the respiratory centre Dr J URBAN HUMAN stated that omnopon and scopolamine should be used in the proportion of 2/3 grain of the former to 1/150 grain of the latter Mr W ETHERINGTON WILSON (Torquay) expressed a preference for omnopon-scopolamine Dr J GILLIES (Edinburgh) inquired if the Tiegal-Henle apparatus was essential and if an intratracheal tube would make administration easier

Anæsthesia in Thoracic Surgery

Dr J T HUNTER said that in no other branch of surgery was the anæsthetist faced with such difficulties as in thoracic surgery. It was impossible to say that any one method was suitable for all operations; each case must be considered on its merits. The preparation of the patient was the same as for any other operation of any magnitude but in some cases a course of postural drainage was invaluable. Premedication should be of the lightest and no drug capable of appreciably diminishing the cough reflex should be employed. Drugs with a transient action such as sodium evipan and sodium pentothal were very valuable. High spinal analgesia had proved excellent for lobectomy and thoracoplasty. Bleeding was reduced to a minimum, the cough reflex was undisturbed and respiration was unimpeded. There was however a tendency to post-operative headache and there was a fall in blood pressure which could be treated by the use of ephedrine and other measures. Regarding general anæsthesia ether on account of its irritating effect and chloroform except in minute doses were unsuitable. Nitrous oxide was of considerable value but it was difficult to maintain a steady anæsthesia without using small quantities of chloroform or divinyl ether. Cyclopropane however seemed in spite of a few disadvantages to be very suitable for thoracic surgery. It could be given with a high percentage of oxygen. Respiratory movement was reduced to a minimum and it was easy to maintain a cough reflex.

SECTION OF PHYSIOLOGY AND BIOCHEMISTRY

Thursday, July 21

Light in Relation to Climate and Health

With the President, Professor H. E. ROAF (Liverpool), in the chair, Dr W. R. G. ATKINS (Plymouth) opened the discussion on light in relation to climate and health.

Dr Atkins first presented some of the results of measurements of daylight—that is both sunlight and sky light—so that a discussion of the physiological effects proper might have a full quantitative background. His data showed that the energy in the anti-rachitic region of ultra-violet light (radiations of wave-length below 313 millimicrons) was a very small proportion of the total solar energy. The whole ultra-violet region even outside the earth's atmosphere contained only about 7 per cent. of that energy, whereas in the visible part of the spectrum there was 52 per cent. and in the infra-red 41 per cent. At the earth's surface the ultra-violet light was relatively much reduced. It was therefore advisable to consider the possible physiological importance of the remainder of the solar energy and the site of absorption of various wave-lengths. The deep red and short infra-red rays (about 0·7 to 1·4 microns) had the greatest power of penetration. Deep-seated heating resulting from their absorption was possibly responsible for the stimulation of the tissues. In heat stroke it was the mechanism of heat regulation of the body that was involved and it seemed likely that a well-sunned skin in which the blood capillaries were larger than in unexposed skins was better adapted for dealing with extremes of temperature. In England bright summer daylight might register up to 125 kilolux and in the Tropics up to 150 kilolux. Of light received during the year in Plymouth 1·5 per cent. was received in December and 15 to 18 per cent. during the brightest month which might be May, June or July. From three-quarters to four-fifths of the total light was received in the six summer months from April to September.

Dr V. F. SOOTHILL (Norwich), who followed, dealt with the problem as it appeared to a medical officer of health. He pointed out that a large body of people in this country worked without any daylight at all and asked if this were satisfactory. There was he stated a general consensus of opinion that some daylight was essential. He referred to certain experiments including those of Niels Finsen on anæmia, which supported that opinion but added that very little accurate scientific work had been done comparing the relative values of whole sunlight and of artificial illumination. Ordinary artificial illuminants showed an inadequacy at the blue end of the spectrum but more research was needed on the subject. The new Factories Act gave the Home Secretary power to lay down a standard of lighting for factories but no power was given in the Shops Act.

Dr J. V. A. SIMPSON (Torquay) said that it was only in the last two or three decades that the influence of sunlight on animal nutrition had been studied. The most biologically active rays were at a wave-length of about 300 μμ. Ultra-violet rays came from the sky as well as directly from the sun in addition the rays were reflected from the sea as he himself had proved at Torquay some ten years ago. The measurement of the rays had been carried out by the acetone-methylene blue gauge at Torquay for eleven years and the average range was from 1·5 units a day in winter to 14 units in summer. He showed coloured charts giving the daily meteorological readings throughout the year and revealing how much weaker was the winter sun in ultra-violet rays than was the summer sun. Even the winter sun on the south coast in clean atmospheres however was sufficient to prevent rickets in young rats and chickens. In spring there was a marked increase in effect owing to the greater power of the sun and the penetration of the shorter waves. Conversely it had been overwhelmingly demonstrated that the smoke screen of large towns with mist and fog stopped the passage of the rays and it was apparent that many parts of the country suffered from a serious deficiency of physiological light especially in winter. The effect of daylight was greatest when it followed darkness—for example in the early morning and in the spring. Darkness was essential to the success of light therapy. The wise use of these stimuli would continue to show excellent results but as Sir Leonard Hill had repeatedly emphasized there were other factors intermingled—for example the stimulating power of moving air on metabolism. It was for medical science to apply the knowledge now available and ensure the proper utilization of daylight in the promotion of public health.

Mr B. D. H. WATTERS's paper in his unavoidable absence was read by the President. This contribution to the discussion stressed the need for some dosimeter which would measure the quantity of ultra-violet energy actually received by the patient. The type of instrument required as well as the standard of measurement necessary to satisfy clinical demands were also discussed.

In the final paper before the subject was thrown open to general discussion Mr J. W. J. WALSH gave his views as an engineer. Regarding the daylight factor he wished on behalf of himself and Dr Paterson to disclaim any credit for the initiation of its use in order to express the natural lighting conditions in a building; actually it was first described by workers in Germany. The use of such a factor was necessitated by the great variability in the intensity of daylight. There were several types of instruments now on the market by means of which daylight factors could be quickly measured and they were being employed by public health departments in connexion with slum-clearance schemes and for other purposes. Dr Atkins had previously stated that situations with a daylight factor of 1 per cent. were adequately lighted but there were, Mr Walsh said, many rooms in which work was carried on where the daylight factor over by far the greater part of the working area was much less than 1 per cent. especially in the rooms on the lower stories of large office blocks. It was probably not too much to say that a large proportion of the urban population of this country spent the greater part of its days in conditions of daylight which for at least six to eight months of the year were miserably inadequate. While this might be more or less unavoidable in certain cases there was no excuse for it in many others. Modern methods of construction had made it comparatively easy to provide for more daylight than was possible twenty-five years ago.

Opening the general discussion Professor W. P. KENNEDY (Baghdad) cited clinical evidence showing the beneficial effect

... the partial exclusion of infectious cases had played an important part Segregation was rarely refused if the position was explained to the patient He stressed the value of adequate nutrition the need to abolish bovine tuberculosis in this country and the importance of detecting the original source of infection in a family He did not believe in the value of the examination of child contacts

Dr G S TODD (Midhurst) pointed out the inadequacy of the teaching of undergraduates so far as pulmonary tuberculosis was concerned It should be compulsory for them to spend three months in a chest hospital so as to familiarize themselves with the various aspects of the disease Only too often had patients been seen with symptoms suggestive of pulmonary tuberculosis months before they eventually reached the sanatorium He deprecated the use of the term tuberculosis dispensary , to call such a dispensary a chest clinic would encourage more people to attend The public should be educated to the belief that tuberculosis was a curable disease

Dr G JESSEL (Leigh, Lancs) believed that the training of undergraduates in tuberculosis was adequate, at least in some places He was surprised that Professor Dunlop had not referred to the importance of radiography in the prevention of tuberculosis Dr JAMES CROCKET (Glasgow) thought that too much stress had been laid on the epidemiology of tuberculosis The death rate from this disease had fallen because of improved conditions of living and because of the progress made for dealing with the disease Much could yet be done to decrease the incidence and mortality of tuberculosis by prompt and thorough action In his experience, when a new case of pulmonary tuberculosis was notified anything from six to twelve weeks elapsed before the local authority could deal with the case, and during that time the patient went progressively down hill

Dr F J H COUTTS (Bournemouth) said that much more education of both the public and the medical profession was needed The general practitioner was often to blame for not applying simple measures for the diagnosis of pulmonary tuberculosis Dr A NEVILLE COX (Brighton) referred to the effect of war conditions on the mortality from tuberculosis and to the fact that pulmonary tuberculosis was often quite symptomless in the early stages

Dr GREGORY KAYNE (Staines) said that exogenous re-infection was possible—at all events when the dose was massive—as was shown by a case recently recorded A medical man whose tuberculin test was known to be positive attempted to commit suicide by injecting into himself a culture of virulent tubercle bacilli , in a very short time he died from generalized tuberculosis It had now been shown that B C G was inoffensive but its protective effect was limited In certain circumstances its administration even in this country would be of value in individual cases The removal of children from households in which they were exposed to the danger of infection should be necessary only for short periods, and was he thought practicable The examination of child contacts was of great value if performed properly it should include Mantoux testing the taking of antero-posterior and lateral radiographs and an examination of the gastric contents in suspicious cases

Black Spots in Tuberculosis Distribution

Dr F J H COUTTS (Bournemouth) opened a discussion on black spots in tuberculosis distribution He indicated the regions of high mortality and discussed in some detail such factors as race occupation (with special reference to seafaring) housing and sanitary conditions overcrowding segregation and migration For practical purposes the racial factor should be ignored in considering measures to be taken against tuberculosis He laid stress on the improvement of housing and sanitary accommodation and above all on a stricter insistence on the segregation of infective cases

Dr D A POWELL (Cardiff) said that the whole of Wales was in a sense a black spot compared with England or Scotland which themselves were black spots when compared with Holland, Denmark New Zealand, and Canada In the

... of health staff ... relating to underground train ... drivers on the other To ... hand and trim drivers the difficulties encountered ... replied stating ... one obstacle Professor ... mentioning the shift system as ... whether the sensitivity ... BLOCKLEHURST (Bristol) inquired ... light individuals increased after they had been in dark-... and also spoke of the effect of exposure to strong winds ... being capable of pigmenting the skin in spite of low ... illumination Dr L H N COOLER (Plymouth) related a personal experience in Norway where on a cloudy day with no sun he rapidly acquired a deep sunburn

In his final reply Dr ATKINS said that one of the objects of his paper was to take attention away from ultra-violet light and direct it to the spectrum as a whole and also to create interest in tropical physiology In regard to the influence of light there were two effects (1) erythema production and (2) the enlargement of the capillaries which could persist for quite a long time He thought gradual training could permanently enlarge the capillaries and thereby alter the whole blood supply to the skin

SECTION OF TUBERCULOSIS

Thursday, July 21

Prevention of Tuberculosis

With Dr ERNEST WARD the President in the chair Professor D M DUNLOP (Edinburgh) opened a discussion on modern views on the prevention of tuberculosis

Professor Dunlop, referring to the factors that might account for the falling mortality from tuberculosis mentioned particularly the possible existence of epidemic waves and the part played by anti-tuberculosis measures There was no reason to believe that an epidemiological curve could not be modified beneficially by human effort He thought that adult tuberculosis usually occurred as a late visceral manifestation of an earlier disease Efforts should be directed, therefore, to the prevention of massive primary infection in the young child These endeavours he maintained must be directed along two main channels children must be prevented from coming into close contact with cases of open tuberculosis and a clean milk supply must be provided As to the first of these it was probably more satisfactory to remove and treat the adult patient who was the potential source of infection More beds for this purpose were urgently needed It was doubtful if any physician in the public health service did his duty adequately unless he was being a continual nuisance to his committee in this respect Raising the resistance of the individual by improving certain environmental conditions was important in prevention as was the adequate training of future practitioners in the diagnosis of early tuberculosis He concluded by saying that some authorities had stressed the difficulty and impracticability of examining contacts while others claimed that these examinations in the widest sense were among the most important functions of the tuberculosis dispensary with the latter view he could not too strongly agree

Dr ERNEST WARD the President thought that up to 1915 the fall in the mortality from tuberculosis was due not to anti-tuberculosis measures but mainly to general public health measures and the improved standard of living since 1915

age group from 15 to 25 years 33 per cent of the deaths among males and 53 per cent of those among females were due to tuberculosis The corresponding proportions for those persons between 25 and 35 were 31 and 38 per cent A high mortality among young adults was however also found in other countries In the last twenty five years there had been a decline of 50 per cent in the mortality from tuberculosis in Wales this fall was much less than in England or Scotland The three main occupations of the people of Wales —coal mining (especially of anthracite) quarrying and sea farming—brought added risks Other factors were depopulation and the intense conservatism of the social and domestic habits and the closeness and tenacity of the family relationships in Wales He did not think that the racial factor played any part but poverty was certainly of prime importance

Dr C ROLLESTON (Rutland) asked what was the part played by alcoholism in the problem under discussion Dr COUTTS in his reply considered that alcohol was not of much importance Dr POWELL said that alcoholism was almost non existent in Wales

SECTION OF OPHTHALMOLOGY

Thursday July 21

Co-operation in Cases of Visual Loss

With Sir STEWART DUKE ELDER in the chair Mr C B F TIVY (Plymouth) opened a discussion on co operation between ophthalmologist and physician in certain cases of visual loss He said that the ophthalmologist was sometimes the first to see signs of established general disease not because others had overlooked them but because patients considered eye symptoms as a separate entity from other bodily symptoms and also because the ophthalmoscope might clearly reveal lesions that elsewhere could only be inferred—for example eye changes in chronic nephritis diabetes and hyperpiesis A number of unsolved problems arose in this connexion such as the clinical fact that there was no parallelism between changes in the fundus and the severity of hyperpiesis A similar difficulty was seen in a recurrent vitreous haemorrhage which occurred in apparently healthy young adults Mr TIVY referred to the good that could be done by rest in cases of thrombosis of a branch of a retinal vein and the diagnostic significance to be attached to diplopia from paralysis of the external rectus in hyperpiesis A study of field defects was most helpful in localizing cerebral lesions and in ascertaining progress while ocular lesions in apparently healed cases of head injury might show the true state of affairs Collaboration was possible in other directions in his experience at least two cases of neurasthenia were relieved by a timely operation for cataract

Dr E MCCULLOCH (Plymouth) said a better understanding of eye diseases by general practitioners was essential if unqualified practice in eye work was to diminish He instanced cases where the time factor was important as showing the need for collaboration

Professor J A NIXON (Bristol) drew attention to the value of perimetry in diagnosis and emphasized the disturbances caused by vitamin deficiency In vitamin A deficiency there was diminished dark adaptation in vitamin B_1 deficiency—for example in beriberi—retinal haemorrhages were present while acute glaucoma had been described in epidemic dropsy Collaboration between ophthalmologist and physician was most helpful in the toxic amblyopias Dr C M HINDS HOWELL discussed a number of neurological conditions particularly chiasmal syndromes caused by localized arachnoiditis Other subjects he discussed were the visual symptoms of tumours of the occipital lobe recovered meningitis with secondary optic atrophy amaurotic familial idiocy Schilder's disease and cataract in dystrophia myotonica Dr R N CRAIG (Exeter) held that it was not because the psychiatrist overlooked the significance of such an essential function as vision that he saw so small a number of patients with serious eye trouble The fact was that the blind rapidly adapted themselves In contrast with the deaf who become isolated, the blind received much sympathy Functional blindness was a defence mechanism against exquisitely painful memories of events associated with seeing and this blindness was generally associated with amnesia

In the subsequent discussion Professor A J BALLANTYNE (Glasgow) emphasized the tuberculous character of at least some cases of recurrent vitreous haemorrhage and pointed out the lack of knowledge on the aetiology of hypertensive retinitis Mr RANSOM PICKARD (Exeter) instanced a case of unilocular retrobulbar neuritis which after thirty years showed no signs of disseminated sclerosis He also related that Nettleship held that a patient who became completely deaf became as placid as one who was completely blind Mr R L BICKERTON drew attention to the pitfalls in the diagnosis of migraine especially in relation to cerebral tumours Dr R M MOORE (California) quoted American work indicating a deficiency of vitamin B and of calcium in a high proportion of patients suffering from eye and ear nose and throat affections

SECTION OF OBSTETRICS

Wednesday July 20

The Obstetrical 'Flying Squad'

In a paper on the organization and uses of the obstetrical *flying squad* *Professor E FARQUHAR MURRAY* said that the squad which was now an essential part of a modern maternity service was especially designed to deal with those acute crises that might occur in the most carefully supervised cases Cases most urgently in need of such a service were those in which there was shock and post partum or ante partum haemorrhage but cases of threatened or actual eclampsia difficult labour or failed forceps would also derive benefit A doctor faced with an emergency sent a message to the maternity hospital giving particulars of the case and the name of the consultant on the panel whom he wished to attend Since the inception of the service in October 1935 there had been forty six calls Among these were many very ill and dying women and yet there had been only five deaths No major operative work was carried out at the patient's home if this could be avoided Saline and blood transfusions simple bipolar version repair of any badly torn perineum etc were performed

Discussing blood transfusion in obstetrics Dr M BLACK (Glasgow) said that the difficulty of securing recipient's serum had been overcome by the use of a special cylinder and piston designed by him in collaboration with Dr Sheehan A small quantity of the patient's blood was placed in the cylinder and a strong piston was screwed down and the blood squeezed against a Zeitz K filter the serum was collected from the end of the cylinder With this apparatus enough serum for testing against the red cells of several prospective donors could be obtained within a few minutes From 600 to 1 000 c.cm of blood were usually given over a period of fifteen to twenty minutes The administration of a few drops of ether on an open mask at the beginning of a transfusion served to keep the patient quiet and had a useful stimulant effect

Miss LETITIA FAIRFIELD congratulated Professor Farquhar Murray on the excellent results of his emergency unit It was pointed out that the high degree of efficiency of the L C C ambulance services had not made the introduction of the emergency unit in London so pressing There were however such units now in existence in the L C C area

---

The Advisory Committee has recommended and the Trustees for the Leverhulme Research Fellowships have approved nineteen awards tenable for varying periods up to two years These include awards of Fellowships to W Cule Davies D Sc Lecturer in Chemistry University College Cardiff (studies of the organic compounds of nitrogen phosphorus and arsenic) W H S Jones Litt D Lecturer and President St Catherine's College Cambridge (Greek medicine and Greek thought from 500 to 300 B C) and O A Oeser M Sc Ph D Lecturer in Experimental Psychology St Andrew's University (the combined method in the social sciences)

Reports of Societies

NUTRITIONAL MACROCYTIC ANAEMIA IN MACEDONIA

At the annual general meeting of the Royal Society of Tropical Medicine and Hygiene, with the president, Lieutenant-Colonel S P JAMES in the chair, a conjoint paper on nutritional macrocytic anaemia in Macedonia was read by Dr N HAMILTON FAIRLEY

Dr Hamilton Fairley pointed out that in a paper read in association with R J Bromfield before the Society last year the prevalence in Macedonia of tropical macrocytic anaemia was recorded in pregnancy as well as in male patients with malaria and blackwater fever (*Journal*, 1937 1 629) As this was the first time that a megalocytic anaemia of nutritional origin had been reported on a large scale in Europe they had returned to Macedonia early this year to study the situation in more detail in conjunction with Mr Henry Foy and Dr Athena Kondi at the League of Nations Malaria Research Laboratory, Thessaloniki The present preliminary report was the outcome of their combined efforts to get a clearer insight into the megalocytic anaemias there

General Considerations

The patients were mainly Greek refugees from Asia Minor, some 700,000 of whom had been settled in villages scattered throughout the plains and mountainous regions of Macedonia Macedonia was an intensely malarious country with a 'spleen rate approximating to 40 per cent and varying from 70 to 90 per cent in some of the villages from which the patients came In the refugee villages poverty was rife meat, eggs and milk were little eaten and the diet generally was very deficient in sources of animal protein as judged by European standards

Though the syndrome commonly encountered in Macedonia was similar to that previously described by Fairley Giglioli, and Napier in tropical patients, difficulty was experienced in naming it In the first place, the term 'tropical' seemed hardly applicable to a disease originating on a large scale in Europe In the second place though they were satisfied that the anaemia had a nutritional basis, certain features generally present such as splenomegaly and reticulocytosis and such evidence of haemolysis as hyperbilirubinaemia urobilinuria and bilious stools were absent in uncomplicated tropical macrocytic anaemia as described by Wills in man, or in the experimentally induced deficiency in monkeys In their present Macedonian series three types of macrocytic anaemia had been recognized (1) haemolytic, (2) non haemolytic (3) aplastic For the reasons given above they proposed substituting for the name tropical macrocytic anaemia that of nutritional macrocytic anaemia —a term which would include as subgroups the common haemolytic type the infrequent non-haemolytic type and possibly the rare aplastic type as well Microcytic hypochromic anaemia—so common in pregnant women in India—was only once encountered, and in this case there had been a severe post-partum haemorrhage some three weeks previously

Clinical Findings

The clinical picture in the haemolytic type was striking and resulted from a combination of factors including (1) panmyelopathy with megalocytic anaemia and its attendant symptoms (2) haemolysis associated with splenomegaly (3) mechanical disturbances caused by visceral enlargement and (4) cardiac decompensation

Though anaemia was intense and haemolytic icterus often evident the general nutrition was unexpectedly good the nails and teeth being excellent and the usual lingual features absent The uterus as it extended upwards was often displaced to the right by the enlarged hard spleen while the liver was not infrequently enlarged and tender from congestive failure Pressure effects on the diaphragm were sometimes evident

Subjective symptoms included lassitude, weakness aching muscles, shortness of breath palpitations, giddiness, and syncopal attacks Anorexia, epigastric discomfort abdominal pain and flatulence after meals were common Free acid was generally present, and in twenty consecutive cases the gastric juice showed the presence of hydrochloric acid following histamine injection Diarrhoea was rare and, in contradistinction to sprue the glucose tolerance and faecal fat were both normal Dyspnoea and cough were frequent and upward displacement of the diaphragm tended to compress the base of the lungs The apex beat was occasionally displaced upward and at times the right heart was obviously dilated Signs of decompensation included jugular engorgement and pulsation enlargement and congestion of the liver, basal rales, and oedema of the feet and dependent parts Albuminuria was not uncommon but casts were rarely found Urobilinuria was the rule and the blood urea was commonly elevated due probably to blood destruction rather than to urea retention No definite evidence of subacute combined degeneration of the cord or neuritis was forthcoming

Not uncommon was a secondary thrombocytopenic purpura manifested by skin haemorrhages bleeding from the nose and gums and sometimes from the other mucous membranes as well The platelet counts in these cases varied from 5 400 to 54,300 per c mm

Haematological Findings

The blood picture was that of a megalocytic anaemia with increased mean corpuscular volume increased mean corpuscular haemoglobin and a colour index equal to or exceeding 1 0 In these profound anaemias blood films fixed and stained with Jenner's stain often proved unsuitable for Price Jones measurements owing to rouleaux formation and excessive shrinkage of the erythrocytes With Leishman staining (when fixation with methyl alcohol was of shorter duration) the shrinkage was often less and in a number of instances typical megalocytic curves were obtained Normoblasts and erythroblasts often appeared in peripheral blood smears Smears from the sternal marrow showed considerable hyperplasia of the red cell series, haemocytoblasts and erythroblasts being generally present in large numbers Ehrlich megaloblasts were demonstrable in most cases but it was rare for their cytoplasm to have ripened beyond the polychromatic stage and it never stained a decisive pink A striking feature was the presence of atypical cells of the neutrophilic series including pathological promyelocytes myelocytes and metamyelocytes

The changes observed included precocious nuclear polymorphism atypical granulation of the cytoplasm cytoplasmic vacuolation and perforation of the nucleus The large pathologically altered stab forms described by Tempka and Braun in pernicious anaemia were often evident Megalocytic nuclei devoid of cytoplasm were not infrequent a finding suggesting that these cells were also affected The conclusion reached was that in nutritional macrocytic anaemia there was a panmyelopathy of the bone marrow similar to that recently described in pernicious anaemia

Conclusions

Both clinical and pathological findings pointed to chronic malarial infection in these cases On the other hand during the time they were under observation fever of malarial origin was infrequent and parasites were rarely found in the peripheral blood or sternal marrow smears In cases coming to necropsy the characteristic features of chronic malaria were observed Active hypertrophy and increased phagocytic activity of the reticulo endothelial elements were very evident in sections of the liver and spleen in two cases studied by Professor G R Cameron malaria pigment and haemosiderin were also present

The conclusion reached was that nutritional disturbances in the bone marrow led to the production of red cells which were somewhat abnormal and that the reticulo-endothelial system already hypertrophied as a result of chronic malaria phagocytosed these non-parasitized corpuscles with the production of a superadded haemolytic anaemia. All available data—clinical pathological haematological and biochemical—supported such a thesis.

Time did not permit full consideration of the haematological response to therapy but in general it might be said that during pregnancy both marmite orally and liver extract by injection had to be given in a much larger dosage than was customary in tropical microcytic anaemia in India to get a maximal reticulocytosis even when this was attained subsequent increase in the red cell count was slow. This was probably due to the haemolytic factor which complicated dietary deficiency in the vast majority of the Macedonian cases.

General Discussion

Dr LUCY WILLS in opening the discussion said that her work had been confined to the uncomplicated disease generally known as tropical macrocytic anaemia but she agreed that in future it might with advantage be called nutritional macrocytic anaemia as Dr Fairley and his colleagues suggested and that the name tropical macrocytic anaemia should be abandoned or be used only for tropical cases as a subsection of the general heading. She had met cases similar to the Macedonian ones in India but had provisionally regarded them as cases of *acholuric* jaundice and unsuitable for therapeutic testing. She also had seen some of the Macedonian cases and was inclined to accept the view put forward that there was a nutritional factor and also a haemolytic factor dependent on reticulo-endothelial hypertrophy resulting *from chronic malaria. The amount of liver and marmite* required to induce a reticulocyte response and also the small rise in the red cell count suggested that all the Macedonian cases were complicated. It also had to be remembered that the curative factor both in these Macedonian cases and in the tropical ones seen in Bombay might not be liver principle pure and simple but some other factor distinct from liver. Her experience in regard to Price Jones curves agreed with that of Dr Fairley. Some preliminary experiments suggested that dilution of blood in the presence of an excess of bilirubin might cause shrinkage of the cells on a smear but not *in vivo*.

Dr JANET VAUGHAN said she was not prepared to accept the suggestion that the discrepancy between mean corpuscular volume and corpuscular measurement was due to an artefact or some abnormality dependent on the method of staining since it was known in acholuric jaundice and had also been seen in mild anaemias in pregnancy where it was associated with increased cell thickness and increased fragility. The remarkable variation in the picture of marrow obtained by sternal puncture described by Dr Fairley was also seen in cases with Addisonian anaemia and many showed as definite a disturbance of white cell maturation as of red cell maturation—in this way resembling nutritional macrocytic anaemia. Addisonian *pernicious anaemia however did not exhibit* the purpuric manifestations described by Dr Fairley. She inquired whether the diet in Macedonia was deficient in vitamin C.

Professor L. E. NAPIER said he had been doing very much the same type of work in India and had just compiled an analysis of fifty-seven cases of anaemia in pregnancy. His series included a large group of microcytic anaemias. The whole population had a microcytic blood picture and those films which elsewhere might be termed normocytic were really macrocytic. Some factor existed which decreased the size of cells in the entire population. The microcytic anaemia was due to dietetic deficiency or to ankylostomiasis the macrocytic anaemia to dietary deficiency and/or malaria. In the latter respect his conclusions were very much the same as those of Dr Fairley. In regard to the suggestion of alteration in nomenclature he considered Macedonia was subtropical and thought that in the present state of knowledge the name tropical macrocytic anaemia should stand.

Dr G. FRASER pointed out that these severe and complicated anaemias were common among labour forces on tea estates in Assam. These patients suffered from dietary deficiency malaria and hookworm but he did not consider hookworm to be more than a minor contributory factor. The majority of cases came from malarious estates with a spleen rate of 30 per cent. or more and practically none came from estates with a spleen rate below 10 per cent. Treatment was on the whole unsuccessful marmite treatment in doses of 24 grammes daily was disappointing in late cases and campolon even in doses of 5 c.cm. daily for ten days often failed. In cases after the seventh month of pregnancy with counts of under 1,000,000 red cells per c.mm. the position was desperate but a better response might be obtained with the larger doses adopted by Dr Fairley. In such cases blood transfusion was liable to be followed by grave reactions and induction of labour to prove fatal on account of shock.

In reply both Dr Fairley and Dr Wills pointed out that stained smears from male patients with nutritional macrocytic anaemia showed the same difficulty in regard to Price Jones measurements. Dr Fairley said he was very interested in what Dr Vaughan had said in regard to increased fragility. They had failed to demonstrate increased fragility of the red cells by qualitative methods in six cases in their series of nutritional macrocytic anaemia. He agreed however that the red cells were abnormal and thought that more delicate quantitative methods might yet reveal increased fragility. So far as could be ascertained there was no evidence of vitamin C deficiency in the diets of patients developing purpura and the condition was invariably associated with very low platelet counts.

Correspondence

Abortion and the Law

SIR,—Most of your readers who have studied the report of the case to which you refer in the leading article entitled Therapeutic Abortion and the Law will probably agree that the issue of widest importance to our profession is the interpretation given in the case to the expressions danger to life and preserving life and this irrespective of any views they may hold of the initial event which led to this interpretation receiving the sanction of the law.

In commenting upon the result of the trial you Sir express the view that the law has been clarified from which it seems reasonable to conclude that you regard these two expressions as having been given greater clarity and definition than they formerly possessed, and the practitioner as having attained in consequence some measure of freedom and security in a certain respect that he did not previously enjoy under the law. I venture to submit that a logical case may be made out for the view that nothing has in fact been clarified and that so far from receiving any advantage from this interpretation those who practise medicine in this country must now be less certain of what protection they may expect from the law in any given case than they were before it was sanctioned.

In considering this question it is essential to dismiss all irrelevant factors and of these the factor of rape is certainly one for the verdict did not give the right to induce abortion for pregnancy ensuing upon ravishment nor did Mr Bourne ask for this. The point upon which the case hung was clearly the meaning to be attached to the expression danger to life. Now this expression has never been and of its nature can never be capable of exact definition. At most it can but connote that order

of moral certainty that is all we can look for in medical assessments But at any rate men could agree about its meaning even if it left the precise expectation of the life of the imperilled person a matter of some uncertainty Perhaps the associated expression "preserving life possessed an even higher degree of literalness in ordinary use whether by doctors or laymen

A study of the case report makes it clear that there was nothing literal in the interpretation of these terms accepted during the hearing or by the jury at its end In the course of this hearing the judge expressed himself as unable to appreciate any essential difference between danger to health and danger to life and then proceeded to cite an instance where health was impaired but life not threatened But this is to admit that there may upon occasion be a profound difference between the two In other words to the aphorism "life depends upon health the inference that danger to health necessarily connotes danger to life is a *non sequitur* Indeed, has not the native wit of our ancestors embodied the general recognition of the fact in the old saying that "creaking gates hang the longest ?

Thus it is that the generalization that there is no clear difference between danger to health and danger to life is not one that can be regarded as useful to the doctor who in his practice has to deal not with categories but with individual sick persons For the doctor then, it is reasonable to hold that nothing has been clarified by this exegesis of the expression "danger to life, though it appears that he may in future be expected to make it a basis of action But this is not all, for not only has danger to health been accepted as the equivalent of danger to life but two modes of health—physical and psychological—are now proposed to us as capable of being separately endangered that is to say 'life is now threatened from two quarters In short psychological ill health may now be equated with danger to life It follows that the expression preserving life has suffered a proportionate loss of definition for it may now be lawfully taken to mean no more than the averting of a possible (and problematical) neurosis So far have we already travelled from reality!

Now if the expression danger to life in its old literalness lacked the highest degree of exactness and lacked this because the art of prognosis is beset with uncertainties how much less exact has it now become! The intellectually candid doctor will admit that forecasts of psychological health are highly speculative In this as yet imperfectly won field of medical knowledge such forecasts cannot be invested with any known or measurable degree of probability and the candid doctor will be cautious in making them, knowing as he does the ever-present danger of self deception, of exaggeration and even of gross error In short when we come to equate danger to life with danger to psychological health we see that the former term has already become a pure figure of speech and has ceased to be an element in the grammar of medicine Surely to speak of this as clarifying anything is to be deceived by a play on words Some may indeed hold that legal sanction for the induction of abortion with a view to averting the development of a psychoneurosis is a good thing but to maintain that this is equivalent in sense to the judge's ruling that the unborn child must not be destroyed except for the purpose of preserving the life more precious life of the mother is a feat of ratiocination that I confess to finding quite beyond my powers Yet this is what the verdict does in fact permit a doctor to maintain

While the two debated expressions do not belong solely to the grammar of medicine yet they are familiar elements in that grammar, and it is plainly desirable that—as with all other elements in any scientific or technical grammar—they should possess as clear meaning as we can give them Can we now say, either as scientists or as practitioners of the art of medicine, that the new, extended, and virtually indefinable meanings now given them really enhance their value to us? Has this legal interpretation rendered them more comprehensible elements in our medical grammar, or has it conferred upon us as practitioners a measure of secure freedom we did not previously enjoy?

I submit that the answer to both these questions is plainly in the negative, and in respect of the second question it would be easy to emphasize the difficulties and uncertainties that now surround the problem you suppose to have been clarified

However, I am anxious not to stray beyond my modest purpose of a defence of clarity and precision in medical terminology—that is, a defence of clear thinking in medicine and a protest against the thesis implicit in your article that facts may be altered by using different words about them If it be said that all this is to make of a live issue a mere matter of words I may reply that if the words we use have no discoverable and definite meaning we cannot think clearly or act reasonably At a first glance the law, by this verdict may seem to have conferred upon us an enlarged measure of freedom, but, as one who believes that medical terminology may be more safely interpreted by doctors than by lawyers I profoundly distrust this similitude of freedom, and with Laocoon—than whom I hope I may be more fortunate in my intervention against popular opinion—I say 'timeo Danaos, et dona ferentes'—I am, etc,

London W 1, July 30 F M R WALSHE

Cancer of the Lung

SIR—It is with some diffidence that I criticize your excellent leading article on cancer of the lung in the *Journal* of July 23 (p 184), but the statement 'The usual operation is lobectomy, or even total pneumonectomy," cannot be allowed to pass unchallenged It suggests that lobectomy is the operation of choice in carcinoma of the lung, if such a belief is maintained and practised the results can only lead to disappointment and hold up the progress of thoracic surgery

It is very rare to find a malignant growth of the lung which is technically amenable to lobectomy, even if it were desirable It is just as important to plan a radical operation for carcinoma of the lung as it is for malignant growths elsewhere in the body The lymphatic communication between the lobes and at the hilus makes total pneumonectomy with individual ligation of the vessels and closure of the main bronchus near the bifurcation of the trachea the only radical procedure

Until some more rational treatment of cancer is established this is the only form of attack on cancer of the lung that can be claimed to be anything better than palliative With modern improved methods of diagnosis and operative technique there is no reason why the results of surgery for carcinoma of the lung should not be at least as successful as those in carcinoma of the stomach which is admittedly a poor standard to set and bears no particular justification for professional pride—I am etc,

London, W 1, July 29 VERNON C THOMPSON

Injection Risks—A Case of Gas-gangrene

SIR,—Your annotation of April 30 (p. 955) on injection risks so impressed me that I issued a circular to all the hospitals and dispensaries under me warning them of the danger of using hypodermic syringes that had been kept or even sterilized in alcohol but admitting that in practice I did not see how they could boil every syringe for ten minutes in 3 per cent. sodium bicarbonate lotion and certainly autoclaving is out of the question. Before reading your article I regret I was not aware of the danger referred to but have now had it brought home to me most vividly.

On June 16 a feeble man of 50 years 5 ft. 5 in. in height but only 6 st. 13 lb. in weight was admitted to the Windham Hospital in Jodhpur for dysuria. His blood pressure was 100/60, blood urea .20 mg., urine urea 2 per cent., Hb. 75 per cent., and indigo-carmine excretion from the right ureteric orifice below 50 per cent. of normal but excellent from the left side. As the bladder was slightly infected he was at one time submitted to ureteric catheterization and as straight x rays were conclusive there was no need to expend uro-electan on him.

The diagnosis was a phosphatic bladder stone and a stone in the right kidney. A two-stage operation was decided on and so his bladder stone was crushed under a caudal block anæsthesia on June 20. His condition improved after this and on July 1 under ether I did a right nephrectomy, the kidney not being worth saving. The operation was unusually easy and the next day his condition was as good as one could expect. He was on a four-hourly injection of atropine and strychnine because he was still rather feeble.

On July 3 in the early morning he was very ill but by middle day he was complaining of pain in the right arm (triceps region) where some at least of the injections had been given and his pulse had shot up from 86 to 126 and his temperature to 100·6. Locally there was tenderness but nothing else of note. He was treated as a case of abscess following hypodermic injection. The same evening however the condition was obviously one of gas-gangrene and by 7 p.m. he was having injections of serum intravenously, intramuscularly and locally. He refused operation and despite all other efforts died on the morning of July 5.

The cause of the infection must certainly be attributed to an injection. Whether that was the one given by the theatre staff before operation or one of the many in the ward could not be traced as the doctor who first diagnosed the case at once had everything that could possibly be infected either destroyed or properly sterilized and all the others of the fifty-two surgical cases in the ward who had had injections which might have been from the same syringe, were given prophylactic doses of serum and no other case has occurred. Satisfactory though this has been from the point of view of the patients it has prevented me from ascertaining the source of the infection.

According to your article there are two factors to be considered—the syringe and the patient. In this country owing to shortage of staff and equipment and the conditions under which work must be done in the villages the syringe must always remain a potential source of danger. It cannot be autoclaved as a routine even in the biggest hospitals I imagine, while in district hospitals and dispensaries boiling for ten minutes is scarcely likely to be done, and on many occasions I know I have in the past given and in the future shall have to give injections in mud huts in far away villages with a sandstorm blowing from a syringe which can only possibly be sterilized by alcohol.

My patient who died was in a bed to which access was easier to the right side than the left, so he may have had most of his injections in the right arm. But what a prospect—a man stands a nephrectomy well but cannot resist perhaps a dozen hypodermic injections! In future I have arranged for all four hourly and six hourly injections to be given in alternate arms the site of each being duly recorded in writing but this of course is possible only in the Windham Hospital and not in smaller hospitals and dispensaries throughout the State where fortunately injections are given less frequently. If however one could guarantee the sterility of syringes this extra work for the nursing staff could be avoided.

Can any of your readers suggest a feasible method of syringe sterilization for adoption where boiling is impracticable? What acids do Coulthard and Sykes recommend where can I see their paper and is subsequent washing out with sterile water necessary? A case like my recent one may occur once only in a million injections but that does not lessen the disappointment at losing a life after a clean operation.—I am, etc.

Jodhpur, India, July 13. E. W. HAYWARD.

The reference to the article mentioned in the last paragraph is COULTHARD, C. E., and SYKES, G. (1936) *Pharmaceut. J.* **137**, 79.—ED., *B.M.J.*

Sulphanilamide for Meningococcal Meningitis

SIR,—My medical experience includes two outbreaks of meningococcal infection at Catterick Camp, Yorkshire, during the period 1930 to 1933. I therefore read the article by Drs. T. C. Morton and J. D. Ebsworth on sulphanilamide therapy in meningococcal meningitis in the *Journal* of June 25 (p. 1362) with considerable interest. The three cases reported suggest the type of case seen in an established outbreak. In my experience serum therapy gives a reasonable recovery rate in these cases.

The fulminating sporadic type of this disease is however a much more severe test of a new therapy. During the last six months I have encountered two such cases. One was that of an English officer with a generalized hæmorrhagic rash. Serum and prontosil soluble (Bayer) were used freely but death followed the infection in six days from the onset. The second case was under my care when the *Journal* of June 25 reached me. An English soldier had a few petechiæ in the skin of his abdominal wall and a temperature of 105° F. he complained of pain below his left costal margin, the clinical picture suggesting an attack of primary malignant malaria. Next day his neck was painful and lumbar puncture gave scanty semi-digested polymorphonuclear cells and a few meningococci. He was treated with serum and solusepta-sine (May and Baker). Death occurred on the eighth day of his illness. In each case meningococci were demonstrated in the cerebrospinal fluid at an early stage in the illness. A sulphanilamide preparation was used freely but did not appear to influence the progress of the infection to a fatal conclusion.—I am, etc.,

F. J. O'MEARA, M.D., F.R.C.P.I.

British Military Hospital, Ramkhet, U.P., India, July 22.

Ischio-pubic Osteochondritis

SIR,—My note in the *Journal* of June 18 (p. 1309) has had the desired effect of drawing attention to this interesting condition. As suggested in my note the condition is evidently not so rare as the published cases would lead

one to infer Mr H A T Fairbank (July 16, p 148) has made a valuable contribution to the subject, but I think that his figures are probably too high Any degree of thickening, irrespective of rarefaction, at the ischio pubic area is apparently included, and the radiographs examined were those of pelves with a bony lesion that one would expect might be associated with an ischio-pubic osteochondritis A congenital dislocation of the hip joint throws undue strain upon the ischio-pubic area, and the reduction of the hip adds to the chances of the junction being traumatized Perthes's disease, or osteochondritis of the upper end of the femur—if it is admitted that trauma plays its part in the production of the pathological process—would also be expected to lead to affection of the ischio pubic junction

The pathology of a condition that is 'self-terminated,' and which only leads to a passing slight disability, will probably always be a matter of conjecture I am unable to agree with Mr G Edgar Church's suggestion (July 9, p 94) that it is due to a general condition, such as avitaminosis, general infection, etc Were such the case other areas of growth should be affected In the reported cases the condition is localized, if we except an associated lesion, as in osteochondritis of the upper end of the femur Also, in those general conditions I have seen in which all the growing ends of long bones are affected the ischio-pubic area was not affected

Lesions in the ischio-pubic area cannot be too closely compared with lesions at the upper end of the femur In the former two centres of ossification are approaching along a bar of cartilage and there is a good blood supply at either end In the latter, there is a proximal epiphysis which derives practically all its blood supply from the vessels piercing the epiphyseal plate—that is, from one end—so that, given a similar pathological process, the results will not necessarily be alike The period of pathological change will be shorter and of less intensity in the ischio pubic area with its blood supply from either end, and the clinical signs less marked for the same reasons and because no joint is involved

The name osteochondritis has already been recognized for this condition, and one cannot with any certainty as I have implied above deny that it is correct In attempts to name correctly what I consider to be a similar lesion at the upper end of the femur there have crept into the literature seven different names for the condition This multiplicity of names has not been of any help to the student—I am, etc,

Belfast July 26 GEORGE D F MCFADDEN

Undescended Testicle

SIR—I think the writer of the criticism in the annotation which accompanied my article on undescended testicle (July 23) has attacked a carefully prepared position a trifle over confidently

For instance I wonder how many of your readers noticed that two of the arguments against me very neatly cancel out The first is that a testicle in the inguinal canal can be felt because the tendon of the external oblique is not always tense The second is that it is impossible to tell on examination whether a suprapubic testis is in the canal or in the subcutaneous tissues Now if the first statement were correct the changes in the palpability of the testis with changes in the tension of the abdominal muscles would very clearly show whether it was under the tendon or not In actual fact a testis that can be felt at all in this position can be felt just as plainly whether the child is resisting or is under an anaesthetic Again, anyone who reads the whole of the paper must see that the two categories of "emergent" positions are quite meaningless unless it is possible to distinguish readily and clearly between the testis when it is inside the canal and when it is outside it When the gland pops in it is quite impossible to feel it, when it emerges it is plainly to be felt in the pouch or over the pubis

As to Dr A P Cawadias's letter (July 30, p 209) I feel that we are at cross-purposes rather than in disagreement What I am pleading for is as careful a diagnosis on the material side as he demands on the vital I admit that my statement that pregnyl will never bring down a testis that would not have descended in any case is a sweeping one and in opposition to the findings of other workers on the subject But has he considered that the percentage of cures reported after pregnyl treatment is just about the same as the difference between the incidence of "undescended testis" in childhood and adult life when no treatment is given at all? As to the complete safety of such a substance I propose to wait another sixty years before pronouncing on it—I am, etc,

London, W 1, July 29 DENIS BROWNE

SIR—I have read with interest Mr Denis Browne's article on undescended testis in the *Journal* of July 23 (p 168) He does an important service when he emphasizes the necessity for distinguishing between a superficial inguinal ectopic testis and an undescended testis I am often surprised at the lack of knowledge of postgraduates in a final Fellowship class on this subject and their failure to recognize the superficial inguinal ectopic testis, which is much the commonest type of ectopic testis

I should like to know if Mr Browne really means what he says when he states in more than one place in his article that 'a testis [or testicle, he uses the terms more or less alternately] that is in the inguinal canal cannot be felt through the skin" I would readily agree that some testes which are in the inguinal canal are quite impalpable through the skin, but it has certainly not been my experience that every testis in the inguinal canal is impalpable The proof of their being in the inguinal canal has been the finding of them in that situation at operation—I am, etc,

London, W 1 July 30 JOHN HOSFORD

Irradiation or Surgery for Cancer?

SIR—In the *Journal* of June 4 (p 1231) I made comparison between the results of radium treatment in carcinoma of the mouth, published by the National Radium Commission for 1936–7, and the results obtained by surgery by Mr Norman Patterson

Mr George F Stebbing and Mr Anthony E C Hare from the National Radium Commission saw fit to reply in the *Journal* of June 18 (p 1333) that I had not read the statement made in the seventh annual report (p 44) that The results shown by the survival rates give a picture of the average results of radium treatment in a very widely scattered group of hospitals and must not be compared lightly either with the results of special clinics or *with results based upon a picked series of cases treated by a highly skilled surgeon'* (The italics are mine) They are right There are no figures from scattered groups of surgeons that can be compared with the figures of radiotherapists Therefore it would be futile to compare the work of any one skilled surgeon with that of the Radium Commission Report

Mr George F Stebbing and Mr Anthony E C Hare have however misconstrued my letter I was not condemning radium in a wholesale manner—as they appear to condemn surgery—but mine is a plea that a better balance and sense of proportion should be obtained in the right treatment of these cases The surgeons one might say have only the interests of the patient at heart and are not concerned with the development of an elaborate technique demanding a profound knowledge of the physics of radium and x rays I desire to stimulate inquiry in the minds of persons using methods of irradiation to be sure that the best interests of the patient are being served because my study of the present condition has led me to believe that there exists a most unjust balance I am not at cross purposes but wish to join them in a reasonable inquiry Let us imagine that they or I were suffering from malignant disease Should we not desire whatever advice and treatment were the most efficacious?—and in doing so I feel sure that we would all consult both surgical and radiological colleagues

I still put forward the plea that more cases should be treated by surgery and not by scattered groups of radiotherapists in scattered groups of hospitals all over the country Would it not be better if a form of centralization were adopted whereby all cases might be referred in the first instance to the proper surgeons who have become technically expert in some special branch of surgery? Then when approximately equal numbers (Mr George Stebbing suggests a thousand) were treated by each means a just comparison could be made I am sure with no detriment to surgery

The reason why comparisons are made on such relatively small surgical numbers is that methods of irradiation have been talked about so freely in the popular press that the number of cases referred to surgeons has become less and less Despite this lack of material the surgical mortality rate has decreased materially as the result of improved technique and the introduction of modern anaesthesia (as stated in my letter)

If Mr George Stebbing and Mr Anthony Hare really believe as they state that the technique of radiotherapy has vastly improved and we are not aware that the same can be said of surgery then I feel they must be like Olympus—alone in their thoughts—I am etc

London W 1 July 23 E. R G PASSE

Hormone Therapy in Mastitis and Breast Cancer

SIR—Mr W Sampson Handley described in your issue of July 16 (p 113) a family history of five sisters suffering from chronic mastitis and cancer of the breast We know that a surplus of oestrin acts on the female breast and frequently causes chronic mastitis We can counteract the effect of oestrin by the male hormone testosterone propionate as I described in the *Lancet* of February 12 and May 14 of this year This is the reason why I should recommend using testosterone propionate to influence chronic mastitis In three cases I succeeded in making the lumps in the breast disappear by intramuscular injections of the male hormone Doses between 500 and 1 000 mg must be given These doses inhibit the production of the gonadotropic hormone in the anterior pituitary and prevent the growth and the ripening of the follicles in the ovary which in their turn do not produce the follicular hormone And the surplus of the follicular hormone is the cause of the chronic mastitis I should advise treating cases of chronic mastitis once or twice every year with testosterone propionate even if the chronic mastitis had disappeared

So far as cancer of the breast is concerned it is advisable to treat patients who have already undergone a radical operation prophylactically with high doses of male hormone every year In my opinion this is a better method of avoiding a secondary deposition than irradiation especially in families in whom cancer is hereditary I have done this in two cases of breast cancer—I am etc

London W 1 July 25 ALFRED A LOESER.

Placenta Praevia

SIR—I most heartily agree with Dr H G Oliver (*Journal* May 14 p 1071) in his contention that Caesarean section is not to be lightly undertaken especially after vaginal examination Upon three occasions I successfully conducted confinements employing a technique similar to that described by Dr Oliver In 1929 however it occurred to me that the application of a vulsellum to the foetal scalp would be much freer from trauma to the cervix and freer from the danger of infection Accordingly taking a wide bite (which can be done with only one finger dilatation of the cervix) I employed an ordinary uterine vulsellum forceps with happy results Credit is due to Dr Willett (of whose work at that time I did not know) for designing a special forceps for this particular purpose

If Dr Oliver or any other general practitioner engaged in midwifery should encounter a case of marginal or lateral placenta praevia with only slight dilatation I would urge him to use the Willett forceps not to worry about version and not to dilate manually the cervix which may tear like wet blotting paper and also not to apply forceps until full dilatation has occurred In the absence of full dilatation the use of midwifery forceps in cases of placenta praevia is fraught with the greatest danger—danger of trauma and infection and of death from haemorrhage and sepsis Three further points about the Willett forceps are always carry a pair take a wide bite of the child's scalp and do not apply more than 1 lb weight for traction I slip the forceps through a funnel of one inch rubber so that this rather than the forceps presses against the posterior vaginal wall and perineum—I am etc

Perth Western Australia June 20 H R PEARSON

"Psychosomatic Illness"

SIR—Dr E K Mackenzie (*Journal* July 23, p 197) is evidently in conflict as to whether he approves or disapproves of Dr James L Halliday's articles on psychosomatic illness I am interested to see that among the bouquets that he throws are concealed daggers and even an occasional bomb But what arrested my attention was his statement that within the last few months he had seen a case of carcinoma of the stomach at the age of 19 years two cases at the age of 22 years and one case at the age of 27 years The statement reads somewhat ambiguously and I should like to ask Dr Mackenzie whether he means that he encountered all four cases in general practice within the last few months If so I feel that he has had a most extraordinary experience I was myself in general practice for twelve years seeing an average of over fifty patients a day Throughout this period I neither encountered nor missed one single case of carcinoma of the stomach in a young person But I saw daily many dozens of cases of psychosomatic illness or as I would prefer to call them cases of psychogenic illness—I am, etc.,

London W 1 July 23 CHARLES BERG M.D., D.P.M

Treatment of Carbuncles

SIR,—I read with interest the note on the treatment of carbuncles by Mr A P Bertwistle in the *Journal* of June 11 (p 1284) Packs of saturated sodium sulphate may be left on for three days in cold countries like England as suggested by Mr Bertwistle, but in the humid high temperatures of India it is very uncomfortable for the patient if the dressings are not changed at least every twenty-four hours I have had good results from the four-hourly application of compresses of a hot saturated solution of magnesium sulphate Sometimes, in sensitive patients, the application of magnesium sulphate directly on to the wound is painful and irritating In these cases I cover the actual wound with fine gauze soaked in hexyl-resorcinol and secure this by cross-strips of adhesive plaster This dressing is changed every twenty-four hours, while the four hourly magnesium sulphate compresses are applied over it This softens the necrotic tissue, which can be easily removed by scissors and forceps Along with this local treatment I give collosol manganese either orally or by injection—I am, etc,

Agra, July 19 P K BANERJEE

Thrombocytopenic Purpura from Sedormid

SIR,—I welcome the annotation on thrombocytopenic purpura from sedormid in your issue of July 30 (p 229), but I cannot agree that this at times so serious illness is 'evidently a very uncommon side effect

In November, 1931, when sedormid had hardly been introduced into this country, I was able to prove experimentally that a severe case of purpura had been caused by this drug and in the first paper on sedormid purpura in the *Lancet* of April 21 1934 (Thrombopenic Haemorrhagic Purpura due to Idiosyncrasy towards the Hypnotic Sedormid Allergotoxic Effect), I was already reporting three cases seen by me within little over two years In 1938 so far two new serious cases have been brought to my notice in London

I have reason to believe that frequently the causative connexion between purpura and sedormid has been missed because the makers—a reputable firm—continued to praise the harmlessness of sedormid in their advertisements even after I had brought my experience and publication to their notice Only recently I have at last received the assurance that purpura would be mentioned as a possible side effect but it will naturally take some time before the old packages have been replaced and I should like meanwhile to emphasize the practical importance of the subject—I am etc

London W 1 July 30 F E LOEWY

Effects of Smoking

SIR,—I was much interested in the annotation in the *Journal* of July 23 (p 187) on electrocardiographic changes due to smoking describing the experiments of Graybiel and his co workers In these experiments the smoke from a cigarette was inhaled until toxic symptoms appeared or it was finished and in some cases two or three cigarettes, a pipe or a cigar were smoked In 1929 with the assistance of Mr C A Beck, B Sc I carried out very similar experiments to determine the effect of smoking on the sugar content of the blood It was found that a reduction of the blood sugar was the rule in non smokers and also among smokers although in two cases there was a very slight increase in the blood sugar Maitland (*Journal*, 1933 **1**, 268) states that it is probable that in many adults who suffer from toxic amblyopia—the result of over indulgence in tobacco or alcohol, or both—there is a disturbance of carbohydrate metabolism, and that a systematic estimation of the blood sugar may prove an important factor in both prognosis and treatment A full investigation of this subject offers a promising field for research Graybiel does not think that carbon monoxide is usually absorbed in amounts capable of inducing the changes recorded Armstrong (*Journal* 1922, **1**, 922) stated that quite an appreciable amount of carbon monoxide is present in smoke and is largely determined for example, in cigars, by the closeness of the packing and the rate of smoking He remarked that 1 cubic foot of ordinary coal gas contained an amount of carbon monoxide equal to that in the smoke from four cigars The proportion of carbon monoxide in South Metropolitan gas, it may be added, is about that of average cigar smoke It is evident, therefore, that alterations in the blood pressure and the frequency of the heart beats due to smoking are of a somewhat complex nature—I am, etc

Southampton, July 23 E SAKOSCHANSKY

Bragg-Paul Pulsator

SIR,—With your permission, and with the concurrence of Sir William Bragg I should like to supplement his story of the development of the pulsator, as given in his letter which you print in the *Journal* of July 30 (p 254)

I have received valuable aid and advice, freely given from Dr P M T Kerridge, M R C P of University College, London, and from the Department of Industrial Physiology at the London School of Hygiene and Tropical Medicine To the former I owe suggestions for the form and mode of application of the air bulb which is an essential part of the equipment In the early stages of the work the measurements of ventilation efficiency made at the latter gave me confidence in introducing the Bragg-Paul pulsator to the notice of the medical profession, with the results already reported—I am, etc,

London, W 14 July 30 ROBERT W PAUL

The Services

NAVAL MEDICAL COMPASSIONATE FUND

At the quarterly meeting of the directors of the Naval Medical Compassionate Fund held on July 8 with Surgeon Vice Admiral P T Nicholls Medical Director General of the Navy, in the chair, the sum of £56 10s was distributed among the several applicants

DEATHS IN THE SERVICES

Lieutenant Colonel JAMES CHARLES GORDON CARMICHAEL OBE RAMC (ret) died at Ewell Surrey on July 27 He was born on October 28 1876 the son of the late Colonel J C G Carmichael I M S and was educated at Edinburgh University where he graduated M B Ch B in 1902 He took the Cambridge D P H in 1912 He entered the Royal Army Medical Corps as lieutenant on January 31 1903 became major on October 31 1914 and retired as lieutenant-colonel on August 11 1925 After retirement he went into practice at Ewell where he was honorary physician to the Epsom and Ewell Cottage Hospital He served throughout the war of 1914-18 and was mentioned in dispatches in the *London Gazette* of December 18 1917 He had been a member of the British Medical Association since 1905

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

T D Davies M.A., M.B., B.Chir. has been appointed Assistant in Research in Pathology (Morbid Anatomy and Histology) to the Regius Professor of Physic for three years from October 1, 1938.

The Marmaduke Sheild scholarship has been awarded to G. J. Romanes, B.A. D. J. Bauer, B.A. has been re-elected to the Michael Foster studentship in physiology.

During June titles of the degrees of M.B., B.Chir. were conferred by diploma on Mrs. F. C. Edwards of Girton College.

UNIVERSITY OF LONDON

The following candidates have been approved at the examination indicated:

M.S.—*Brackish (Surgery)*: K. C. Eden, S. H. Wass. *Branch III (Orthopaedics)*: L. J. Somerset.

ACADEMIC POSTGRADUATE DIPLOMA IN MEDICAL RADIOLOGY.—E. P. Allen, J. W. D. Ball, A. G. S. Cooper, N. I. C. Hill, D. J. Hurrell, C. W. S. Jerram, O. Macfeat, B. Y. Mina, J. G. Nel, S. F. Oosthuizen, K. M. Rai, P. N. Vaus, H. H. Winterbottom, Gillespie.

ACADEMIC POSTGRADUATE DIPLOMA IN PSYCHOLOGY.—Eveline M. Begbie, J. D. Copp, Eleano A. Eattell, Phyllis M. Freeston, W. M. Gould, G. H. Kjellberg, Ivy W. Langan, Jeannie McM. McKinlay, H. Sampson, Ralph, Doria M. Wills, Rachel Zabarl. *Part II*: S. C. Amin, Vera D. Deutz, Sylvia C. Harnett. *Part III*: Norah C. Morrison.

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE

The following candidates have been approved at the examination indicated:

ACADEMIC POSTGRADUATE DIPLOMA IN PUBLIC HEALTH.—S. Amarasinghe, P. H. R. Anderson, Annie R. Chalmers, F. C. L. B. D. Crawford, P. A. Crowley, L. D. P. Dharmaratne, C. W. Dixon, R. Y. Dunlop, A. C. Gee, I. W. Gilbert, M. G. Hyder, O. G. Lloyd, G. A. Macgregor, I. M. Macgregor, M. Markowe, J. S. Minnett, F. Noronha, P. N. O'Dwyer, D. F. Parry, A. I. Ross, A. F. H. Stewart, S. Sivasankara Pillai, J. Taylor, Emils S. O. Thomson, S. C. Thurai Rajah, M. Watkins, Helen E. Wight.

ACADEMIC POSTGRADUATE DIPLOMA IN BACTERIOLOGY.—E. Agius, R. D. Andrews, D. R. Balombe Brown, Dharmendra, Winifred M. Hill, H. D. Holt, W. Lewin, H. H. Stroud, J. M. Vincent.

* Mark of distinction.

UNIVERSITY OF DURHAM

The honorary degree of D.C.L. will be conferred on the Prime Minister, Mr. Neville Chamberlain, on the occasion of the opening of the new buildings of the Medical School at Newcastle upon Tyne on October 8.

The Council of King's College, Newcastle, has appointed J. E. Francis, M.B., B.S., B.Sc., assistant demonstrator in the Department of Physiology.

UNIVERSITY OF EDINBURGH

A graduation ceremony was held in M'Ewan Hall on July 20 when the following degrees and diplomas were conferred:

HON. LL.D.—The Right Hon. Walter Elliot, Elliot, D.Sc., M.B., F.R.S., Minister of Health.

M.D.—D. Bell, *D. S. Cownie, G. Fraser, K. Girgis, J. W. D. Goodall, J. L. Henderson, R. Lees, A. D. Macdonald, A. M. Mackenzie, N. Macmichael, G. R. M'Nab, C. de C. Martin, *R. Scott, E. Townsend, *H. L. Wallace, * D. Wyllie.

M.B., CH.B.—A. Y. Adam, J. A. W. Adams, T. M. Adnams, A. S. Affara, B. H. M. Aldridge, J. H. Annan, S. V. Appavoo, R. S. G. Arnott, R. B. Baird, †J. M. Barkla, F. C. Barlow, Olive B. Bernetson, J. Baxter, D. E. H. Beattie, †Marion B. Bethune, R. W. Biagi, Margaret E. Black, A. de V. Bourke, K. Brauer, J. A. C. Brown, J. W. Buchanan, Joan Campsie, Mary Cannell, J. Carrick, Geraldine M. H. Carrington, R. Cathcart, L. J. Charles, J. Cohen, W. P. Collingwood, A. E. A. Cordin, W. R. S. Cowe, J. Cowen, W. N. Crow, Dorothy Cunningham, C. H. Davidson, J. S. Davidson, T. K. Davidson, J. G. Davies, P. F. de Caires, D. P. Degenhardt, D. S. Dick, G. W. A. Dick, W. Donaldson, †A. J. M. Drennan, Agnes D. Ferguson, J. R. P. Finlay, W. Forbes, D. D. A. Fraser, W. R. N. Friel, †Jessie R. M. C. Fulton, Eileen M. Gavin, W. D. Giffen, W. A. Gordon, A. P. Gracie, M. K. Granger, R. G. S. Grant, W. D. Gray, R. H. Greig, C. Grimshaw, P. M. L. Gunn, L. J. Gurry, J. P. A. Halcrow, G. R. Hales, E. S. Hamaty, D. J. Harman, J. R. Hassan, G. Hay, P. J. Helliwell, M. L. R. Hersey, Elizabeth G. Higgins, Marjory C. Hogg, R. B. Hunter, A. D. Ingram, M. Ismail, R. M. Johnstone, J. S. Kerr, Jean M. Lardlaw, M. L. Levinson, R. I. S. Lewis, R. G. Linton, A. P. Littlewood, J. D. Lodge, D. Lorimer, Isobel St. M. Macaulay, D. I. M'Callum, G. H. M'Cricken, J. M'Garrity, Agnes D. M'Harg, L. G. M'Intosh, C. G. G. Mackay, C. M. Mackenzie, Marjorie L. Mackinnon, †J. G. Macleod, A. S. B. M'Neil, G. H. M'Pherson, D. A. C. M'Rae, R. Makin, W. J. Matheson, D. R. S. Milne, J. B. M. Milne, F. H. Minors, A. M. Morris, R. C. Morton, H. B. M. Murphy, W. H. Murray, W. D. Oliver, E. Oppenheim, D. L. Owen, L. M. Owen, T. Parkin, F. H. Patel, W. I. Paterson, H. S. Patterson, I. P. Paul, D. T. Pitt, S. L. Pollock, Ivy F. Proctor, H. S. Provis, K. D. G. Reid, L. E. Resnikoff, D. A. W. Rittey, C. G. Robertson, D. M. Robertson, D. S. F. Robertson, F. J. Robertson, R. H. Robertson, T. W. Robson, Elizabeth M. Rose, D. E. Ross, J. M. L. Ross, R. A. Rutherford, G. Salvesen, Sarah C. Saunder, G. S. Scott, Jean M. G. Shaw, J. A. S. Shaw, L. J. M. Shearer (*in absentia*), H. R. Shenkin, D. M. Sheppard, M. Simenof, J. M. D. Simpson, T. B. M. Sloan, H. J. C. C. Smith, M. L. Stein, J. Straton, J. Taylor, L. F. Tegner, J. K. Toop, W. J. Toop, Jean L. Turnbull, Ida F. Tweedie, Janet A. Walker, G. B. R. Warnock, W. S. Watson, A. C. Watt, R. G. M. Wedderburn, C. D. Weir, R. B. C. Welsh, A. Whitewright, Katherine M. Wilkie, A. R. Wilson, Lesley M. Wilson, M. L. Winston.

B.Sc. PATHOLOGY. *First Class*.—†R. M. M. Hunter.

DIPLOMA IN PUBLIC HEALTH.—J. Cooper, Winifred M. Dempster, J. M. Irvine Young, S. B. Lal, D. C. Logan, A. M. Diarmid, J. S. Oliphant, Isabella A. Purdie, F. Townsend.

DIPLOMA IN TROPICAL MEDICINE AND HYGIENE.—H. Hastings, E. Maung.

DIPLOMA IN PSYCHIATRY.—J. K. Grant, J. S. Johnstone, A. Paterson, G. R. Pile, F. M. G. Prendergast, H. Stalker.

DIPLOMA IN MEDICAL RADIOLOGY.—R. J. C. Campbell, D. B. Faulds, M. Y. Khan.

* Commended for thesis. Highly commended for thesis.
† Passed with honours.

The following prizes were presented:

Cameron Prize in Practical Therapeutics: Karl Landsteiner, M.D. (Vienna), member of the Rockefeller Institute for Medical Research, New York. In recognition of his researches on isohaemagglutinins and blood groups and the influence of his discoveries on the practice of therapeutic blood transfusion. *Ettles Scholarship and Leslie Gold Medal*: Beanes. *Prize in Anatomy and Surgery*: Anwar Dale. *Gold Medal in Clinical Surgery and Murdoch Brown Silver Medal in Clinical Medicine*: J. M. Barkla. *Scottish Association for Medical Education of Women Prize*: Marion B. Bethune and Jessie R. M'C. Fulton (equal). *Mouat Scholarship in the Practice of Physic*: Marion B. Bethune. *Buchanan Scholarship in Midwifery and Gynaecology*: G. W. A. Dick. *James Scott Scholarship in Midwifery and Gynaecology and Dorothy Gilfillan Memorial Prize*: Jessie R. M'C. Fulton. *Conan Doyle Prize*: A. C. Watt. *Royal Victoria Hospital Tuberculosis Trust Gold Medal*: G. R. Hales. *Bartleman Prize in Clinical Medicine*: J. Cohen. *Syme Surgical Fellowship*: D. L. C. Bingham. *Stark Scholarship in Clinical Medicine*: H. Milne Redhead. *Vans Dunlop Scholarship in Materia Medica and Medicine*: J. Innes. *Ellis Prize in Physiology*: Barbara Petrovskaia. *Gunning Victoria Jubilee Prize in Chemistry*: J. L. Bolland. *Gunning Victoria Jubilee Prize in Materia Medica*: J. C. Lees. *Gunning Victoria Jubilee Prize in Therapeutics*: H. W. Devere and D. Wallie (equal). *Gunning Victoria Jubilee Prize in the Practice of Physic*: J. W. D. Goodall. *Gunning Victoria Jubilee Prize in Psychiatry*: W. M. Millar. *Lewis Cameron Postgraduate Prize*: R. Scott. *Thomson Memorial Medal in Child Life and Health*: J. L. Henderson. *Lewis Cameron Undergraduate Prize in Bacteriology*: G. R. Millar. *Maclagan Prize in Forensic Medicine*: L. S. Cooke. *Wellcome Gold Medal and Prize in the History of Medicine*: H. W. Smith. *Wellcome Silver Medal and Prize in the History of Medicine*: H. L. de Waal. *Cunningham Memorial Medal and Prize in Anatomy*: J. R. Lauckner. *Proxime Accessit*: Elizabeth G. Harris. *Whiteside Bruce Bursary*: R. T. S. Louttit. *Vans Dunlop Prize in Botany and Zoology*: M. S. Fraser.

An address was delivered to the new graduates by the Chancellor, Lord Tweedsmuir.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH

At a meeting of the Royal College of Surgeons of Edinburgh held on July 23 with Mr. W. J. Stuart, President, in the chair, the following, having passed the requisite examinations, were admitted Fellows:

H. Aitken, M. M. Ali, N. F. Babbage, G. K. Bhide, Ida L. Birchall, R. B. Eaton, J. A. Elliot, C. A. Haysmer, R. G. Henderson, S. Henderson, G. W. A. Keddy, J. S. Kinnear, S. Klemot, P. Kohnstamm, L. R. Levy, J. Ll. Lewis, R. A. Lucas, N. M. L. Lund, J. S. Mackay, D. E. Mackenzie, I. Mackenzie, J. A. Magnus, D. V. Marshall, D. A. O'Reilly, J. F. Philip, D. F. Price, D. K. Rao, J. B. Shield, D. F. Smith, Anna Vareed, P. M. Williams, W. W. Wilson, J. Wolfowitz, W. A. Wright.

Medical Notes in Parliament

On July 28 Mr Hore-Belisha announced conditions of service, pay, and retirement for combatant officers of the Regular Army Sir FRANCIS FREMANTLE asked whether any corresponding advances would be given to the Royal Army Medical Corps or other technical corps Mr HORE-BELISHA replied that each technical corps had its own manner of enlistment and recruitment which differed in each case but each one was being looked into

Quack Medicine Trade

[In these columns last week we gave a brief account of the debate on the quack medicine trade, which was opened by Lord Horder in the House of Lords on July 26 The following is a fuller report of this important discussion]

Lord HORDER said it might be thought that his topic was rather a hardy annual but he assured them that the question of quack medicines in relation to the health of the public was not really so much a hardy annual as a pernicious growth When he suggested dealing with this subject the first objection raised by his friends was that he would have vested interests heavily against him—the vested interests, that was of newspapers and their proprietors the large Press agencies and those who owned hoardings and posters It was becoming more and more obvious that the head and fount of the offence in the matter of quack medicines was the advertisements, so often grossly misleading if not actually fraudulent

Far from any signs of opposition he had received both help and encouragement from the reputable members of the groups to which he had referred For very decency's sake and a sense of duty these people were themselves taking steps to exercise a degree of control and censorship which in other countries responsible authorities imposed He had received assurances on this matter from the Proprietary Association of Great Britain the Newspaper Society the Advertising Association, the Periodical Proprietors Association and the Institute of Incorporated Practitioners in Advertising Seeking again for advice from all authorities in any way connected with this subject of course he was warned that 'they will say that if you as a doctor raise this subject, you will be charged with trying to create a monopoly for your colleagues, you will be charged with depriving the poorer classes of cheap cures to the efficacy of which they constantly testify On this question of monopoly he believed it to be true that if there was a monopoly it lay with the trade which, at a cost of nearly as much as the total money spent on the whole of our hospital services bled the public to the tune of between £25 000 000 and £30 000 000 a year He was seeking to break this unscrupulous monopoly a monopoly which successive Governments seemed almost to have gone out of their way jealously to guard witness the exclusion of patent and proprietary medicines and food from the otherwise excellent Food and Drugs Bill which was about to become law

DOCTORS BENEFIT FROM QUACK MEDICINES

Referring to the position of the doctor Lord Horder said he felt sure that Lord Dawson would agree with him that if the doctor thought only in terms of hard cash in this matter he would actually benefit from this unprincipled trade The doctor had eventually more patients because of this, and not fewer Especially would the surgeon benefit for cases became serious in proportion as diagnosis and treatment were delayed Ultimately even the undertaker benefited sooner and oftener than he might In striving to cleanse this Augean stable he (Lord Horder) was not acting in the interests of doctors He was acting in the interests of the public which was least able to stand up against exploitation—poorer people who could less afford to lose money on health than any other section of the nation and the straitened middle classes People who were better off but perhaps not less foolish could afford to pay for any damage which their adventures into quack medicines might incur

The third objection with which he would deal was expressed by those who said, 'It is all very well to be destructive but if the citizen does not send his coupon for his lung cure and if he does not get his diagnosis by post for his kidney trouble and if he does not get his gastric ulcer healed with a patent powder what is there for the poor citizen to do' Now and perhaps only now we had something infinitely better to put in the place of these extremely dubious specifics We had now available to the poorest everywhere one of the finest health services in the world, and the slogan "Use your health services" was one of the most intelligent slogans he had ever heard Health services, constantly expanding health insurance services were what the Government could and must now encourage the people to put in the place of this medieval witch-doctoring

There were clear and abundant reasons why the present chaotic state of the law in relation to quack medicines should come to an end His main reason for pressing the motion for papers at this time was his deep concern for the success of the concerted move we were making towards national fitness By fitness he did not mean muscular supremacy but meant health as a basis for good citizenship and happiness Men and women of all parties were converging on this objective They were all genuinely moved with the desire to help Anything directly bearing on the basic health and happiness of the people was outside party politics He knew from the support he had received during the past few days when it was known that he was going to put this subject before the House of Lords that it was commonly felt that in the realm of party politics there was no room for the question as to how we should keep the nation fit

INCONGRUOUS SITUATION

The incongruity to which he referred in his notice was apparent to everyone On the one hand the Government had launched a campaign to improve the national physique had recruited all of them whose business it was to know something about health had set aside subsidies for the purpose of education and demonstration in regard to fitness and had spent quite a lot of money in health propaganda On the other hand they had this campaign of quack medicines and food totally uncombated so far by the Government but by very subtle and skilled generals bent on maintaining national ill health moral and physical in order to have a ready market for their goods For every £100 that the Government spent on making people health conscious quack medicine mongers spent £1 000 in making them disease conscious While were trying to teach people the meaning of nutrition and the money they might spend on food they were spending on quack medicines or on very poor substitutes for good food Those were the considerations which led him to bring the subject before the House We had recently witnessed what financial friends assured him was a most necessary and thought creditably expeditious effort to limit the evil called share-pushing It seemed to him that if the State so readily protected the property of its less wary citizens against financial sharks it should not regard it as less important to take some steps to protect their health from wanton damage

A famous group of patent and proprietary medicine vendors catering chiefly for nervous and digestive disorders had just budgeted for nearly £1 000 000 for Press advertisements alone during the current year This particular group covered some sixteen preparations if one excluded shampoos and dog and cat medicines He saw that it was about to buy the control of six to ten more preparations The profits on the deferred shares had risen from £40 000 to £280 000 in the past five years In 1931 the price of the 5s shares stood at 5s and in each of the past three years these shares had risen above £3 These figures gave some indication of the lucrative nature of the concern and of the great expansion of the quack medicine trade No wonder that the board of this concern thought it a wise thing to make a large donation to one of the London hospitals He was unable to inform their lordships if the donation was earmarked for the treatment of patients who had doctored themselves with the company's medicines

THE PUBLIC AS A CONSERVATIVE

A few patented and proprietary things were good things and the claims made for them as claims went were not unreasonable A good many things that did little or no good and little or no harm were sold at fantastic prices But now and again something was sold that did infinite harm—not often because an inquest was a thing that put some of these people out of business more quickly than anything else and for that reason dangerous drugs were as a rule avoided All the same there was nothing in law to prevent a vendor in this country from trading in some new drug not as yet on the Poisons Schedule and concerning which experience of its action was required to discover the danger In other words the public was made the guinea pig as it were of the unscrupulous vendor

But there were an enormous number of preparations which were fraudulent in the degree of the advertisement—fraudulent in the claims they made and very fraudulent in the way in which those claims changed without any change in the nature of the specific The public was slowly becoming aware that certain diseases like cancer and hernia were not cured by drugs and the advertiser was quick to realize that So disease conditions which were for any reason in the public mind were made the means of selling the same old goods For example the subject of malnutrition was topical now and a number of preparations formerly advertised to cure quite different conditions were now advertised as a cure for malnutrition A set of new preparations arose which claimed to do the same thing The subject of vitamins having become somewhat popular it would be found that quite a large proportion of the quack medicine advertisements to-day claimed that they contained "all the vitamins necessary for health

Some people had recently become rather anxious about the prevalence of rheumatic disease in this country and straight away the quack medicine vendors orientated their advertisements in that direction Advertising had become a specialized profession The maker of quack medicine need no longer rack his own brains as to how best to overcome any reluctance the public might have in spending He handed the matter over to the advertising specialist together with a large sum which had been appropriated for this purpose and the thing was put across the public as they said There was a rake off for the manufacturer the advertising agent and the newspaper When they remembered the enormous increase in the media through which advertisement operated—newspapers omnibuses hoardings wireless and aeroplanes—they began to realize the appalling results which this mass suggestion must eventually have upon the country's health and morale These advertisements had become a much graver danger than the medicines they sold Fear was the chief emotion they relied upon so that much of this trade was in effect a huge form of blackmail

It was all very well to vet the medicine and reject its advertisement if harmful which was claimed by some responsible newspaper proprietors but there was poison in the advertisement Nobody seemed to vet the advertisements except a few papers and he paid them all credit for that A picture that he had was of an operating theatre with the surgeon and nurses in their masks and it said Buy our invaluable ointment and you will escape operation and the result is guaranteed There was another a picture of a strong acid burning a hole in the carpet which said This is what is happening inside your stomach when it pains you Take our tablets and you can eat anything Then there was a diagram of a circle a very considerable part of which was coloured on the poster to represent the proportion of nourishment in a certain meat juice The representation was a lie because the stuff was mainly extractives which were not nourishing salts and colouring matter and the actual food value was almost negligible Of course everyone takes a laxative said one advertisement so why not ours? And the wretched man who did not take a laxative began to wonder if he could possibly be well without it Four out of five have pyorrhoea —which was not true—said another advertisement But the chances were so heavily loaded against the reader that the goods sold

A MENACE TO HEALTH

So he might go on almost endlessly It was perhaps because some of our Continental friends had been reading our advertisement pages that they thought that Britain had become decadent This of course was in the language of the street a ramp It was not only demanding money with menaces it was coining money out of the fears of the people Not only the sick but the well were swindled for by what other word could they rightly stigmatize the deliberate promotion of credulity for the purpose of gain? In Continental countries exploitation was forbidden It was forbidden in the United States in Australia and Canada there were heavy penalties for making false and fraudulent claims and even in South Africa last year a Bill was introduced based on the recommendations of the Select Committee of this country of 1914 It was humiliating to think that Great Britain remained complacent in face of this menace to the health of her citizens

The Government as well as the others got a rake off and it was sometimes thought that this fact prevented legislation He could not think that that was a very powerful preventive of legislation in this country because the Chancellor of the Exchequer only netted £1 000 000 a year out of this sordid business Of course he could make much more the Medicine Tax Act of 1812 was being evaded in the grossest manner To quote only one anomaly taxes were levied only *on drugs advertised as a cure for ailments* and so cough medicines and pills for backache were taxed but chest mixtures and kidney pills were exempt

It was nearly fifty years since a Royal Commission stated that the India opium revenue was morally indefensible and within a month of the presentation of its report Parliament approved it Yet there was the report of the Select Committee on Patent Medicines a compendious document which was so ill fated as to be printed on that tragic day August 4 1914 That was twenty four years ago and the committee's recommendations simple though they were—registration disclosure and censorship of advertisements—had never been implemented Why were we so prompt to protect the Chinaman and so dilatory in protecting our own citizens? Yet his analogy was fairly close because to paraphrase a famous saying Quack medicines are the opium of our people

What was the remedy? With the best intentions for which he gave the reputable newspapers every credit no censor nor hip of their own would ever effectually deal with this nuisance This voluntary effort had been on trial for more than twenty years and things were now much worse than before Central or Government control would tighten up the situation at once The people who might be expected to know—that was the owners of large newspaper combines—supported him in this contention He had letters quite a number from noble Lords to this effect and they agreed with him that the evil must be attacked at its source These papers which were trying to-day but unsuccessfully to control the grosser forms of exploitation of their readers would by some central control be protected and not penalized as at present they were

GOVERNMENT ACTION REQUIRED

Lord Southwood who was president of the British Advertising Association had told him that an important department of that association devoted its efforts to the elimination of advertisements of undesirable products Yet as an example of how impossible it was to carry out this good intention in practice he had there that afternoon an advertisement of Yadil in that week's *John Bull* and it was fourteen years ago that Yadil was so thoroughly exposed in three successive issues of the *Daily Mail* that its sale was entirely stopped This was the stuff that did not contain the harmless ingredient which it was alleged to contain but 1 per cent of formalin an intense irritant of which it made no mention True the figure 1935 appeared now in brackets after the name Yadil That might mean something or nothing The point was that this monster was hydra headed and it could only be destroyed by being strangled at its birth

It was only fair to admit that a few things had been done since 1914 and they were to the good The Venereal Diseases Act made it an offence to advertise medicines for venereal

disease, and the very success of this veto showed that measures of this kind were both practicable and effective Then there were the Pharmacy and Poisons Act, the Dangerous Drugs Act and the Therapeutic Substances Act, but good though all these laws were taken together, they did not touch the real problem he was presenting to the House In the Food and Drugs Bill there was a great opportunity of dealing with this pest Instead of that quack medicines were specifically exempted from any penalties under that measure—an exemption which renewed automatically the exemption made in the previous Food and Drugs Act of 1928 In Part I of the new Bill, Clause 4 dealt with defences available in proceedings taken under the Bill Subsection (3) contained the words where the food or drug in question is the subject of a patent in force and Subsection (5) read that the article supplied was a proprietary medicine and was supplied in response to a demand for that medicine In short, no action could succeed under that measure if it were attempted

A record of the Bills that had been introduced into the House of Lords and the House of Commons since 1920 made very gloomy reading They had generally died of that common disease lack of Parliamentary facilities, though in one or two cases a more accurate explanation of death would be *felo de se* On the last occasion the failure of the Bill in the House of Commons was attributed to its having had the bad luck to be introduced on the day of the Grand National There appeared to be a 'hoodoo' resting upon private Bills dealing with this matter He earnestly trusted that the House would support him in his efforts to persuade the Government to tackle it by a Government measure The machinery would be easily forthcoming His friend and colleague who now had charge of the Ministry of Health must by virtue of his training and experience, have exceptional knowledge of the whole of this subject, and must be more fully alive perhaps than some of his predecessors in that responsible office to the importance of the matter He (Lord Horder) believed that the Minister would have the opinion of the country behind him and he had good reasons for believing that the Press as a whole would support him A Bill dealing with this would be a most fitting corollary to the efforts we were all making for national fitness It would demonstrate clearly to the world that the Government was really serious in regard to their health campaign It would close a wide gap in our defences a gap which was increasing month by month and through which at the moment the enemy was pouring and spreading havoc among our people Once behind the lines there was no limit to the damage which this particular enemy could do

PUBLIC EDUCATION IN USE OF COMMON DRUGS

Lord FARINGDON in supporting the motion suggested that the recommendations of the 1914 Committee in one respect at any rate did not go far enough They suggested the registration of preparations and disclosure to a Government Department of their contents There was no reason why this disclosure should not be absolutely public, he suggested, in view of the experience we had now of the extraordinarily abstruse and incomprehensible nature of disclosure of contents of secret remedies which was made in many cases incidentally to avoid the Government tax that there should be a legal obligation to make them in a form generally accepted by the medical profession so that there should not be any misunderstanding as to what was contained in any preparation that was sold It would of course be said that that would not affect a great many of the public who would be unable even if they knew the nature of the actual drugs in a preparation to judge for themselves of their efficacy That was true but a purchaser would always be able to consult his medical practitioner or the chemist from whom he bought as to the value of a particular drug Lord Horder had fully repelled the suggestion that members of the medical profession had any personal or financial interest in the perpetuation of this trade The medical profession had, he thought, shown a really admirable attitude since the eighteenth century in forbidding to members of the profession the use of secret remedies and insisting on publication Nevertheless something might be done by the medical profession itself in co-operation with education authorities He suggested to Lord Horder that perhaps it would be possible to give more public instruction in the use of household remedies In that way people who had headaches would not buy some kind of headache powder, they would know for example, that an ordinary aspirin was in any case the active drug in any preparation which they were likely to buy, and that it could be obtained in a purer form at a very much cheaper price direct from the chemist That was naturally only one of many possible examples The general public in the interests of its health, should be educated to appreciate the use of common drugs

Lord ADDISON said that Lord Horder had studiously understated his case and had done it deliberately In 1920 or 1921 he (Lord Addison) remembered as Minister of Health being a party to the initiation of proceedings that led to a joint conference representative of all the various interests concerned including medical men and newspaper proprietors, which made recommendations This step did not go very far it was a very tentative and moderate approach to the matter He only mentioned it to emphasize the certainty that if the Government would remove what Lord Horder had described as *the fear which beset private Bills* and take on themselves the responsibility in this matter they would be supported much more vigorously and widely than they suspected The general public would be glad to be protected against this exploitation, which had been enormously increased during the last few years The modern advertiser had a technique in which he promoted what he called a suitable atmosphere and this technique during late years had been imported into the advertisement of these various nostrums The technique played particularly upon the fear of people and drove them into that state of apprehension which Lord Horder had described as being so exceedingly dangerous to a vast multitude of sensitive and nervous people

GOVERNMENT REPLY

Viscount GAGE said that he was sure the Minister would wish that the speeches of Lord Horder and the other noble Lords should command a wide attention It was perfectly true that every investigation that had been made had borne out that the improper use of drugs and of substances in themselves harmless was a distinct danger to health in this country that it had handicapped the work of the medical profession and that they were behind other countries He would be quite ready to agree with Lord Horder that it might constitute an obstacle to the national fitness which they all wished to obtain The problem of the dangerous drug had largely been solved, except possibly for the case mentioned by Lord Horder—namely that of the new drugs that were continually being put on the market by the enterprise of manufacturing chemists He thought that Lord Horder had some criticism to make on these new medicines He had said that the public had been used as a guinea pig by the unscrupulous manufacturers He (Lord Gage) was informed that there was no real method of foretelling what the effect of some of the new compounds was going to be It was true that their effect on the human body could only be ascertained by experiment and he believed there had been fatal cases abroad where these experiments had been incomplete This constituted a possible danger but it was one which was very difficult to guard against without putting an absolutely undue restriction on these very valuable new inventions He understood that the majority of these substances were made by firms of the highest possible repute, which in their own interests saw that the precautions which were taken were very complete He believed that the dangers arising from that possible source were really remote

The real difficulty as Lord Horder had pointed out arose from drugs and substances which were not in themselves harmful and which could not be scheduled as dangerous or poisonous The improper use of these did constitute a danger and that danger arose in two ways Aspirin if used properly did provide a remedy or relief anyhow for a number of illnesses, if used to excess it was not beneficial If aspirin

was not used to excess but was used to cure some dangerous fever then it did harm because it might prevent proper treatment being applied It was true that if these unfortunate results could arise from the improper use of these reputable products advertised in a respectable way far worse results could obviously ensue from the improper use of other drugs presented to the public with far less regard to truth and with far less security of quality

The inherent difficulty in dealing with these substances was that the real fault lay with the individual who took them It was surely just as difficult to stop people indulging in the excessive use of drugs and medicines as it was to stop people from excessive indulgence in drink If people did not use the immense State assisted medical schemes which had been provided for at least 18 000 000 of the inhabitants and if people preferred to diagnose and treat their own complaints it was surely largely their own responsibility if they suffered in consequence It was true that they might be encouraged to do so by carefully worded advertisements and he agreed in theory that there was a case for controlling these advertisements but here again he thought the resources of the legal profession could easily be turned to bad account and it was very easy to find forms of words which evaded the penalties that might be devised in Acts of Parliament unless these Acts were so strict as to bring within the meshes of their nets a number of perfectly harmless and well-established compounds that could at present be cheaply and easily procured It was not always easy to devise forms of words which could not be evaded He was surprised to hear Lord Horder and Lord Farnedon say how easily they thought this control of advertisements could be effected He was not attempting to exclude the possibility of some legislation on the lines suggested but it would be very difficult to guarantee that such legislation would be effective It had been suggested that certain advertisements relating to certain specified diseases should be prohibited altogether, this had been done so far as venereal disease was concerned A Private Member's Bill was recently introduced in the House of Commons to extend this prohibition to other diseases and if that Bill had gone any way it would have received the sympathetic consideration of the Government. What happened was that during the second reading the House was counted out and the Government were unable to take any action sympathetic or otherwise because the Bill was automatically dropped

Parliamentary apathy in these matters was frequently explained by the phrase "vested interests" to which Lord Horder had referred He appreciated the tone in which Lord Horder referred to that pressure but others of his colleagues had gone a long way further than he had gone He noticed that in an article Professor Clark had said that the obvious reason why Parliament has refused for a quarter of a century to attempt to remedy any of the disgraceful abuses revealed by the report of the Committee is that the Press controls the politicians and the secret remedies trade associations control the Press"—the argument being of course that vested interests represented by advertisers in the Press were so strong that the Government were powerless against them They might be perfectly certain that no major reform had ever been or was ever likely to be effected in this country except in the face of vested interest of some sort He thought that Professor Clark was rather severe on the Press and he was glad that Lord Horder treated the matter in a different way

If he was asked to say why successive Governments had done so little in this matter he should first explain it by the popular theory that people had the right to make fools of themselves in their own way provided they did not do harm to other people That might perhaps sound a rather crude argument but he put it to Lord Horder that surely the point was to be considered whether there was no danger in weakening the individual sense of responsibility in these matters Secondly they could not legislate effectively without at least risking adding to the difficulty and expense of obtaining remedies which were in many cases harmless and beneficial In saying that he was not trying to exclude the possibility of further repressive and restrictive legislation he said most emphatically that repression alone was one of the most dubious of all lines of progress Lord Horder would agree that it was only education as to what health and fitness meant that would really induce people to refrain as the well known phrase went from pouring drugs of which they know little into bodies of which they know nothing The Minister of Health would carefully examine what Lord Horder had said and would see whether anything could be done to incorporate in the educational side of the national fitness movement something of a warning nature against the misuse of drugs generally

He had tried to be frank in answering Lord Horder Lord Horder might not be convinced and if that were so perhaps he would like to have a try at legislation himself In spite of the fact that there was a great mass of public opinion behind him in this matter the only explanation Lord Horder gave why private legislation had failed was in the perhaps somewhat unscientific phrase that there was a hoodoo on private Bills He assured Lord Horder that on legal matters the Government would be very pleased to place all their resources at his disposal and on medical matters they had no higher sources of information than those which he himself could command The Government's own attitude must be to some extent at any rate dictated by public opinion because in these matters the public must have the last word He was prepared to lay any papers that Lord Horder liked but he hoped he had met the main arguments to his satisfaction

Lord HORDER said he understood that he had free access in a private capacity and he would like to avail himself of that He asked leave to withdraw the motion

The motion for papers was withdrawn accordingly

Work of the Ministry of Health

When the House on July 28 went into Committee on the Appropriation Bill D ELLIOT made a statement on the Ministry of Health Estimate for 1938 He said the net total of £22 752 572 was an increase of £ 2 206 over the figure for the preceding year This increase was mainly due to progress in respect of housing and under the Midwives Act of 1936 For the latter it was £250 000 After dealing with housing slum clearance planning atmospheric pollution sewerage and water supplies Dr Elliot turned to air raid casualties In air warfare it was impossible to forecast with certainty where casualties would occur What was intended as a base hospital might be required to function as a casualty clearing hospital The casualties occurring in a particular locality might prove to be beyond its hospital resources even if its peace time accommodation had been considerably augmented They must aim at pooling hospital resources over a wide area and making provision for additional beds and equipment where this seemed to be necessary Plans had to be worked out for moving as many as possible of the peace-time sick from the hospitals best suited to deal with casualties and for transporting the casualties themselves from raided areas to hospitals in less vulnerable positions His Department was at work on these lines and would submit them as soon as possible to the local authorities and others concerned A survey of hospital accommodation throughout the country had been in progress since early this year Medical and other officers of the Department had been assigned to various districts in the country to maintain close contact with the local authorities and managers of voluntary hospitals in working out schemes which could be put into operation immediately if required Co operation between the municipal and voluntary hospitals was essential for the proper planning of this work In the London area a number of hospital experts presided over by Sir Charles Wilson dean of St Mary's Hospital had submitted provisional conclusions and he had conveyed them to the Voluntary Hospitals Committee for London as well as to the local authorities in the area The next step was for officers of the Department to work out the plan in greater detail for individual hospitals This was being done

FALL IN INFANT AND MATERNAL MORTALITY RATES

The vital statistics for the year 1937 bore witness to the improvement in the public health which had been continuous

in recent years The number of live births registered during the year was 610 557 corresponding to a rate of 14 9 per 1 000 population The provisional figures available for 1938 suggested that the rise was still continuing The increase in the birth rate since 1933 had been accompanied by a fall in the infant mortality rate, which stood at 58 per 1,000 live births in 1937, the second lowest rate ever recorded compared with 64 in 1933 The crude death rate per 1 000 population last year was 12 4 This showed a rise of 0 3 per 1 000 over 1936 Many deaths were due to the prevalence of influenza and influenzal conditions during the earlier part of the year The crude death rate from all forms of tuberculosis was 692 per million population in 1936 the lowest yet recorded a rate which was practically maintained in 1937 The exact figure was 695 per million

The maternal mortality rate in 1937 fell to 3 13 per 1 000 total births the lowest rate recorded There was room for renewed efforts to secure a greater reduction, and measures already taken appeared to be showing results

The number of attendances of children at infant welfare centres expressed as a percentage of live births was 63 and the number of attendances of expectant mothers at ante-natal clinics similarly expressed was 54 Both these figures were records During 1937 local authorities improved their maternity services on the lines recommended in recent reports on maternal mortality in England and Wales above all by promoting co operation between doctors health visitors and midwives which was essential Mr Norman Birkett's committee had investigated the question of abortion, and the report might be available before the end of the year Throughout England and Wales local authorities now ensured the employment of nearly 7 500 midwives on an improved and permanent basis by engaging midwives as their own servants and by making extensive use of those voluntary associations which had done such excellent service in the past and still continued to do so The establishment of the service had now been substantially achieved The Central Midwives Board had made rules embodying important alterations in training which would come into force by stages beginning in the autumn In the future trained nurses would undergo 4 years training instead of six months and other potential midwives two years instead of one year Practising midwives would be required to take post certificate courses at least once every seven years By the payment of increased grants in aid of training the supply of fully qualified practising midwives would be stimulated

The scheme for the provision of certain additional items of diet to expectant mothers which with the aid of grants from the Commissioner for the Special Areas was begun by the National Birthday Trust Fund, was now being carried out by the Joint Midwifery Council It must be regarded as still in the experimental stage Local authorities made increasing use of their powers to supply milk free or cheap to expectant and nursing mothers and children under the age of 5 A Bill had passed both Houses which would enable a scheme to be brought into operation for securing a reduction in the price of liquid milk to local authorities for maternity and child welfare purposes Arrangements were under active consideration

HOSPITAL SERVICES OF THE COUNTRY

In addition to specific services such as those for tuberculosis and venereal disease the years since 1929 had seen remarkable developments in the general hospital services The increase in the number of beds had not been strikingly great but there had been a continuous improvement in the standard of treatment equipment and accommodation Whereas in 1932 88 000 beds in local authority hospitals were in Poor Law institutions and 38 000 in public health hospitals the corresponding figures for 1937 were 69 000 in public assistance institutions and 60 000 in public health hospitals Transfer from Poor Law to public health had not only given an opportunity for an improved service but made possible and indeed essential close co operation between local authority hospitals and voluntary hospitals In many areas co operation had been developed and there were signs of a growing recognition by those responsible that general hospital accommodation, however provided should form a pool for use to the maximum advantage of the whole population It might be that they were on the eve of expansion and reform in the hospital world

Last autumn a campaign with the slogan 'Use your Health Services' was inaugurated by the Prime Minister with the support of Lord Addison and others To draw attention to the health services was only a small part of health education Much could be done to inculcate positive rules of hygiene and the healthy way of life especially by means of the film Good work was already done in this field, but there was room for more He hoped local authorities would support the work of the Central Council for Health Education a co-ordinating and executive body on which the medical profession was represented

MEDICAL RESEARCH

Further progress had also been made in research on influenza The first widespread epidemic of influenza since the recent work on the transmission of the virus began in December 1936 The results obtained confirmed experimental identification of the virus as the primary cause of the infection In remedial work the group of drugs of which prontosil and sulphanilamide were members had been the subject of much further study and application The result of the use of these agents were as good as anything that had ever been shown in the early history of remedies—so good that they must be treated with caution and checked in the true scientific spirit

In conclusion Dr Elliot said the nation could not afford to lose every year nearly 2 000 mothers and more than 35 000 children under the age of 1 year They could not view with complacency an annual death roll of nearly 30 000 persons from tuberculosis and nearly 70 000 from cancer, or the estimated loss of 5½ million weeks every year owing to rheumatism a disease to which one sixth of industrial invalidism was due They were beginning to realize how much could be done even in the case of those at present considered normal and fit

MEDICAL CRITICISM

Dr HADEN GUEST asked Dr Elliot why, in the appointment of a committee which had been asked to advise on the organization of hospitals in the London area under the air raid precautions arrangement, the British Medical Association was not consulted Dr ELLIOT said this was a matter of material The British Medical Association had undertaken a review of the personnel available and when these two inquiries were completed the Ministry would be able to bring the two halves of the plan together

Captain ELLISTON said that the Health Department of the Borough of Kensington reported that of the 500 women attending an ante-natal clinic 100 admitted that at some time they had tried to procure abortion In nineteen cases they had been successful and in ten admitted that they used the female pills advertised in the less reputable newspapers The medical officer of health for Kensington recommended that mothers attending clinics should be educated in the dangers of abortifacients that the sale of these should be prohibited and that there should be an extension of notification to include termination of pregnancy Of these 100 women fifty three had used proprietary pills

Mrs TATE said the report of the Board of Control for 1936 showed the number of persons in institutions for mental disorder was about 155 000 and that the mentally defective people under control were between 80,000 and 90,000 Mental ill-health nearly approximated to the whole physical ill of the nation because in ordinary hospitals there were about 198 000 beds Some mental hospitals really gave curative treatment but in a large number of hospitals all that could be said was that the sufferers were kept out of harm's way She urged that the old turbulent lunatics should be segregated in the more old fashioned mental hospitals and that more up to date hospitals should be kept for cases in which there was a chance of cure In regard to the recent case of Dr Bour

it was time Parliament considered whether the action taken by Dr Bourne should not be permitted in cases of girls only about 14 years whether the girl's health was in danger or not More inspection should be made of conditions of hygiene in nursing homes

Dr EDITH SUMMERSKILL speaking on maternal mortality said the final report of the Departmental Committee showed that of mothers who died and should be saved 7 per cent died from lack of facilities and 7 per cent through negligence on the part of the patients that 5 per cent of the deaths were due to lack or failure of ante natal care or error of judgment Expert midwifery was a factor of major importance and she regretted that her profession did not face up to it Six years ago it was recommended that education in obstetrics for medical students should be improved She qualified in 1924 and was qualified in midwifery simply by being in a room where twenty confinements were conducted though she never went near a bed or touched a patient She was lucky because her father was a general practitioner and so she had been able to get expert tuition at home Nevertheless she was signed up and certified as being qualified to conduct a confinement without having conducted one in a hospital In reply to Sir Henry Morris Jones she said she did not attend one case outside hospital On November 1 1938 the licensing authorities were going to be told that the education of students in obstetrics must be improved She had a copy of the recommendations and found to her horror that a student was still to be signed up after twenty cases which need not present any abnormality That was a kind of confidence trick played on the mothers who believed that every doctor was fully qualified

She was glad to hear from the Minister that films and lectures were used to make people health minded but she referred him to the speech made by the President of the British Medical Association in the previous week when he said every child in elementary schools should be instructed in anatomy and physiology The ignorance of the average patient on the location of his organs when he went to see the doctor was equal to that of a native in darkest Africa Education was particularly necessary in the case of potential mothers. She pressed upon the Ministry the need to attend to the final recommendations of the Departmental Committee on the Medical Staffing of Maternity Hospitals To-day many patients sent into maternity hospitals were treated by assistant medical officers who had not the knowledge possessed by the doctors who sent them there

UNHEALTHY MONASTIC LIFE OF MENTAL HOSPITAL OFFICERS

Sir ERNEST GRAHAM LITTLE said it was difficult to obtain experience for students in maternity cases and the system of training students adopted in London was excellently adapted to meet the position One branch of medical practice in which little improvement had been made was that of mental diseases The reason lay in the faulty education that was offered and the faulty provisions made for medical officers in mental hospitals This applied in the provinces and London A case in the court of King's Bench last year established that it was possible under the Lunacy Act of 1890 for a visiting committee of a mental hospital to discharge an officer of the hospital without giving any reason The only officer recognized at such a hospital was the medical superintendent who was able to rule his community with an autocratic rule In an asylum which had been described to Sir Ernest no assistant medical officer could be absent without the leave of the medical superintendent and could only get away at all at the annual holiday He lived in the hospital was unable to marry and remained there sometimes for twenty years in that unhealthy monastic condition In addition these assistant medical officers were inadequately paid

They were trying to improve the training of officers in mental hospitals by instituting in every university an improved diploma in psychological medicine The training for such a diploma required an absence of at least six months at a recognized hospital and it was difficult to persuade medical officers at mental hospitals to take this extra qualification at their own risk Provision in the Minister of Health's Estimates for study leave would repay itself many times over Research had been stagnant in this department of medicine owing to the conditions in the hospitals many of them were antiquated and inadequate to deal with the cases which they took The chairman of the Mental Hospitals Committee of the London County Council had told him that for some time they had insisted on the diploma in psychological medicine but they now further insisted that their medical officers should also take the membership of the Royal College of Physicians of London—an onerous and difficult examination in which the failure rate was some 80 per cent The President of the Royal College deprecated the idea that this should be insisted on in the case of a mental hospital officer holding the diploma in psychological medicine To take an examination of that kind while at the same time working in the hospital was beyond the requirements of the case it put an intolerable strain on the officer Yet officers had been told they could not hope for promotion in the London County Council mental hospitals unless they had a good M D or M R C P$_2$ or both in addition to a diploma in psychological medicine and the qualification which put them on the register Sir Ernest also said that considerable dangers had to be faced in regard to the present position of the London County Council hospitals These had inadequate personnel as compared with voluntary hospitals One hospital with 400 beds had four assistant medical officers no house surgeon no house physician and no students Since 1929 these hospitals took a number of acute cases and one officer told him that in twenty months of service he was called upon to deal with 530 cases of illness caused by unskilled and dangerous attempted abortion

THE GENERAL PRACTITIONER'S PLACE IN THE HEALTH SYSTEM

Sir FRANCIS FREMANTLE said he would like to know the results of the mission which was sent out by the Ministry of Health to Scandinavia to inquire into the treatment of syphilis in Scandinavian countries This disease would continue to wreck the stamina of the nation unless it was tackled He hoped that Parliament would get to work on the dangers of the quack medicine trade the new Drugs Act would enable them to deal not only with popular patent medicines which medical men often prescribed themselves but with misleading advertisements in relation not only to medicines but to instruments Voluntary hospitals were on the rocks and not least the teaching hospitals Easier conditions of service and better rewards for the nurses and doctors employed in the hospitals would mean immense additional cost They must obtain some co operation with the municipal hospitals which would retain what was good in the voluntary hospital system and at the same time allow it to develop General practitioners should be the basis of the health system he hoped general practitioners united together as they were in the British Medical Association for the benefit of the public would be more consulted by the Government If from the first the doctors had been induced to work the Fitness Campaign it would have made greater progress

RESEARCH GRANTS DISCREDITABLE POSITION

Dr HADEN GUEST said that what was lacking in the frontal attack upon disease was a proper staff organization On the purification of rivers £7 000 000 was spent on water supply £4 500 000 on mental diseases £10 000 000 on patent medicines £30 000 000 annually but the grant in aid for medical research from the Government was £195 000 only It was discreditable that the Medical Research Council had to go cap in hand to funds in charge of private individuals Money from private research funds such as the Rockefeller Foundation should be spent on pioneering work Yet the Medical Research Council asked for money from such sources for research on rheumatism cancer and malaria For medical research work in connexion with the Ministry of Health that Ministry should provide at least £1 000 000 A private appeal had been launched to raise £500 000 for work on rheumatism That money should certainly be provided from Government funds

Mr BERNAYS replying to the debate said the number of maternity beds had increased in the last two years by 1 000

and plans were under consideration to increase that number further Mrs Tate had proposed to redistribute incurable mental patients to the old hospitals That was a council of despair The old hospitals should be brought up to date which was in fact being done Of 101 mental hospitals forty-five had separate admission units and fifty-five had separate convalescent units Each year that figure was improved and in due time all hospitals would have these units He believed that progress in well being in this country had been so swift as to commend the records of the Ministry of Health to the world

The Appropriation Bill was then read a third time

EPIDEMIOLOGICAL NOTES*

Poliomyelitis

A further case of infantile paralysis has occurred at Braintree, Essex, and 2 more suspected cases have been reported at Halstead—the first to be noted for over forty-eight hours The total number of cases reported which includes suspected and confirmed cases, is now 21, of which 1 has been fatal

The recent occurrence of this small outbreak of acute poliomyelitis in Essex, which appears to be on the wane, exemplifies well the epidemiological behaviour of the disease in this country, in which no large epidemics have ever been recorded, although on the average about 640 cases have been notified annually Within the last ten years the annual number has varied from 1,397 in 1936 to 394 in 1931 and 700 in 1935 In the same period large epidemics have been reported in Australia, the United States of America and Canada, and to a less extent in Europe—notably in Denmark The low incidence of the disease in this country probably increases rather than lessens the administrative difficulties in connexion with its control It may be difficult to decide whether the particular measures which have been adopted have exerted any influence on the course of the outbreak In outbreaks at Chicago in 1937 and in Manitoba in 1936 postponement of reopening of schools was regarded as the most important single measure in bringing the outbreak to an end and there is ample reason to believe that closure of day schools as has been carried out at Braintree is a desirable measure With regard to the disbanding of residential schools difference of opinion has been expressed by various authorities by placing such a closed community in strict quarantine the chances of spread to other areas are undoubtedly lessened, but the probability of infection among its members may be increased The interest of everyone concerned would be adequately safeguarded provided that the contact goes to a home in which there are no young children and is kept under medical supervision for a period of three weeks, when the likelihood of his developing the disease is remote Carriers and cases clinically so mild as to escape recognition may be responsible for spreading the disease but proof of their guilt in a given instance is rarely forthcoming For individuals who are intimately exposed, gargles and nasal douches with a solution of permanganate of potash 1 in 5 000 in 0 8 per cent of sodium chloride, should be employed More drastic measures such as instillation of alum tannic acid and picric acid have been advocated but their efficacy has not been established and the method is probably not free from risk of damage to the epithelial surfaces Immune serum taken from individuals convalescent from poliomyelitis may be used for passive immunization in special instances but it is not applicable on a large scale in this country while poliomyelitis remains a sporadic and comparatively infrequent disease

* Except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

Diphtheria and Scarlet Fever

Notifications of diphtheria in England and Wales during the week under review fell from 1 075 to 1,031, but in London they rose from 153 to 155 There was a slight rise recorded in the notifications for Scotland—123, as against 121 in the previous week—while in Eire there was a definite fall the figures for the week being 45 compared with 58 in the previous week, in Northern Ireland a considerable rise was noted—37 as against 24 Deaths from diphtheria in the 126 Great Towns of England and Wales rose from 26 to 27, while in London they remained at 3 Of the 27 deaths recorded in the 126 Great Towns 3 (5) occurred in Liverpool 2 each in Newcastle upon-Tyne (0), South Shields (3) Stanley (0) There were 8 deaths from diphtheria in the 16 principal towns of Scotland during the week under review—3 (1) in Glasgow and 1 each in Edinburgh (1) Paisley (0), Motherwell and Wishaw (0) Hamilton (0) Ayr (0) There was an increase in the number of notifications of scarlet fever in England and Wales during the week—1 791 compared with 1,740—and in London —191 (168) In England and Wales the figures were considerably in excess of the median value for the last nine years There were 3 deaths from scarlet fever in the 126 Great Towns of England and Wales during the week

Primary and Influenzal Pneumonia

There was a drop in the notifications of primary and influenzal pneumonia in England and Wales during the week under review—528 to 493—and in London—37 to 33 the figure for England and Wales is above the median value for the last nine years, while that for London is well below

Typhoid Fever

Eight cases of typhoid fever were notified in Essex up to July 30 The outbreak began in the Tilbury area a week previously

Measles and Whooping-cough

There were 6 deaths from measles in the 126 Great Towns of England and Wales during the week under review compared with 5 in the previous week of these 2 (1) occurred in London and 3 (0) in Stoke on-Trent The number of cases reported in the L C C elementary schools during the week was 119 compared with 176 in the previous week while the average daily admissions to the L C C fever hospitals was 11 as against 9 in the previous week Notifications dropped in five of the metropolitan boroughs in which measles is notifiable remained the same in three and rose in three—Finsbury 11 (9) Lambeth 26 (15) and Shoreditch 3 (1) In Scotland the figures for measles rose during the week from 109 to 117 of these 46 (54) occurred in Kirkcaldy 36 (8) in Dunfermline and 6 (6) in Edinburgh As recorded last week there have been more deaths from whooping cough than from measles during the week in England and Wales—7 deaths from whooping cough as against 6 deaths from measles—but in London there was only 1 death from whooping cough while 2 deaths from measles were reported In Scotland there were 3 deaths from whooping cough (all in Glasgow)

Cholera

During the week ended July 23 505 cases of cholera with 204 deaths were reported in Shanghai, and in Hong Kong 3 cases with 33 deaths A further increase of the cholera incidence was noted in the Central Provinces and Berar—3 648 cases with 1 785 deaths—and in Bombay Presidency—150 cases with 71 deaths in the United Provinces on the other hand there is a decline in the number of cases reported —777 (1 682) with 388 deaths

Small-pox

During the week under review 2 cases of small pox were notified in Wigan county borough In the same week in Shanghai there were 6 cases of small pox with 2 deaths reported and in Hong Kong 2 cases with 2 deaths

No 29

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended July 23 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and of Deaths recorded under each Infectious disease are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 13 principal towns in Eire (e) The 10 principal towns (9 in 1937) in Northern Ireland

A dash — denotes no cases a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929-37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever Deaths	19	3 1	12 2	2	1	13	1 1	3 2	1	—		
Diphtheria Deaths	1 041 27	155	125 5	45 3	17 —	906 0	119 2	124 3	56 4	13 —	944	163
Dysentery Deaths	2	7	2	— —	— —	22	5	5	1 —	— —		
Encephalitis lethargica acute Deaths	3	1 —	—	1	—	7	— —	1		—		
Enteric (typhoid and paratyphoid) fever Deaths	19 —	3 —	4 —	6 —	1 —	28 1	2 —	2 —	12 —	1 —	59	—
Erysipelas Deaths		— —	57	6	3		— —	46	2	2		
Infective enteritis or diarrhoea under 2 years Deaths	57	19	13	6	5	40	20	10	11	1		
Measles Deaths	6	2	117 —	—	12 1	9	—	66 1	2	2 —		
Ophthalmia neonatorum Deaths	97	8	20		2	117	18	28		—		
Pneumonia influenzal‡ Deaths (from influenza)	495 19	33 3	9 3	1 —	9 —	445 6	31 —	1 —	4 1	4 —	477	45
Pneumonia primary Deaths		14	115	4 12	9		12	120	3 9	5		
Polio-encephalitis acute Deaths	10	— —				1	1 —					
Poliomyelitis acute Deaths	19	— —	10		—	18	3 1	—		—		
Puerperal fever Deaths	3*	3 1†	7	4	—	46	7 1†	19		1		
Puerperal pyrexia Deaths	165	8	19		7	118	14	21		1		
Relapsing fever Deaths	—	—			—	—	—	—		—		
Scarlet fever Deaths	1 791 3	191 1	282 2	66 —	67 —	1 618 5	159 1	302 2	96 —	35 2	1 619	258
Small pox Deaths	2 —	— —	—	— —	— —	— —	— —	—	— —	— —		
Typhus fever Deaths	—	—	—	— —	— —	—	—	—	— —	— —		
Whooping-cough Deaths	7	1	16 3	— —	7 1	8	3	42 6	—	—		
Deaths (0-1 year) Infant mortality rate (per 1 000 live births)	272 45	52 43	67	19	11	252 43	48 40	55	21	8		
Deaths (excluding stillbirths) Annual death rate (per 1 000 persons living)	3 853 9 5	678 8 6	599 12 2	163 11 0	118 10 5	3 604 8 9	713 9 0	561 11 5	143 9 7	108 10 3		
Live births Annual rate per 1 000 persons living	6 979 17 1	1 275 16 2	898 18 3	400 27 1	280 24 8	5 627 16 4	1 289 16 2	931 19 0	404 27 5	280 26 8		
Stillbirths Rate per 1 000 total births (including stillborn)	258 36	42 32				276 40	56 42					

After October 1 1933 puerperal fever was made notifiable only in the administrative county of London

† Death from puerperal sepsis.

‡ Includes primary form in figures for England and Wales London (administrative county) and Northern Ireland.

Medical News

The Royal College of Physicians of London is closed for cleaning etc and will reopen on Monday September 12

At a special meeting of the governors of The Warneford, Oxford held at New College Oxford on July 28 Dr Robert Gow McInnes M R C P Ed D P M was appointed physician superintendent of the hospital

A Royal Commission has been set up to investigate social and economic conditions in Jamaica Trinidad British Guiana British Honduras Barbados and the Leeward and Windward Islands The chairman is Lord Moyne, and one of the members is Dr Mary Blacklock, wife of Professor D B Blacklock of Liverpool She has been professor of pathology at Lady Hardinge College, Delhi and is now curator of the museum of the Liverpool School of Tropical Medicine and a member of the Colonial Advisory Medical Committee

An international balneological association has been founded in Budapest The first meeting will be held in Germany in 1938 the next in 1940 in France and the third in Italy in 1942 during the World Exhibition

A meeting of the Osler Club of London was held at the Langham Hotel on July 12 in honour of the eighty-ninth anniversary of the birth of Sir William Osler Dr Archibald Malloch delivered the eleventh Oslerian oration on Osler' recounting the story of his life and work in a happily personal way that made him live again Among those who spoke were Dr Harvey Cushing and Dr Charles Singer Thirty six members and friends sat down to dinner and honoured in silence the toast to the memory of Sir William Osler

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone, unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary, B M A House Tavistock Square W C 1 on receipt of proofs Authors overseas should indicate on MSS if reprints are required as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary, B M A House Tavistock Square W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are

EDITOR OF THE *BRITISH MEDICAL JOURNAL* *Aitiology Westcent London*

SECRETARY *Medisecra Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Irish Free State Medical Union (I M A and B M A) 18 Kildare Street, Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Green Stools at 74

MEWT writes I have a patient aged 74 of active disposition but slightly neurotic He has been passing green stools for the last two months The tongue is fairly clean though there are symptoms of occasional gastritis notably some pain especially at night X ray examination has shown some diverticulitis The diet has been curtailed and kept simple and there has been an improvement lately in the condition Can anyone tell me what is the cause of the trouble and whether any treatment is of real value?

Finger-prints of Twins

Dr L W LA CHARD (St Kitts Leeward Islands) writes With reference to Dr R Cottens (May 21 p 1142) note on finger-prints of twins may I state that during the five years that I was occupied in inaugurating the finger print system in Northern Nigeria and was attached to Scotland Yard to study the system as carried out in England I came across many sets from known twins but never once did I see any that were identical One curious feature which I pointed out in my *Correlation of Finger prints and Racial Characteristics* (1913) was that in the cases of twins the whorl type of impression prevailed and the loop type was quite uncommon This incidentally is the mark of lower racial standard the higher the race in the ethnological scale the less the proportion of whorls and the greater the proportion of loops In monkeys several hundreds of whose digital impressions I recorded a loop is unknown It would seem that there is a field for research into atavistic possibilities and while I think there can be no doubt that finger prints of twins differ just as others do it is worthy of inquiry as to why they are definitely characterized by the predominance of the racially inferior type of impression

Syphilis in South Africa

Dr E E BARNETT (Sefhare Hospital Bechuanaland Protectorate) writes Here as in many parts of the Empire we are faced with a population largely syphilitic and much too poor to pay for treatment sufficient to cure the disease Treatment is therefore undertaken by the Government or Mission Hospitals Because of the enormous cost of adequate treatment even if it could be enforced the accepted aim in most areas like this is to sterilize the patient—that is to render him non infectious This is done by means of a short course of injections—for example six graded injections of N A B and a further six of bismuth In addition where necessary iodides are given by mouth. What I am anxious about is this Are we not encouraging the persistence of a strain of arsenic resistant spirochaete by this technique? If so is not our last state likely to be worse than our first when that minority of patients who are not rendered non infectious by treatment have again infected the population? I should be grateful for information as to whether any work has been done on this problem and, if so with what result

LETTERS, NOTES, ETC

The Medical Directory Uncommunicated Addresses

The Editor of the *Medical Directory* 104 Gloucester Place Portman Square London W 1 desires to notify members of the medical profession that certain of their number have not communicated to him their present addresses He asks that the persons in question will kindly give the information without delay Otherwise the words (*address uncommunicated*) will appear in lieu of an address in the forthcoming 1939 issue

Protest from Valhalla

We have received the following letter signed 'Fras Drake and written from *The Golden Hind* off Plymouth Ho I anxiously scanned your account of the B M A Annual Dinner at Plymouth in the hope that someone would have recalled the fact that it was actually held on the 350th anniversary of my fight with the Spanish Armada Apparently no one did I feel rather neglected especially as I married a Sydenham as your great Thomas Sydenham was so proud to remember

Unilateral Nystagmus

Mr SYDNEY TIBBLES (London W) writes A woman aged 70 was sent to me complaining that her sight was bad The results of the examination were as follows vision in the right eye 6/60 and Jaeger 6, not improved vision in the left eye, 6/18 and Jaeger 1, with glass 6/6 and Jaeger 1 Both eyes had a fair amount of mixed astigmatism and the right eye apart from a vertical nystagmus was normal the low degree of vision being the result of the nystagmus The movements were fine and rapid The general health was good and the patient who had no other nervous symptoms said she had always had this condition Most ophthalmic textbooks deny the possibility of unilateral nystagmus occurring though Gordon Holmes mentions it in an article on nystagmus in the *Dictionary of Practical Medicine*

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Deutsche Medizinische Wochenschrift

Berlin vol 63 May 1937

Rapid Recovery after an Incompatible Blood Transfusion—H Kammerer
Pneumonitis after Administration of Uterin—O Ehrecke
Experimental and Clinical Experiences with a New Bile Remedy—S Markees
Protective Immunization against Diphtheria Antitoxin Titre in the Serum after Precautionary Treatment with Diluted Antitoxin—L Schai
Suppression of Milk Secretion by a Hormone—A P Lames and F Crembs
Uterine—G Stumpke
Treatment of Gonorrhoea with Uterin by Mouth—E Jacob
Cases of Malaria with Remarks by Long Latent Period—R A Bechtel
Electrocardiography in General Practice—G Biedermann
Value of Statistics Based on Notified Causes of Death—K Pesch
Homecraft Guides as a Combative Biological Process of Selection—J v Leers

Incompatible Blood Transfusion—A man aged 30 of blood group B had suffered for about eight weeks from a high remittent septicaemic fever when he was given a transfusion of blood supposed to come from a group B donor The patient reacted during the transfusion with nausea pain vomiting and collapse A rigor and a temperature of 104·8 F followed It transpired that the donor's blood belonged in reality to group O The patient's temperature fell below normal next day and thereafter remained normal Complete recovery was still maintained eight weeks after this transfusion The possible reasons why this blunder achieved such a dramatic therapeutic success are discussed

Die Medizinische Welt

Berlin vol 19 May 6 1938

Serological Blood Picture in Late Stages of Syphilis Hearing—P W Schmidt
Pure Marrow Aplasia Essential Thrombopenia—N Mark
Three Cases of Glomerulonephritis—K Baumeister
Prophylactic Treatment of Acquired Defect of Palate—A Ehrike
Occurrence of Alopecia Pityroides—H Hoffmann
Intravenous Treatment of Encephalitis Lethargica—O Buss
Treatment of Tuberculous Peritonitis with Gold Salts—T Sparchez
Standardization and Gauging of Bronchoscopes—L Heermeyer and I v Matuss
Reply to Essays of F Holtz and A E Roffo on Ultraviolet Irradiation and Cancer—H Bach
Treatment of Male Impotence—P Schmidt

Gold Salt Therapy of Tuberculous Peritonitis—In comparing a series of twenty cases of tuberculous peritonitis treated with gold salts and eighty four treated by other methods, Sparchez found that the former group had a much higher proportion of cures He found that gold injections had not only a local but a general effect A careful analysis of indications and contraindications of the treatment is given and the prognosis in different forms of tuberculous peritonitis is discussed

Indian Medical Gazette

Calcutta vol 73 May 1938

Anaemia in Pregnancy A Haematological Clinical and Statistical Study—S Choudhury and V S Mangalik
Some Clinical Aspects of Anaemia in Pregnancy in Indian Women in Bengal—H N Chatterjee
Incidence of Rheumatic Infection in India II—H Stott
Short Note on Epidemic of Chicken-pox in Central Jail Cannanore—P Karamchandani
Case of Adrenal Insufficiency Simulating Adams-Stokes Syndrome—E S Phipson
Dietary Habits of Some Communities Living at Calcutta—D D Mitra
Guinea pig in Laboratory Diagnosis of Tuberculosis—R K Goyal
Specific Gravity of Serum of Epidemic Dropsy Patient—C Pasricha S Lal and K S Malik
Method of Anti-larval Oiling for Rivers.—D Manson
Aphasia and Complete Right Hemiplegia after Scorpion Bite—S H Mody
Use of Procaine in Cellulitis of the Arm—M L Pathak
Spinal Tumour and its Diagnosis—M G Kini and P Kesavamany
Case of Staphylococcal Polyarthritis—M M Mody
Pedunculated and Pendulous Lipoma of Perineum—A R D Abreu
Case of Chopart's Amputation after Fifteen Years—M Kini and P Kesavamany
Diet and Incidence of Disease in India—S C Seal

Anaemias in Pregnancy—As the result of a statistical survey Choudhury and Mangalik found a 5·6 per cent incidence of anaemia in 2,400 confinements Of forty one cases which were studied clinically and haematologically 65·8 per cent were of the macrocytic type These cases were identical with tropical macrocytic anaemia as described by Napier The microcytic anaemias were due to an inadequate iron intake made worse by pregnancy and parturition There is no evidence to show that the anaemia of pregnant women is different from that of non pregnant women or of men Thus the authors prefer the term "anaemias in pregnancy" to "anaemia of pregnancy"

Journal of the American Medical Association

Chicago vol 110 May 7 1938

Intra abdominal Cryptorchidism treated with Gonadotropic Substance—G B Duff
Treatment of Wounds resulting from Deep Burns—V P Blair and L T Byars
Cerebrospinal Meningitis—S F Branham R H Mitchell and W Baron
Cecal Puncture Prostatic Resection—J L Emmett
Treatment of Alcoholic Psychoses with Benzedrine Sulphate—E C Reifenstein and E Davidoff
Fatalities following Injection Treatment of Hernia—C J Bettre
Precocious Sexual Development from an Anterior pituitary like Principle—W O Thompson and N J Heckel
Renal Mobility—E Hess
Intersexuality—W H Rubenis and W Sapher
Vitamin E—H A Mattill

Klinische Wochenschrift

Berlin vol 17 May 28 1938

Allergy and Resistance to Tuberculosis V (Conclusion)—W Seiffert
Effect of Liver Extracts on Carbohydrate Metabolism of Liver—A Wiedmann
Sugar Content of Cerebrospinal Fluid during Insulin Shock Treatment of Schizophrenia—K Th Dussik
Acid Cover of Skin and Antibacterial Protection III—A Marchionini and R Schmidt
Value of Chemotherapy in Surgical Coccal Infections—J Frankl
Effects of Avitaminosis in Rats following Oral Subcutaneous and Percutaneous Administration of Concentrated Vitamin A I—W Weslaw B Wronski A Wróblewski and B Wroblewski
Effect of Cormed—K Thiel
Hydrochloric Acid Collargol Reaction New Cerebrospinal Fluid Test—C Riebeling
Effect of Sexual Hormones on Cock's Comb—J Morato-Munaro A S Albrieux and W Bufo

Acid Cover of Skin—The third part of this paper describes a glass-bell method which allows the determination of the number and type of organisms on different parts of the skin Investigations by this method have proved that there are fewer organisms and fewer varieties of organisms on the acid parts of the skin They have also proved that the antibacterial protection of the skin increases with the strengthening of the acid reaction as for example after sweating, when the sweat has been allowed to dry on the skin

Hydrochloric Acid-Collargol Reaction—The new test is particularly suitable for the diagnosis of general paralysis of the insane for the differentiation of various types of chronic syphilitic affections of the central nervous system and for the recognition of somatic syphilis not involving the central nervous system.

Lancet

London vol 234 May 28 1938

Chemotherapy of Pneumococcal and Other Infections with 2 (*p* aminobenzene sulphonamido) pyridine —L E H Whitby
Treatment of Acute Suppurative Otitis Media —A Tumarkin
*Femoral Thrombosis —R T Payne

Femoral Thrombosis—The term here means a clinical condition similar to that of puerperal white leg"—with which indeed it began in thirty-nine of the eighty-five cases analysed The causal factor in the remainder included some post operative state in seventeen, typhoid in twelve, and infections of the lung or pleura in seven The symptoms and treatment in the acute and later stages are described in no case did the limb become normal and twenty-six cases presented ulceration From the clinical evidence it is suggested that the primary cause of manifest femoral thrombosis is a perivenous lymphangitis Pulmonary embolus is much less likely to occur with manifest than with latent venous thrombosis

Medical Journal of Australia

Sydney vol 1 May 7 1938

Treatment of Poliomyelitis —L Macdonald
Early Treatment of Poliomyelitis —J Steigrad
Mild Leptospirosis in Southern Queensland —D W Johnson
Effect of Auricular Fibrillation on Course of Hypertension —L E Rothstadt

Sydney vol 1 May 14 1938

Critical Inquiry into Aetiology of Chronic Peptic Ulcer —H C R Darling
Physical Efficiency of Recruits for New Zealand Permanent Forces —F A Bowerbank
Periarteritis Nodosa —J B Cleland
Supervision of Air Traffic from Overseas and its Attendant Risks —F W A Ponsford
Preliminary Survey of Types of *Corynebacterium diphtheriae* isolated at Metropolitan Infectious Diseases Hospital Northfield —M C Puckey
Some Aspects of Maxillary Antrum Infection —R H Bettington

Medizinische Klinik

Berlin vol 34 May 27 1938

Otosclerosis —O Steurer
Medico legal Proof of Poisoning by Toxic Gases —A Forster
*Value of New Anti diphtheria Vaccines Ditoxoid and AlFT (Behring) —E Hasler
Semeiology of Duodenal Diverticulosis —P Speidel
Treatment of Haemorrhage from Acute Gastric or Duodenal Ulcer —O Orth
*Ulcer Diet Rich in Vitamins —R Euler and H Otto
Case of Sclerodermia with Pernicious Anaemia —A Schneiderbauer
Relation between Pylorus and Benign Polyps of Stomach —J G Knoflach
Treatment of Itching Skin Affections with Ocinum —E Ettinger
Latest Publications on Health Insurance —P Horn

New Anti diphtheria Vaccines—Investigations of twenty-six adults and thirteen children after the injection of ditoxoid and of twenty-three adults after "AlFT have proved that active immunization with these vaccines does not afford protection against infection The vaccination however is advisable where there is danger of a diphtheria epidemic spreading but only when it can be carried out at least four weeks before exposure is likely The vaccinated persons must be warned that the vaccination does not afford absolute protection

Ulcer Diet Rich in Vitamins—A diet rich in vitamins particularly in vitamin C has proved beneficial in cases of recent gastric ulcer The patient must receive at least 50 mg of vitamin C a day

Munchener Medizinische Wochenschrift

Munich vol 85 May 27 1938

* Bursting Open of the Prostatic Ring —O Franck
Problem of Suicide from the Medical Aspect —G Saker
Bactericidal Effect on Blood and Diuretic Action of Quinine Redoxon and Quinine Redoxon in Animal Experiment —W Wullner
Isolated Infection of Sublingual Gland with Plaut Vincent's Spirochaete —E Bock
Poisoning following Injection of Infusion of Arnica —H Schonemann
Gentle Handling and Measuring of Newborn —H Hofweber
Treatment of *B coli* Infections of Urinary Tract with Mandelic Acid —H Kunstmann
Successful Treatment of Coronary Infarct with Eupaverine —H Kastendieck
Weltmann's Reaction in Rheumatic Diseases Simplification of Technique —A Kemen
Eugenic Measures introduced into Medical Jurisprudence in Latvia in December 1937 —F v Neureiter
Acute Mercury Vapour Poisoning in the Home —F Lickint
Patients—Fools—Malingerers (Documents on Quackery) —Kessler
Two Important Conditions for Good Quality of our Daily Bread —E Eck

Bursting the Prostatic Ring—Franck advocates the separation of the lateral lobes of the prostate in all cases of prostatic hypertrophy The results are as good as those following enucleation for the lobes never reunite The procedure is short almost bloodless and without danger of complications It is of equal value in early and late cases and is recommended even in 'inoperable' cases

New England Journal of Medicine

Boston vol 218 May 26 1938

Growth of Boston City Hospital from 1864 —M Moore
Ascorbic Acid Requirements in Early Infancy —T H Ingalls
*Effect of Sulphanilamide on Rheumatic Fever and Chorea —B Massell and T D Jones
Early Diagnosis of Cancer of Cervix —W Schiller
Disturbances of Bladder Function in Pernicious Anaemia —C J E Kahn and W C Moloney
Foreign Bodies in Male Urethra —A Riley

Sulphanilamide in Rheumatic Fever and Chorea—Massell and Jones administered sulphanilamide to fifty eight patients with rheumatic fever After two or more days of treatment a toxic rash or fever developed in 53 per cent of the cases Patients ill with active rheumatic fever are particularly prone to develop severe febrile reactions This fact together with the lack of any observed beneficial effects, contraindicates the use of sulphanilamide in active rheumatic fever

Nordisk Medicinsk Tidskrift

Stockholm vol 15 May 28 1938

*Skeletal Discoveries from Korsbetningen Graves at Visby —B E Ingemark
Quantitative Chemical Determinations of Carotinoids and Vitamin A in Blood —H Willstaedt and T K With

Skeletal Discoveries—This is an anthropological study of skeletons of Scandinavians who fell in battle in 1361

Policlinico

Rome vol 45 May 23 1938 (Sez Prat)

Photosensibilization by Acridinic Substances —G Chiorazzo and G Cassano
Morphology of Anthrax Bacillus —R Lucena
Latent Visceral Leishmaniasis during Typhoid Infection —A Piccinelli

Presse Medicale

Paris vol 46 May 25 1938

Inaugural Lecture on Morbid Anatomy —Roger Leroux
*Pregnancy and Renal Fragility —A Powilewicz
*Senility and Chronic Arthritis of Hip —J G Duverney

Renal Fragility—The author makes a plea for the early diagnosis of what he terms latent renal instability by means of Legueu's 'provocative shock' test The test should be tried either in early pregnancy or before incurring the risk of another pregnancy

Senility and Chronic Arthritis—The author's discussion of the age incidence of chronic arthritis of the hip is based on a review of 1 067 cases He points out the importance of early diagnosis so that treatment may be instituted while there is still a reasonable hope of its being effective

Paris vol 46 May 28 1938

*Resistance of Bones and Site of Fracture of Long Bones due to Muscular Causes —H Rouviere
*Epidemiological Data on Epidemic Encephalitis in Japan —Ryoki Inada
*Vascular Spasm *in vitro* Experimental Study of Isolated Perfused Blood Vessels —A Mougeot

Site of Fracture of Long Bones—H Rouviere discusses the various factors which combine to give the long bones

their normal resistance They include the amount of compact substance the ratio between the length and the circumference of the shaft the shape of the shaft and its cross-section the ridges for muscle insertions etc He then discusses the effect of these various factors on the site of fracture of the long bones by indirect violence

Epidemic Encephalitis—The author gives an account of an elaborate investigation into the history distribution mode of spread aetiology etc of this disease He compares it with epidemic encephalitis in Europe which would appear to be quite different at any rate as regards the mortality curve of the disease in Europe and in Japan Inada is inclined to the view that the Japanese variety is spread by a mosquito but states that this is not yet definitely established

Vascular Spasms—A Mouzon describes the action on isolated strips of blood vessels kept alive by immersion in Tyrode's solution of various chemical agents such as alkali oxygen carbon dioxide splenic suprarenal and pituitary extracts barium chloride histamine acetylcholine pepsin etc The author also investigated ten illegal antimorbids but found the only active spasmolytic *in vitro* were the nitrites and carbon dioxide

Schweizerische Medizinische Wochenschrift

Basle 68 May 8 1938

Functional Pathology of Bone Marrow—K Rohr
Disturbances of Resistance of Carbohydrate Metabolism—L Lichtwitz
Obstruction of Flexor Tendons of Both Thumbs and Ankylosis of Knee—J R Dreyfus

Bone Marrow—The method of examination of the marrow by sternal puncture has marked a new era in clinical haematology from the standpoints of both morphology and diagnosis The closure of the marrow vessels from the general circulation is confirmed and immature cells are thought to gain extramedullary access to the blood—in the liver spleen and lymph glands The different views held concerning the development and derivation of the various cellular blood elements in foetal and in normal stimulated or inhibited adult marrow are discussed As special examples of functional pathology the medullary functions in agranulocytosis and during the liver treatment of pernicious anaemia are traced In an allusion to the function of the medullary reticulum it is stated that the medullary plasma cells are regarded not as lymphatic derivatives but as coming from the reticulum and as responsible in normal and pathological conditions—for example myeloma—for the formation of complex protein substances

Ugeskrift for Laeger

Copenhagen vol 100 May 6 1938

Women whose Pregnancy Albuminuria does not disappear during Puerperium—R Bull
Neuritis following Uterine Treatment—M Brun-Pedersen and T Dalgaard Nielsen
Treatment of Pneumothorax with Solvochin-calcium and Quinine-calcium Urethane—C C Jacobsen
Cancer Survey of 4,000 Male Cases—P Lercy

Pregnancy Albuminuria—This paper coming from Professor Hauch's hospital in Copenhagen deals with a follow-up study of fifty three women whose albuminuria did not disappear during the first ten days of the puerperium The study is also extended to the fate of the children of these mothers

Wiener Klinische Wochenschrift

Vienna 51 May 19

Treatment of Dysmenorrhoea H Kaminker
Therapeutic Value of Nasal Infiltration in General Medicine—W Fliess and E Lenz
Low Cases Recurrent Whooping Cough H Zschiesche
Short Wave Therapy Application and Effectiveness Hans
Chemotherapy of Erysipelas H Hoyer and W Nowak
Effect of Pituitrin on Blood Sugar Content in Healthy Persons and in Diabetics H Pick

Treatment of Dysmenorrhoea—Kaminker classifies the causes of dysmenorrhoea as follow (1) pain due to stretching by menstrual hyperaemia of a pathological uterine mucous membrane (2) pain due to diminished up-flow of blood and increased painful contraction (3) coagulation of menstrual blood due to pathological cause (4) abnormally painful uterine contractions due to lowered threshold to pain (5) stimulation of the pelvic peritoneum on account of retrograde transportation of blood through the tubes (6) hyperstimulation of the hypogastric plexus The latter cause is extremely common and cannot be treated successfully by the ordinary methods Kaminker recommends resection of the presacral nerve with or without appendicectomy antefixation of the uterus etc The technique and indications are described The results are excellent

Wiener Medizinische Wochenschrift

Vienna 1 88 May 8 1938

Practical Therapy of Leucorrhoea—W Haberer
Light as to the Decline of Birth Rate—O Mühsam
Importance of Blood Circulation in Surgery of Abdomen and Conclusions derived therefrom—R Friedrich
Specific Characteristics of Spa Treatment in Rheumatism and in the Specific Infections—O E Zimmermann
Public Meeting in the Auditorium Maximum of the University of Vienna May 14 1938

SPECIAL JOURNALS

Acta Tuberculosa Scandinavica†

Copenhagen vol 12 1938 Fasc 3

Pneumothorax Vitamin C in Pathogenesis of Tuberculosis in Guinea-pigs (Eng)—K E Birkhaug
Studies on Types of Tubercle Bacilli Isolated from Man V (Eng)—K A Jensen and J Kinder
Course and Lethality of Tuberculosis at Different Age Periods (Ger)—S Magnussen
Two Atelectasis with Recurrent Appearance Remnants of Basal Mediastinal Pleurisy (Eng)—H Hallander

Vitamin C—A significant hypovitaminosis C develops during progressive tuberculosis in the guinea-pig and is demonstrable by quantitative analysis of the vitamin C content of the urine during life and of the suprarenal glands post mortem The urine and suprarenal gland vitamin C deficit is rapidly and adequately overcome during the early tuberculous infection by a daily oral administration of 10 mg of *l*-ascorbic acid Hypovitaminosis C renders the animal organism more vulnerable to progressive tuberculosis

Types of Tubercle Bacilli—In type determinations in about 5,000 cases of tuberculosis from various parts of Denmark the authors found fourteen cases of so-called mixed infections Eight cases were selected—that is they were discovered by carrying out serial examinations in patients in whom a bovine infection had previously been demonstrated The remaining six cases were discovered accidentally Of 100 patients—with pulmonary tuberculosis produced by the bovine type of tubercle bacillus—who were under observation up to one year only two were found to show a double infection but of seventeen observed for from one to four years no fewer than nine were found to have turned into a mixed or double infection The authors conclude that the present methods of type determination are not sufficiently accurate for the sure application of the term type to the two mammalian bacilli

† After the title of each article in this journal an indication is given of the language in which it is written thus Ger means that the paper is in German Eng that it is in English

American Journal of Cancer

Lancaster vol 33 May 1938

*Role of the Neural Crest in Embryonal Adenosarcomas of Kidney—P Masson
Inflammatory Carcinoma of Breast—G W Taylor and A Meltzer
Chemical Compounds as Carcinogenic Agents First Supplementary Report Literature of 1937—J W Cook and E L Kennaway
Spontaneous Bone Tumours of Mice—F C Pybus and E W Miller
Transmissible Leukaemia in A Strain of Mice—J H Lawrence and W U Gardner
Chromosomes in Man—E Schwarz

Embryonal Renal Adenosarcomas—Masson studied complex adenosarcomas of the kidney from three children, using neurological impregnation as well as the usual histological methods He describes nephrons in various stages of differentiation mesenchymatous elements which in part become muscular and sympathetic elements which form neuroblasts and ganglion cells All these seemed to develop from a single blastema which combined therefore the characteristics of the neural crests and the renal blastema It is suggested that in normal embryogenesis certain striated muscles and the nephrogenic tissue originate from the mesectoderm of the neural crests If this is true, the displacement and precocious neoplasia of some elements of this neuro epithelium may be the source of mixed tumours of the kidney

Chemical Compounds as Carcinogenic Agents—In this valuable review Cook and Kennaway summarize 180 papers published during 1937 and concerned with the carcinogenic activity of chemical compounds It forms a continuation of the important review which the authors and their colleagues published in 1937

American Journal of the Medical Sciences

Philadelphia vol 195 May 1938

*Problems relating to Invasive Properties of Haemolytic Streptococci and their Control by Sulphanilamide—W T Longcope
*Studies in Diabetes Mellitus VI Mortality and Longevity of Diabetics—L P Joslin L I Dublin and H H Marks
Creatine Tolerance Test in Differential Diagnosis of Graves's Disease and Allied Conditions—A R Sohval F H King and M Reiner
Coexistence of Myxoedema and Pellagra in Same Patient—J A Greene
Spectrographic Determination of Lead in Blood from Normal Human Subjects—C H Scott and J H McMillen
Aetiological Importance of Fatigue and Prognostic Significance of Monocytosis in Neutropenia (Agranulocytosis)—P Reznikoff
Optic Atrophy in Pernicious Anaemia—R H Kampmeier and E Jones
Course of Hypertensive Heart Disease in Relation to Gross Arteriosclerosis—N Fixman
Specific Dermatoses due to Vitamin A Deficiency—J B Youmans and M B Corlette
Periarteritis Nodosa Report of Case diagnosed Clinically and confirmed by Necropsy—B P Sandler
Relationship of Sydenham's Chorea to Other Rheumatic Manifestations—L P Sutton and K G Dodge
Blood Cultures after Tonsillectomy—H Southworth and C G Flake
Oxygen Want and Intracranial Pressure Preliminary Report—J Michelsen and J W Thompson
Control of Gastric Acidity in Peptic Ulcer by Alkalinized Powdered Skimmed Milk Tablets—P H Wosika
Subcutaneous Emphysema complicating Bronchial Asthma Report of a Case and Analysis of Seventeen previously Reported Cases—L Rosenberg and J Rosenberg

Invasive Properties of Haemolytic Streptococci—The mortality in blood stream infections due to haemolytic streptococci varied in 166 patients from 53 6 per cent in cases of mastoiditis and otitis media to 85 7 per cent in erysipelas and cellulitis In cases with meningitis 95 per cent succumb and in peritonitis the mortality is perhaps still higher The remarkable therapeutic effect of sulphanilamide on haemolytic streptococci is most pronounced in the early stages of these infections It may fail to sterilize foci of latent infection in the tonsils Intoxications by the drug especially the most serious types of these are rare and are probably due to individual idiosyncrasies

Mortality and Longevity of Diabetics—There has been a continuous decline in the death rate of diabetics which in the period 1926 to 1929 was 75 per cent lower than that of 1897 to 1913 The gains have been greatest in young diabetics The decline in mortality became more rapid after the introduction of insulin There is a large increase in the expectation of life, which at the age of 10 is held to be about thirty years and which becomes progressively less with advancing age The death rates for diabetics are still much in excess of those for the general population

Subcutaneous Emphysema complicating Bronchial Asthma—A case of widespread subcutaneous emphysema complicating an attack of bronchial asthma in a girl aged 3 is described Although the condition presents an alarming picture it usually has a good prognosis A series of seventeen similar cases collected from the literature is analysed

American Journal of Tropical Medicine

Baltimore vol 18 May 1938

*Effectiveness of Carbarsone as a Remedy for Amoebiasis—E G Hakanson
Seventh Year's Observation on Malaria in Panama—H C Clark and W H W Kemp
Role of Some Common Anopheline Mosquitos of Panama in Transmission of *Malaria*—Lloyd E Kozelka
Studies of *Sparganum mansonoides* and *Sparganum proliferum*—J F Mueller
Further Observations on Incidence of *Hepaticola* (*Capillaria*) *hepatica* Ova in Human Faeces—Harry E Wright

Carbarsone in Amoebiasis—Varied dosage was employed from 0 5 gramme daily for four weeks to 1 6 grammes daily for ten days The only untoward reaction—namely *jaundice* and glycosuria—occurred in a patient who had received only 0 5 gramme daily for twenty days The small doses in current may clear the stools of *E histolytica* cysts in two or three days but fail to cure some although continued for four weeks the largest dose also failed in some cases In acute dysentery the small doses may not clear the stools or even control the dysentery but the large doses relieve the symptoms and in some cases appear to eradicate the infection

American Review of Tuberculosis

Baltimore vol 37 May 1938

*Incidence of Extrapulmonary Primary Tuberculosis—H C Sweany and W L M Martinsen
*Studies on Retrogressive Changes of Tubercles—H C Sweany Vera E Tillotson and V Kozielek
Tuberculosis Dissemination during Therapeutic Pneumothorax—W A Zapol
Tuberculous Bacillaemia in Rabbits I Bacillaemia in Non allergic Animals—J P Duchaine
Tuberculous Bacillaemia in Rabbits II Bacillaemia in Allergic Animals—J P Duchaine
*Flotation Method of Sputum Examination—C R Smith
Clinical versus Public Health Point of View in Treatment of Tuberculosis—F M Pottenger
Positive Intrapleural Pressure as an Aid to Pneumothorax Therapy—G Elias
Tuberculous Infection in Negro Colleges—P B Cornely and E H Alston
Study of Results of Treatment of Pulmonary Tuberculosis in Mexican and White Patients—F R Harper
Tuberculosis Survey in Jamaica—E W Flahiff

Extrapulmonary Primary Tuberculosis—This is a study of the calcified foci in 132 necropsies made with the object of determining the percentage occurrence of each portal of entry in the community In 73 5 per cent the primary infection involved only the lungs and hilar lymph glands This figure became 79 when cases having multiple portals of entry were added In 8 3 per cent the gastro intestinal tract was the sole portal of entry, it was the portal of entry in 12 9 per cent when the cases of multiple portals of entry were added The corresponding percentages were 1 8 and 4 5 for cervical and head primary lesions (considered together) There were 2 per cent pleural primaries 2 3 per cent "cryptic" lesions in the liver or lymph glands with no demonstrable focus of lesion 2 3 per cent doubtful cases and 5 3 per cent in which no calcification was found In 30 6 per cent of the cases primary haematogenous calcifications were found in the liver and spleen

Retrogressive Changes of Tubercles—The changes that take place in the ageing of primary tubercles depend upon the following factors autolysis or enzymatic digestion of the

that have been killed by chlorination of this digest and the proximity of these elements to the circulating fluids of the body which permits of resorption and ossification. The penetration of the capsule by capillaries may eventually cause the removal of remnants of calcified cretaceous material and perhaps even of bone tissue.

Flotation Method.—In 1 per cent. of smear negative specimens and 19 per cent. of smear negative persons were shown to have tubercle bacilli by this method. Flotation smears showed in average of eighty-five times as many acid-fast bacilli as direct smears. The advantages of flotation over sedimentation procedures are better distribution of tubercle bacilli and cleaner smears.

Annales de Dermatologie et de Syphiligraphie

Paris. 9 May 1938

Sensitization and Mal-sensitization Forms. [Arthritis Following Injection in Man of Serum from Mouth Disease Cow.]—A. Rabinovitch and J. Declos.
Cystic Disease (Reticular Perivascular Fibrosis) of Testicle and Neck.—L. F. Portis.

Annals of Internal Medicine

Lancaster, Pennsylvania. Vol. 11. May 1938.

The Function of the Corpus Luteum (Physiological Aspects).—J. H. Mein.
New Experimental Data on Arterial Hypertension.—A. Boveri.
Digitalis in Treatment of Heart Disease.—K. L. Levy.
Use of Mercurial Suppositories as a Diuretic.—J. Hepner.
Some Public Health Aspects of Undulant Fever.—H. C. Newman.
Friedemann-Zinz Insulin in Diabetes.—E. P. McCullagh.
Association of Scalp Neuritis with Lues and Diabetes.—S. S. Lieberman.
Reserve of Ascorbic Acid in Normal and Deficient Subjects Measured by a Vitamin C Extract Test.—E. B. Reed and C. I. Friedman.
Peptic Ulcer: Effect of Administration of Bile.—E. S. Emerson and M. A. Schaffer.
Exercise Tests and Electrocardiographic Studies.—Am. Heart Assn.—M. I. Wessel.
Case of Osteogenesis Imperfecta Congenita Associated with Anomalous Pituitary Gland.—R. F. Hueper jun.
Complete Atrioventricular Dissociation Due to Digitalis with Alternating Effect of Overdosage. Case Report.—T. J. Dry and G. A. Kerkhof.

Mercurial Suppositories.—Mercurin suppositories which are said to be identical with novurit suppositories were used on patients with varying degrees of cardiac failure and a satisfactory diuresis was obtained in 85 per cent. Ammonium chloride should be given in addition. The treatment was of little avail in two cases of hepatic cirrhosis with oedema and observations on cases with renal complications suggest that the mercurial compound may be actually harmful in these conditions.

Response to Cevitamic Acid.—The urinary excretion of vitamin C in the three hours following the intravenous injection of 100 mg. of cevitamic acid was used as a measure of vitamin C deficiency. Normal subjects excrete about 40 per cent. of the vitamin C thus administered while cases of scurvy excrete only a trace. Tests using larger doses of cevitamic acid were found to possess no advantage. Observations on the effect of prolonged administration of vitamin C showed that the amount required to raise the urinary excretion to normal was proportional to the degree of deficiency.

Bile in Peptic Ulcer.—The effect of the administration of bile in cases of peptic ulcer was tried because of reports that interference with the normal flow of bile in man and animals is associated with lesions of the gastric and duodenal mucosa. Forty patients with ulcer were treated with bile and carefully followed for periods up to two years. The results show clearly that bile has no beneficial effect in the disease.

Archiv für Dermatologie und Syphilis

Berlin. Vol. 177. May 1938.

Results of Series of Diagnostic Tests in 3,000 Cases of Eczema.—S. Lomholt.
Value of Comparing Routine Checks in Standard Series of Eczema Tests in Dermato-venereal Patients.—P. Bormeyer.
Nature and Treatment of Bier Hyperæmia.—E. Mayer.
Eczema.—Burkhardt.
Chemical Methods in Industrial Enterprises as a Possible Cause of Industrial Eczema.—W. Schulze.
Eczema in 300 Cases of Eczema.—J. Mayr.
Question of Milan Bacterium.—V. Pokrovskaya.
Simultaneous Erythema after Smallpox Vaccination.—W. Richter.
Erythema of Persistent Irritation of Skin.—G. Hopf.
Surgical Specimen Resulting from Therapeutic Intravenous Injection.—Stuhrmer.
Pathology and Treatment of Hydroa Vacciniforme.—J. Wendelberger.
Dermatology and Folklore.—F. Dermuth.
Diagnosis and Treatment of Diseases of Peripheral Arterial Circulation with Special Reference to Arteriography.—M. Ratschow.
Microchemistry of Skin Cholesterin in Subcutaneous Atheroma.—A. Marchionini.
Contribution to Research in Chemistry of Skin.—K. Hübner.
Excretory Capacity of Sweat Gland.—Koch.
Immunity of Prurigo to Eczema by Indirect Short Wave.—R. Bezecny.
Second Glandular Change in Tuberculosis. Clinical Observations in Lower Austria in Winter of 1937.—L. Arzt.
Immunological and Serological Relationship between Lues and Pemphigus.—Wilfram and Schwinbirg.
Case of Lymphogranuloma Inguinale with Visceral Processes and Fatal Issue.—H. Luh and W. Volk.
Conclusions drawn from Fourteen Years' Experience of Malaria Treatment of Syphilis.—Bering and Memmesheimer.
Biology of Spirochæta pallida in Artificial Culture.—Koch.
Further Experiments on Cultivation of Pallidum and the Treponema Test in Syphilis.—Citronberg.
Case of Myeloid Leukæmia with Characteristic Dermatological Symptoms.—Richl.
Further Research on Value of Libertized Oil in Pathogenic Forms of Skin.—P. W. Schmidt.
New Histological Contribution to Lues.—O. Gruiz.
Treatment of Psoriasis with Spirochæta Extract.—Rabe.
Observations and Treatment of Lupus Erythematosus.—Koch.

Malarial Treatment of Syphilis.—Bering and Memmesheimer summarize their experiences in the treatment of 1,400 cases in which malarial treatment was preceded by injections of bismuth and followed by injections of salvarsan. Over 60 per cent. of the cases were subsequently followed. With fully developed general paresis a slight improvement may occur or the disease may remain stationary. In other cases there was however swift progression. In incipient paralysis marked improvement often occurred even to restoration of working capability at intellectual pursuits although this might be preceded by transient mental deterioration immediately after the malaria. In established and incipient tabes dorsalis cessation of progression might result but some cases did not react. In both diseases improvement in the spinal fluid tests might or might not run parallel with the clinical changes. In those cases with positive change in the spinal fluid without physical signs the reversal of the change following malarial treatment is almost invariable and in no case did paralysis or tabes develop subsequently.

Spirochæta pallida in Artificial Culture.—The author refers to the interest which has been taken in the subject of artificial cultivation of the spirochæte of syphilis since the organism was discovered in 1905 and to the absence of satisfactory evidence that the disease has been produced in susceptible animals by the inoculation of culture material. His own experiments in this respect have been negative. His present work is based on the discovery by Marchionini that the *Spirochæta pallida* destroys diastatic ferment. He describes the technique of his experiments which showed that spirochætes from the syphilitic lesions of human subjects or animals destroyed the ferment almost completely whereas the culture material produced only a slight effect. He believes this evidence taken in conjunction with previous work supports the prevailing opinion that these cultures do not contain true *Spirochæta pallida* but other spirochætes which are probably harmless saprophytes obtained from the genitalia.

Archiv für Ophthalmologie

Berlin. Vol. 138. May 1938. Heft 2.

Miners' Nystagmus in the Saar District.—O. Wieder heim.
Dark Adaptation: Observations with New Self-registering Device for Threshold Values.—W. Kanzler.
Experimental Observations on Contractility of Lens Fibres.—P. Gillessen.
Vitamin C Content in Patients with Senile Cataract.—J. Seefried.
Ectopic Demonstration of Yellow Colour of Macula Lutea.—R. Zubler.
Ocular Aspects of Endarteritis Obliterans.—H. Cesenik.
New Way of Using Achromatic Double Lenses.—E. Lebeck.
Tuberculosis of Bulbar Conjunctiva.—J. Schmidt.
Effect of Excess of Vitamin A on Rat Eye and Counter-effect of Vitamin D.—W. J. Karuscin jun.

Control of Tension in Juvenile Glaucoma —W Kapuscinski
Early Operations in Caustic Burns of Eye —O Thies
Nystagmus —J Ohm
Experimental Observations on Origin of X Ray Cataract —H Goldmann and A Liechti

Contractility of Lens Fibres —A comprehensive review is given of the literature on the subject After considering experimental observations with such substances as acetyl choline and histamine the author concludes that the lens behaves like striated muscle and takes an active part in accommodation

Vitamin C and Senile Cataract —After making observations on forty four patients with senile cataract the conclusion is reached that there is a disturbance not only in the metabolism of vitamin C in the lens in such cases but also in the body as a whole

Ocular Aspects of Endangiitis Obliterans —The author gives a detailed report of the eye changes in a patient diagnosed at one time as suffering from choroiditis and at another as a case of disseminated sclerosis ultimately proved to be a case of endangiitis obliterans The multiplicity of appearances seen in this affection are discussed

Archiv fur Psychiatrie und Nervenkrankheiten

Berlin vol 108 April 29 1938

Systematic Atrophies a Well defined Group of Hereditary Diseases of Central Nervous System —H Spatz
*Endemic and Epidemic Disorders of Thyroid Gland and their Relation to Soil and Climate —F Wolter
Contribution to Functional Organization of Corpus Geniculatum Laterale of Man —A Juba
*Statistical Contribution to Problem of Acute and Chronic Epidemic Encephalitis —H Nagel
Rapid Method of Impregnation of Connective Tissue of Central Nervous System of Especial Use for Tumours —L Bonkalo
Problem of Chronic Poliomyelitis —H Lange
Chemistry and Psychiatric Shock Therapy —J Schuster
Systematic Atrophy of Superior Olive —E Weisschedel
Forms of Superstition in Black Forest —K Beringer
Two Cases of Tumour of Trigeminus with Mid brain Symptoms —W Birkmeyer and J Silberpfennig

Endemic and Epidemic Thyroid Disorders —F Wolter provides an exhaustive discussion of facts and theories relative to the aetiology of endemic goitre In his view the theory of iodine deficiency can no longer be maintained and the aetiology is to be sought in the nature of the soil deficiency of sunlight and a largely windless atmosphere with increased radio activity of the air nearest the ground

Acute and Chronic Epidemic Encephalitis —Nagel analysing the hospital figures of Munich finds two [redacted] to every female among the chronic encephalities The years 1918 and 1919 provided more cases than any other years There has been a slight increase in acute encephalitis since 1934 The disease has shown no change in character In nearly half the chronic cases there is no definite history of previous encephalitis and in 14 per cent no history of any definite illness Half the cases had an interval of about two and a half years between the acute and chronic stages and 36 per cent showed no such interval

Archives of Diseases in Childhood

London vol 13 March 1938

*Treatment of Renal Rickets —G Graham and W G Oakley
Case of Periarteritis Nodosa with Subcutaneous Lesions Recovery —C W Vining
Congenital Steatorrhoea due to Pancreatic Defect —M H Harper
*Administration of Thyroid Gland to Premature Babies —A Moncrieff
Undulant Fever in Children —D H Paterson and C Hardwick
Standard Intravenous Glucose Tolerance Test —T Crawford

Renal Rickets —Two patients with renal rickets were treated with sufficient alkali to restore the alkali reserve to within normal limits and at the same time with large doses of vitamins A and D The lesion of the kidney in renal rickets is a peculiar one and tends to progress very slowly Complete tests of the blood and urine in the cases are described with many radiographs The general condition of the children improved, they grew in height and their weight increased The state of the kidneys also slightly improved as did the condition of the bones Many references are given

Thyroid Therapy of Prematurity —The administration of thyroid gland to premature infants appears to exert a beneficial effect A large number of premature infants have been treated The dose is 1/20 grain per lb body weight daily In a controlled investigation the mortality rate in a group receiving thyroid was only one third of that in the control group Reasons are given why better gains in weight are not obtained and the opinion of the nursing staff is mentioned as emphatically in favour of thyroid administration as rendering small babies easier to manage as regards feeding and keeping them warm

Archives des Maladies de l'Appareil Digestif et des Maladies de la Nutrition

Paris vol 28 April 1938

Caecum Recurvatum and Chronic Subhepatic Appendicitis —F Tremolières A Bergeret and A Maurice
Studies of Metabolism of Vitamin C —M Vanthey
Glycosuria and Diabetes in Cancer of Pancreas —J V Grott

Archives des Maladies du Cœur et des Vaisseaux

Paris vol 31 May 1938

Respiratory Variations in Cardiac Systole and Arterial Tension —E Rist
Parasystole with Slow Rates and Mechanism of Rhythmic Extrasystole —Ld Doumer
Electrocardiogram of the Human Foetus —M I Marcel and J P Etchepare
Annular Peristaltic Systole —R Luttembacher

Archivio di Ortopedia

Milan vol 54 March 31 1938

Tuberculous Spondylitis Clinical and Statistical Surveys of Cases at the Istituto Rachitici from 1903 to 1937 —A Poli
Congenital Talipes Its Regional Distribution as compared with that of Dislocation of Hip and Congenital Torticollis —A Poli
*Mechanical Treatment of Scoliosis —A Albanese
*Congenital Dislocation of Hip and Blood Groups —E Tranquilli Leali
Cuneiform Osteotomy of Astragalus in Treatment of Deformities of Foot —C Schapira
Clinical and Statistical Study of 1 583 Cases of Poliomyelitis —A Mazzoni and F Vecchione
Orthopaedic Apparatus for Correction of Pronated Forearm —I Racheli

Mechanical Treatment of Scoliosis —This is a review based on 1 245 cases of the response of various components of the deformity to gymnastic, physiotherapeutic and mechanotherapeutic measures The last named include the use of two machines (here illustrated and briefly described) introduced by Professor Galeazzi

Congenital Dislocation of the Hip and Blood Groups —A connexion is mooted between a vitium primae formationis on the one hand (congenital dislocation of the hip being an example) and constitutional disharmony of spermatozoal origin on the other In seventy cases of congenital hip deformity 20 per cent came from parents of the same and 80 per cent from parents of different blood groups The corresponding proportions in controls were 72 and 28 per cent The biochemical racial indices in different parts of Italy are summarized there is some evidence that congenital dislocation of the hip is commoner where the index is high

Beitrage zur Klinik der Tuberkulose

Berlin vol 91 April 1938 Heft 4

Psychological Symptomatology of Pulmonary Tuberculosis —G Klose and N Erwin
Ascorbic Acid (Vitamin C) in Treatment of Pulmonary Tuberculosis —J Trautwein
Bronchiectasis in *Situs viscerum inversus totalis* —K Glaum
Inflammation of Serous Membrane in Tuberculosis —V Dietz
Contribution to Application of Pneumoperitoneum —H Zwerg

Specific Prevention and Treatment of Tuberculosis by Allergy produced with Killed Tubercle Bacilli embedded in Lanolin or Vaseline—A Contribution to the Problem of Tuberculous Immunity—G Hensel
Experiences with Positive Tuberculin Reactions in Treatment of Surgical Tuberculosis—F Wesserer
Surgical Considerations in Lung Suppuration—K Waldschmidt
Treatment of Pulmonary Tuberculosis by Intrapleural Pneumothorax—F Kathberg

Pneumoperitoneum—It is suggested that the sudden lowering of the intra-abdominal pressure after peritonitis could be avoided by inducing a pneumoperitoneum. This procedure might prevent exacerbation of a coexisting pulmonary tuberculosis.

Lupus—This paper deals with 600 patients seen at the Breslau University skin clinic. The following factors are examined: distribution as regards town or country and sex; the fate of the patients from the point of view of the age at which the condition developed; its pathogenesis; a history of tuberculosis in the family; localization of the lesion; involvement of mucous membranes; and tuberculosis elsewhere. Over 50 per cent. of the patients in the Breslau clinic were cured or much improved.

British Journal of Radiology

London vol. 11 [illegible]

Silicosis in the Pottery Industry—J. T. Bro[illegible]
Silicosis in Pottery Workers—P. A. K. Harper
Silicosis in Grinders—J. L. A. C[illegible]
Asbestosis—J. V. Spark
Occupational Disease of Lungs in Agriculture—W. Ker[illegible] K. Lewis
Radiological Demonstration of Pathological Changes produced by Certain Industrial Processes—J. F. Br[illegible]
Tests for Respiratory Efficiency and Their Correlation with Radiological Appearances in Lungs—E. M. K[illegible]
Kidney Stones: Study of Excretion of Drugs by Intravenous Pyelography—A. L. P. K. J. Franklin and R. G. M. Both
Factors which Determine Diagnosis in Cancer—C. I. S[illegible]

Silicosis in Pottery Workers—The confluent type of silicosis is a fairly common among pottery workers but it may also be found in stone workers and in workers in the South African mine. There appears to be no typical picture for one type of worker and the evolution of the disease probably depends on the patient's condition, the type of dust and the presence or absence of infection. This may account for the fact that men employed at the same type of work and for the same length of time may present completely different pictures.

Occupational Lung Diseases in Agricultural Workers—Agricultural workers are liable to infection by organic matter, the microfungi, bacteria and parasites which exist in vegetable matter and in the excreta of farm animals. Various types of mycotic infection of the lungs are described and the radiological appearances illustrated. The author is of the opinion that the common microfungi, though usually innocuous, may become pathogenic under certain conditions.

International Journal of Psycho-analysis

London vol. 19 April 1938

Unconscious Function in Central Nervous System: A Question of Physiology or Psychology—P. Federn
Free and Arbitrate—M. Balint
Some Palaeobiological and Biological Reflections—M. Bonaparte
Analysis of a Poem—G. W. Pa[illegible]
Psycho-analytical Explanation of Mysticism—W. S. Inman

Journal of Clinical Investigation

Philadelphia vol. 17 May 1938

Effect of Eclampsia Blood upon Urinary Output and Blood Pressure of Human Recipient—E. W. Page
Studies in Physiology of Artificial Fever: I. Changes in Blood Volume and Water Balance—J. G. Gibson and I. Kopp
Effect of Insulin on Concentration of Uric Acid in Blood—E. F. Rosenberg
Studies of Circulation in Patient Suffering from Spontaneous Myxedema—H. J. Stewart, J. E. Deitrick and N. F. Crane
Heat Stroke: Clinical and Chemical Observations on Forty-four Cases—E. B. Ferris, Jun., M. A. Blankenhorn, H. W. Rob[illegible], and G. E. Cullen
Measurement of Tubular Excretory Mass: Effective Blood Flow and Filtration Rate in Normal Human Kidney—H. W. Smith, W. Goldring and H. Cha[illegible]
Effect of Alcohol on Water and Electrolyte Balance in Man—W. M. Nicholson and H. M. Taylor
Determination of Work of Heart during and between Attacks of Angina Pectoris—I. Starr, C. J. Gamble, J. S. Donal and L. H. Collins
Critical Remarks on Determination of Urinary Excretion of Acetone Acid—M. Jon Fekete and M. Heinemann
Cure of Renal Bleeding in Dogs with Experimental Hypertension produced by Constriction of Renal Arteries—C. G. Child
Effect of Vitamin D on Calcium and Phosphorus Metabolism: Studies on Four Patients—F. Albright and H. W. Sk[illegible]ch
Comparison of Effect of AT 10 (Dihydrotachysterol) and Vitamin D on Calcium and Phosphorus Metabolism in Hypoparathyroidism—F. Albright, E. B. Ropers, T. Drake and H. W. Sulkowitch
Experiments on Bone Water and Labile Pneumonia—G. K. Anderson
Observations on Nature and Relationship of Abyla Cattrea to Perna Isognomon Ambrosia VII. Resemblances between Protein Affinity of Normal Human Cuticle and Tanned Casein or Nectria Skin and Artificial Tanned Leather—F. H. L. Taylor, W. B. Cate, R. W. Hen[illegible] and M. V. Sc[illegible]
Experimental Normal Man and in Subjects with Glomerular Nephritis—H. Chas[illegible] H. W. Smith
Effect of Sympathetic Stimulation Occurring after Shock from Haemorrhage—N. E. Freeman, S. A. Shaffer, A. E. Shetter and H. E. Hollin[illegible]

Insulin and Blood Uric Acid—Subcutaneous injection of 1 to 2 units of insulin per kilogramme body weight causes a marked fall in the concentration of uric acid in human blood. The fall is independent of the appearance of hypoglycaemia but it occurs when hypoglycaemia is allowed to develop and not when it is prevented by the administration of carbohydrate.

Heat Stroke—Cardiac failure or peripheral circulatory collapse was not evident in the majority of the forty-four patients studied and the sodium chloride content of the blood was not significantly altered. There was, however, a moderate acidosis and haemoconcentration. The high body temperature proved to be the chief cause of the symptoms of heat stroke. Old age, degenerative disease and acute alcoholism are important contributory factors in heat stroke. The onset was precipitated by a diminution or cessation of sweating in the majority of patients but the primary causes of this change are not known. Measures to lower the body temperature promptly are indicated; ice-water tubbing with massage being the most effective method in severe cases.

Evaporation of Body Water in Lobar Pneumonia—The body weight of children suffering from lobar pneumonia is found to be increased. The insensible water loss through the skin is less than that which usually occurs in other fevers. It is at the same level as that of the normal skin before the crisis and it is greatly elevated only at the time of the crisis after which it decreases. The lung vaporization is highest during the febrile period. The skin temperature rises to correspond with the rectal temperature.

Journal of Laryngology and Otology

London vol. 53 May 1938

Otogenous Non-purulent Encephalitis—E. Jefferland
Observations on Variations in Hearing in Otosclerosis—Stephen Suggit
Mesial Dermoid Cyst of Nose occurring in Twin Boys—F. Webster Finn
Transparent Cast of Labyrinth: Improved Method of Preparation—E. W. Pest

Otogenous Encephalitis—Otogenous non-purulent encephalitis is a rare condition usually diagnosed as cerebral abscess. Jefferland describes one typical case in which a radical mastoid operation was performed; exploration of the cerebrum and cerebellum revealed nothing abnormal. The symptoms slowly disappeared and the patient made a complete recovery after three months. The existence of this condition must be borne in mind, otherwise too free and dangerous incisions of the cerebrum and cerebellum may be practised in the hope of finding an abscess.

Otosclerosis—In following up the work of A. A. Gray on otosclerosis Suggit studied the effect on the hearing of the introduction of 2 to 3 c.c.m. of normal saline into the middle ear by way of the Eustachian tube. This was done in eleven patients with characteristic symptoms and signs of

otosclerosis The results were negative Although some of the patients showed improvement critical examination failed to place the improvement in the hearing outside the limits of normal variation The variations in the hearing of otosclerotic patients over periods of up to twenty-two months were studied in a further fifteen persons who did not receive any treatment The hearing tests were made with the audiometer and the results are given in the form of graphs reproduced in the text

Journal of Tropical Medicine and Hygiene

London vol 11 May 16 1938

*Outbreak of Plague in Mwanza February to June 1937 —J McPhail Campbell
Maurizio Ascoli's Treatment in Practice of a Malaria Control Station — Alessandro Milletari

Plague —This is a good summary of the factors associated with the 1937 epidemic in Mwanza and the steps taken to control it

Medical Clinics of North America

Philadelphia vol 22 May 1938

Symposium on Nervous and Mental Diseases
Neurological Examination in General Practice —T J Putnam
Postoperative Psychosis —S Cobb and N T McDermott
Diagnosis and Treatment of Vascular Lesions in Brain —H H Merritt
Hysteria as a Problem in a General Hospital —E Lindemann
Disabilities in Speaking and Reading —E M Cloe
Causes Diagnosis and Proper Handling of Coma —P Solomon
Diagnosis and Treatment of Polyneuritis —M R Brown
Paranoid Psychosis in Narcolepsy and Possible Danger of Benzedrine Treatment —D Young and W B Scoville
Traumatic Neuroses —A Myerson
Electrical Injuries to Central Nervous System —L Alexander
*Migraine Syndrome —J J C von Storch
*Diagnosis and Treatment of Meniere's Disease —E C Bartels
*Differential Diagnosis of Pulmonary Tuberculosis —F T Lord
Protamine Zinc Insulin —E P Joslin H F Root I White A Marble and A P Joslin
Upper Gastrointestinal Haemorrhage —J H Mean
Back Pain in Gastrointestinal Disease —C M Jones
Vaginitis Vulvitis and Cervicitis —J V Meigs
Cardiac Functional Tests —A Graybiel and P D White
Generalized Vaccinia and Eczema Vaccinatum —C F McKhann and R A Ross
Treatment of Infantile Eczema —J H Swartz
Recognition and Treatment of Adolescent Endocrine Disturbances —P B Talbot
Feeding in Newborn —I M Bitty
Management of Nutritional Disorders of Infancy —P M Smith
Gonococcal Arthritis —C S Keefer
Treatment of Advanced Cardiac Decompensation —B E Hamilton and C A Schuck

Migraine —When the four cardinal symptoms—recurrent hemicranial headache visual disturbances such as scintillating scotoma vomiting and nausea and a family history of migraine epilepsy or allergy—are present the diagnosis is definite Treatment of the attacks by means of the parenteral administration of 0·25 to 0·5 mg of ergotamine tartrate preferably during the premonitory symptoms gives rapid success the most rapid response is obtained after the intravenous injection of 0·25 mg Oral administration should be tried with 5 mg followed by 2 mg each hour until a total of 11 mg has been given Two injections (2 mg) of 20 mg by mouth may be given each week for long periods Unpleasant symptoms (nausea etc) should not alarm the patient or the doctor Gastric symptoms may be ameliorated by 1/120 grain of atropine sulphate pains and paraesthesiae by massage or exercise

Meniere's Disease —Eight patients were treated by severing the vestibular part of the eighth cranial nerve or if deafness was present by sectioning the entire eighth nerve There was no mortality and in seven cases complete alleviation of the attacks of vertigo was obtained Of eighteen patients treated on the lines of Festenberg's low sodium diet twelve recovered completely

Pulmonary Tuberculosis —The importance of x ray examination in the differential diagnosis of pulmonary tuberculosis and other lung complaints is emphasized This is especially so in cases where the area of consolidation is small or deeply seated Other important signs and symptoms are a family history of tuberculosis, a sudden haemoptysis or a primary pleurisy with or without effusion Also important is the examination of the sputum for tubercle bacilli the physical character of the sputum in absence of any leucocytosis and a positive tuberculin test in early childhood Primary infection in the apical subapical or any other part of the lung is more common in children than in adults, and may appear as a lobar pneumonia or bronchopneumonia

Protamine Zinc Insulin —Protamine zinc insulin has been used alone in thirty one cases and together with ordinary insulin in thirty four cases It acts slowly, but continues its action over a period of forty eight hours This allows the number of injections to be reduced to one a day but it can also produce hypoglycaemia especially after physical exercise or as the tolerance improves Even a severe attack of hypoglycaemia can easily be checked by means of adrenaline and intravenous glucose In order to avoid local skin complications the injections should be spread over a wide area

Surgical Clinics of North America

New York vol 18 April 1938

Symposium on Amputations
Amputation —B Chew Smith
Amputations General Considerations —R H Kennedy
Traumatic Amputations of Fingers —W Ennis and H S Hubbard
Bacteriology of Amputations —F L Meleney
Anaesthesia Preference for Amputation of Extremities —E A Rovenstine
Amputation of Leg for Arteriosclerotic Gangrene —B Chew Smith
Amputations for Gangrene in Diabetes —W C White
Amputations following Trauma and Infection —J G Lee
Care of Diabetic Extremity Lesions —T O Kane and F W Williams
Medical Treatment of Diabetes before and after Amputation —L Barnett
Amputation for Tumours of Bone —B L Coley
*Amputations in Thrombo-angiitis Obliterans —S Silbert
Arterial Embolism and Thrombosis of Extremities —N Cornell
Amputation for Aneurysms —A H Blakemore
Optimum Amputation Site in Lower Extremity Amputation —F D Oppenheimer
Amputations during Childhood —F Beekman
After care of Amputation Stumps —J E Sullivan
Plastic Surgery in Amputations —J P Webster
Plastic Surgery for Amputated Arms —D A Mulvihill
Physical Therapy in Treatment of Amputation Stumps —N F Titus
Surgical Correction of Atrophy in Ozaena —A Wachsberger
Trauma in Gynecology —R T Frank
Treatment of Incomplete Abortion in Bellevue Hospital —W E Studdiford
Use of Colposcope and Schiller Test in Diagnosis of Early or Latent Cancer of Cervix —L K Farrar
Carcinoma of Pharyngeal Portion of Tongue with Metastasis to Cervical Lymph Node —W F MacFee
Early Grade I Carcinoma of Lower Lip with Metastasis to Cervical Lymph Nodes —W F MacFee
Surgical Treatment for Massive Haemorrhage in Peptic Ulcer —J W Hinton
Acute Osteomyelitis of Femur with Septic Arthritis —C W Cutler and others
Five Cases illustrating Surgical Treatment of Gastroduodenal and Gastric Ulcers —R Lewisohn

Amputations in Thrombo-angiitis Obliterans —The results given in this article of the treatment of nearly 700 patients with thrombo angiitis obliterans It was found that amputation was rarely required and over 687 patients were treated by means of repeated intravenous injections of a 5 per cent sodium chloride solution The disease need not be progressive if the use of tobacco is discontinued by the patient Major amputations were reduced to 6·4 per cent If amputation of the lower limb is necessary the knee should be saved

Zeitschrift fur Tuberkulose

Leipzig vol 80 May 1938 Heft 1

*Morbid Anatomical Studies relating to Open and Closed Methods of Cavity Therapy —O Koch
An Estimate of the Value of Gold Therapy in Pulmonary Tuberculosis — Martini and A Rosenthal

Open and Closed Healing of Cavities —This is a study of the beneficial effect on cavities of large perforation and of closure of the draining bronchus The author considers the state of the draining bronchus is of as great importance as the tissue changes in the cavity for the fate of the cavity and for the effect on the cavity of therapeutic measures

Coramine

'Ciba'

A non toxic circulatory and respiratory stimulant for oral hypodermic intravenous and intracardiac administration improves the pulse and blood pressure reinforces the contractions of the myocardium

Increases the respiratory amplitude activates the ventilation of the lungs causing cyanosis to disappear

Indicated in collapse coma accidents during narcosis poisoning by coal gas narcotics and barbituric derivatives fatigue phenomena etc

CORAMINE LIQUID FOR ORAL USE
CORAMINE AMPOULES FOR INJECTION

Literature and Samples on request

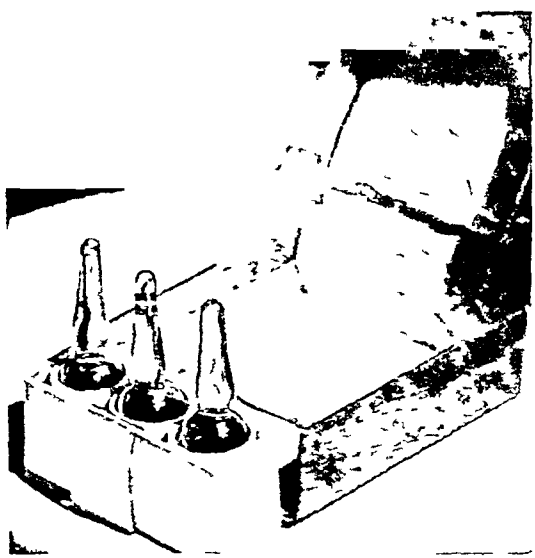
CIBA LIMITED
40, Southwark Street, S.E.1

Telephone Hop 1041 *Telegrams Cibaling Borch London*

ANAHÆMIN B.D.H.

In the treatment of Pernicious Anæmia

'If physicians realised what a wonderful product Anahæmin is and how well patients respond to it, they would not consider using any other product for the treatment of pernicious anæmia'
— M.B. Ch.B.



Sample on request

THE BRITISH DRUG HOUSES LTD
LONDON N.1

Telephone Clerkenwell 3000
Telegrams Tetradome Telex London

An. S. 47

BMF

A Comprehensive Financial Service for Medical Men

The scope of the facilities offered by the Company has been greatly extended and finance can now be obtained by a doctor for ANY purpose connected with the running of his practice or his house The charges are unusually low and the service is strictly confidential as between the Company and the doctor Further particulars and proposal forms may be obtained from the Company

BRITISH MEDICAL FINANCE LTD.
TAVISTOCK HOUSE SOUTH, TAVISTOCK SQUARE, LONDON, W C 1

HAWKSLEY'S
BRITISH MADE
Haemacytometers
(conforming to British Standards Specification)
Haemoglobinometers
Lee Sedimentometer
and other apparatus for
Blood Diagnosis

Distributors for Great Britain of the
BAUMANOMETER
The Standard Instrument for Blood Pressure NEW 300 mm LIFETIME MODEL

Distributors for Great Britain of
COOKE MICROSCOPES
British made by Cooke Troughton & Simms Ltd
Illustrated List on request

SECONDHAND MICROSCOPES
by makers of repute

REPAIRS
to all forms of Medico Scientific Apparatus Microscopes and Objectives Microtomes Optical Projection and other Apparatus
Estimates submitted

HAWKSLEY & SONS, LTD
17, New Cavendish St , London, W 1
Telephone WELbeck 5839
Telegrams Diffract Wesdo London

RECENT ADVANCES
FIVE LATEST VOLUMES

PATHOLOGY
By G HADFIELD M D F R C P and I P GARROD M D F R C P
Third Edition 65 Illustrations 15s

INDUSTRIAL HYGIENE AND MEDICINE
By T M LINC B M M R C P 29 Illustrations including 9 Plates 12s 6d

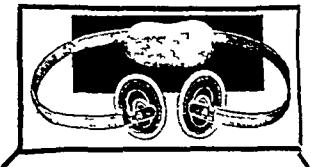
RHEUMATISM
By F J POYNTON M D F R C P and BERNARD SCHLESINGER M D F R C P
Second Edition 51 Illustrations 15s

PULMONARY TUBERCULOSIS
By L S T BURRELL M D F R C P
Third Edition 48 Plates and 22 Text figures 15s

ENTOMOLOGY
By A D IMMS D Sc F R S
Second Edition 94 Illustrations 15s

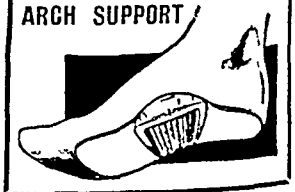
Detailed Brochure of Complete Series on Application
J & A CHURCHILL LTD
104 Gloucester Place London W 1

WHOLEMEAL & BUTTERMILK
for Roughage and Nutriment
"Healthy Life"
BISCUITS WAFERS 1/-
WRITE FOR SAMPLE
Dept M MITCHELHILL'S "Healthy Life" BISCUIT FACTORY, EDINBURGH



DOCTORS PRESCRIBE
the famous
SALMON ODY BALL & SOCKET TRUSS
Most scientific and reliable ly devised Perfect support comfort resiliency
Single 30/ Double 50/
Most of our clients are sent to us by Doctors
WRITE FOR BOOKLET
NOTE NEW ADDRESS
SALMON ODY LTD
Truss Makers for 130 years
74, NEW OXFORD ST.,
LONDON, W C 1
Phone Museum 2313

ARCH SUPPORT



The Doctor's View of War
edited by H JOULES, M D M R C P,
with a Foreword by JOHN A RYLE M D *Regius Professor of Physic Cambridge* The doctor's view of war is different from that of the layman This book presents current medical opinion in relation to this problem of increasing complexity
3s 6d net
ALLEN AND UNWIN

ALUZYME
NON-AUTOLYSED YEAST
Full particulars descriptive matter and prices on request
ALUZYME PRODUCTS,
PARK ROYAL ROAD LONDON N W 10

TOTAL VITAMIN B ACTION
Aluzyme supplies *all* the members of the Vitamin B Complex in a fully active state The B Vitamins form a synergy the separate factors of which accentuate or facilitate the action of the others (*Med Research Council Special Report* 167) In all B deficiency conditions the best results may be anticipated from administration of the entire Complex which Aluzyme provides B_1 potency 1140 International Units per ounce Nuclein 0·5 Active response to tests for nicotinic acid flavin and glutathione Of indications anaemias furunculosis many nervous and skin affections

BECAUSE IT HAS REAL MERIT the Dr Deimel Underwear was awarded the Gold Medal at the Seventeenth World Congress of Medicine held in London It grows in popularity every year It is so comfortable so satisfactory that after a few days wear you realise you have settled the underwear question for good

Can be washed in boiling water for sterilization without injury

Dr Deimel "DEIMELIN" Underwear BRITISH MADE

Dr Deimel Underwear is made in a complete range of sizes and styles for Men Women and Children

Please write for full particulars

DEIMEL FABRIC COMPANY, 99, NEW BOND ST, LONDON, W 1

S.P.C. SULPHAQUA BATH CHARGES

For upwards of thirty-five years largely prescribed for the local treatment of

GOUT RHEUMATISM ECZEMA SCABIES and all SKIN DISEASES

Relieve Pain and Intense Itching, Soothing and Sedative in Effect Instantly prepared No objectionable Odour

SAMPLES AND LITERATURE ON REQUEST

SULPHAQUA SOAP

Extremely effective in Disorders of the Sebaceous Glands and in Eczema ous and o her skin Troubles

In boxes of ½-doz and 1-doz BATH CHARGES ½-doz TOILET CHARGES and ½-doz SOAP TABLETS

THE S.P.C. CHARGES CO. STIRLING, LANCS

STOCKED BY ALL LEADING WHOLESALE HOUSES IN SOUTH AFRICA, CANADA, AUSTRALIA, NEW ZEALAND, INDIA, U.S.A.

Why Lactogen so adequately replaces Breast Milk

where natural Feeding is deficient or impossible



Scientifically and in actual practice, Lactogen resembles Baby's natural food as closely as is possible. Both the proportions of its food elements and its physiological character are practically identical The homogenisation process reduces the fat globules to a size even smaller than those of breast milk. The curd is light, flaky and easily digested The vitamins remain practically unaltered, and the mineral salts are presented in an assimilable form That is why babies who are deprived of their natural food thrive so well on Lactogen

"LACTOGEN"

THE BETTER MILK FOR BABIES

Cohyrigt

FREE SAMPLES with detailed descriptive literature will be sent to any member of the Medical Profession upon request Lactogen Bureau Nestlé's Milk Products Ltd (Dept Z 1 A) St George's House 6 7 8 Eastcheap London E.C 3

Gaymer's CYDER

SPECIAL RESERVE (STILL)

(as advertised in The Diabetic Journal & EXHIBITED AT THE BRITISH MEDICAL EXHIBITION PLYMOUTH)

This brand of GAYMER'S CYDER has been recommended as suitable for Diabetics, it contains only the barest trace of sugar (see typical analysis)

Specific gravity	0 9984	Sugars	0 12%
Alcohol by volume	6 46%	Acidity	0 53%
Extract or solids	1 05%	Ash or Mineral	0.25%
Non-sugar solids	1 8.%	Original gravity	1 0483

Calories per pint 2.0

Grams sugars per fluid oz 0 02

The extract contains metabolisable organic acids glycerol and sorbitol The mineral matter is mostly carbonate and phosphate of potash

FREE SAMPLE ON RECEIPT OF MEDICAL CARD QUOTING BMJ

WM GAYMER & SON, LTD, ATTLEBOROUGH, NORFOLK

QUEEN *non-irritant* Toilet Preparations

specially for prescription in Allergic cases

Leaders of the profession have found these of great use as an alternative to beauty preparations and cosmetics suspected of giving rise to allergic symptoms Completely free of Orris in any of its forms or other irritants Through any Chemist or direct from —

BOUTALLS LTD., 150 Southampton Row London, W C 1

If you have any **OVERDUE ACCOUNTS**
which require firm but tactful handling write to —
NORWICH & EAST OF ENGLAND MEDICAL PROTECTION SOCIETY
2 & 4, VALENTINE STREET, NORWICH
(Prospectus on application)

CATALOGUE OF SECOND HAND SURGICAL INSTRUMENTS



OSTEOLOGY, MICROSCOPES, POST FREE Telephone Temple Bar 2–06

Half Sets of Osteology, Articulated Skeletons and Disarticulated Skulls and Microscopes

MILLIKIN & LAWLEY, 67 & 68, CHANDOS PLACE, STRAND, W C 2
(Adjacent to Charing Cross Hospital Medical School)

NAMEPLATES of distinction in Brass & Bronze
Send for Illustrated Brochure and Price List
F B **HALL** & CO 445 New Cross Rd, S E 14 *TIDeway 3818*

NAME PLATES in Bronze and Enamel
Stainless Steel Brass or Chromium
Actual Makers Quick Delivery Low Price
The WHITE BRONZE Co 196 London Rd CROYDON

Addmeter Money ADDING MACHINES 77 6 p f
TAYLOR'S TYPEWRITERS
SELL HIRE HIRE PURCHASE EXCHANGE BUY and REPAIR ALL MAKES of Typewriters Duplicators and Calculating Machines
Desks Tables and Chairs
Est 1884

THE QUIET BIJOU The best portable Writer complete in Travelling Case £14 14s
Write for Bargain List or Phone—Holborn 3793
BUY A BIJOU FOR 15 a Month
74 CHANCERY LANE (Holborn End) W C 2

NAME PLATES
in BRONZE and ENAMEL or BRASS
Send details for sketch or leaflet
S J & A HERD Tel Clerkenwell 2441
30 CLERKENWELL ROAD E C 1

FREQUENT MICTURITION
"WET" ABSORBENT BAGS
Male day pattern 35/
New Model Female day pattern 42/
"DUPLEX" BAGS
Male or Female day and night 70/
"SANITUBE"
For helpless bedridden patients 70/
Our bags catch all leakage easing mind and body Invisible under clothing and easily emptied Now worn world wide Special patterns for motorists and aviators
Diagrams etc on request from
HILLIARD 125 Douglas Street Glasgow C 2

NAMEPLATES Brass Bronze Stainless Steel
REDUCED PRICES
Send for List 18 to the actual Maker
F OSBORNE & Co, Ltd Tel Euston 4893
117 Gower Street London W C 1

VACCINE LYMPH
PURE ASEPTIC CALF LYMPH
for reliability and normal reaction
Prepared under Swiss Government control
As supplied to the Bacteriological Department Guy's Hospital London
Price 9d per small tube
(6 for 3s 9d)
Sole Agents
WILLIAM HEINEMANN
(Medical Books), Ltd
99, Gt Russell St, London, W C 1
Telephone MUSEUM 3946 *Telegrams* SUNLOCKS LONDON

NAME PLATES
in BRONZE or BRASS
Estimates and Sketches sent free
H K LEWIS & Co Ltd
Medical and Scientific Stationers,
136 Gower St London W C 1

EPILEPSY
Owing to extensions there are at present a few Vacancies at the
DAVID LEWIS COLONY
for Ladies and Gentlemen who have **Epilepsy**, but are of good intelligence and sound mind
Colony life gives to most people who have epilepsy the best chance of happiness and contentment
Apply to the **Director**,
The David Lewis Colony, Warford, Alderley Edge



HOME FOR EPILEPTICS
MAGHULL (near LIVERPOOL)
FARMING and OPEN AIR OCCUPATION for PATIENTS
A few vacancies in 1st and 2nd Class Houses FEES 1st Class (men only) from £3 per week 2nd Class (men and women) £2 per week
For further particulars apply
C EDGAR GRISEWOOD, A C A
Secretary, 20 Exchange Street East Liverpool

HALLIFORD HOUSE, UPPER HALLIFORD, SHEPPERTON *Established 1*
This handsome secluded residence stands in park of 36 acres situated 16 miles from London licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections
Voluntary or certified cases received for moderate Patients are under the constant care of the Resident Medical Superintendent Dr R A Stewart from whom full particulars may be obtained Tel Sunbury on Thames

WYE HOUSE, BUXTON, AND CLIFFE
for the PREVENTION and TREATMENT of NERVOUS and MENTAL DISORDERS of both sexes Large country house beautifully situated in its own grounds Croquet lawns hard tennis courts billiards wireless installation throughout Electric facility for specialised modern treatment including psychotherapy occupational therapy ultra violet light diathermy Private rooms with specialist attendant if required Voluntary Temporary and Certified patients received —For terms apply to the Medical Superintendent HELEN S L MURRAY M D Nat Tel 130

THE GRANGE,
near ROTHERHAM
A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental Disorders Both certified and voluntary patients received Approved for Temporary Patients This is a large country house in beautiful grounds and park five miles from Sheffield Tel No 40030 Ecclesfield Private
GILBERT J MOULD L R C P M R C S
Grange Lane L C N Rly

ASHWOOD HOUSE,
KINGSWINFORD, STAFFORDSHIRE
An old established PRIVATE HOME for the care and treatment of Ladies and Gentlemen of unsound mind afflicted Probationary cases and permanent patients are received as well as those certified
The home is beautifully situated in its own grounds of 40 acres
Full particulars as to reception terms etc may be obtained from the Resident Medical Officer

RUSSELLS
HEMEL HEMPSTEAD RD WATFORD
Telephone WATFORD 21
A convalescent home for the care and treatment of mild and recoverable nervous cases of both sexes The house is situated high up in its own grounds of grounds 17 miles from London and 2 miles from the centre of the Watford by pass Open all the year Doctor in residence and two others are in attendance
Fees from ten guineas a week upwards
Apply RESIDENT MEDICAL OFFICER

BAILBROOK HOUSE, BATH

For sufferers from Nervous and Mental Disorders with or without certificates

The house is delightfully situated in wooded grounds of 20 acres with magnificent views of the City and the Avon Valley (See Medical Directory page 2340)

For terms apply A CLIFFORD MA DM BCh DPM Resident Physician

Telephone Bathford 3159

HEIGHAM HALL NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well-wooded grounds For Ladies and Gentlemen suffering from Nervous or Mental Illness Voluntary Patients Temporary Patients and Patients under Certificate are admitted for treatment Fees from 4 guineas a week upwards according to requirements A few vacancies exist for Ladies and Gentlemen at reduced fees on the recommendation of the Patient's own Physician Apply to Dr J A Small Telephone 89 Norwich

TYKEFORD ABBEY, NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest and stands in 15 acres of garden and grounds and is situated 14 miles from Northampton and 1 miles from Bedford on the main London to Northampton Road fifty miles from London Both sexes are accommodated Hydrotherapeutic Treatment is used extensively in suitable cases Radiant Heat Violet Ray Ultra Violet Light Diathermy and Foam Baths Pleasant Temperate

Apply Dr D E M DOUGLAS-MORRIS Telephone Newport Pagnell 11

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS (20 miles from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on modern lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital Convalescent or mild cases can be treated in a delightful country mansion with extensive grounds known as

HICHFILLD HALL,

situate about a mile away from the Hospital FEES TWO TO THREE GUINEAS PER WEEK For further particulars apply to the Medical Supt W J T KIMBER LRCP DPM

ST ALBANS HERTS

CHISWICK HOUSE, PINNER, MIDDLESEX

Telephone PINNER 234

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes

A modern country house 12 miles from Marble Arch in beautiful secluded grounds

Fees from 10 guineas per week inclusive Cases under Certificate Voluntary and Temporary patients received for treatment

Douglas Macaulay MD DPM

STRETTON HOUSE,

Church Stretton Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provisions of the Mental Treatment Act 1930 Bracing hill country See Medical Directory p 2348—Apply to the Medical Superintendent Phone 10 P O Church Stretton

FENSTANTON, CHRISTCHURCH ROAD Streatham Hill SW2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders Certified Voluntary and Temporary Patients received Large Mansion with 1 acres of grounds (See Medical Directory p 2317) Apply Resident Physician Telephone Tulse Hill 7181

ST. ANDREW'S HOSPITAL FOR MENTAL DISORDERS NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

President THE MOST HON THE MARQUESS OF EXETER CMG ADC

Medical Superintendent THOMAS TENNENT MD MRCP DPH DPM

The Registered Hospital is situated in 110 acres of park and pleasure grounds Voluntary patients who are suffering from incipient mental disorders or wish to prevent recurrent attacks of mental illness temporary patients and certified patients of both sexes are received for treatment Careful clinical and pathological examinations Private rooms with special nurses male or female in the Hospital or in one of the numerous villas in the grounds of the various branches can be provided

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders It comprises special departments for hydrotherapy by various methods including Turkish and Russian baths the prolonged immersion bath Vichy Douche Scotch Douche Electrical baths Pneumotherapy treatment etc There is an Operating Theatre a Dental Surgery an X-ray room an Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment It also contains Laboratories for biochemical bacteriological and pathological research

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 600 acres Milk meat fruit and vegetables are supplied to the Hospital from the farm gardens and orchards of Moulton Park Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves on farming gardening and fruit growing

BRYN-Y-NEUADD HALL

The second of the ST Andrew's Hospitals is beautifully situated in a park of acres Llanforda Hall amongst the finest scenery in North Wales On the North West side of the Estate miles east from the Hospital Patients may reach the Branch for short seaside parties by motor cars The Hospital has its own private bathing beach and tennis courts

At all the branches of the Hospital there are miles of golf course (one at Llanforda Hall) and tennis courts (one at Bryn-y-neuadd) Croquet grounds flower gardens and bowling greens Ladies and gentlemen have their own garages and stables are provided for hard riding and driving cobs

For terms and further particulars apply to the Medical Superintendent (Telephone No 169 and 167 Northampton) who can be seen at London by appointment

THE COPPICE, NOTTINGHAM

HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted Occupational Therapy Voluntary and Temporary Patients received

Tel 64317 For terms etc apply to the Medical Superintendent

HAYDOCK LODGE

NEWTON LE-WILLOWS LANCASHIRE

Telegraphic Street Ashton-in Makerfield Phone Ashton-in Makerfield 7311

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntarily temporarily or under Certificate Patients are classified in separate buildings according to their mental condition

Situated in park and grounds of 400 acres Self supported by its own farm and gardens in which patients are encouraged to occupy themselves Every facility for indoor and outdoor recreation For terms prospectus etc apply MEDICAL SUPERINTENDENT

NORTHUMBERLAND HOUSE, GREEN LANES FINSBURY PARK N 4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses Conveniently situated and easy of access from all parts Six acres of ground highly situated facing Finsbury Park Voluntary and Temporary Patients received without certification Occupational Therapy Psychotherapy and other modern forms of treatment

Telephone STAMFORD HILL 2688 Telegrams SUBSIDIARY LONDON

Convalescent Home KEARSNEY COURT DOVER. For further particulars apply to the Medical Sup

COURT HALL, KENTON, near EXETER,

for the treatment of eight Ladies voluntary, temporary or certified patients Large gardens and own dairy

CLIFFDEN TEIGNMOUTH for early and convalescent cases A well appointed house with spacious balconies and extensive views of the South Devon coast Sub tropical gardens own dairy in 25 acres Private road to beach

		Telephones
Resident Physicians	BERTHA M MULES MD BS ANNE S MULES MRCS LRCP	Starcross 59 Teignmouth 289

BOWDEN HOUSE,

HARROW ON THE HILL

For the residential treatment of Functional Nervous Disorders

No case under certificate nor under the M T A

This home which was founded in 1911, is designed to provide for psychoneurotics a curative environment associated with modern psychological treatment modified to suit each individual patient The treatment is in the hands of three experienced psychotherapists and most patients receive three hours of analytical treatment per week Occupational therapy of many varieties is available but not obligatory Recreations include tennis badminton billiards etc

On admission patients are examined by the diagnostic physician who advises on all physical treatment As far as possible all necessary pathological examinations are carried out by the pathologist in the laboratory on the premises

STAFF

H CRICHTON MILLER M A M D M R C P (*Senior Physician*) GRACE H NICOLLE M A, M B (*Resident Physician*)
ALFRED TORRIE M A M B Ch B, D P M (*Medical Superintendent*) MARY HALL M B B Ch (*Pathologist*)

CAMBERWELL HOUSE, 33, Peckham Road, London, S.E.5.

Telegrams PSYCHOLIA LONDON — *Telephone* RODNEY 4 4 [illegible]

FOR THE TREATMENT OF MENTAL DISORDERS

Also completely detached villas for mild cases with private suites if desired Voluntary patients received Twenty acres of grounds Hard and Grass Tennis Courts Putting Greens Bowls Croquet Squash Rackets Recreation Hall with Badminton Court and indoor amusements including Wireless and other Concerts Occupational Therapy Callisthenics and Dancing Classes X Ray Actino therapy Prolonged Immersion Baths Operating Theatre Pathological Laboratory Dental Surgery and Ophthalmic Dept Chapel Senior Physician Dr HUBERT JAMES NORMAN assisted by three Medical Officers also resident and visiting Consultants An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary

The Convalescent Branch is HOVE VILLA, BRIGHTON and is 200 feet above sea level

PECKHAM HOUSE, 112, Peckham Road, London, S.E.15.

Telegrams "Alleviated, London" **Telephone Rodney 2641 2642**

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders Certified voluntary and temporary patients are received Separate houses for treatment and accommodation of special cases adjoining the Institution Occupational therapy physical drill and other forms of modern treatment There is a seaside branch Kearsney Court near Dover to which patients may be sent for treatment or on holiday Motor drives are arranged when required Tennis courts Entertainments dances and indoor amusements held throughout the year Terms from £3 3s per week Illustrated prospectus and further particulars can be obtained from the **Medical Superintendent**

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date Lovely house and grounds (18 acres) Certified and uncertified cases taken Facilities for golf to the seaside

ESTABLISHED OVER 200 YEARS

Apply to Med Supt for illustrated brochure Tel SALISBURY [illegible]

CHEADLE ROYAL HOSPITAL

CHEADLE, CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay N Wales is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES

The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary

In addition to the Main Building there are separate villas Extensive grounds Hard and grass tennis courts cricket and croquet ground and a fair badminton There are also wireless installations Golf may be had within easy distance Occupational therapy

VOLUNTARY TEMPORARY AND CERTIFIED PATIENTS received

The Hospital is nine mile from Manchester 50 minutes by rail from Liverpool and 3¼ hours from London

For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT

Telephone GATLEY 2231 (3 lines)

THE OLD MANOR SALISBURY

Extensive grounds Detached Villa Chapel Garden and dairy produce from own farm Terms very moderate

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds with tennis courts [illegible]
Voluntary Temporary or Certified Patients may visit by arrangement for bathing [illegible]

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Illustrated Brochure on application to the Medical Superintendent, The Old Manor Salisbury 'Phone Salisbury [illegible]

CALDECOTE HALL

NUNEATON

WARWICKSHIRE

(Phone Number 41)

Residential treatment of

FUNCTIONAL NERVOUS DISORDERS

Including Alcoholism and other Addiction

(Certifiable Cases are not received)

The beautiful mansion situated in the heart of the country (less than [illegible] from London by L M S R) and surrounded by charming pleasure grounds [illegible] and outdoor occupational therapy are available [illegible] Functional Nervous Disorders by psychotherapeutic and [illegible]

Illustrated brochure and [illegible] from A E CARTER M D D P M Resident Medical Superintendent

MINERAL 88 SPRINGS

HARROGATE specialises in the treatment of Disorders of the Liver—congestion cirrhosis jaundice, cholecystitis cholelithiasis, and tropical liver Also in Diseases of the Skin—eczema, psoriasis the coccal infections of the skin etc Other types of cases suitable for Harrogate treatments are —The Chronic Rheumatic Diseases—Arthritis Fibrositis Neuritis Gout Hyperpiesis Mucous Colitis Functional Disorders of the Heart Pelvic Disorders of Women Convalescence from acute illness

At Harrogate a wide range of Sulphur waters strong and mild and of Iron waters both saline and pure chalybeate is available for dealing with the large group of disorders amenable to Spa treatment The Royal Baths at Harrogate is one of the finest Spa establishments in Europe, and the Corporation has embarked upon still further extension at a cost of £66 000

DIET Prescribed diets for Spa patients may be obtained at hotels and boarding houses without extra charge **Complimentary and reduced price facilities for the Cure, Accommodation, and Amusements are available for Members of the Medical Profession**

Full details of Harrogate for Cure and Holiday will be sent free upon application to Spa Manager Information Bureau Harrogate I

"IT'S QUICKER BY RAIL"
Cheap monthly return fares to Harrogate from all parts Any train any day

HARROGATE

TOR-NA-DEE SANATORIUM
MURTLE DEESIDE ABERDEENSHIRE
FOR THE DIAGNOSIS AND TREATMENT OF ALL FORMS OF TUBERCULOSIS

Managing Director DAVID LAWSON M.D., F.R.S.E.

Southern aspect. Low rainfall Pure bracing air Sheltered grounds Beautiful surroundings All modern equipment for diagnosis and treatment including operating theatre No extra charge for X Rays, Artificial Pneumothorax, Ultra Violet Light or other special treatment

Day and Night Nursing Staff All bedrooms have central heating electric light Hot and cold running water and wireless (headphones) Comfortable and airy public rooms

Medical Superintendent J M JOHNSTON M B M R C S D P H For terms and prospectus apply to the Secretary Telephone CULTS 107

PENDYFFRYN HALL SANATORIUM
PENMAENMAWR, NORTH WALES
All Modern Methods of Treatment Available

Ideally situated for the treatment of Tuberculosis Sheltered from E and N E winds Climate mild and bracing Low rainfall high average of sunshine. The Sanatorium is situated in its own park There are miles of graduated walks through pine gorse and heather rising to 1000 ft and commanding extensive sea and mountain views Central heating electric light X-ray installation Wireless in all rooms Full day and night nursing staff. Special milk supply from a tuberculin tested herd Easily accessible from London (4 hours) Manchester Liverpool Birmingham and the North

Resident Physicians Dennis Pickering M D J W Pugh M B B Ch. Phone 20

For particulars apply to the Secretary Pendyffryn Hall Penmaenmawr North Wales

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S.S.W sheltered from North and East elevation 800 feet. Pure bracing air Special Treatment by Artificial Pneumothorax (X ray controlled) Tuberculins and Ultra violet Rays are available when necessary without extra charge X ray plant Fully equipped Dental Department. Electric light. Radiators hot and cold basins and Wireless in all rooms Up to date main drainage

Terms 5 gns to — gns a week inclusive

Full day and night Nursing Staff *Med Supt* GEOFFREY A HOFFMAN B.A M B T C Dub *Asst Phys* MARGARET A HARRISON M B B S Lond *Pathologist* EDGAR V DAVEY M.B B Ch. *Consult Laryngologist* CASSIDY DE W GIBB F R C S Edin. *Consulting Dental Surg* GEORGE V SAUNDERS L.D.S. R C S Lond Apply Secretary The Cotswold Sanatorium, Cranham Gloucester *Tel* 81 and 82 Witcombe. *Grams* "Hoffman, Birdlip"

THE CLINIC

20 Devonshire Place
London, W.1

Tel Welbeck 4444 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns to 18 gns per week (Average—14 gns)
8 Operating Theatres
150 State Registered Nurses
2 Resident Medical Officers (for emergencies)
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary



NEW LODGE CLINIC, WINDSOR FOREST

This Clinic was founded in 1921 in order to provide for the scientific investigation and treatment of disease by a team of physicians and specialists
All forms of non-infectious medical cases are admitted, special attention being paid to disorders of digestion and metabolism arthritis anaemias asthma heart and kidney disease, and functional and organic nervous disorders
Particulars can be obtained on application to the Secretary, New Lodge Clinic, Windsor Forest, Berks
Telephone 181 and 182 Winkfield Row

CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy Cases of alcoholism and drug addiction are admitted The Physiotherapy Department has separate units fully equipped for X ray work heliotherapy short wave therapy electro therapy and hydrotherapy (swimming bath prolonged baths Scotch and Vichy douches Plombieres treatment electric and Turkish bath cabinets etc) There is a fully equipped gymnasium under qualified instructors Facilities are provided under special recreational therapists for all indoor and outdoor games including golf course cricket football and hockey grounds lawn tennis and squash courts croquet and bowling greens

The Hospital has its own Cinema Library and Hairdressing Saloon Terms include regular motor drives

Private rooms suites or villas are available and special nurses can be provided

The Hospital grounds extending to nearly 1 000 acres are situated in delightful country and include an extensive farm (T T herd) gardens and orchards

As the Hospital is well endowed terms are exceptionally moderate e g First Department 3 to 30 guineas per week Second Department 2 and 2½ guineas per week Voluntary and certified patients are received Medical Certificates given anywhere in the British Isles are valid for admission of patients For prospectus necessary forms and further information apply to

Physician Superintendent P K McCOWAN J P M D F R C P D P M Barrister at Law
July 1st Tel Dumfries 1119

SHAFTESBURY HOUSE, FORMBY BY THE SEA Nr Liverpool

Specially built and licensed for the care and treatment of a limited number of Ladies and Gentlemen suffering from Nervous and Mental breakdown Voluntary and certified patients received Ladies also admitted as Temporary Patients without Certification Terms moderate

Apply RESIDENT PHYSICIAN who may be seen at 31 Rodney Street Liverpool by appointment
Tel No 8 Formby

Smedley's Great Britain's Greatest Hydro Matlock

Full range of Hydropathic Treatment in Turkish tiled suites of Baths Turkish and Russian Baths Mixed and Vichy Douches Massage Plombieres Treatment Studio Chair Electric Installation for Baths and other Medical Purposes Dowsing Radiant Heat Infra red Light Artificial Sunlight Diathermy and High Frequency Diathermy Nauheim Baths Sprays Foam Baths etc Certified milk from own farm Large Winter Garden Orchestra Special provision for Invalid Night Attendance Over 60 trained Male and Female Nurse Masseurs Attendants etc

Terms 13/ to 18/6 per day inclusive board
Illustrated Brochure M J on request

Resident Physicians
G C R HARBINSON M B B Ch, B A O (R U I) R MacLELLAND, M D C M
Phone No 17 Grams Smedleys Matlock

A SPA UNDER ONE ROOF

In Rockside are combined all the amenities of a modern spa including treatment rest and entertainment

SHELTERED SITUATION SPACIOUS GROUNDS HIGHLY QUALIFIED STAFF

The Baths and Treatment Rooms occupy a special wing accessible by lift from all floors and are fully equipped for every form of physical treatment including the most modern hydrotherapeutical and electrical methods massage and remedial exercises dietetic and occupational therapy Terms £4 4s 0d to £6 6s 0d

Inclusive terms for consultation fees treatment board residence and attendance from £6 6s

Write for Tariff to the Secretary

Consulting Physician
C F LESKE RANGE
O B E M B B Ch
(Camb) M R C P (Lond)



ROCKSIDE PHYSIOTHERAPEUTIC ESTABLISHMENT
MATLOCK

ALCOHOLISM, OTHER DRUG HABITS, FUNCTIONAL NERVOUS DISORDERS, INSOMNIA

Old Hill House Chislehurst (25 mins from London) is charmingly situated in quiet secluded grounds Billiards and outdoor recreations Under new management with added accommodation ladies and gentlemen are admitted for treatment Fees, 6 to 8 guineas Special terms for long periods For illustrated prospectus write to the Medical Superintendent or Matron Phone Chislehurst 451

OLD HILL HOUSE
CHISLEHURST - KENT

Within 10 miles of London yet in lovely and secluded surroundings

Home for the Treatment of

WORRY AND NERVE STRAIN

(Under Medical Supervision)

Large airy rooms—Studied dietary—Expert cooking Pleasant garden with tennis court—Friendly and cheery atmosphere—New emphasis on Happiness in the Home

Terms from £5 5 0 per week

Apply to—D H C GIVEN M D D P H D T M & H Surgeon Captain R N (ret)
(late Resident Medical Superintendent Nerve Sanatorium Beckenham)

"GLENROY,"
16, Sundridge Avenue, Bromley, Kent
Telephone RAVensbourne 4410

"ECCLESFIELD," Staplehurst, Kent
(Removed from Ashford Middlesex)

PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large mansion beautifully situated in 100 acres of park land Extensive views Home farm R C Chapel Under the management of the Sisters of the Good Shepherd Apply Rev Mother Tel Staplehurst 61

SPRINGFIELD HOUSE
Near BEDFORD (Phone 3111)
For Mental Disorders with or without Certificates
Resident Physician CEDRIC W BOWER
Ordinary Terms Five Guineas per week
(Including Separate Bedrooms where desired)
Interviews in London by Appointment

BISHOPSTONE HOUSE, BEDFORD
A select Private Mental Home for Ladies and Gentlemen and Voluntary with separate House and Grounds Voluntary Boarders Under personal supervision of a Resident Mental Specialist and Psychologist Medical Supt Dr J LANGHAM MACALLAN Tel Bedford 2708

THE GROVE HOUSE, CHURCH STRETTON SHROPSHIRE
A private Home for the care of and treatment of a limited number of Ladies requiring Voluntary and Temporary Patients under the new Mental Treatment Act 1930
Medical Superintendent Dr M CLIFFORD

CITY OF LONDON MENTAL HOSPITAL DARTFORD KENT
Ladies and Gentlemen received for treatment under certificates and without certificates either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upwards

Tel and Telegrams Hayes [illegible]
LITTLETON HALL, BRENTWOOD [illegible]
Large grounds 400 ft above [illegible] Ladies Mentally afflicted [illegible] received Stations Ilford and Shenfield 1 mile Liverpool Street 20 min Apply [illegible]

DOCTORS OWN SPA for RHEUMATISM

Sunny Pistany

VOLCANIC-SULPHURIC MUD SPRINGS in delightful surroundings

21 DAYS INCLUSIVE CURE

Special facilities for doctors and their wives

Second Class Fare with Sleeper £5 5s 0d return.

Made from Pistany in packs ready for home use. Simplest safest and most economical treatment may be entrusted to any patient. Cost £4 or £9 treatments. Literature on request.

PISTANY AGENCY LTD., 310 Regent Street, London W.1. Tel. LANgham 4246. PISTANY SPA BUREAU 25 Cockspur Street, S.W.1. Tel. Hitchin 1094.

BARNWOOD HOUSE, GLOUCESTER

... CARE and ENTLEMEN suffer ... TAL DISORDERS. ... with two miles of the G.W. Railway and L.M.S. Railway Stations at Gloucester, the Hospital is easily accessible by road from London and all parts of the United Kingdom. It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres. Voluntary Patients of both sexes are also received for treatment. Special accommodation for Ladies Voluntary Patients is provided at the MANOR HOUSE, which is in own private ground and is entirely separate from the Main Hospital. For particulars ... to terms, etc., apply to C. W. T. H. FLEMING, M.R.C.S., L.R.C.P., D.P.M., Medical Superintendent. Telephone No. 6707 Barnwood.

TORQUAY

GRESHAM COURT HOTEL

RECENTLY OPENED. Luxurious comfort combined with an earnest desire to please.

The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure. "M." TEL. 7658.

THE LONDON SCHOOL OF DERMATOLOGY

St. John's Hospital for Diseases of the Skin

... Lisle Street, Leicester Square, W.C.

Conducted by the Honorary Staff of the Hospital together with the Physicians in charge of the Dermatological Departments of the London Teaching Hospitals. Lectures and Demonstrations twice weekly during October and November and again during January and February and four times weekly during May. General Practitioners will be welcome as occasional visitors on presentation of their Cards. Clinics daily at 2 p.m. and 6 p.m. Saturdays 10 a.m. only. The Laboratory is particularly well equipped and arrangements can be made for classes, individual instruction or for research work. Enquiries: The Dean or Secretary of the School.

LONDON HOSPITAL MEDICAL COLLEGE

PRIMARY FELLOWSHIP EXAMINATION

A SPECIAL COURSE OF INSTRUCTION for the above Examination will begin on Monday September 12th.

The fee for the Course is 15 guineas.

Further particulars may be obtained from — DR. A. E. CLARK-KENNEDY, M.D., F.R.C.P., Dean, Turner Street, London, E.1.

LONDON HOSPITAL MEDICAL COLLEGE

F.R.C.S.

A Course of Instruction for the FINAL FELLOWSHIP EXAMINATION will begin on Thursday September 1st 1938. Fees (exclusive of Operative Surgery) 25 guineas. Operative Surgery 10 guineas.

Further particulars may be obtained from — DR. A. E. CLARK-KENNEDY, M.D., F.R.C.P., Dean, London Hospital Medical College, Turner Street, London, E.1.

HIGHER MEDICAL QUALIFICATIONS

Why not add one of the following degrees or diplomas to your name?

Diploma in Psychological Medicine — Diploma in Tropical Medicine
Diploma in Laryngology etc. — Diploma in Child Health
Diploma in Ophthalmology — Mastery of Midwifery
Diploma in Radiology — M.C.O.G. and D.C.O.G.

You can qualify for any of the above by our Courses of Combined Postal Clinical and Practical Instruction.

We specialise in Post Graduate Coaching for all Examinations

Special Preparation for all Surgical Qualifications F.R.C.S. ENGLAND, F.R.C.S. EDINBURGH, F.R.C.S. IRELAND, M.S. LONDON, M.C. CANTAB, AND ALL THE HIGHER SURGICAL DEGREES AND DIPLOMAS.

Full particulars of above Courses ITEM ... from the

MEDICAL CORRESPONDENCE COLLEGE

19 WELBECK STREET, CAVENDISH SQUARE, LONDON, W.1

Candidates always in great demand for all the Primary Examinations, and also the 1st and 2nd M.B., B.S. LONDON, and all other Examinations, 1st and 2nd Parts, Conjoint, Scottish, Triple, and L.M.S.S.A., D.P.H. (Cantab, Lond., Vict. Univ.), M.D. (Lond.), M.S. (Lond.), M.R.C.P. (Lond. and Edinburgh), M.D. (Dublin), Medical Jurisprudence, Bacteriology, Clinical Pathology, Dental Examinations.

VALUABLE BOOK FREE!

Write at once for ... Guide to Medical Examinations, stating in which Examination you are interested, and a copy will be sent post free by return.

Medical Correspondence College, 19 Welbeck Street, W.1.

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)

CITY ROAD, E.C.1

The Hospital offers facilities to POSTGRADUATES for observation in the Work of the Antenatal, Postnatal and Delta Clinics, and to male MEDICAL STUDENTS (and Practitioners) during a Refresher Course) a two or four weeks Midwifery Course (Resident). Nearly 4,000 patients annually.

RALPH B. CANNINGS, Secretary.

M.R.C.S. ENGLAND
F.R.C.S. EDINBURGH
F.R.C.S. IRELAND
M.S. LONDON — M.C. CANTAB
and all Higher Surgical Examinations

For particulars of short Intensive Postal and Oral Revision Courses apply SECRETARY, Medical Correspondence College, 19 Welbeck Street, W.1.

STAMMERING SPEECH DEFECTS

BEHNKE METHOD. Established 1880. Cases non-resident treated at 39 Earl's Court Sq., S.W.5, and in residence in the Summer holidays at Miss BEHNKE's House on the Chilterns. Free ... in education and treatment ... speech defects. — Times ... principles. — Lancet ... correct and perfect ... Gazette.

effective. — Go...

Stammering, Cleft Palate Speech, Lisping. 39 of Miss BEHNKE, 39 Earl's Court Sq., S.W.5.

ADVICE ON THE CHOICE OF SUITABLE ... AND TUTORS ... with prospectuses of ... will be given free ... age of pupil, district preferred, range of fees and type of school required.

J. & J. PATON,
143 Cannon Street, London, E.C.4.
Publishers of
Paton's List of Schools & Tutors. Post free 5/6.

DIPLOMAS IN MEDICAL RADIOLOGY

ST. BARTHOLOMEW'S HOSPITAL, E.C.1

A complete course of study for —

(a) The ACADEMIC DIPLOMA of MEDICAL RADIOLOGY, University of London, and

(b) The DIPLOMA of MEDICAL RADIOLOGY, Conjoint Board,

will be given by St. Bartholomew's Hospital and College, beginning Monday 3rd October 1938.

Tuition will be provided for both Parts I and II of the above.

If accommodation is available, a limited number of students will also be accepted for a course of instruction in Practical Radiology for Part II of the Diploma in Medical Radiology and Electrology of Cambridge University.

Application should be made to the Dean of the Medical College, St. Bartholomew's Hospital, E.C.1.

LONDON HOSPITAL MEDICAL COLLEGE & DENTAL SCHOOL

THE WINTER SESSION will Open on Monday, October 3rd

The LONDON HOSPITAL serves the East End of London and with eight hundred and ninety beds is the largest voluntary Hospital in Eng The Out patient Department which deals with a hundred thousand new patients per annum is extensively used for teaching

The size of the Hospital necessitates a large number of resident medical officers Every year seventy resident house physicians and house surgeons eighty salaried non resident clinical assistants are appointed from among recently qualified students The opportunities which these appointments offer for obtaining clinical experience is invaluable

The MEDICAL COLLEGE is attached to the Hospital and is staffed by Professors of Anatomy Physiology Bacteriology Chemical Pathology Anatomy and Medicine of the University of London

SPECIAL COURSES in Anatomy and Physiology for the Primary F R C S and Advanced Courses in Surgery for the Final F R C S Examination in Medicine for the M D and M R C P Examinations are held twice a year

ENTRANCE SCHOLARSHIPS AND PRIZES of the total value of £950 are awarded annually Research Funds to the value of £11 000 per annum assistance being given to students and graduates engaged in medical research

The MEDICAL COLLEGE contains a modern Museum of Pathology and a Library provided with all the current medical periodicals in charge of a full time Librarian There is also an Athenaeum Club and Dining Hall a Gymnasium a Fives Court and two Squash Courts in the Students House The Athletic Ground of 13 acres at Hale End is within easy distance of the Hospital

The HOSPITAL is only 20 minutes from Charing Cross and Baker Street Stations For those who wish to live in immediate proximity to the Hospital there is accommodation for sixty students in the Students Hostel

Further details may be obtained from the Dean Dr A E CLARK KENNEDY M D F R C P Physician to the Hospital and Fellow of Corpus Christi College Cambridge who is always pleased to meet students wishing to see the Hospital and College and to whom application for admission should be made Turner Street London E 1

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17 RED LION SQ, LONDON, W C 1

FOUNDED IN 1882

by E S WEYMOUTH M A (Lond)

POSTAL OR ORAL PREPARATION FOR ALL MEDICAL EXAMINATIONS

SOME SUCCESSES

M D (Lond)	1901 37 (11 Gold Medallists during 1913 37)	413
M S (Lond)	1901 37 (including 4 Gold Medallists)	24
M B, B S (Lond)	*Final* 1918 37 (Completed Exam)	255
F R C S (Eng), 1919 37	*Primary*	199
	Final	192
M R C P (Lond)	1919 37	286
D P H	(Various) 1906 37 (Completed Exam)	348
F R C S (Edin)	1918 37	65
M R C S, L R C P	*Final* 1919 37 (Completed Exam)	606
M D	Various By Thesis	Many successes

Preparation for the above also for Medical Preliminary and all examinations leading up to M R C S L R C P or M B of various Universities also for M R C P (Edin) D P M D O M S D T M H D L O D C H D A D M R E M M S A L M S S A D C O G and some exams of Dominions Universities

ORAL CLASSES

M R C P M D Primary and Final F R C S F R C S (Edin) also Final M B B S and L R C S L R C P Museum and Microscope Work Also Private Tuition

MEDICAL PROSPECTUS (47 pp)

CONTENTS The method and the cost of entering the Medical Profession *Particulars of all Medical Examinations* Postal Courses and Oral Classes Suggestions for the Higher Medical Examinations Suggestions for the Higher Surgical Examinations Suggestions for the Special Diploma Examinations Refresher Courses Openings for Women Hints for writing theses

Medical Prospectus gratis along with list of Tutors etc on application to the Principal 17 Red Lion Sq London W C 1 (Telephone Holborn 6313)

BRITISH POSTGRADUATE MEDICAL SCHOOL

Applications are invited from fully qualified medical practitioners for the post of CASUALTY OFFICER to commence duty at the beginning of September 1938

The appointment is for six months and non resident Salary is at the rate of £150 per annum and the post is specially suited to candidates trained in Edinburgh qualifications

Applications should be addressed to the Dean British Postgraduate Medical School Ducane Road Shepherd's Bush London W 12 to arrive not later than the first post on Tuesday August 9th 1938

COACHING

By M D M R C P F R C S in Surgery and Pathology for Conjoint M B or Fellowship Classes or individually Address No 7636 B M A House Tavistock Square W C 1 or Phone (mornings) KEN 2450

F.R.C.S (Edin.)

EDINBURGH POSTAL COURSES

Full details of above and Oral Classes — H C ORRIN F R C S Surgeon's Hall Edinburgh

NORTH-EAST LONDON POST-GRADUATE COLLEGE

PRINCE OF WALES'S GENERAL HOSPITAL N 15

The Practice of the Hospital is limited to Medical Practitioners Particulars from J BROWNING ALEXANDER M D Dean

NEW ZEALAND GOVERNMENT

Applications are invited from registered and qualified medical men for appointment to the Mental Hospital Service Salaries Junior Assistant Medical Officers 1st year £615 2nd year £665 3rd year £715 Senior Assistant Medical Officers 1st year £765 2nd year £815 3rd year £900 plus an allowance of £50 if appointed Deputy Medical Superintendent Medical Superintendents £1 200 In addition to salary quarters fuel and light are provided and are estimated for superannuation purposes at £150 per annum Medical Officers contribute to the Superannuation Fund Commencing salaries in this instance will be determined by qualifications and previous experience Appointees will receive first-class passage to New Zealand and half salary from date of embarkation

Applications giving full particulars regarding career and qualifications accompanied by copies of testimonials should reach the High Commissioner for New Zealand 415 Strand London W C 2 not later than August 27th 1938 Candidates must supply their full names age and nationality and state whether they are married or single

APPLICATIONS ARE INVITED IN WRITING in the first instance for the EUNICE OAKES RESEARCH FELLOWSHIP at the HOSPITAL FOR SICK CHILDREN Great Ormond Street London W C 1 tenable from January 1st 1939 Candidates must be medically qualified and fully equipped technically and by experience to conduct research work upon the prevention and cure of Children's Diseases They must be under 35 years of age and the salary is to be not less than £700 per annum

Applications which must give full particulars of the candidate and of the proposed line of research and be accompanied by references and copies of recent testimonials should be addressed to the undersigned

H F RUTHERFORD Secretary

July 19 8

BRIGHTON EDUCATION COMMITTEE

ASSISTANT SCHOOL DENTIST

Application for the above appointment are invited from Registered Dental Surgeons Inclusive annual salary £450 rising by annual increments of £25 to £500 subject to satisfactory service The appointment is subject to the conditions of the Local Government and Other Officers Superannuation Act 1922

Forms of application and schedules of duties may be obtained on receipt of a stamped addressed envelope from the undersigned to whom all application must be returned by August 26th 1938 Canvassing will be regarded as a disqualification

54 Old Steine T HELPBERT TOYNE

Brighton Education Officer

THE KING EDWARD VII WELSH NATIONAL MEMORIAL ASSOCIATION

Applications are invited from duly registered medical practitioners for the post of HALF TIME ASSISTANT TUBERCULOSIS OFFICERS (three in number) to be attached to the Cardiff Newport and Pontypridd areas respectively commencing duty on October 1st next The appointments are limited to one year at a remuneration for the year of £250 During the year successful candidates will be expected to take during the other half of their time the Course for the Diploma in Tuberculosis Diseases (Wales) at the Tuberculosis Department Welsh National School of Medicine and afterward sit for examination Particulars as to fees for the course can be obtained from the Secretary Welsh National School of Medicine Cardiff

Applicants must have held a house appointment in medicine or surgery at a general hospital for at least six months and must also have held a post as resident for a period of twelve months in an institution for the treatment of tuberculosis (medical or surgical) or a period of such work accepted by the Senate as equivalent

Applications stating age qualifications experience etc together with copies of three testimonials should reach the undersigned not later than Wednesday August 24th 1938

D A POWELL

Principal Medical Officer

Memorial Offices

Westgate Street Cardiff

August 1st 1938

OLDHAM EDUCATION COMMITTEE

APPOINTMENT OF SENIOR SCHOOL DENTAL SURGEON

Applications are invited for the post of Senior School Dental Surgeon Salary £500 per annum rising by annual increments of £25 to £600 additional emoluments of £100 per annum Maternity and Child Welfare Service The person appointed must have had at least five years experience in the working of a large and efficient Dental Service under a Local Authority and must be capable of supervising the existing dental service in which two dental surgeons are at present employed The person appointed will not be permitted to practise in private practice and will be required to live within the County Borough

The post is designated under the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination Applicants must be over 45 years of age

List of duties and form of application which must be returned not later than the first post on August 17th 1938 may be obtained from the undersigned Canvassing strictly prohibited

W KERSHAW

Education Offices Director of Education

Oldham

July 27th 1938

LONDON COUNTY COUNCIL

Applications invited from Medical Practitioners at least one year standing to fill vacancies in positions Experience in a resident appointment in a general hospital for at least six months Married quarters not available

Queen Mary's Hospital for Children Carshalton Surrey (1 284 beds) The Treatment Centre for rheumatic and orthopaedic cases and for congenital malformations and injuries

ASSISTANT MEDICAL OFFICERS (two positions) Salary £400 board lodging and washing Appointment for one year only in first instance free at end of year under certain conditions

Application forms obtainable on receipt of foolscap envelope prepaid addressed to the Chief Clerk of Health Staff Division 4A County Hall S E 1 returnable by August 15th

Canvassing disqualifies

ROYAL NAVAL MEDICAL SERVICE.

Vacancies exist for Medical Officers in the Royal Navy, and applications are invited for entry in September 1938

Candidates below the age of 28 years are preferred and they must be registered under the Medical Acts No examination in professional subjects will be held but candidates will be required to attend for interview by a Selection Board

Selected candidates will be entered for Service for a period of three years, which if desired is usually extended to five years at the discretion of the Admiralty

At the end of three years service officers may retire with a gratuity of £400, but those who serve for five years will receive £1,000

At the end of five years Short Service, permanent commissions will be given to selected officers who wish to make the Naval Medical Service their permanent career Officers transferred to the permanent list will receive a gratuity of £1 000 (less Income Tax)

Full opportunities exist for transfer to the permanent list and periods of unemployed or half pay are very rare The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Opportunities are available for officers on the permanent list for post graduate study, to specialise o take higher examinations and to obtain further qualifications

Naval Medical Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers

Copies of the regulations for entry and conditions of service including rates of pay, allowances and retired pay may be obtained from the Medical Director General of the Navy, Admiralty, S W 1 and from the Deans of all Medical Schools

Applications for entry from intending candidates must be received not later than 31st August, 1938

HIS MAJESTY'S COLONIAL SERVICE

COLONIAL MEDICAL SERVICE.

During 1938 the Secretary of State for the Colonies proposes to select a number of Medical Officers to fill vacancies the majority of which will occur in Tropical Africa and Malaya

QUALIFICATIONS —Candidates must be British subjects of European parentage under 30 years of age and must possess a medical qualification registrable in the United Kingdom Preference will be given to candidates who have held Hospital or Public Health appointments or who have special knowledge of anaesthetics radiology surgery medicine ophthalmology gynaecology and midwifery diseases of the ear nose and throat, venereal diseases etc

SALARY —Initial salaries vary from £600 to £700 and rise by increments to a maximum of between £1 000 and £1 200

PRIVATE PRACTICE —Private practice is not allowed as of right but in the case of some appointments it is permitted on certain conditions

QUARTERS —In Tropical Africa free quarters or an allowance in lieu are provided In Malaya quarters are provided at an annual rental not exceeding 6% of the officer s salary

PASSAGES —Free first class passages are provided on first appointment and when proceeding on and returning from leave Assistance is also given towards family passages

TERMS OF APPOINTMENT —The appointments are pensionable subject to a probationary period which varies from two to three years

COURSES OF INSTRUCTION IN TROPICAL MEDICINE AND HYGIENE —Selected candidates will normally be required to attend a course of instruction leading to the Diploma in Tropical Medicine and Hygiene before proceeding overseas

DUTIES —Although Medical Officers are appointed in the first instance for general service there are opportunities for work in special branches of medicine and surgery in public health and in medical research

Further particulars and forms of application may be obtained from the Director of Recruitment (Colonial Service), 8, Buckingham Gate, London, S W 1

CITY OF PORTSMOUTH

SAINT MARY'S MUNICIPAL HOSPITAL (1 050 Beds)

Applications are invited for the appointment of a SENIOR ASSISTANT RESIDENT MEDICAL OFFICER for the Maternity Department of the above Hospital Applicants must be single gentlemen duly qualified and registered not exceeding 30 years and must have had at least one year's experience in a Maternity Hospital The Department has at present 800 births per annum and Ante natal and Post natal Clinics are conducted in connexion therewith There is a Resident Medical Superintendent at the Hospital and a Consultant Obstetrician attends regularly and is on call for emergencies The appointment is one of value to a medical man specializing in obstetrics who desires to take the M M or M C O G Diplomas

The appointment includes service at any Institution belonging to the City Council that may be required and will be limited to a term not exceeding two years Salary for the first year £350 and for the second £375 with residential emoluments valued at £125 per annum and the appointment will be subject to one month's notice on either side

Application forms may be obtained from and must be returned to the Medical Officer of Health The Guildhall Portsmouth not later than Thursday August 18th 1938

Canvassing either directly or indirectly will be a disqualification

The Guildhall F J SPARKS
Portsmouth Town Clerk
July 22nd 1938

COUNTY BOROUGH OF DEWSBURY

ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from qualified and registered medical practitioners (men or women) for the post of Assistant Medical Officer of Health and Assistant School Medical Officer

Applicants should have had at least three years experience since qualification and possess the D P H Experience in eye work and refractions is desirable The duties are in connexion with School Medical work Child Welfare and Tuberculosis and there are also opportunities for experience in general Public Health work

The salary is £800 per annum rising by annual increments of £25 to £700 per annum The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination

Particulars of the duties and terms and conditions of the appointment together with application form may be obtained from Dr J F GALLOWAY Medical Officer of Health Municipal Buildings Halifax Road Dewsbury to whom applications accompanied by copies of not more than three recent testimonials should be delivered not later than Monday August 15th

Canvassing in any form will be a disqualification

Town Hall HOLLAND BOOTH
Dewsbury Town Clerk
July 26th 1938

COUNTY BOROUGH OF DERBY

DERBY CITY HOSPITAL

ASSISTANT RESIDENT MEDICAL OFFICER

Applications are invited for the post of Assistant Resident Medical Officer (male) at the above Hospital of 300 beds This Hospital provides treatment for acute medical and surgical cases obstetrics and children's diseases etc

Candidates must be registered in medicine and surgery

The appointment is for a period of six months two months notice of termination of duties may be given on either side The successful applicant will be required to commence duties on or about September 8th

Salary at the rate of £.00 per annum with board and residence

Applications stating age experience and accompanied by three recent testimonials should be sent to the undersigned as soon as possible

Public Health Department GORDON LILICO
1 Derwent Street Medical Officer of Health
Derby

CITY OF BRADFORD

MUNICIPAL GENERAL HOSPITAL St Luke's

HOUSE PHYSICIANS and HOUSE SURGEONS required Salary in each case £150 per annum plus board and lodging These appointments are for six months renewable for a further period of six months

Application forms may be obtained from the Medical Officer of Health Town Hall Bradford and should be returned to the undersigned not later than August 27th 1938

N L FLEMING Town Clerk
Town Hall Bradford

COUNTY BOROUGH OF SOUTHPORT

DEPUTY MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER

The Council of the County Borough of Southport invites applications for the post of Deputy Medical Officer of Health and School Medical Officer from gentlemen duly qualified holding a Diploma of Public Health or a degree in State Medicine and not over 40 years of age

The salary will be at the rate of £700 per annum with two annual increments of £25 to a maximum of £750 per annum

The appointment will be subject to three months notice on either side The person appointed will not be allowed to engage in private practice

An allowance of £50 per annum will be made for the maintenance of a motor-car if used in the service of the Corporation

The person appointed will be required to pass a medical examination and to contribute to the Corporation's Superannuation Scheme

Experience in the diagnosis and treatment of external eye diseases and errors of refraction will be regarded as an additional qualification

Applications on the prescribed form obtainable from the Medical Officer of Health 2 Church Street Southport should be addressed to the undersigned endorsed Deputy Medical Officer of Health and delivered not later than August 12th 1938

Canvassing direct or indirect will disqualify

Town Hall R EDGAR PERRINS
Southport Town Clerk
July 25th 1938

COUNTY BOROUGH OF GATESHEAD

ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from duly qualified medical men in possession of the Diploma of Public Health or similar qualification for the post of Assistant Medical Officer in the Public Health Department The person appointed shall work under the general supervision and control of the Medical Officer of Health The salary payable is at the rate of £500 rising to £700 by annual increments of £25 and the appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 The appointment will be terminable by one month's notice from either side

A list of the duties of the office may be obtained from the Medical Officer of Health Greenesfield House Mulgrave Terrace Gateshead to whom applications stating age and experience and accompanied by not more than three recent testimonials should be sent not later than August 26th 1938 in envelopes endorsed Assistant Medical Officer

J W PORTER
Town Clerk

Town Hall Gateshead 8
July 27th 1938

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

SCALEBOR PARK MENTAL HOSPITAL

The Visiting Committee of the Scalebor Park Mental Hospital invite applications for the appointment of JUNIOR ASSISTANT MEDICAL OFFICER at the Scalebor Park Mental Hospital for private patients at a salary of £350 per annum rising by annual increments of £25 to £450 per annum with board and residence at the Hospital with an additional £50 for the D P M or M D in Psychological Medicine General hospital experience will be an additional qualification

Further particulars and form of application may be had from the undersigned by whom all applications together with copies of not more than three recent testimonials must be received not later than August 29th 1938

J CHARLES McGRATH
Clerk to the Visiting Committee

County Hall Wakefield
August 1938

CITY OF BIRMINGHAM

SELLY OAK HOSPITAL (520 Beds)

JUNIOR MEDICAL OFFICERS (MALE)

Applications are invited from fully equipped Medical Practitioners for the whole-time appointment of Junior Medical Officer (male) at the Selly Oak Hospital Birmingham The appointment will be for a period of six months in the first instance but may be extended at the end of that time for a further period of not exceeding six months

Salary at the rate of £200 per annum and full residential emoluments

Further particulars may be obtained from the Medical Superintendent at Selly Oak Hospital to whom applications stating age experience and qualifications with copies of recent testimonials should be forwarded not later than Saturday August 20th 1938

F H C WILTSHIRE
The Council House Town Clerk
Birmingham July 1938

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

SCOTTON BANKS SANATORIUM

APPOINTMENT OF SENIOR ASSISTANT MEDICAL OFFICER and DEPUTY MEDICAL SUPERINTENDENT

The County Council of the West Riding of Yorkshire invite applications from registered medical practitioners for the appointment of Senior Assistant Medical Officer and Deputy Medical Superintendent (non resident) at the Scotton Banks Sanatorium near Knaresborough for women (150 beds) and children (100 beds)

Candidates should have previously held an appointment as House Physician or House Surgeon Experience in Pulmonary and Non-Pulmonary Tuberculosis is essential and a knowledge of Anaesthetics will be an advantage

Salary £600 per annum rising by annual increments of £25 to £700 per annum

Further particulars and forms of application may be had from the undersigned and applications together with not more than three testimonials must be sent to me not later than Monday August 15th 1938

County Hall J CHARLES McGRATH
Wakefield Clerk of the County Council
July 1938

CHESHIRE COUNTY COUNCIL

CLATTERBRIDGE (COUNTY) GENERAL HOSPITAL (Nr Birkenhead) (300 Beds)

JUNIOR RESIDENT ASSISTANT MEDICAL OFFICER

Applications (male or female) are invited for the above appointment which falls vacant on August 8th

The appointment is for a period of six months at a salary of £250 per annum together with usual residential allowances The appointment may be renewed for a further period of six months

There is a Non Resident Medical Superintendent a Resident Deputy Medical Superintendent and Consulting Staff from Teaching Hospitals

Applications to be made on forms obtainable from the undersigned and returned not later than August 12th 1938

24 Nicholas Street IAN MACKAY
Chester County Medical Officer of Health

COUNTY COUNCIL OF ROSS AND CROMARTY

Applications are invited for the appointment of RESIDENT MEDICAL OFFICER (female) at the Lewis Sanatorium and Infectious Diseases Hospital for a period of six months with option of extension Salary at the rate of £250 per annum with board lodging and laundry Duties Resident Medical Officer at the Sanatorium and Infectious Diseases Hospital and other Public Health duties as required by Medical Officer of Health or his resident Assistant

Applications giving particulars of qualifications and previous experience and stating when candidate can take up duty accompanied by six copies of applications and of testimonials to be lodged with the undersigned on or before August 20th current

County Clerk's Office T S H BURNS
Dingwall County Clerk
July 27th 1938

COUNTY COUNCIL OF FIFE

DEPUTY MEDICAL OFFICER OF HEALTH

The County Council invite applications for the above post from registered male Medical Practitioners under 40 years of age Applicants must possess Diploma in Public Health and have previous experience Duties General Public Health Work Housing Water Supplies Drainage Infectious Diseases Food and Milk Supervision Salary £800 subject to deduction under Superannuation Act 1922

Applications stating age qualifications and experience together with copies of three testimonials should reach the undersigned not later than 11 a m on August 2/th

J M MITCHELL
County Clerk

County Buildings
Cupar Fife
July 23rd 1938

BOROUGH OF GUILDFORD

MATERNITY AND CHILD WELFARE CLINIC

A LADY DOCTOR is required to attend one session of the Maternity and Child Welfare Clinic at a fee of £1 11s 6d per afternoon session of three hours

Applications stating qualifications experience etc should be received by the Town Clerk Municipal Offices Guildford not later than August 20th 1938

GERALD H R VILES
Town Clerk

Municipal Offices Guildford
July 29th 1938

COUNTY COUNCIL OF MIDDLESEX

HAKEFIELD AND CLARE HALL SANATORIA

OCCUPATIONAL THERAPY

Applications are invited for the appointment of OCCUPATIONAL THERAPY INSTRUCTORS (male and female) at the above Sanatoria. The selected candidates will be required to undertake the following duties:

Printing — Leatherwork
Carpentry — Rug-making
Light Wood-work — Basket-making

Salaries in accordance with the Burnham Scale for the London area are applicable, and appointments will be subject to the Conditions of Service and Superannuation Scheme of the Council.

Applications, stating age, qualifications and experience (if any), with copies of not more than three recent testimonials, must be received by the undersigned not later than August 15th, 1938.

Canvassing, or the solicitation of support by members of the Council, will be a disqualification.

C. W. RADCLIFFE, "Z"
Clerk of the Middlesex County Council.

Guildhall,
Westminster, S.W.1.
July 26th, 1938.

STOKE-ON-TRENT CORPORATION

LONDON ROAD HOSPITAL

RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the appointment of RESIDENT ASSISTANT MEDICAL OFFICER (male) at the London Road Hospital, Stoke-on-Trent, at a salary of £250 per annum, with board, residence, laundry, and all fees received to be paid to the Council. Candidates must be single.

Applicants must have had at least one year's hospital experience. The Hospital comprises accommodation for 160 beds, and there is excellent scope for medical work. The appointment (which will be terminable by one month's notice on either side) will be for a period of one year, and preference will be given to candidates who are willing to take a resident post.

Applications, stating qualifications and experience, accompanied by copies of not more than three recent testimonials, should be delivered to the undersigned not later than first post on August 11th.

F. B. SHARPLEY
Public Assistance Offices, Town Clerk.
Broadway, Stoke-on-Trent.

BOROUGH OF SHREWSBURY

TEMPORARY ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the above post for a period of 3 months.

Preference will be given to applicants who have had previous experience more especially in School Medical Inspection, Infant Welfare Work and administration of general anaesthetics. Experience in Isolation Hospital work and the examination and certification of mentally defective children will be an additional recommendation.

Remuneration will be at the rate of £10 10s. per week.

Forms of application may be obtained from the undersigned to whom applications should be returned in an envelope endorsed "Temporary Assistant Medical Officer" not later than August 11th, 1938.

Guildhall, R. T. PRIDEAUX
Shrewsbury, Town Clerk.
July 26th, 1938.

THE WARWICKSHIRE AND COVENTRY JOINT COMMITTEE FOR TUBERCULOSIS

KING EDWARD VII MEMORIAL SANATORIUM
Hereford Hall, near Warwick

Application is invited for the post of JUNIOR ASSISTANT MEDICAL OFFICER (man or woman) at the Memorial Sanatorium, near Warwick, of 45 beds.

The salary will be at the rate of £200 per annum, with board, lodging and laundry in addition, and the successful candidate will be appointed for 6 months.

There are three other Medical Officers at the Sanatorium.

Applications with copies of testimonials should be forwarded direct to the Medical Superintendent at the Sanatorium to reach him by not later than Thursday, August 18th, 1938.

Shire Hall, Warwick. L. EDGAR STEPHENS
Clerk of the Joint Committee.
July 26th, 1938.

COUNTY BOROUGH OF SUNDERLAND

CHERRY KNOWLE
(Mental and County Borough Mental Hospital)
Ryhope, near Sunderland

APPOINTMENT OF DEPUTY MEDICAL SUPERINTENDENT

Applications are invited for the post of Deputy Medical Superintendent of Cherry Knowle.

Applicants must have held House appointments at a Central Hospital. The salary will be £550 per annum, subject to satisfactory service by annual increments of £25 to £650 per annum, plus emoluments valued for purposes of Superannuation at £100 per annum. If in possession of a diploma in psychological medicine, the person appointed will receive an additional sum of £50 per annum.

The appointment will be subject to the provisions of the Asylum Officers Superannuation Act, 1909.

Forms of application may be obtained from the undersigned, to whom they should be returned, endorsed "Deputy Medical Superintendent, Cherry Knowle," together with copies of three recent testimonials, to be delivered at my Office, Town Hall, Sunderland, not later than Tuesday, August 23rd next. Canvassing, either directly or indirectly, will after the first selection of candidates by the Committee will be a disqualification.

Town Hall, C. S. MEINTJES
Sunderland, Town Clerk and Clerk of the Committee.
July 19th, 1938.

COUNTY BOROUGH OF PRESTON

SHAROE GREEN HOSPITAL
(Beds)

ASSISTANT RESIDENT MEDICAL OFFICER (female)

Applications are invited from duly qualified registered practitioners for the above appointment. Salary at the rate of £250 per annum, with board and residence. The appointment will be for 6 months in the first instance.

Previous experience in infectious diseases essential. Applicants must be single and will be required to undertake the general work of the Hospital.

Applications are required to be made on the prescribed form, which may be obtained from the Medical Superintendent, and must be delivered not later than first post on Saturday, August 13th.

G. W. MOSELEY
Town Clerk.
Town Hall, Preston.
July 27th, 1938.

CITY OF BRADFORD

ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited for the post of Assistant School Medical Officer at a salary of £400 per annum, rising by £25 annual increments to £450, the first increment to take effect on April 1st, 1939.

The salary is subject to deduction of 5 per cent. per annum under the terms of the Local Government and Other Officers Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Application forms may be obtained from the Medical Officer of Health, Town Hall, Bradford, and should be returned to the undersigned not later than August 15th, 1938. Envelopes should bear the words "Assistant School Medical Officer" in the top left hand corner.

N. L. FLEMING, Town Clerk.
Town Hall, Bradford.

HORSFORTH URBAN DISTRICT COUNCIL

Appointment of Part-time MEDICAL OFFICER OF HEALTH for the Horsforth Urban District and Sanitary Officers (Outside London) Regulations, 1935

Applications are invited for the above-mentioned post at a salary of £100 per annum. The appointment will be made in accordance with the provisions of the above-mentioned Regulations and will terminate on March 31st, 1939.

Applications endorsed "Medical Officer" should reach me by noon on August 15th, 1938. Forms of application may be had on receipt of a stamped foolscap envelope.

The Green, G. W. BOYES, F.C.I.S.
Horsforth, Clerk of the Council.

PEMBROKE COUNTY WAR MEMORIAL HOSPITAL

Haverfordwest, Pembrokeshire
(64 Beds to be increased to 100 Beds)

RESIDENT HOUSE SURGEON

Applications are invited for the post of Resident House Surgeon, male or female, from duly qualified registered Medical Practitioners with previous resident experience to commence as soon as possible. Salary £200 per annum, with residence (private bungalow), board and laundry.

Applications, stating age, and accompanied by copies of not more than three testimonials to be sent to the undersigned at the above address.

B. GLANVILLE DAVIES, Secretary.

RADNORSHIRE COUNTY COUNCIL

APPOINTMENT OF COUNTY MEDICAL OFFICER OF HEALTH

Applications are invited for the above appointment from medical men of not more than fifty years of age who are duly qualified for the appointment pursuant to the statutory provisions contained in the Local Government Act, 1933, and the Regulations made by the Minister of Health thereunder and by virtue of the Public Health Act, 1936.

The duties will include all statutory duties as County Medical Officer and School Medical Officer, work required under the Mental Deficiency and Maternity and Child Welfare and Midwives Acts, together with duties in connexion with the supervision of the work of the County School Dentist and Health Visitors, general supervision and control of the Maternity and Child Welfare Centres and such Clinics and such other duties as may be prescribed.

Salary £600 per annum, increasing after two years' service by four annual increments of £25 to £700.

The appointment will be subject to the approval of the Government Department concerned, the provisions of the Local Government and Other Officers Superannuation Act, 1937, and to a satisfactory medical examination, and will be terminable by three months' notice on either side.

A form of application may be obtained from the undersigned, to whom applications must be received not later than August 19th, 1938.

Canvassing directly or indirectly will be considered a disqualification.

County Buildings, G. W. MOSELEY
Llandrindod Wells, Clerk of the County Council.
July 27th, 1938.

STAFFORDSHIRE COUNTY COUNCIL

WORDSLEY PUBLIC ASSISTANCE INSTITUTION

RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the appointment of Assistant Medical Officer at the Wordsley Public Assistance Institution.

Salary £300 per annum with board, residence, laundry, and attendance. The appointment will be terminable by one month's notice on either side.

The successful candidate will be required to undertake the duties of Anaesthetist during the first month of the engagement, which may be extended for a further two weeks if required.

The Institution comprises accommodation for 1,000 inmates, and the Hospital and Infectious Blocks will be under the supervision of the Medical Officer. There will also be a Maternity Block under the charge of a Midwife.

Applicants should be registered under the Midwives Act, 1936, and must be in possession of a qualification in Anaesthetics.

Further details may be obtained on application to the County Medical Officer of Health.

Applications, stating age, qualifications and experience, with copies of testimonials, should be sent to the undersigned not later than Thursday, August 11th, 1938.

H. L. UNDERWOOD
Clerk of the County Council.
County Buildings, Stafford.
July 6th, 1938.

THE RADIUM INSTITUTE AND MOUNT VERNON HOSPITAL

ASSISTANT RADIOLOGIST

Applications are invited from fully qualified and registered Medical Practitioners for the post of Assistant Radiologist in the Deep Therapy Department at the Mount Vernon Hospital, Northwood.

Candidates must possess a diploma in medical radiology.

Salary to be arranged according to the qualifications of the successful candidate (minimum £400 per annum).

Applications together with full details of training and experience and accompanied by copies of not more than three testimonials should be received by the undersigned as soon as possible but not later than August 13th, 1938.

Details concerning the duties etc. may be obtained on application.

T. A. CARVER
1 Riding House Street, Secretary.
London, W.1.

AMENDED ADVERTISEMENT

BOROUGH OF BEXLEY

ASSISTANT MEDICAL OFFICER OF HEALTH

The stipulation which appeared in previous advertisements relating to this appointment and requiring any successful woman applicant to resign on marriage has now been deleted from the condition of appointment.

The closing date for receipt of application has been extended to August 13th, 1938.

Council Offices, Bexleyheath. W. WOODWARD
Town Clerk.

SURREY COUNTY COUNCIL

PUBLIC HEALTH DEPARTMENT

SURREY COUNTY SANATORIUM
Milford (300 Beds)

JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER

Applications are invited from registered Medical Practitioners (either sex) for the appointment of Junior Assistant Medical Officer at County Sanatorium Milford near Godalming Resident experience in general hospital essential Appointment is for six months renewable for further period of six months

Salary £250 per annum together with full residential emoluments Appointment is subject to the Staffing Regulations of the County Council

Applications stating age qualifications and experience and enclosing copies of not more than three recent testimonials should be sent to the Medical Superintendent Surrey County Sanatorium Milford Surrey to reach him not later than Saturday August 20th 1938

County Hall DUDLEY AUKLAND
Kingston upon Thames Clerk of the Council
August 2nd 1938

CITY OF LIVERPOOL

ASSISTANT VENEREAL DISEASES MEDICAL OFFICER (Male)

The Hospitals and Port Health Committee of the Liverpool City Council invite applications for the post (non resident) of whole time Assistant Venereal Diseases Medical Officer (male) for the Central Venereal Diseases Clinic and Male Venereal Diseases Wards of the Mill Road Infirmary at a salary of £400 per annum the appointment to be tenable for a period of one year

Applicants must be registered Medical Practitioners with experience in modern methods of treating these diseases

Applications on forms to be obtained from the Medical Officer of Health Hospitals Department Municipal Annexe Liverpool 2 to be endorsed V D Medical Officer and addressed to the Town Clerk Municipal Buildings Liverpool 2 so as to be received not later than August 20th 1938

Canvassing of members of the City Council will be deemed a disqualification

Municipal Buildings W H BAINES
Liverpool 2 Town Clerk
August 1938

WORCESTER COUNTY AND CITY MENTAL HOSPITAL
Powick near Worcester

Applications are invited for the post of ASSISTANT MEDICAL OFFICER Applicants must be male single under thirty five years of age and duly qualified in medicine and surgery Commencing salary £350 rising by annual increments of £25 to a maximum salary of £450 per annum together with furnished apartments board laundry and attendance A further £50 per annum will be paid if the selected candidate holds or obtains a Diploma in Psychological Medicine Experience in Anaesthetics will be a recommendation The appointment is subject to the provisions of the Asylums Officers Superannuation Act 1909

Applications stating age and full particulars of qualifications and experience accompanied by copies of three recent testimonials to be forwarded to the Medical Superintendent not later than Wednesday August 10th 1938

MANCHESTER ROYAL INFIRMARY

The Board of Management of the Manchester Royal Infirmary invite applications for the post of RESIDENT MEDICAL OFFICER of the Private Patients Home of 100 beds

Applicants must be registered and hold a Medical and Surgical qualification and must have had previous resident experience in a general hospital The appointment is for twelve months renewable for a further period Salary £250 per annum with board residence and laundry allowance

Full information is obtainable from the undersigned to whom applicants must send twelve copies of their application and testimonials on or before 9 a.m. on Thursday August 18th 1938

By Order
E J CABLE
General Superintendent and Secretary

THE JESSOP HOSPITAL FOR WOMEN
Sheffield (151 Beds)

The Board of Management invite applications for the post of RESIDENT ANAESTHETIST (female) for a period of six months commencing August 15th Salary £100 per annum together with board residence and laundry The candidate appointed will be expected to carry out other House Surgeon duties

Applications stating age together with copies of testimonials should be addressed to the undersigned immediately

DAVID OSWALD
Secretary and Superintendent

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY

RESIDENT SURGICAL OFFICER

The Board of Management invite applications from unmarried gentlemen for the post of Resident Surgical Officer the duties of which also include care of the Senior Surgeon's beds

Candidates should possess a Fellowship of one of the Royal Colleges of Surgeons or a post graduate degree in Surgery

The Infirmary and its two Homes of Recovery contain 420 beds Total Resident Staff 8

Salary at the rate of £300 per annum with board residence and washing One year's appointment

Applications stating age qualifications and previous post held together with copy testimonials to be forwarded on or before the 20th instant to the undersigned who will supply any desired information relative to the post

Royal Infirmary JOHN GIBSON
Preston Superintendent and Secretary
August 1st 1938

HUDDERSFIELD ROYAL INFIRMARY
(321 Beds)

Applications are invited from gentlemen possessing the Fellowship of one of the Royal Colleges of Surgeons for the post of RESIDENT SURGICAL OFFICER to commence duty on September 1st 1938 The salary will be at the rate of £225 £250 per annum with board residence and laundry and the appointment will be for a period of twelve months in the first instance

Applications together with copies of three recent testimonials to be addressed to the undersigned immediately

H J JOHNSON
Gen Supt and Secretary

THE LADY CHICHESTER HOSPITAL
Hove Brighton
For Functional Nervous Diseases
(60 Beds)

SENIOR HOUSE PHYSICIAN (woman) required Six months appointment (£100 per annum all found Valuable experience for Diploma in Psychological Medicine

Also JUNIOR (woman) at £75 per annum

Applications with testimonials to be sent to the Secretary Mr P F STOONER 33 West Street Brighton

July 25th 1938

HORTON GENERAL HOSPITAL
Banbury Oxon (60 Beds)

RESIDENT MEDICAL OFFICER (female) wanted for six months from the middle of August Salary at the rate of £150 per annum with board residence and laundry

Applications stating age qualifications and experience in the administration of anaesthetics with copies of two recent testimonials to be sent to the undersigned not later than August 9th 1938

RICHARD H TRESCOTT
Secretary and House Governor

EAST SUFFOLK AND IPSWICH HOSPITAL
(350 Beds—8 Residents)

Wanted August 17th CASUALTY OFFICER (male British) Salary at the rate of £144 per annum with board apartments and laundry

Applications stating age qualifications and experience to be sent to the undersigned together with copies of three recent testimonials

ARTHUR GRIFFITHS
The Hospital Ipswich Secretary
August 6th 1938

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN

HOUSE SURGEON (man or woman) wanted for six months from October 1st 1938 Salary to be at the rate of £100 per annum

Applications with full particulars and copies of testimonial to be sent not later than August 20th to HUGH C ASTON 45 Newhall Street Birmingham 3

DUCHESS OF YORK HOSPITAL FOR BABIES MANCHESTER 19

Applications are invited for the post of AURAL REGISTRAR Details of the appointment can be obtained from the Secretary to whom applications together with testimonials should be sent by August 24th 1938 LOUISE BAILEY
Secretary

DUCHESS OF YORK HOSPITAL FOR BABIES MANCHESTER 19

Application are invited for the post of CLINICAL ASSISTANT to work in the Out Patient Department Details of the appointment can be obtained from the Secretary to whom applications should be sent by August 24th 1938

LOUISE BAILEY
Secretary

HILL END HOSPITAL AND CLINIC
for the Prevention and Treatment of Mental and Nervous Disorders
St Albans Herts

HOUSE PHYSICIAN male or female age under 30 years Appointment for six months at the rate of £165 p.a. with board and quarters renewable for a further six months at the rate of £200 p.a.

The Hospital has over 1 000 beds and is the County Mental Hospital for Hertford Laboratory Psychological and Child Guidance Clinic Occupational Therapy etc

Application forms from the Medical Director to be returned with copies of recent testimonials Duties to commence in September 1938

ROYAL VICTORIA HOSPITAL
Belfast

RESIDENT MEDICAL OFFICER wanted for Gynaecological Wards (52 beds) Appointment for six months from September 1st

Salary at the rate of £100 per annum Applicants must have held a resident appointment for not less than one year This post offers facilities for candidates who wish to qualify for the membership of the College of Obstetricians and Gynaecologists

Applications with three testimonials to reach the Superintendent not later than August 13th

(By Order) F A HERON Hon Sec

SWANSEA GENERAL AND EYE HOSPITAL
(136 Beds)

HOUSE PHYSICIAN wanted gentleman Salary £150 per annum with board residence and laundry Appointment for six months Duties to commence early September

Applications stating age nationality qualifications and experience together with copies of two recent testimonials to be forwarded to the undersigned O C HOWELLS
Secretary Superintendent

MANCHESTER ROYAL EYE HOSPITAL

OUT PATIENT MEDICAL OFFICER required at once Applicants must be fully registered Medical Practitioners and must also have a good knowledge of refraction work Salary £100 per annum for morning work only Particulars of appointment can be obtained on request

Applications with recent testimonials to reach the undermentioned as early as possible

H R NORTH
Gen Supt and Secretary

ROYAL UNITED HOSPITAL BATH

HOUSE SURGEON required (General Surgery and Ear Nose and Throat) for July

Salary £150 per annum with board residence and laundry

Applications with copies of three testimonials to be addressed to the undersigned immediately

J LAWRENCE MEARS
July 8th 1938 Secretary Superintendent

ROYAL VICTORIA HOSPITAL DONCASTER
(66 Beds Two Resident)

Wanted for August 27th R.M.O. duly qualified and registered Salary £140 per annum board residence and laundry

Applications stating age with particulars of experience accompanied by copies of three testimonials should be sent to the Secretary as soon as possible

ST PAUL'S HOSPITAL FOR UROLOGICAL AND SKIN DISEASES
Endell Street London W.C.

Applications are invited for the post of HOUSE SURGEON Candidates must be registered Salary £100 per annum board residence The appointment is for six months in the first instance and the holder later be eligible for the post of Resident Medical Officer During his appointment as House Surgeon the duties involve work in the surgical wards in the out patient department

Applications with copies of recent testimonials to be submitted not later than August 13th The successful candidate will be required to take up duties about September 14th

J P KEY CHISLETT Secretary

ST THOMAS'S HOSPITAL

VACANCY

The appointment of a PHYSICIAN to Out Patients in the event of a Physician to Out Patients being promoted to the Wards the appointment of Assistant Physician with charge of Out Patients Department must be Fellows or Members of the Royal College of Physicians

Applications with full details of qualifications and copies of testimonials on the Committee's own forms obtainable from the Clerk to the Governors and sent in to him no later than August 15th He will be pleased to give further

AYR COUNTY HOSPITAL
(Voluntary General Hospital)

The Directors invite applications for the post of CASUALTY OFFICER (male) not required. Salary £100 per annum with board and residence. Candidates please state age. Appointment to be for six months from September 1st and October 1st respectively.

Applications with copies testimonials to be lodged with the undersigned not later than August 15th 1938.

AYR County Hospital JOHN J COLDIE
July 25th 1938 Secretary and Treasurer

BURY INFIRMARY (LANCS)
(114 Beds)

APPOINTMENT OF HOUSE SURGEON

A vacancy has arisen on the Resident Medical Staff and applications are invited for this post.

The Resident Surgeon for RADIOLOGY is a House Physician and the House Surgeon.

The appointment is for a term of six months and the salary payable is at the rate of £110 per annum with board residence and laundry, the salary being increased to £115 per annum in the event of a favourable report to the Committee after the expiration of a period of six months.

The successful applicant will be expected to take up duties immediately.

Applications stating age, qualifications and previous experience together with copies of three testimonials must be forwarded to the undersigned not later than Monday August 15th.

H WILKINSON Secretary and Superintendent

BIRMINGHAM AND MIDLAND EYE HOSPITAL (114 Beds)

Applications are invited from registered Medical Practitioners for the post of RESIDENT SURGICAL OFFICER at the New Hospital. Salary £400 per annum and £10 laundry allowance.

The Resident Surgical Officer is a Resident House Officer and in the event of a vacancy occurring in the post of Resident Surgical Officer applications will be considered from House Surgeons who will be willing to accept appointment as House Surgeon at a salary of £130 on or at the end of six months' satisfactory service to £150 per annum.

Applications with testimonials and evidence of registration must be received not later than Monday August 15th.

Church Street J W PEARCE
Birmingham House Governor

CORNELIA AND EAST DORSET HOSPITAL
Poole Dorset (115 Beds)

HOUSE PHYSICIAN

Applications are invited from single men for the post of House Physician.

Period ending March 31st 1939. Salary at the rate of £110 per annum with board and residence. The appointment may be applied for and if granted the salary is at the rate of £105 per annum. Duties to commence on August 15th 1938.

The Hospital is recognized by the Royal College of Surgeons of England in connection with the Final Examination for the Fellowship.

Applications stating age and nationality experience and qualifications together with copies of three recent testimonials (which will not be returned) should reach the undersigned at the Hospital immediately. Preference will be given to applicants who have already held a resident appointment in a Hospital.

E A HART Secretary

COVENTRY AND WARWICKSHIRE HOSPITAL

APPOINTMENT OF MEDICAL REGISTRAR

Applications are invited for the above appointment. Candidates must hold a Degree in Medicine of a University of England Scotland or Ireland and be registered under the Medical Acts.

The appointment which is honorary is subject to renewal every twelve months.

Applications stating full particulars and qualifications, accompanied by Registration Certificate and copies of testimonials must be addressed to the undersigned and received not later than 1 noon August 19th 1938.

S CECIL HILL
House Governor and Secretary

COSSHAM MEMORIAL HOSPITAL
Kingswood Bristol

A vacancy will occur at the end of August for a RESIDENT MEDICAL OFFICER. Salary £110 per annum with board and laundry to remain for six months in the first instance. Applicants (male) should be of British nationality fully qualified and registered.

Applications with copies of recent testimonials to be sent to the Secretary.

ST MARY'S HOSPITAL LONDON W

EAR NOSE AND THROAT DEPARTMENT

Applications are invited for the post of HONORARY REGISTRAR to the Ear Nose and Throat Department.

Candidates must be Fellows of the Royal College of Surgeons or a Graduate in Surgery of a British University. A knowledge of the regular nursing routine of the post will be held in appreciation.

The appointment will be for the first instance for a period of twelve months but the holder will be eligible for re-appointment for a second year.

Applications together with copies of three recent testimonials should be sent to the undersigned not later than August 15th.

W PARKES
House Governor

THE QUEEN HOSPITAL DUDLEY
(General Hospital 150 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons.

APPOINTMENTS are invited from registered Medical Practitioners for the post of RESIDENT SURGICAL OFFICER (male) Duties to commence August 15th 1938. Salary £150 per annum. Applicants must have had at least three years' hospital experience including one year's experience in emergency work and preference will be given to those who have passed the FINAL FRCS or MS.

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned.

H RAYMOND HURST
House Governor and Secretary

THE QUEEN HOSPITAL DUDLEY
(General Hospital 150 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons.

TWO HOUSE SURGEONS (male) required. One to enter on duty immediately and the other on September 15th 1938. Salary £120 per annum with furnished apartments board and laundry. Candidates must be fully qualified and registered.

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned.

H RAYMOND HURST
House Governor and Secretary

THE STOCKPORT INFIRMARY
(140 Beds)

Applications are invited for the post of HOUSE SURGEON. Applicants must be unmarried. Salary £110 per annum with board residence and laundry. Duties to commence September 1st.

The Resident Staff consists of a Resident Surgical Officer two House Surgeons and a House Physician.

Applications together with copies of three recent testimonials stating age nationality and qualifications to be sent to the undersigned not later than August 9th.

H C PRICE
Secretary Superintendent

THE DUCHESS OF YORK HOSPITAL FOR BABIES MANCHESTER
(80 Beds)

Applications are invited for the post of JUNIOR RESIDENT MEDICAL OFFICER for six months from October 1st 1938. Salary £85 per annum with board residence and laundry.

Applications together with copies of testimonials to be sent to the Secretary by August 15th 1938.

LOUISE BAILEY
Secretary

THE GENERAL INFIRMARY AT LEEDS

Applications are invited for the post of SENIOR RESIDENT ANAESTHETIC OFFICER.

Salary £149 per annum with the usual residential allowances.

The appointment is for twelve months subject to renewal. Candidates must be fully qualified and registered. Applications with copies of testimonials to be sent in at once to the undersigned.

S CLAYTON FRYERS
House Governor and Secretary

THE HARTLEPOOLS HOSPITAL
(95 Beds)

Applications are invited for the position of HOUSE SURGEON at a salary of £150 per annum plus board residence and laundry.

Appointment for six months subject to renewal and duties to commence immediately.

Applications to be made to the undermentioned.

NORMAN O DEANS
Secretary

KENT COUNTY MENTAL HOSPITAL MAIDSTONE

ASSISTANT MEDICAL OFFICER (male) required. Commencing salary inclusive of emoluments £309 per annum rising by annual increments of £30 to £659 per annum. Excellent facilities for working for higher examination and for attending lectures for the Diploma in Psychological Medicine for which Diploma an additional £10 per annum is paid.

Previous experience not essential. The appointment is pensionable under the Administrative Act 1909. Candidates must be qualified registered medical practitioners of single and not more than 35 years of age.

Applications giving full particulars with copies of three recent testimonials and endorsed "APPLICATION" on envelope should be sent to the Medical Superintendent of the Hospital at an early date.

STROUD GENERAL HOSPITAL
Stroud Glos

RESIDENT MEDICAL OFFICER required. Candidates must be fully qualified and registered. Six months' appointment. Duties to commence as soon as possible. Salary £100 per annum with board and laundry.

Applications stating age nationality etc together with copies of three recent testimonials to be sent to the undersigned from whom further particulars may be obtained.

C FORD SPENCER Secretary

THE CHILDREN'S HOSPITAL SHEFFIELD
(Beds)

Applications are invited for the post of HOUSE PHYSICIAN vacant September 1st 1938.

The appointment is for six months. Salary £110 per annum with board residence and laundry. Candidates (male and unmarried) who must possess registered qualifications should forward applications stating nationality etc together with copies of three recent testimonials to the undersigned.

F H G CARTLAND
Superintendent and Secretary

THE WINGFIELD-MORRIS ORTHOPAEDIC HOSPITAL HEADINGTON OXFORD

THE LORD NUFFIELD SCHOLARSHIP IN ORTHOPAEDIC SURGERY

MALE RESIDENT £60 per annum for two years followed by three months' travel £100. Resident to commence about November 1st 1938. Experience essential.

Information can be had from and applications before October 15th should be made to Professor G R Girdlestone.

THE HOSPITAL FOR SICK CHILDREN Newcastle-upon-Tyne

The Board of Management has declared a vacancy for the post of HONORARY OPHTHALMIC SURGEON and invites applications for the appointment stating age and qualifications to be forwarded to the Secretary Mr Neil Brodie 16 City Road Newcastle-upon-Tyne 1 accompanied with copies of three recent testimonials.

VICTORIA HOSPITAL DEAL
(70 Beds)

Applications are invited for the post of RESIDENT MEDICAL OFFICER (male) British nationality unmarried. The appointment to commence immediately for six months. Salary £110 p.a. with board lodging and laundry. Special knowledge of anaesthetics is desirable.

Application stating age and qualification together with copies of three recent testimonials to be sent to the Secretary Medical Board Victoria Hospital Deal Kent.

WEST CORNWALL MINERS' AND WOMEN'S HOSPITAL REDRUTH

Wanted HOUSE SURGEON Lady September 1st or October 1st. 90 Beds £100 per annum with board and laundry.

Applications with testimonials to E. POPE. Hon Secretary.

WEST KENT GENERAL HOSPITAL
(Incorporated) Maidstone.
(135 Beds)

Applications are invited for the post of HOUSE SURGEON who must be a male of British nationality.

Salary at the rate of £175 per annum with board apartments and laundry.

Candidates must possess registered qualifications.

Applications stating qualifications and experience together with copies of testimonials should be sent to the undersigned immediately.

EDWARD J GREGG
House Governor and Secretary

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(220 Surgical and Medical Beds)

HOUSE SURGEON to Ophthalmic and Ear Nose and Throat Departments
Applications are invited from fully qualified men for the above post The appointment is for six months Salary at the rate of £150 per annum
Applications stating age together with copies of three recent testimonials should be sent to the undersigned as soon as possible
M H BOONE
July 29th 1938 Superintendent and Secretary

EAR AND THROAT HOSPITAL
Birmingham 3

FIRST HOUSE SURGEON required (resident) Must be fully qualified and with clinical experience Salary at the rate of £150 per annum with full board and residence Appointment for six months commencing October 1st Facilities for training for D L O
Applications and testimonials to be forwarded to the undersigned
W H LOMAS Secretary

EAR AND THROAT HOSPITAL
Birmingham 3

THIRD HOUSE SURGEON wanted (non resident) Must be qualified and with clinical experience Salary at the rate of £150 per annum with lunch on six week days and an allowance of £50 per annum in lieu of board and lodging Appointment for six months commencing October 1st *Candidates are eligible for election to* senior posts Facilities for training for D L O
Applications and testimonials to be forwarded to the undersigned
W H LOMAS Secretary

LEICESTER ROYAL INFIRMARY
(500 Beds)

RESIDENT RADIOLOGIST

Applications are invited for the above position vacant early in September
The successful candidate will be expected to act as House Physician to the Radiologists and assist in the diagnostic and therapeutic sides of the X ray Department
The appointment is for six months in the first instance and the salary is at the rate of £200 per annum together with board residence and laundry Candidates holding the Diploma of Radiology preferred but not essential
Applications giving full particulars as to age qualifications experience and accompanied by not more than three testimonial should be sent not later than August 15th to the House Governor and Secretary
July 29th 1938

LEEDS JEWISH HOSPITAL

Wanted October 1938 RESIDENT MEDICAL OFFICER (male) Salary £200 per annum The appointment is for six months but may be extended by mutual arrangement Candidates must be fully qualified Applications stating qualifications experience together with copies of testimonials should be sent to the undersigned by Friday August 26th
LILY CURITZ (Secretary)

LIVERPOOL MATERNITY HOSPITAL
Oxford Street

HOUSE SURGEON required for the six months commencing October 1st next salary at the rate of £90 per annum with board residence and laundry Previous experience as House Surgeon essential Membership of a Medical Defence Society is a *condition of appointment*
Applications stating age qualifications and experience together with copies of testimonials to be sent to the Honorary Secretary of the Medical Board on or before Friday August 26th

LEWIS HOSPITAL STORNOWAY
Isle of Lewis

Applications are invited for the post of HOUSE SURGEON Salary at the rate of £150 £200 per annum (according to experience) with board residence and laundry The appointment to be for six months and subject to renewal Duties to commence early in October
Application to be lodged with the Superintendent before August 7th from whom further particulars may be obtained

LINCFIELD EPILEPTIC COLONY
(150 adults 250 children)

ASSISTANT MEDICAL OFFICER required [illegible] preferably Salary £300 a year with board [illegible]
Applications stating age qualifications and experience together with copies of testimonials should reach the Medical Superintendent The Hospital Lincfield Surrey

MANCHESTER ROYAL INFIRMARY

MEDICAL CHIEF ASSISTANT (Non resident)

The Board of Management invite applications for the above appointment
Applicants must be registered medical practitioners Higher qualifications desirable
The candidate appointed will be attached to a medical unit and will be required to attend on seven half sessions per week of which at least four will be morning sessions Duties will include work in the In patient and Out patient departments and participation in teaching There will be facilities for research work
Salary £300 per annum The appointment will be for one year in the first instance but may be renewed for two further periods of one year subject to the provisions of the Bye Laws as to notice etc
Candidates should forward fifteen copies of their applications giving particulars of age experience etc together with copies of recent testimonials not later than 9 a m on Thursday August 18th to the undersigned from whom further information may be obtained
By Order
F J CABLE
General Superintendent and Secretary
July 25th 1938

MERTHYR GENERAL HOSPITAL
(118 Beds)

RESIDENT HOUSE SURGEON required for a period of six months
Salary at the rate of £150 per annum with board and laundry Applications stating age nationality qualifications and accompanied by three (copies only) recent testimonials should be addressed to the Secretary of the Merthyr General Hospital

PRESTON AND COUNTY OF LANCASTER QUEEN VICTORIA ROYAL INFIRMARY

RESIDENT OBSTETRICAL OFFICER

The Board of Management invite applications from *unmarried Medical Practitioners for the* above post with duties in the Maternity Hospital (43 beds) under the direction of the Consulting Obstetrical Surgeon Candidates should have had experience in dealing with emergency cases and in conducting ante natal and post natal clinics Twelve months engagement from October 1st 1938 Salary £300 per annum with board residence and washing
Applications stating age qualifications and *experience accompanied by copies of recent* testimonials to be forwarded to the undersigned on or before August 15th 1938
JOHN GIBSON
Superintendent and Secretary

ROYAL VICTORIA AND WEST HANTS HOSPITAL Bournemouth

The Board of Management will after the expiration of one month proceed to appoint an HONORARY ANAESTHETIST
Applications stating qualifications age and experience should be sent to the undersigned by August 30th 1938 Canvassing personally or otherwise will disqualify
By Order of the Board of Management
GORDON M SAUL
July 27th 1938 Secretary

ROYAL BUCKINGHAMSHIRE HOSPITAL
Aylesbury (115 Beds)

Applications are invited for the post of JUNIOR RESIDENT MEDICAL OFFICER (male) for four months commencing September 1st 1938 After this period the candidate appointed will be eligible for the Senior Post Salary £150 per annum with full board residence in own flat and laundry Previous Hospital experience is desirable
Opportunity will be afforded to undertake all branches of medical practice including anaesthesia and work with London consultants
Selected candidates will be required to attend for interview by the Medical Committee on Wednesday August 17th 1938
Applications should be sent to the undersigned by August 10th 1938
F G DAWES Secretary

ROYAL EYE HOSPITAL
Pevensey Road Eastbourne

NON RESIDENT HOUSE SURGEON required to commence duty in August The appointment will be for six months in the first instance
Salary £100 per annum and allowance in lieu of board residence £175 per annum
Application stating age qualifications and ophthalmic experience together with recent testimonials should reach the undersigned as soon as possible
Before an appointment candidates have to be interviewed by the Hon Surgeon from whom further particulars could be obtained in person
H BYGRAVE Hon Secretary

ROYAL BERKSHIRE HOSPITAL
Reading (338 Beds)

Applications are invited for the post of RESIDENT ANAESTHETIST (male) which is vacant on August 6th 1938
The appointment is for six months in the first instance Candidates must be fully qualified registered and have had considerable experience in the administration of anaesthetics
A salary of £250 p a with board residence and laundry will be paid to the candidate possessing suitable qualifications for the post
Applications stating age and experience with copies of not more than three recent testimonials to be sent to the undersigned as soon as possible
H E RYAN
Secretary and House Governor

ROYAL BERKSHIRE HOSPITAL
Reading (338 Beds)

ASSISTANT RADIOLOGIST required for full time duty Salary £400-£500 per annum according to qualifications Candidates must be fully qualified Medical Practitioners and have had Hospital experience in Radiology and Deep Therapy and possess the D M R E qualification
Applications together with not less than six copies of testimonials to be sent to the undersigned on or before August 30th 1938
H E RYAN
Secretary and House Governor

ROYAL WEST SUSSEX HOSPITAL
Chichester
(114 Beds including 12 in the Private Patients Block Two Residents)

SENIOR HOUSE SURGEON required immediately Salary at the rate of £175 per annum with board residence and laundry
Applications should be sent to the undersigned together with not less than three recent testimonials stating age nationality experience and qualifications
By Order of the Board of Management
J CONON INCE
July 27th 1938 Secretary

ROYAL LANCASTER INFIRMARY
Lancaster
(140 Beds) Four Residents

Applications are invited for the post of SENIOR HOUSE SURGEON Salary £200 per annum with board residence and laundry The appointment is for six months in the first place and may be renewed for a further six months
Applications stating age qualifications experience and nationality together with copies of two recent testimonials to be sent to the undersigned
FRANK A MILNES
Superintendent Secretary

ROYAL LANCASTER INFIRMARY
Lancaster
(140 Beds) Four Residents

Applications are invited for the post of SECOND HOUSE SURGEON Salary £175 per annum with board residence and laundry The appointment is for six months
Applications stating age qualifications experience and nationality together with copies of two recent testimonials to be sent to the undersigned
FRANK A MILNES
Superintendent Secretary

ROYAL LIVERPOOL BABIES HOSPITAL
Woolton

Required RESIDENT MEDICAL OFFICER for the above Hospital Appointment commencing October 1st Salary at the rate of £175 per annum for the first six months £150 per annum for the second six months
Applications with copies of testimonials to be sent to the Honorary Secretary of the Medical Board 9 Copperas Hill Liverpool 3 not later than August 20th

ROYAL CORNWALL INFIRMARY TRURO
(84 Beds)

HOUSE SURGEON (male) required who has had experience of Anaesthetics to commence duty on August 1st next Salary £170 per annum with board and washing
Apply with copies of three recent testimonials to the Secretary of whom further particulars may be obtained
W F GRENFELL
Truro Hon Secretary
July 4th 1938

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN
Brighton (100 Beds)

HOUSE PHYSICIAN (male) required at the rate of £150 per annum with board and laundry No canvassing allowed Registered for the D C H Diploma
Applications in writing accompanied by testimonials should be sent to Mr Percy F Secretary Dyke Road Brighton
July 25th 1938

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1 (in the case of Scottish appointments, with the Scottish Secretary, 7, Drumsheugh Gardens, Edinburgh).

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—*(cont'd)*	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY *(Medical Officer)*	MID RHONDDA MEDICAL AID SOCIETY *(Assistant Medical Officer)*	COUNTY OF ROXBURGH *(Assistant Medical Officer of Health)*
BLAENAVON MEDICAL SOCIETY *(Chief Medical Officer)*	NEATH AND DISTRICT *(Medical Attendant)*	**DISPENSARY APPOINTMENTS**
GILFACH GOCH GLAMORGAN *(Workmen's Medical Scheme)*	OGMORE VALLEY GLAMORGAN *(Hon. Local Consulting Medical Aid Society)* *(Workmen's Medical Scheme)*	LIMERICK CITY *(Assistant Dispensary Medical Officers)*
LLWYNYPIA CLYDACH VALE PENYGRAIG GLAMORGAN *(Workmen's Medical Scheme)*	OAKDALE MON. *(Medical Officer of Medical Aid Association)*	

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

Town or District	Hon. Sec. of Division or Branch	Town or District	Hon. Sec. of Division or Branch	Town or District	Hon. Sec. of Division or Branch
NEW SOUTH WALES *(All Friendly Society Appointments)*	The Medical Secretary, New South Wales Branch, 135 Macquarie Street, Sydney, N.S.W.	**VICTORIA** *(All Institutional, Medical, Dispensary)*	The Hon. Secretary, Victorian Branch, British Medical Association, Medical Society Hall, Albert St., East Melbourne, Victoria.	**WESTERN AUSTRALIA** *(Contract and Private Practice)*	The Hon. Sec., Western Australian Branch, British Medical Association, Shell House, 20 St. George's Terrace, Perth, Western Australia.
QUEENSLAND *(Brisbane Ambulance Friendly Society Institute)*	The Hon. Sec., Queensland Branch, British Medical Association, B.M.A. House, 6 Wickham Terrace, Brisbane, Q.				

July 30 1938 By Order of the Council G. C. ANDERSON, *Secretary*

BUTE HOSPITAL, LUTON

HOUSE SURGEON (male) wanted to commence duties as soon as possible. Salary £1 0 per annum with board, residence and laundry.

Applications stating age, nationality and experience, together with copies of not more than three recent testimonials, should be sent immediately to the Secretary of the Medical Advisory Committee of the Hospital.

R. E. LINGARD,
Secretary, Bute Hospital.

COSSHAM MEMORIAL HOSPITAL, Kingswood, Bristol

Wanted an additional HONORARY SURGEON for general surgical work.

Apply with full particulars, to the Secretary.

ECCLES AND PATRICROFT HOSPITAL, near Manchester

JUNIOR RESIDENT SURGEON required, September 1st 1938. Appointment in first instance for six months. Good surgical work. Salary at rate of £150 per annum, all emoluments. Apply with references to Secretary.

KELLING SANATORIUM, HOLT, NORFOLK

The Committee of Management of the Kelling Sanatorium (Tuberculosis) desire applications from Medical Practitioners with suitable qualifications for the post of MEDICAL SUPERINTENDENT of Kelling Sanatorium, Holt, Norfolk (169 bed resident). Preference will be given to applicants between the ages of thirty-five and fifty who have had administrative experience, knowledge of modern methods of Sanatorium treatment and X-ray work. The position is open as from October 1st 1938. Salary £600 per annum with excellent house in sanatorium grounds. A Superannuation Scheme in force.

Application, stating qualifications to either with three recent testimonials, should be sent to the Secretary, Kelling Sanatorium, Holt, Norfolk, not later than September 3rd 1938.

ROTHERHAM HOSPITAL
(130 Beds)

CASUALTY HOUSE SURGEON

Applications are invited from qualified men for the post of Casualty House Surgeon. Duties to commence as soon as possible. Will include work in the Ear, Nose and Throat Department. Excellent experience may be gained in the treatment of fractures. Salary £150 per annum with full board, residence and laundry.

Applications with copies of recent testimonials should be sent to the Secretary, C. W. Reeves, 8 Moorgate Street, Rotherham, Yorks.

LEICESTER ROYAL INFIRMARY
(400 Beds)

Staff: 4 H.S.'s, 1 H.P., 2 C.O.'s, 3 Res. Anaesth., 1 Res. R.d.

VACANCIES FOR OCTOBER 1st 1938.

HOUSE SURGEON

Salary £125 per annum. Applicants must have held a Resident Hospital post or had similar experience of Hospital work.

Unsuccessful candidates will be considered for Senior Casualty Officership if they so intimate.

CASUALTY OFFICERS

Senior Casualty Officer: Fellowship standard. Salary £125 per annum.

Junior Casualty Officer: Salary £100 per annum.

HOUSE PHYSICIANCIES (2).

Salary £125 per annum. Applicants must have held a Resident Hospital post or had similar experience of Hospital work.

RESIDENT ANAESTHETIST

Salary at the rate of £150 per annum for first six months, £200 per annum for second six months, £225 for third six months, £250 fourth six months.

Applications with copies of three recent testimonials to be forwarded to the House Governor and Secretary not later than August 13th.

Appointments for six months will be made on August 24th.

July 14th 1938.

ROCHDALE INFIRMARY AND DISPENSARY
(110 Beds. Three Residents.)

The Board of Management invites applications for the appointment of HOUSE PHYSICIAN (male). The salary attached to the appointment is at the rate of £1 0 per annum with board, residence, laundry. The duties include work in the Out-Patient, Aural, Ophthalmic and Casualty departments, as well as in the wards. The Hospital covers a large industrial area and affords excellent opportunity for experience.

Applications, stating age, nationality, etc., with three recent testimonials to be sent to the Secretary, Rochdale Infirmary.

Infirmary Office, Rochdale. W. WYNNE, Secretary.

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL.

Applications are invited from duly registered candidates (male and unmarried) for

a HOUSE SURGEON, salary £1 0 per annum from August 1st,

a HOUSE PHYSICIAN, salary £125 per annum from July 1st.

The appointments are for six months and include apartments, board and laundry. The House Surgeon must be an experienced anæsthetist.

All applications stating age, etc., with copies of testimonials to be sent to me at once.

FRANK H. TOONE,
9 Leicester Road, Loughborough. Secretary.

MANCHESTER ROYAL EYE HOSPITAL.

JUNIOR HOUSE SURGEON required. Salary £1 0 per annum with residence, board, etc.

Applications (with copies of testimonials) endorsed "House Surgeon," to be addressed to the undermentioned.

H. R. NORTH,
Gen. Supt. and Secretary.

(*Appointments continued on p. 40.*)

CHARGES for ADVERTISEMENTS

CIRCULATION OF THIS ISSUE—41,000 COPIES

CLASSIFIED — The *Minimum* charge is 9s, which covers up to 30 words Extra words are charged 1/6 for 5 or less

Example 33 words would be charged as for 35 Name and address should be included when counting words for cost

If *Box Number* is used it should be reckoned as 5 words in the total

Replies should be addressed separately to each Box No care of this office

Advertisements, accompanied by remittance, should reach this office not later than NOON—TUESDAY, TO ENSURE INSERTION IN CURRENT ISSUE. Please write CLEARLY

DISPLAYED — Whole page £24, and pro rata to one-eighth page Special positions, dates and rates on application

Every effort is made to ensure the accuracy of advertisements appearing in the Journal No recommendation is implied by acceptance and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement

ADVERTISEMENT MANAGER, BRITISH MEDICAL JOURNAL, B M A HOUSE, TAVISTOCK SQUARE, W.C 1

EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA TOBACCO GOOD SMOKES at a low price quality guaranteed Box of 50 for 25/ post free — Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"BIZIM" CIGARETTES THESE luxurious deliciously satisfying smokes 50 s or 100 s at 6/3 per 100 58/6 per 1 000 post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"SOLACE CIRCLES" TOBACCO THE finest combination ever discovered of Choice Natural Tobaccos Every pipeful an indescribable pleasure 1/6 per ¼ lb tin post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

MISCH—THESE DESIGNATORY letters after a CHIROPODIST'S name indicate that he or she is a MEMBER of the INCORPORATED SOCIETY OF CHIROPODISTS Founded 1912 Patron His Grace the Duke of Portland K G P C G C V O Panel of Examiners in Medical Subjects approved by the Royal College of Physicians and Royal College of Surgeons of England respectively The regulations of the Society PROHIBIT Members from advertising but names and addresses of Chiropodists in the district who are members of the Society and also information regarding training for Membership may be obtained from the Secretary Incorporated Society of Chiropodists 1 Cavendish Square London W 1 (Telephone Langham 4228)

OFFERED IN DEVONSHIRE FOR DELICATE child requiring individual care ACCOMMODATION in home of experienced medical psychiatrist Young family Educational facilities Lovely surroundings Terms by arrangement —Address No 7816 B M A House Tavistock Square W C 1

TYPEWRITING DUPLICATING TRANSLATIONS —Experts in Medical work TESTIMONIALS THESES etc accurately copied in style that commands attention —WESTERN BUREAU Dorset House Gloucester Street London W C 1 (c/o B M A House) EUSton 1754

TYPEWRITING —SPECIALISTS IN TYPING Medical and scientific papers lectures theses and books Shorthand typists always available Proof reading indexing — MARGARET WATSON LTD 16 Palace Chambers Bridge Street S W 1 WHitehall 3838

ASSISTANCIES

WANTED IMMEDIATELY OUTDOOR male ASSISTANT for colliery practice in Co Durham to reside at branch Salary £350 all found (including board) plus £50 car allowance — Address No 7743 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY INDOOR AND Outdoor ASSISTANTS for Town and Country Practices with and without view to Partnership Good salaries offered State full particulars —BRITISH MEDICAL BUREAU 33 Cross Street Manchester 2

WANTED AT END OF YEAR WELL qualified and experienced ASSISTANT with view to Partnership in good-class mixed practice 8 miles west of Marble Arch —Apply with full particulars Address No 7611 B M A House Tavistock Square W C 1

WANTED END OF AUGUST YOUNG male indoor ASSISTANT English or Scotch preferred for mixed practice in North London Time for reading Car provided Salary £300 —Address No 7825 B M A House Tavistock Square W C 1

WANTED ASSISTANT OUTDOOR MALE single English or Scotch for industrial and private practice Yorkshire Age under 30 Salary £300 and all found with car allowance —Address No 7623 B M A House Tavistock Square W C 1

WANTED MALE ASSISTANT BRITISH Isles for South Yorkshire town Indoor car dispenser hospital excellent experience Salary £300-£350 p a —Address No 7801 B M A House Tavistock Square W C 1

WANTED OUTDOOR MALE ASSISTANT for panel and private practice by Scottish doctor in the Midlands Salary £400 per annum Local bond —Address No 7552 B M A House Tavistock Square W C 1

WANTED MALE OUTDOOR UNMARRIED ASSISTANT near Cardiff Salary to experience —minimum £350 with [illegible] rooms and attendance and car provided Driving licence essential Young energetic person of private nationality and age and furnish references and photograph with application —Address No 7809 B M A. House Tavistock Square W C 1

WANTED MALE ASSISTANT COUNTRY practice Shropshire Indoor (non-resident household) Car provided Salary £ according to experience Young man [illegible] sport preferred —Address No 611 B M A House Tavistock Square W C 1

WANTED OUTDOOR ASSISTANT at once Panel and private practice North Manchester English or Scotch State married or single Salary £500 p a and rooms Private —Address No 7816 B M A House Tavistock Square W C 1

WANTED AN ASSISTANT WITH VIEW to partnership and ultimate succession to well-established country practice in West Sussex Married man prepared to settle down and has own family State essential particulars and give references Address No 7832 B M A House Tavistock Square W C 1

WANTED IN COUNTRY TOWN IN MIDLANDS male Outdoor ASSISTANT £400 to £450 according to experience Car provided Ample time for reading —Address No B M A House Tavistock Square W C 1

ASSISTANT, EITHER SEX UNDER 30 with view wanted in large S E Practice E N T Gynae or children's experience desirable not essential good prospects Full particulars photo to—Address No 804 B M A House Tavistock Square W C 1

ASSISTANT REQUIRED MALE SCOTTISH or English unmarried young [illegible] experience general practice preferred Own [illegible] branch Kent border £350 per annum and £50 car allowance and garage —Address No B M A House Tavistock Square W C 1

ASSISTANT OUTDOOR WANTED IN industrial district Essex Married [illegible] experienced G P Young energetic English [illegible] required Salary £430 £50 car allowance furnished house Early view if desired—Address No 7831 B M A House Tavistock Square W C 1

IN GREATER LONDON—YOUNG ASSISTANT Protestant British (including Channel Islands) married or about to be Large general practice If satisfactory junior partnership Salary £400 with free house Car required Full copies of testimonials —Address No [illegible] B M A House Tavistock Square W C 1

MB, CH B OVER THREE YEARS' experience House Surgeon [illegible] ASSISTANTSHIP preferably in North Tyne district or Co Durham Free to [illegible] abstainer Energetic Good references —Address No 7819 B M A House Tavistock Square W C 1

NORTH WALES—WANTED ASSISTANT indoor or outdoor Country town [illegible] Welsh speaking essential Drive car Full particulars to—CHEMICALS 40 Hamilton Street Hoole Chester

LOCUMS

WANTED LOCUM WITH EXPERIENCE for Eye Ear and Throat House at Londonderry Northern Ireland Mid August to September Hospital £5 5s 0d per week private practice by arrangement Accommodation provided and all found —Reply to Secretary Eye Ear and Throat Hospital Londonderry Northern Ireland

WANTED LOCUM OP HOSPITAL LOCUM for two to three weeks — or October in Lancashire [illegible] three guineas per week or perhaps [illegible] Own car essential —Address No [illegible] B M A House Tavistock Square W C 1

WANTED LOCUM FOR TWO [illegible] Oct 2nd to 16th in mixed practice near Manchester [illegible] —Address No 7815 B M A House Tavistock Square W C 1

WANTED LOCUM IMMEDIATELY Vale of Neath [illegible] weeks weekly with all found State [illegible] cations Usual bond —Address No House Tavistock Square W C 1

HOLIDAY LOCUMS AND ASSISTANTS—Experienced ladies and gentlemen available immediate or near future are invited to communicate with—THE MEDICAL AGENCY Ltd 36/38 Southampton Street Strand W C

LOCUM MEDICAL OFFICER WANTED August 16th one to two months Salary to ten guineas weekly according to experience with board-residence—Apply MEDICAL SUPERINTENDENT Cherry Knowle Ryhope Sunderland

LOCUM REQUIRED FOR TWO WEEKS Second half August or Sept Huddersfield Car essential but allowance if using own car—Address No 7 BMA House Tavistock Square W C 1

MEDICAL POSTS DISPENSERS

A LADY DISPENSER BOOKKEEPER SUPplies female assistant if so required qualified with practical experience in private practice and dispensary work also trained in Bacteriological Laboratory of the LONDON COLLEGE OF PHARMACY FOR WOMEN Preparations for Examinations—Write or wire to-day (Bayswater 0989) Secretary 7 Westbourne Park Road W 2

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at CORDON HALL SCHOOL OF PHARMACY and Secretary Dispensers can be supplied to Doctors Sessions January April and September—Apply Principal School of Pharmacy Drayton House Gordon Street W C 1 Phone Euston 3990

DISPENSING CAREER FOR YOUNG LADIES FULL TRAINING for Apothecaries Hall Certificate Examinations every three months—Apply The Principal Central School of Pharmacy 17 Victoria Street London S W 1 Telephone Victoria 1441

DISPENSER (HALL) AGED 35 SEEKS POST with Doctor or Hospital Will make himself generally useful Recommended doctor's highest London references chauffeur guaranteed by firm of solicitors—Address No 7605 BMA House Tavistock Square W C 1

DOCTORS REQUIRING QUALIFIED Dispensers Nurse Dispensers Secretary Assistants or Chauffeur-Dispensers are invited to write or phone Temple Bar 4668 THE DISPENSERS BUREAU 3 Lindsay House 11 Whitcomb Street London W C 2

LADY B.Sc. QUALIFIED AS BIO-CHEMIST (Company's) for Food and Urea Analysis) experienced good references interested in research requires POST in hospital or private work in Provinces—Address No 7593 BMA House Tavistock Square W C 1

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION 66 Eccleston Square S W 1 (Telephone Victoria 2—) supplies trained Dispensers Bookkeepers Laboratory assistants Secretary Attendants Male Nurses Female Nurses Special Treatment Orderlies Dental Clerk Orderlies Porters Caretakers etc without charge to prospective employers

YOUNG GENTLEWOMAN DESIRES POST AS NURSE SECRETARY Hospital experience Good shorthand typing very interested in medical and surgical work and keen to be of practical assistance—Address No 7581 BMA House Tavistock Square W C 1

PARTNERSHIPS

WANTED BETTER-CLASS PARTNERSHIP by experienced practitioner age 47 in Oxford neighbourhood £1,500-£2,000—Address No 7587 BMA House Tavistock Square W C 1

APPLICATIONS ARE INVITED FOR A PARTNER in very old-established substantial male not over 33 Protestant short probationary partnership valuable appointments held Unique security and prospects Share worth £1,250 to £2,500 to suitable man two years purchase—Address No 7614 BMA House Tavistock Square W C 1

MIDLAND CITY —PARTNERSHIP IN steadily increasing Practice Panel 2,500 £21 List year Half-share at £3,000 or near offer Choice of house—THE WESTERN MEDICAL AGENCY 22 Clare Street Bristol 1 (Bristol 24689) and 15 Bedford Street Strand W C 2 (Temple Bar 4538)

MD OR MRCP WANTED TO JOIN three others in South Coast practice SHARE equal one-seventh of about £7,800 rising to equality Good house for purchase Hospital facilities available—Address No 7581 BMA House Tavistock Square W C 1

PARTNERSHIP WANTED 2/3 MONTHS preliminary Assistantship (locum if possible) September Ex H S Orthopaedic Casualty Surgical Hons Mental Hospital appointment MB ChB (Cape) Cath 30 yrs Surgical scope—Address No 619 BMA House Tavistock Square W C 1

SOMERSET COAST — PARTNERSHIP IN country town Man keen on medicine and surgery wanted to take patients Panel 1,400 Over £3,000 p a Three-share at two years purchase House for sale or rent—THE WESTERN MEDICAL AGENCY Clare Street Bristol 1 (Bristol 24689) and 15 Bedford Street Strand W C 2 (Temple Bar 4538)

THIRD PARTNER REQUIRED RAPIDLY increasing practice near Manchester Share exceeding £1,000 Hospital practice £1,200 including book debts Great scope Large housing estate Immediate investigation invited Salary offered six weeks—Address No 7619 BMA House Tavistock Square W C 1

URGENT—ONE-THIRD SHARE IN INDUSTrial practice near London Two cars provided Last year's receipts over £1,100 increasing House rent free Unmarried Scot Experienced G P Adequate research and journal—Address No 7610 BMA House Tavistock Square W C 1

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed

Applications should be separately enclosed and clearly addressed

Address No
B.M.A. House
Tavistock Square W C 1

All communications are forwarded to advertisers under plain cover

PRACTICES

WANTED IMMEDIATELY PRACTICE London Income £1,500 upwards Panel essential Ample capital No agents—Address No 7616 BMA House Tavistock Square W C 1

WANTED IMMEDIATELY UNOPPOSED country PRACTICE from £1,000-£1,500 p a with Panel Good garden and house essential—Address No 7580 BMA House Tavistock Square W C 1

WANTED GENERAL PRACTICE IN London or one about £2,000 per annum with a substantial panel Preferably N W or S W Cash available—Address No 7607 BMA House Tavistock Square W C 1

FOR SALE AT ATHLONE, EIRE THE Medical PRACTICE of the late Dr Thomas P MacDonnell The Purchaser would have the option of purchasing the residence which contains a theatre private hospital office waiting room compounding room and laboratory dark room and violet ray and x-ray apparatus and household furniture —For full particulars apply to FAIR AND MURTAGH Solicitors Athlone

FOR SALE OLD-ESTABLISHED HIGH class PRACTICE in fashionable seaside resort South Coast Excellent house and garden either let Another convenient house can be had Practice £1,350 Ample scope for increase and for surgery hospital and private Two years purchase—Address No 7624 BMA House Tavistock Square, W C 1

FOR SALE—COUNTRY TOWN MIDLANDS PRACTICE Gross income £3,500 Ideal for partnership Panel almost 3,000 Modern house and garden with tennis court Educational facilities unusually ample Cottage hospital Wide scope for surgery Premium 4 years purchase House £2,500 Only applicants with some capital please—Address No 7589 BMA House Tavistock Square W C 1

FOR SALE PRACTICE OF £1,400 SUITABLE for man and wife in North Midlands. Two years purchase Panel 1,100 Good scope—Address No 608 BMA House Tavistock Square W C 1

MIDLAND CITY —WOMAN'S PRACTICE This Practice can easily be amalgamated with the above and worked as a Partnership if required Receipt average £850 p a increasing Panel 900 Good scope Premium £1,800 House rent—THE WESTERN MEDICAL AGENCY Clare Street, Bristol 1 (Bristol 24689) and 15 Bedford Street Strand W C (Temple Bar 4538)

MIDLANDS CITY —MIDDLE AND WORKING-class PRACTICE in pleasant suburb Suitable for two friends in partnership or may be run by one man and an assistant Cash receipts last year £3,000 Part £1,850 Good prospects of steady increase Excellent modern corner house two reception five bedroom separate profes sional room double garage included in dem Also branch surgery—both properties for sale Premium practice £1,000—Address No 1 BMA House Tavistock Square W C 1

MIDLAND CITY —STEADILY INCREASING PRACTICE Average £1,050 p a (Recent £1,151 taxes) Panel 1,100 Well established Premium £5,250 House in excellent repair—THE WESTERN MEDICAL AGENCY 22 Clare Street Bristol 1 (Bristol 24689) and 15 Bedford Street Strand W C (Temple Bar 4538)

NEWCASTLE-ON-TYNE —WANTED PRACTICE within 10 miles Newcastle-on-Tyne Income up to £1,400 Panel Educational facilities Garden—Address No 605 BMA House Tavistock Square W C 1

PRACTICE IN COUNTRY DISTRICT 10 miles south of Glasgow for sale Income approximately £1,400 Good house also for sale Substantial Panel Good introduction given—Apply CRAWFORD HERRON AND CRAWFORD Solicitors 5 West George Street Glasgow C 2

SOUTH COAST — PART PRACTICE TO-gether with desirable CORNER HOUSE garden garage Excellent position Suit man or woman Might consider partnership House 1,200 Share by arrangement—Address No 7581 BMA House Tavistock Square W C 1

WEST RIDING OLD-ESTABLISHED PRACTICE averaging £1,400 Panel 1,400 increasing Ample scope Premium £2,500 Pleasant house tennis freehold £1,700—Address No 7611 BMA House Tavistock Square W C 1

12 MILES CHARING CROSS RAPIDLY increasing area Panel 1,170 Private £1,000 Dentist on premises House freehold to let or sell—Address No 7 BMA House Tavistock Square W C 1

HOUSES CONSULTING ROOMS

ESTABLISHED 1845

ELLIOTT, SON & BOYTON

(H C ROWE F.S.I.)

VEREST, CAVENDISH SQUARE, W.1

Estate Agents Auctioneers and Surveyors

are the BEST LOCAL AGENTS for HOUSES and CONSULTING ROOMS in th Harley Wimpole, Queen Anne and other streets in the Cavendish Square district Valuations for all purposes

Telephone 3704 MAYFAIR

DEVONSHIRE STREET TWO DOORS FROM Harley Street an excellen CONSULTING SUITE of three good rooms in one of the finest professional houses Rent only £2.0 p a or single rooms may be had at £100 p a with plate on the door and all services. Vacant Sept 29th 1938—Address No 7610 BMA House Tavistock Square W C 1

DENTAL SURGEON CAN OFFER SURGERY WAITING-ROOM LIVING ACCOMMODATION etc in growing seaside town—Address No 7606 B.M.A. House, Tavistock Square W C 1

ESTABLISHED 1860

BEDFORD & CO.

Surveyors Auctioneers and Estate Agents
10 WIGMORE STREET
CAVENDISH SQUARE W 1

Specialists in Professional Houses, Flats, and Consulting Rooms
in Harley Street and leading Medical Positions
Telephone Langham 3927 and 3928

DIRECTLY ADJOINING SLOANE SQUARE — A delightful HOUSE in perfect order just re decorated Accommodation consists of 4 fine living room including ideal consulting and waiting room on the ground floor Upper part perfect for private residence Splendid price £2 950 for long lease at low ground rent — Apply Sole Agents J EWART CHIES AND PARTNERS 2 Hans Road S W 3 Ken 0001

HARLEY STREET AND DISTRICT — A NUMber of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application — FLOOD AND Co 10 Henrietta Place Cavendish Square W 1 Lang 2001

QUEEN ANNE STREET — ONLY £40 P A secures exceptionally fine CONSULTING ROOM for use when required all services Residential —Address No 6355 I Square W C 1

SURREY — GROWING DISTRICT DOCTOR S HOUSE to Rent 3 s Cd per week inclusive 4 l dr ms garage garden Panel 41 increasing and no less did £90 last year Will accept £50 BM CLVX London W C 1

HARLEY STREET AND MEDICAL DISTRICT

For all types of available accommodation

BERTRAM & CO, Surveyors and Estate Agents
89 Connaught Street W 2 Paddington 1642 3

IMPORTANT
to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE *Specially Cut* Fitted and Moulded to each individual figure made from *Finest Quality* Materials and in the Best Possible *Style* cost no more than mass production ready made clothes

The invaluable Practical Experience and Advice of our 14 Expert West End Cutters and Fitters is always at your disposal

ALL HALZONE *Productions are* HAND FINISHED IN EVERY ESSENTIAL DETAIL

SPECIAL OFFER

JACKET & VEST (in black or grey) £4 4s
Lined best quality Art Satin Art Silk or Alpaca
SOLID FANCY WORSTED TROUSERS £2 2
The ideal Suit for Professional or Business wear
LOUNGE SUITS *to measure from* £6 6
OVERCOATS £5 5s
DINNER SUITS £8 8s
DRESS SUITS from £10 10s
PLUS FOUR SUITS from £6 6s
THE IDEAL Suit for Country and Sporting Wear
COLD MEDAL RIDING BREECHES from £2 2s
RIDING HABITS £8 8s
RIDING BOOTS £3 3s
COSTUMES & LONG COATS £6 6

UNSOLICITED APPRECIATION

I strongly advise all medical men who wish to have satisfaction to patronise Harry Hall Ltd as all the clothes I have had from them during 35 years have been perfect in Fit Cut and Finish
(Signed) S J A MA MB F R C P S

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self measurement Form or Pattern Garments
Visitor to London can order and fit same day
Special Lettering could then be cut and Perfect Fitting Clothes supplied after without trying on

HARRY HALL, LTD

Governing Director Harry Hall
LATE *Coat Breeche Habit and Costume Specialist*
181 OXFORD ST W 1 119 CHEAPSIDE E C 2
Telephones
GERrard 4905 4906 and 4907 NATional 8696/7
Makers of Finest Quality Bespoke Civil Sporting and Hunting Clothes for Ladies and Gentlemen
Highest Awards 12 Gold Medal
Est over 10 years

MISCELLANEOUS SALES, etc

INCOME TAX
YOUR burden is OUR business
Tax Specialists to the Medical Profession
HARDY & HARDY
19 CHANCERY LANE LONDON W C 2
Telephone Holborn 6659
Write for free copy of Advice on Income Tax

COVERS FOR BINDING

Vols I and II of the BRITISH MEDICAL JOURNAL for 1937 and previous years can be had price 2s 6d by parcel post 2s 10d each

Orders with appropriate remittance should be addressed to

THE SECRETARY
BRITISH MEDICAL JOURNAL
B M A HOUSE TAVISTOCK SQ
LONDON W C 1

APPOINTMENTS—Contd

DREADNOUGHT HOSPITAL
Greenwich S E 10
(Seamen's Hospital Society)

Half time Non Resident Male RECEIVING *ROOM OFFICER required from September 1st* for six months Morning or afternoon sessions with alternate Saturdays 9 a m to 12 *noon* Previous experience in residential posts essential The post is suitable for those studying for higher examinations Salary at the rate of £150 per annum with meals

Application stating age nationality and experience accompanied by copies of testimonials to be sent at once to the undersigned

F A LYON Secretary

July 30th 1938

SMALL ADVERTISEMENT FOR INSERTION IN BRITISH MEDICAL JOURNAL.

The MINIMUM charge is 9s which covers up to 30 words Extra words are charged 1s 6d for 5 or less Example 33 words would be charged as for 35 Name and address should be included when counting words for cost

If BOX NUMBER is used it should be reckoned as 5 words in the total

PLEASE WRITE CLEARLY—ONE WORD IN EACH SPACE

1						
					(30 words)	9/
						10/6
						12/
						13/6
10						15/

To the Advertisement Manager BRITISH MEDICAL JOURNAL B M A House Tavistock Square, London, W C 1

Please insert my advertisement in issues Name
Address

I enclose postal order value £

Date

KENT COUNTY COUNCIL

PUBLIC HEALTH DEPARTMENT

CONSULTANT OPHTHALMIC SURGEON

The County Council invites applications from registered medical practitioners (not over 45) qualified and experienced in ophthalmic work for appointment as Consultant in Ophthalmic Surgery to the Council's Ophthalmic Scheme. The Consultant appointed will be required (a) to attend cases in the Urban Districts of Chatham and Sevenoaks and Swanscombe (b) to receive either in his own or in other suitable premises and (c) to advise and (d) to appear as an expert witness when required by the County Council in matters of ophthalmic importance.

Consultations will be arranged by medical practitioners but the consultant will be required to attend cases in the case of the County Medical Officer and in accordance with such other requirements as may be prescribed from time to time by him.

The remuneration of the consultant will be as follows:

	£	s	d
For consultations at or within one mile of the County Hall	2	2	0
Up to 5 miles	3	3	0
From 5 to 10 miles	4	4	0
From 10 to 15 miles	5	5	0
Over 15 miles	6	6	0

The appointment will be at the pleasure of the County Council and the arrangement will be reviewed at the end of the first year.

Forms of application and if required further details of the appointment can be obtained from the County Medical Officer, Sessions House, Maidstone, to whom completed application forms should be returned not later than August 11th, 1938.

W. L. PLATTS,
Clerk of the County Council.

Sessions House, Maidstone.
July 26th, 1938.

LANCASHIRE COUNTY COUNCIL

WHISTON COUNTY HOSPITAL, Near Prescot

APPOINTMENT OF RESIDENT SURGICAL OFFICER

Applications are invited for the appointment of Resident Surgical Officer (unmarried) at the Whiston County Hospital, near Prescot (700 beds).

Applicants must be Fellows of the Royal College of Surgeons or hold Degrees or Diplomas of similar standing and must be capable of dealing with surgical emergencies.

The salary is at the rate of £400 per annum together with the usual residential emoluments. The appointment is for a period of one year in the first instance but may be renewed for a further year only.

Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom applications must be returned not later than August 31st, 1938.

COUNTY OFFICES, PRESTON. GEORGE ETHERTON, Clerk of the County Council.

July 27th, 1938.

LANCASHIRE COUNTY COUNCIL

WHISTON COUNTY HOSPITAL, Near Prescot

APPOINTMENT OF RESIDENT MEDICAL OFFICER

Applications are invited for the appointment of Resident Medical Officer (unmarried) at the Whiston County Hospital, near Prescot (500 beds).

Applicants must have held previous hospital appointments in which they have gained experience in clinical medicine and pathology and they should hold one of the higher medical qualifications.

The salary is at the rate of £400 per annum together with the usual residential emoluments. The appointment is for a period of one year in the first instance but may be renewed for a further year only.

Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom all applications must be returned not later than August 31st, 1938.

COUNTY OFFICES, PRESTON. GEORGE ETHERTON, Clerk of the County Council.

July 28th, 1938.

EAST HAM MEMORIAL HOSPITAL, Shrewsbury Road, E.7 (104 Beds)

Applications are invited for the post of HOUSE PHYSICIAN (male). The appointment is for six months commencing September 1st.

Salary at the rate of £150 per annum with board, residence and laundry.

Applications stating age, nationality, experience and full particulars, together with copies of three testimonials, should reach the undersigned by August 18th.

REGINALD PERRY,
Secretary.

LANCASHIRE COUNTY COUNCIL

WHISTON COUNTY HOSPITAL, Near Prescot

VISITING RADIOLOGIST

Applications are invited for the appointment of a Visiting Radiologist (Part-time) at the Whiston County Hospital, near Prescot. Remuneration at the rate of 3 guineas per session.

Application forms and terms of appointment may be obtained from the County Medical Officer of Health and Medical Department, County Offices, Preston, to whom all applications must be returned not later than August 31st, 1938.

COUNTY OFFICES, PRESTON. GEORGE ETHERTON, Clerk of the County Council.

July 26th, 1938.

MILLER GENERAL HOSPITAL, Crown Road, S.E.10

Applications are invited for the following posts:

HOUSE PHYSICIAN (male, unmarried). Salary £100 per annum.

HOUSE SURGEON (male, unmarried). Salary £100 per annum.

CASUALTY OFFICER (male), part-time, after recognition. Salary £150 per annum, non-resident.

Fuller particulars on application.

The appointments are for six months from October 1st, 1938. There are six Resident Officers.

Application forms can be obtained from the Secretary and must be returned not later than August 20th, 1938.

August 3rd, 1938.

THE PRINCE OF WALES'S GENERAL HOSPITAL, London, N.15

The following Resident Posts will be vacant on September 1st next:

(a) One JUNIOR HOUSE PHYSICIAN.
(b) Two JUNIOR HOUSE SURGEONS.

Salary at the rate of £90 per annum, board, residence and laundry. Appointments held for six months, but holders are eligible for a further term as Senior.

Candidates (male and unmarried) must be fully qualified and registered, and applications (on the prescribed form), together with copies of three recent testimonials, should be sent to the undersigned on or before August 31st, 1938.

J. C. BURDETT,
July 21st, 1938. Director and House Governor.

THE PRINCE OF WALES'S GENERAL HOSPITAL, LONDON, N.15

Applications are invited for the appointment of HONORARY CLINICAL ASSISTANT with special Psychiatric experience.

Applications should be sent to the undersigned on or before August 31st, 1938.

J. C. BURDETT,
Director and House Governor.

July 26th, 1938.

ST. BARTHOLOMEW'S HOSPITAL.

APPOINTMENT OF DENTAL HOUSE SURGEON

Applications are invited for the office of House Surgeon to the Dental Department. Candidates must hold a registrable dental qualification and a medical qualification in addition is desirable but not essential.

Candidates will be required to call upon the three Dental Surgeons. Appointment will be made for six or twelve months as from November 1st, 1938. The salary attached to the office is £80 per annum (non-resident).

Twelve copies of applications with testimonials must be left with the undersigned on or before Monday, September 19th, 1938.

(Sgd.) C. C. CARUS-WILSON,
July 14th, 1938. Actg. Clerk to the Governors.

THE QUEEN'S HOSPITAL FOR CHILDREN, Hackney Road, London, E.2. (160 Beds)

HOUSE SURGEON required September 1st, 1938.

TWO CASUALTY OFFICERS required September 1st, 1938.

Six months appointments. Salary at the rate of £100 per year with board, lodging and laundry in each case.

Applications must be made on forms to be obtained from the undersigned and be sent in with copies of not more than three testimonials on or before August 12th, 1938.

CHARLES H. BESSELL,
July 19th, 1938. Secretary.

GUY'S HOSPITAL, S.E.1

Applications are invited for the post of WOMAN MEDICAL OFFICER for the Department of Venereal Diseases commencing October 1st, 1938, to attend on six sessions per week each of three hours. Salary £350 per annum.

Applications giving age, qualifications and details of experience and accompanied by testimonials must be sent to the Superintendent, Guy's Hospital, London Bridge, S.E.1 not later than September 1st, 1938.

QUEEN CHARLOTTE'S MATERNITY HOSPITAL, Marylebone Road, N.W.1

Applications are invited from registered Medical Practitioners for the following appointments:

ASSISTANT RESIDENT MEDICAL OFFICER (male). Salary £50 per annum.

RESIDENT ANAESTHETIST AND DISTRICT RESIDENT MEDICAL OFFICER, six months. Salary £50 per annum.

RESIDENT ANAESTHETIST, three months. Salary £100 per annum.

With board, residence and laundry allowance (£6 weekly). Appointments to commence on October 1st.

The Assistant Resident Medical Officer is appointed for three months and on completion will be expected to proceed to the post of Senior Resident Medical Officer (salary £100 per annum). Obstetric experience desirable.

Applications stating age, and with copies of three testimonials should be sent to the Secretary by August 22nd.

H. B. STOKES,
Secretary-Superintendent.

QUEEN CHARLOTTE'S MATERNITY HOSPITAL, Marylebone Road, N.W.1

RESIDENT MEDICAL OFFICER (male or female) required for the Lecturer Hospital (for Puerperal Fever) at Paramount Square, Hammersmith, W.6, to commence duty on October 1st, 1938.

Appointment for six months, renewable for a further six months. The salary is at the rate of £200 per annum with board, residence and laundry allowance.

Applications with copies of testimonials should be sent to the Secretary by August 22nd.

H. B. STOKES,
Secretary-Superintendent.

THE SALVATION ARMY MOTHERS' HOSPITAL, Lower Clapton Road, Clapton, E.5

Applications are invited from Medical Women for the post of JUNIOR RESIDENT MEDICAL OFFICER from October 1st, 1938. Salary £50 per annum with board, residence and laundry. The appointment is for six months.

Applications with testimonials must be sent to the Secretary on or before Monday, August 29th, 1938.

FRED HAMMOND, Secretary.

THE DOCTOP IN PRACTICE OP ABOUT TO ENTER THEPEIN SHOULD BE ADEQUATELY PPOTECTED BY INSURANCE IN PESPECT OF

HIS LIFE
HIS HEALTH
HIS HOME
HIS PRACTICE
AND
HIS CAR

□

FOR ALL THESE CONSULT

The
Medical Insurance Agency
(Limited by Guarantee)
BRITISH MEDICAL ASSOCIATION HOUSE
TAVISTOCK SQUARE W.C.1

□

WE CAN ALSO APPANGE ADDITIONAL CAPITAL FOP THE PURCHASE OF A PRACTICE OP PAPTNERSHIP

State age next birthday when writing

PERCIVAL TURNER
LTD
MEDICAL AGENCY
ESTABLISHED 60 YEARS
25 MAIDEN LANE STRAND, W C 2
(Corner of Bedford Street)

Telegram Fp omian London
Phone Temple Bar 9011 (3 line)
Attendance hours Walton on Thames 1785

Assistants and Locums Provided without fee to Principals Practices investigated Book keeping Debt Collecting etc

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE EXCLUSIVE OF HOUSE PROPERTY £ 0 FULL TERMS ON REQUEST

FOR DISPOSAL

NORTHERN TOWN —ABOUT £2 000 Very old estd Panel Club and Appts Principals Visits 5 to 6 Prem £3 000 incl house etc House only £ 00 —1

KENT COAST — WOMAN'S PRAC Average £400 p a Panel over 00 Visiting fee 10 6 Premium £650 House 4 bed Rent £ p a —

MIDDLESEX — HALF SHARE OF £1 p a Panel 700 Appts over £100 p a Premium 00 Nice house to rent —

SUSSEX COAST —£1 500 P A NON-DISPENSING Non-disp Fee 7 6 up *Premium* £ 000 Good basement (5 bed) tennis etc Freehold might sell —4

LONDON W 5—ABOUT £550 P A Panel 800 Visits 3 0 to 5 Premium 2 years purch House 4 bed etc to rent —5

LONDON N W —ONE FIFTH SHARE of £ 000 p a Panel 6 000 Appts over £100 Fees 6 6 to 10 6 Prem 2 years purch Small maternity let —6

SCOTLAND (N) —COUNTRY OVER £1 000 p a incl panel of £ 00 p a Visits to 5 Premium 1½ years purchase or offer Good house rent or sell —7

MIDDLESEX —SUBURB £1 030 P A Panel 600 increasing P M S £100 Premium 2 years purchase Comfy house (4 bed) Sell or let —8

SURREY SUBURB —HALF SHARE £1 000 p a Old est increasing modern house 4 bedrooms garage to let Premium £ 000 —9

MIDDLESEX SUBURB — PARTNER Small share producing £450 p a to commence in full nursing Practice Premium 2 yrs purchase —10

HYDE PARK NEAR — PHYSICO THERAPY PRACTICE about £1 000 p a Well established Ample accommodation on rental of £500 —11

LANCSTOWN OLDEST INCREAS £1 000 p a Select panel of 1 000 Nice ample accommodation Premium £1 500 and no rent or furniture —12

KENT SUBURB ~ GOOD MIDDLE £ 00 p a increasing select panel Modern surgery Nice Tudor house for principal Premium 11 years purchase —13

SOUTH COAST —OLDEST NEARLY £1 p a increasing Fair panel mixed middle and better class Detached house garden and tennis for sale or might let Premium £2 500 —14

COUNTY TOWN WITHIN 100 MILES OF LONDON —PARTNERSHIP with early succession Present about £1 50 p a and approximately £ 50 p a 2 years purchase Purchase to be PCS Choice of house —15

DEVON ~ UNOPPOSED COUNTRY £ 1 p a increasing panel worth £ 60 p a Visits p a Prem £1 50 Ex freehold house garage and garage for sale £ 500 Rent Premium £1 5 0 —16

BIRMINGHAM NEAR — NEARLY Practice panel nearly 500 decreasing House garage for sale at £5 0 Rent p w Premium £1 500 —17

HANTS — OLDEST AVERAGE Fees Appts about £1 0 p a Good Panel increasing and extra Prem £10 Rent £ —1

YORKSHIRE DALES—BEAUTIFUL £ 1 p a Large and Panel nearly 5 Streets patients Fees Income worth £ p

NEAR VICTORIA S W 1—LOCK UP Practice Premises Rent £ Premium £ —

MIDLANDS OLDEST NEAR JM Established Very Practice Visits Fees Income Rent £ Premium £ —

CHOICE TO CHASERS
TAKE A LOOK AFTER
ASSISTANTS VACANCIES IN

THE MEDICAL AGENCY, Ltd.
DUDLEY HOUSE, 36-38, SOUTHAMPTON ST, STRAND, W C 2
Telephones—Temple Bar 1034 1054 Established in 1893 by J A REASIDE

LONDON W 2—Mixed G P residential locality Double fronted house Large garden garage Receipts nearly £2 000 Panel 1 300 Premium for goodwill and house £4 500 or near offer

LONDON S E—Working class G P House to rent Receipts approx £2 700 Panel 3 200 inc Fees 1/6 up 1 App Premium 2 years purchase or near offer

LONDON W —Easy distance West End Middle class G P House to rent on lease Receipts approx £2 400 Panel 1 500 Several apps Fees 3/6 up Premium £4 000 or near offer

N E COAST—Mixed G P Receipts approx £2 000 Panel nearly 2 200 Clubs nearly £500 1 App Premium £4 000 or near offer to include Book Debts Surgery Furniture Drugs etc

YORKSHIRE—Mixed G P Residential locality near large Town Medium sized house Large garden garage Receipts £1 500 Panel over 2 000 Fees 3/6 up Premium £2 500

LONDON W —PARTNERSHIP Suburban G P cope House to rent Receipts nearly £6 000 Panel approx 4 000 One fifth share 2½ years purchase with view to one third share

MIDDLESEX (W)—G P growing residential locality Excellent house with large pleasant garden Receipts approx £ 500 Panel 1 700 Fees 3/6 up Prem 2 years purchase Free hold house and furniture £ 000

WEST COUNTRY (Seaside)—PARTNERSHIP House to rent on lease Receipts £ 000 Panel 1 200 Fees 3/6 up One third share 1½ years purchase

LONDON S W 12—Old established middle-class G P Residential locality Large house splendid garden Receipts approx £1 500 Select panel nearly 420 Fees 3/6 up Premium 1 years purchase or near offer

LONDON N E—Middle class G P Receipts approx £2 500 Panel 1 200 Premium 2 years purchase or near offer

MANY OTHERS FOR SALE DETAILS ON REQUEST

ESTABLISHED 1877
LEE & MARTIN, LTD.
The Birmingham Medical Agency,
71, TEMPLE ROW, BIRMINGHAM
Telegrams Locum Birmingham *Telephone* 596 Midland B'ham

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED
MAXIMUM FEE £50 if exclusively entrusted to us
ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED
RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORT NOTICE also ASSISTANTS

WANTED TO PURCHASE
1 BIRMINGHAM (or within 50 miles thereof)—*Good Mixed PRACTICE* with a Panel of 1 200 over and receipts of from £1 500-£ 000 URGENTLY REQUIRED CAPITAL AVAILABLE
2 REQUIRED—Good English Scottish and Irish LOCUMS Immediate posts to offer Also ASSISTANTS immediate posts to offer with and without view to Partnership

FOR DISPOSAL
1 GLOUCESTERSHIRE — Well established middle and working class PRACTICE Receipts av £1 250 p a Panel 1 200 scope to increase and good house with all services
2 STAFFS—Rapidly increasing mixed Private and Panel PRACTICE Receipts last year £1 0 0 Panel 1 230 over Excellent house all services
3 MIDLANDS—Old established industrial and middle-class PRACTICE Receipts average £1 068 p a Panel 967 scope to increase and good house
4 SOUTH WALES—Well established middle and working class PRACTICE Receipts last year £2 200 Panel 2 100 Good house
5 LONDON—Old established mixed and Private and Panel PRACTICE Receipts av £1 7 0 p a Panel 966 Ample scope to increase and good house
6 WEST COUNTIES—Old established working class PRACTICE Receipts 1 7 0 Panel 2 26 Good detached corner house which may be rented

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partnerships on very reasonable terms Full particulars on application
RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE

Telephone Welbeck 2728
Telegrams ASSISTIAMO LONDON
NURSES
MALE OR FEMALE
TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES
Nurses reside on the premises and are available for urgent calls Day and Night
THE NURSES ASSOCIATION
(In connection with the MALE NURSES ASSOCIATION)
29 York St., Baker St London W 1
Mrs MILLICENT HICKS *Supt*
W J HICKS *Secretary*

ESTABLISHED 1868
PEACOCK & HADLEY, Ltd.,
MEDICAL TRANSFER AGENCY,
67 68, Chandos St Bedford St Strand, W C 2
Telegrams Herbarn Lesquare London
Telephone Temple Bar 5564
LOCUM TENENS and ASSISTANTS supplied free of charge to principals

FOR DISPOSAL
1 GLAMORGAN COAST—Half share of old established PRACTICE Receipts average over £3 000 p a Large panel Very fine house with good grounds for sale Premium for share two years purchase payable part by instalments
2 A number of small PRACTICES at low premiums *Excellent opportunities for practitioners wishing to get a Practice with scope*
NEAR FULHAM S W — Well-established PRACTICE Receipts last year over £900 panel nearly 00 increasing Nice house on rental Premium £1 2 0
4 OUTLYING SUBURB N —Well established PRACTICE Receipts last year over £400 including small increasing panel Very attractive house can be had on mortgage Premium for Practice about £630
5 NEAR HOLBORN W C — Well-established PRACTICE Receipts average £1 000 p a panel 1 104 Splendid surgery accommodation only Long introduction Premium £2 000
6 NEAR VICTORIA S W — Well-established mixed-class PRACTICE Receipts last year nearly £1 000 Fair panel Nice small flat on rental Good scope Premium £850 payable £600 down
7 BRIXTON S W —Old established PRACTICE Receipts about £500 p a including panel 670 Nice semi detached house on rental Premium about 2 years purchase
8 OXFORDSHIRE—Charming Town A well established PRACTICE Receipts nearly £800 p a including fair panel Nice house on rental Scope for increase Premium open to offers
9 WANTED IN LONDON OR PROVINCES PRACTICES with incomes £500 to £ 000 p a Many purchasers waiting and quick transactions for immediate cash

No charge made to purchasers or for inquiries

THE WESTERN MEDICAL AGENCY
Dr K H BENNETT and Dr W J PARAMORE who give personal attention to every client
22, CLARE STREET, BRISTOL, 1
Teleg Medgen Bristol *Tel* Bristol 2 6 9
15, BEDFORD ST, STRAND, W C 2
Tel Temple Bar 2532

COVERS FOR BINDING
Vol I and II of the BRITISH MEDICAL JOURNAL for 19 and previous years can be had price 2s 6d or post free 2s 10d each Orders with appropriate remittance should be addressed to
THE MANAGER
BRITISH MEDICAL JOURNAL
B M A House Tavistock Square
London W C 1

BRITISH MEDICAL BUREAU

(The Scholastic, Clerical and Medical Association Ltd.)

(FOUNDED 1860)

NORTHERN BRANCH

33, CROSS ST., MANCHESTER, 2.

Telephones: {Manchester - Blackfriars 3925 / Manchester - Rusholme 2549 (Night Calls)

Telegrams "Locum Manchester"

Branch Offices at Leeds and Belfast

Recommended with every confidence to the profession by the BRITISH MEDICAL ASSOCIATION as a thoroughly trustworthy medium for the transaction of all Medical Agency business

TRANSFER OF PRACTICES AND PARTNERSHIPS INTRODUCTION OF RELIABLE ASSISTANTS AND LOCUM TENENS at Short Notice VALUATION and INVESTIGATION OF PRACTICES, Etc

Practices and Partnerships wanted Large list of bona fide purchasers with ample capital available Enquiries invited from prospective vendors All information treated in strict confidence

FOR DISPOSAL

Full particulars free on request

LANCS TOWN.—Very old-established mixed Panel and Private PRACTICE. Cash receipts last year £1,37—. Panel 1,95. Scope. Good house 2 reception, 4 bedrooms, 3 Professional rooms (separate entrance). Premium—Practice—1½ years purchase.—No 1131.

CHESHIRE.—Old-established mixed Panel and Private PRACTICE in pleasant County town. Average cash receipts £2,—7—a. Panel 1,9—. Attractive house, 3 reception, 5 bedrooms, garage and 1 acre garden with tennis court to rent. Premium—1½ years purchase.—No 1143.

MANCHESTER.—We establish mixed Panel and Private PRACTICE in pleasant suburban district adjacent to new Housing Estate. Cash receipts approximately £1,100. Panel about 1,000. Excellent modern house, 2 reception, 4 bedrooms, Professional rooms, garage and nice garden. For sale or may be rented. Premium—1½ years purchase.—No 1145.

NEAR LEEDS.—Old-established modern and well-appointed class PRACTICE. Cash receipts average £1,200 p.a. Panel 900. Excellent detached house, 2 reception, 4 bedrooms, Professional rooms (separate entrance), garage and grounds. Price £1,000. Mortgage can be arranged. Premium—Practice—1½ years purchase, or near offer.—No 1145.

NORTHUMBERLAND COAST.—Old-established middle-class PRACTICE in Seaside and Residential town. In present hands 18 years. Cash receipts over £1,400 p.a. Small panel of 300. Excellent house, 2 reception, 5 bedrooms, 2 Professional rooms, garage and nice garden. Premium—1½ years purchase.—No 1151.

NORTH WEST LANCS.—Old-established mixed Panel and Private PRACTICE in large town. Cash receipts last year £1,10—. Panel over 1,000. Good house pleasantly situated, 2 reception, 5 bedrooms, garage and small garden. Premium—Practice—1½ years purchase.—No 1105.

NEAR MANCHESTER.—Very old-established middle and better working-class PRACTICE. Cash receipts over £2,500 p.a. Panel 1,—0. Excellent detached house, 2 reception, 6 bedrooms, garage and garden, with tennis court. Price £1,000. Premium—1½ years purchase.—No 1108.

DERBYSHIRE.—Old-established PRACTICE capable of great increase. Cash receipts last year £740 (increasing). Panel 85—. Excellent house, 2 reception, 4 bedrooms, 3 Professional rooms (separate entrance), garage and good garden. Premium—Practice and house £1,600.—No 969.

NORTH EAST COAST.—Old-established mixed Panel and Private PRACTICE. Cash receipts last year £2,160. Panel 2,220. Appointments (transferable) over £400 p.a. Good house, 2 reception, 3 bedrooms, 3 Professional rooms, garage and small garden. Price £700. Premium—1½ years purchase.—No 1094.

MANCHESTER.—Sound old-established PRACTICE in industrial district. Cash receipts last year £2,200. Panel 2,230. Scope. House, 4 bedrooms, 2 Professional rooms. Rent £50 p.a. Premium—best offer.—No 1054.

CHESHIRE TOWN near Manchester.—DEATH VACANCY.—Old-established mixed Panel and Private PRACTICE. Cash receipts last year £1,6—6. Panel 2,135. Scope. Excellent detached house (in own grounds), 2 reception, study, 4 bedrooms, 3 Professional room, garage with servant's quarters and garden. For sale at valuation. Premium—Practice—best offer.—No 1136.

MONMOUTHSHIRE.—Old-established Contract PRACTICE. Cash receipts last year £2,114, of which over £2,000 is from contract work. Excellent house, containing 3 reception, 4 bedrooms, 2 maid's rooms, garage for 2 cars, and garden. Rent £52 p.a. on long lease. Good prospects of increase in income. Premium—best offer.—No 1144.

LANCS TOWN.—Sound mixed Panel and Private PRACTICE, close to county. In present hands 38 years. Average cash receipts £1,400 p.a. Panel 1,400. Nice detached house, 2 reception, 5 bedrooms, garage and large garden. Premium—1½ years purchase.—No 1153.

YORKSHIRE (W.R.).—Old-established middle and better working-class PRACTICE in large town. Cash receipts last year £1,762. Panel (not encouraged) 550. Good house, 2 reception, 4 bedrooms, 3 Professional rooms, garage. For sale or may be rented. Premium—1½ years purchase.—No 1141.

NORTH LANCS—YORKSHIRE BORDER.—Old-established unopposed Country PRACTICE in present hands 20 years. Cash receipts £1,000 p.a. Panel and appointments approximately £—,0 p.a. Well built house with ample accommodation, central heating, electric light, garage and grounds of 2 acres. Rent £75 p.a. Premium—£1,500. Vendor retiring.—No 1119.

NEAR MANCHESTER.—PARTNERSHIP in old-established mixed-class Practice, owing to death of senior partner. Average cash receipts £2,—46 p.a. (increasing). Panel 2,300. Scope for increase. Good house to rent, 2 reception, 4 bedrooms, 3 Professional rooms, garage and small garden. Premium—one half share—1½ years purchase.—No 1114.

NORTH MIDLANDS.—Old-established mixed Panel and Private PRACTICE in County town, in busy district near large town. Average cash receipts £1,0—7 p.a. Panel 9,0— and transferable appointments £200 p.a. Excellent detached house, 2 reception, 6 bedrooms, Professional rooms, garage and large garden. Price £1,2—0.—Premium—1½ years purchase.—No 1117.

MANCHESTER.—Very old-established mixed-class PRACTICE in suburbs. Average cash receipts £1,3—0 p.a. Panel 835. Good corner house, 5 bedrooms, 3 Professional rooms, garage, etc. Premium—1½ years purchase or near offer.—No 11—0.

NORTH STAFFS.—Very old-established better working and middle-class PRACTICE. Cash receipts last year £2,—31. Panel 1,225. Scope as district developing. Excellent house, 2 reception, 4 bedrooms, maid's room, separate surgery premises, garage and garden. For sale. Freehold. Premium—Practice—1½ years purchase or near offer.—No 11—0.

NORTH WALES COAST.—Good-class PRACTICE in select residential resort. Cash receipts last year £90—. No Panel or appointments. Nice detached house with splendid accommodation, garage and garden. Premium—Practice—2 years purchase.—No 1152.

SHROPSHIRE.—Old-established unopposed Country PRACTICE. Cash receipts last year £688. Panel 4—0. Modern house, 2 reception, 5 bedrooms, 3 Professional rooms, garage and large garden. Electric light. Rent £—0 p.a. Premium—best offer.—No 10—6.

LANCS TOWN.—PARTNERSHIP in old-established Practice in semi-rural district. Cash receipts over £—,900. Panel 2,000 and appointments £150 p.a. Good house, 2 reception, 3 bedrooms, garage and garden. Price £650. Premium—one-third share—£1,750 (to include book debts).—No 1142.

NORTH WEST COAST.—Medical Woman's PRACTICE offering great scope. Cash receipts £267. Good house to rent, £45 p.a. Premium—best offer.—No 11—9.

MIDLAND SPA.—PARTNERSHIP (after preliminary Assistantship) in old established Practice. Cash receipts last year £3,—+. Panel 1,300. Incoming partner may choose own residence. Possibility of Hospital appointment. Premium—7,2—th share—2 years purchase.—Further share in three years.—No 1069.

NEAR MANCHESTER.—Very old-established middle and working-class PRACTICE in prosperous town. Very suitable for two friends in partnership or may be run by one man and an Assistant. Cash receipts last year £—,220. Panel 3,000. Nice modern house, 2 reception, 4 bedrooms, separate Professional rooms, garage and large garden. For sale at valuation. Premium—best offer.—No 1137.

LINCOLNSHIRE.—Very old-established PRACTICE in pleasant country town. Cash receipts last year £2,471. Panel about 1,—00. Cottage Hospital. Good house, 5 bedrooms, small garden, garage, etc. Premium—Practice—£3,150 for quick sale.—No 113—.

NEAR MANCHESTER.—Well-established middle and better working-class PRACTICE in pleasant suburban district. In present hands 15 years. Average cash receipts over £—,000 p.a. Panel 1,833. Good scope. Good corner house, 2 reception, 4 bedrooms, 3 Professional rooms, garage and garden. Also Branch Surgery premises. Both may be rented on lease. Premium—1½ years' purchase.—No 1138.

MIDLANDS.—Increasing middle and working-class PRACTICE in large town. Cash receipts last year £1,050. Panel over 1,200. Scope. Excellent modern house, 2 reception, 4 bedrooms, garage and large garden. For sale. Freehold. Premium—Practice—£2,000.—No 1123.

YORKSHIRE (W.R.).—Old-established mixed Panel and Private PRACTICE in better working-class and rural district. Cash receipts last year £1,186. Panel 1,35—. Scope. Good house, 2 reception, 3 bedrooms, maid's room, 2 Professional rooms (separate entrance), garden with tennis court. Rent £—5 p.a. Garage rented. Premium—1½ years purchase.—No 1122.

LIVERPOOL.—Steadily increasing mixed-class PRACTICE in suburbs. Cash receipts last year £758. Panel 650. Excellent detached house, 2 reception, 6 bedrooms, garage and garden. Premium—Practice—best offer.—No 1026.

— WANTED —

ASSISTANTS and LOCUMS

For Immediate Engagements

Apply with full particulars to above address

All communications to be addressed to the Branch Manager BRITISH MEDICAL BUREAU 33 CROSS STREET MANCHESTER, 2.

INDEX TO ADVERTISEMENTS

PUBLISHERS

Allen & Unwin 22
Bale's Medical Publications 2
British Medical Association Supp ii
Churchill J & A Ltd 22
Lewis H K & Co Ltd 2
Oxford University Pre 3
Wright John & Sons Ltd 2

ASSURANCE & INSURANCE

London & Counties Med Prot Soc Ltd Supp v
Medical Agency Ltd 41
Medical Insurance Agency 41

BANKS & FINANCE

British Medical Finance Ltd 2

CHEMISTS

Abbott Laboratories Ltd 17
Allen & Hanburys Ltd 11 12
Aluzyme Products 22
Bayer Products Ltd 16
Boutalls Ltd 24
British Drug Houses Ltd 21
Burroughs Wellcome & Co 19
Ciba Ltd 21
Duncan Flockhart & Co 8
Eli Lilly & Co Ltd 10
Evans Sons Lescher & Webb Ltd 9
Fellows Med Mfg Co Ltd 10
Kaylene Ltd 11
Maw S Son & Sons Ltd 6
Robinson & Sons Ltd 46
Saccharin Corpn Ltd 15
Sandoz Products Cover iv
S P Charges Co 23
Thackray C F Ltd Supp iv
Valentine's Liver Extract 14
Wander A Ltd 13
Washington Chem Co 15

FOODS BEVERAGES

Cavmer William & Son Ltd 23
Genatosan Ltd 18
Marmite Food Extract Co Ltd 3
Mitchellhill Biscuits 2
Nestlé's Milk Products Ltd 23
Silvertypes Ltd 14
Summers Typh Test Ltd 8

NAME PLATES etc

Hall I B & Co 24
Herd S J & A 4
Lewis H K & Co Ltd 24
Osborn E & C Ltd 24
White Bros & Co 24

PRINTING TYPEWRITERS etc

Taylors Typewriters 24

SURGICAL APPARATUS

Grout & Co Ltd 6
Hawkesley & Sons Ltd 22
Hilliard 24
Millikin & Lawley 24
Robinson & Sons Ltd 46
Salmon O's Ltd 22
Salt & Son Ltd Supp iii
Smith & Nephew T J Ltd Cover ii

TAILORING & CLOTHING, etc

Burberrys Ltd 2
Dermel Fabric Co 23

TOBACCO & CIGARETTES

Carreras Ltd 5 6
Player's Navy Cut 1

VACCINES SERA etc

Burroughs Wellcome & Co Ltd 6
Chiron Laboratories Ltd 3
Hutchinson Wright Ltd 4

HOMES & INSTITUTIONS

Bethesda Convalescent Home 4

HOUSE AGENTS

Bell 4

HOSPITALS & CLINICS

Bethesda Clinic 4
Nuffield Clinic 4

SANATORIA

Cotswold Sanatorium 2
Lyndhurst Hall San
Tor-na-Dee San

SPAS HEALTH RESORTS & HYDROS

Gresham Court Hotel 23
Harrogate 27
Pitlochry Spa 29
Rockside Hydro 28
Smedley's Hydro 28

MOTORS & ACCESSORIES

Ford Motor Co 5

MEDICAL SCHOOLS TUTORS & LECTURERS

Bell's Coaching Establishment 3

NURSING etc

Bethesda 4

TRANSFER AGENTS

Bell Mortimer & Co 4
Bell Mortimer & Co 43 44 45
Bell Mortimer & Co 4
Bell Mortimer & Co 4
Bell Mortimer & Co 4
Bell Mortimer & Co 4
Mortimer & Mortimer 4

CONTRACT PRACTICE

Bell 4

HOSPITAL VACANCIES etc

Bell 33 34 35 36 37 38 39 40 41

CLASSIFIED ADVERTISEMENTS—(Wanted and Vacant)

Bell 33 & 39

GENERAL

British Oxygen Co Ltd 7
Norwich & East of England Med Prot Soc 24
Tampax Ltd 6

For use in the treatment of the

Chest *and* **Lungs**

and surgical uses generally . . .

"Gamgee Tissue"

REGD TRADE MARK

Made exactly according to the direction of its inventor the late Sampson Gamgee, F R S E Consulting Surgeon to the Queen's Hospital, Birmingham Composed of high grade cotton wool enclosed in absorbent gauze

Obtainable in three qualities from all chemists

SOLE PROPRIETORS & MANUFACTURERS ROBINSON & SONS LTD OF CHESTERFIELD & 168 OLD ST LONDON E C 1

Published by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Ewer and Spottiswoode Limited East Harding St Fleet St London E C 4 Printed in Great Britain Entered as Second Class at New York, U S A Post Office

BOVRIL MEDICAL AGENCY, LTD.

ALDINE HOUSE,

10 13 BEDFORD STREET, STRAND LONDON, W C 2

Telegrams BOVMEDICAL, ESQUARE, LONDON Telephone TEMPLE BAR 1616 (3 Lines)

Chairman and Managing Director Dr J FIELD HALL.

The maximum commission payable on the sale of any Practice or Partnership in Great Britain placed exclusively in the hands of this Agency is £50 (fifty pounds) which sum covers goodwill drugs surgery fittings fixtures and furniture instruments and book debts but not house property Schedule of Terms will be forwarded on application.

Accountancy and legal services furnished by the Agency where desired at moderate inclusive charges
No charge is made to Principals for the introduction of Locum Tenens or Assistants

1 LSSEX NEAR EPPING FOREST—Rapidly developing PRACTICE established 4½ years Receipts £3 3 £1 019 and for past 4 months £4 Panel of about 1 600 units increasing Suitable house with ample accommodation available on rental at £75 p.a. Premium £1—50 for quick sale

2 DURHAM COUNTY —Old-established industrial PRACTICE producing £2 000 p.a. of which about £450 is earned from private work Panel over 3 000 units Practice has been held by present vendor for about 20 years Premium £ 000 including book debts drugs surgery fittings etc (part by arrangement) or £3 600 cash down

3 COAST TOWN WITHIN 30 MILES OF LONDON —Well-established PRACTICE producing about £1 600 p.a. net which about £1 100 p.a. is earned from panel Panel limited to 1 00 persons EMS e Good freehold house available The house is well appointed and decorated central heating Ample accommodation garden garage Price £1 800 Premium 2 years purchase Vendor advises there is scope for another doctor

4 CITY LOCUM —Old-established PRACTICE producing about £1,250 p.a. gross or approximately £ 00 p.a. net Fees 10 and 21 Good class of client Private practice only Premium £1 00 with furniture equipment etc at valuation Hours Mondays to Fridays only 10 to 5

5 WEST END—One partner (physician desirous of entering West End PRACTICE MUST have minimum qualification special Full details on personal application

6 EAST LONDON —Well-established PRACTICE producing about £1 500 p.a. of which half £750 p.a. is derived from panel of about 1 0 patients S P 1S and Public Vaccinations work Large proportion of cash Premium 2 years purchase

7 SOUTH DEVON —PARTNERSHIP —A third partner (after preliminary assistantship) is required in old-established mixed-class Practice Share to produce £ 00 p.a. Suitable house available with ample accommodation Rent £90 p.a. Premium 2 years purchase Salary during preliminary assistantship at rate of £600 p.a.

8 COUNTY TOWN WITHIN 120 MILES WEST OF LONDON —PARTNERSHIP—A HALF SHARE in old-established good mixed-class Practice producing approximately £ 00 p.a. including large panel Fees 2 6 to 1 Low expenses Purchaser can choose his own house as Practice is worked from central surgery Premium 1½ years purchase Incoming partner should be experienced and under 0

9 SURREY —WITHIN 15 MILES OF LONDON —PARTNERSHIP — ONE HALF SHARE in very good mixed-class Practice situated in good residential district Gross cash receipts approximately £3 000 p.a., with substantial panel Very nice house with all modern conveniences and beautiful garden (2 reception 4 bedrooms etc) Can be rented or purchased Premium 2 years purchase

10 LONDON, S W.—Old-established mixed-class PRACTICE producing for last 12 months £750 including panel of 250 Flat can be rented at £ a p.a. Premium £1 250

11 LONDON, EAST —Middle and working-class PRACTICE producing over £500 p.a. with good scope Panel of about 750 Fees from 2 Ten roomed corner house Price for lease £550 Premium £500 to include drugs, surgery fittings, etc and some furniture

12 ESSEX COAST—PARTNERSHIP —A third partner is required in old established Practice Suitable house available Premium 2 years purchase Further details on application.

13 DEVON COAST—POPULAR HOLIDAY RESORT—Old-established non-dispensing PRACTICE averaging for past 3 years £1 640 p.a., including panel of 400 Suitable house with ample accommodation. Freehold £1 700 or might rent Premium £2,800

14 NORTH WELSH COAST.—Good middle-class non-panel PRACTICE averaging about £900 p.a., with good scope Detached house overlooking beautiful bay with ample accommodation Sport of all kinds. Good schools Premium 2 years purchase Ill health reason for sale

15 LINCS —MARKET TOWN —Old-established PRACTICE in prosperous district producing nearly £2,500 p.a. including panel of 1 387 Well built house (2 reception 7 bedrooms) rent £75 p.a. Premium 1½ years purchase or near offer for quick sale Good introduction

16 [illegible] ate PRACTICE in picturesque [illegible] Parcel of 300 Very easily worked 1½ years purchase

17 [illegible] with succession in 2 or 3 years [illegible] very pleasant surroundings Parcel of about 850 On large [illegible] hall billiard [illegible] commodation nice garden [illegible] Price £1 6 0

18 BEDS —PARTNERSHIP —ONE THIRD SHARE in well-established mixed-class Practice producing £1 675 p.a. Panel of 760 Suitable house easily obtainable Premium £1 000 Definite scope

19 WELSH COAST —Well-established good mixed PRACTICE producing over £2,000 p.a. including panel of 1 450 Suitable house with ample accommodation good garden and garage Rent £50 p.a. Premium £3 000 for quick sale

20 SURREY —RAPIDLY EXPANDING DISTRICT —PRACTICE at present produces about £700 p.a., but could be much increased Panel of 350 (discouraged) No midwifery Excellent house with all modern conveniences. Premium for Practice and house £5 000

21 MIDLANDS.—GOOD RESIDENTIAL COUNTRY DISTRICT —Compact PRACTICE producing £770 p.a., with good prospects. Choice of 2 houses. Moderate premium Ill health reason for sale

22 S W ENGLAND —FAVOURITE COAST TOWN —HALF SHARE after preliminary assistantship in chiefly better-class Practice producing nearly £2,000 p.a Small panel Choice of residence Must be experienced and preferably knowledge of E.N.T Premium 2 years purchase part by arrangement

23 NORTHANTS —Old-established Country PRACTICE averaging £1 600 p.a. Parcel of 1 500 Practically unopposed Premium 11 years purchase Long partnership in prospect

24 LONDON, S.E.—Well-established PRACTICE, chiefly cash Receipts average about £1 030 p.a., with panel and club producing over £500 p.a. Can be run as a locum Suitable premises available Premium 2 years purchase.

25 LONDON, S.W. —RESIDENTIAL DISTRICT —Good middle-class PRACTICE producing about £1 400 p.a. including panel of 500 patients and appointment with about £ 00 House on rental Good scope for energetic worker Premium 2 years purchase or near offer

26 SURREY —Well-established increasing PRACTICE situated in developing residential district Gross cash receipts for last 12 months about £500 including panel of about 500 Small compact freehold house Price £850 part on mortgage or would rent at £55 p.a. Premium £1 00 Ample scope for energetic worker

27 GROWING RESIDENTIAL DISTRICT WITHIN 10 MILES OF LONDON —Recently established upper and middle class PRACTICE producing about £700 p.a. with definite scope for increase Selected panel of 72 Fees 5 guineas Prominent corner house with 2 reception 5 bedrooms Separate entrance to Professional rooms Well laid out garden House on rental. Premium 1½ years purchase

28 LONDON, S.W. —WITHIN EASY REACH OF CITY AND WEST END — Well established cheque middle and better-class PRACTICE with surgical scope producing about £1 450 p.a. Selected panel of 85 Fees 5 and 7 6. Choice red first floor flat with all conveniences. Purchaser should be able to do surgery and F.R.C.S. would be advantageous.

29 LONDON, W.C.—Well-established PRACTICE producing nearly £1 700 p.a. Average £1 60 Parcel of 1 650 Suitable accommodation available and surgery premises used as locum on rental Premium 2 years purchase

30 LONDON —WESTERN DISTRICT —Old-established non-dispensing non-panel PRACTICE producing about £500 p.a. Capable of expansion especially if panel work undertaken Well situated corner house on main road with ample accommodation Premium 1 year's purchase Practice would be sold apart from house if wished

31 SOUTH WALES —Old-established mainly contract PRACTICE producing last year £ 700 of which £2,050 is from contract work and panel Suitable house available Future prospects are considered to be excellent as new works have recently been erected in the district Premium £3,00

32 LADY DOCTOR'S PRACTICE —BIRMINGHAM —Old-established PRACTICE producing last year over £1 00 panel Fees £1 upward Midwifery usually Suitable house available Premium 1½ years cash for quick sale

33 KENT COAST —FAVOURITE SEASIDE RESORT —Old-established middle-class PRACTICE producing about £670 p.a. Small panel 50 patients. Very good house in best end of the town with ample accommodation Freehold available Premium £1,200 Eminently suitable for retired army officer wishing to augment pension or there is scope for younger man

34 SUSSEX —FAVOURITE COAST TOWN —Old-established PRACTICE producing about £900 p.a., including panel which brings in about £150 p.a. Good house on two floors 2 reception 4 bedrooms, etc. Freehold for sale. Premium 2 years purchase

35 SOUTH COAST SEAPORT —PARTNERSHIP —ONE THIRD SHARE available in old-established and rapidly increasing Practice which last year produced approximately £3 385 including a panel of over 1 600 patients. Purchaser can choose his own residence Practice is conducted from central surgery and the expenses are not high.

36 LADY DOCTOR'S PRACTICES —Several available Full details on application

37 NORTHANTS —ASSISTANTSHIP with view to Partnership in an old established country Practice with good future prospects. Initial salary £500 p.a., including car allowance the assistant to live out Full details on application

38 MIDLANDS — FAVOURITE COUNTY TOWN — SURGICAL OPENING —A QUARTER SHARE (after preliminary assistantship of [illegible] lished increasing Practice producing approximately £2,800 One appointment worth about £ o dispensing. Suitable house with garden [illegible] 2 years purchase part by arrangement. 35 experienced and able to do some surgery

39 SOUTH OF ENGLAND —COAST TOWN —PARTNERSHIP —A HALF SHARE in good mixed-class Practice established over 100 years, averaging approx [illegible] worth about £ [illegible] reasing Practice [illegible] reasing House [illegible] 5 years purchase

40 MIDD [illegible]

41 [illegible] PRACTICE [illegible]

42. [illegible]

43 [illegible]

[illegible] approximately £1 200 p.a., with good scope Panel brings in about £700 p.a. Good house with 4 bedrooms, etc. Rent £50 p.a. Very reasonable premium for quick sale

The Agency has made arrangements for special facilities on very favourable terms, to be afforded to approved purchasers for the advance of part of the premium for any suitable practice or partnership Full details on application.

BELLERGAL

INHIBITS AUTONOMIC HYPEREXCITABILITY

Experimental and clinical investigations by Jores and Govert (1936) — Deutsche Med. Woch. 1936

OCULOCARDIAC REFLEX DERMOGRAPHISM RESPIRATORY ARRHYTHMIA BEFORE AND AFTER BELLERGAL TREATMENT

Before Bellergal Treatment			After Bellergal Treatment		
Oculocardiac Reflex	Dermographism	Respiratory Arrhythmia	Oculocardiac Reflex	Dermographism	Respiratory Arrhythmia
— 6	+ 12	— 2	17	+ 18	— 19
+ 12	w +	17	1	+	1
+ + 1	r w l	1	0	+ + 0	0

Under oculocardiac reflex [illegible] not only [illegible] but [illegible] what [illegible] white dermographism [illegible]

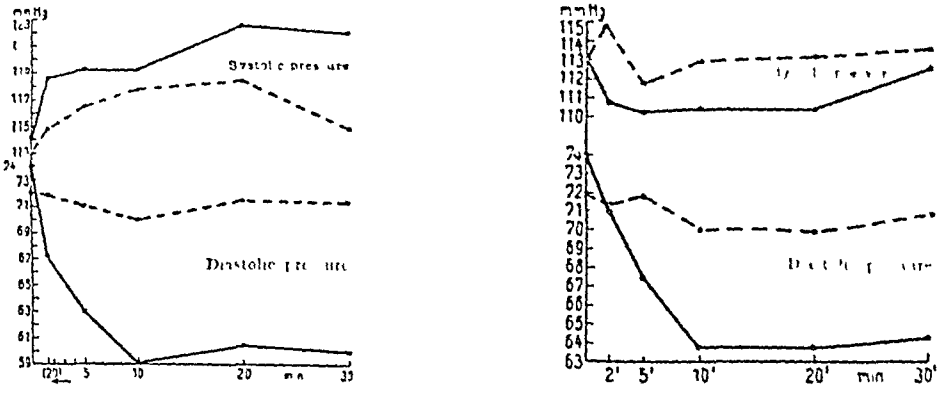
It is seen that the oculocardiac reflex was negative in only 6 cases before treatment with Bellergal but in 17 cases after treatment white dermographism was observed in 12 cases before but only in one case after treatment, respiratory arrhythmia present in 18 cases disappeared except in one case

RESPONSE OF THE BLOOD PRESSURE TO AUTONOMIC STIMULANTS BEFORE AND AFTER BELLERGAL TREATMENT

Action of Adrenaline — Action of Pilocarpine

—— Before Bellergal treatment

- After Bellergal treatment



In subjects with a labile autonomic nervous system Bellergal diminishes the exaggerated reactions especially of the diastolic pressure to stimulants of the autonomic nervous system such as adrenaline and pilocarpine It also inhibits the action of adrenaline and pilocarpine on the pulse temperature oculocardiac reflex dermographism and respiratory arrhythmia

Clinically, 40 cases exhibiting marked irritability of the autonomic nervous system were treated with Bellergal They included a series of neurogenic disorders of various forms nervous heart troubles without organic basis stomach troubles of the ulcer type without an ulcer being demonstrable ulcer and spastic constipation By treatment commencing with 2 tablets of Bellergal three times daily gradually decreasing to small doses we obtained in all cases a marked improvement and even complete disappearance of the symptoms in the majority of cases Secondary effects were never observed The preparation may truly be described as a very effective remedy for the sedation of numerous conditions of hyperexcitability of the autonomic nervous system

Full particulars from

J. [illegible], SANDOZ PRODUCTS, 134, WIGMORE STREET, LONDON, W.1

BRITISH MEDICAL JOURNAL

JOURNAL OF THE

BRITISH MEDICAL ASSOCIATION



SATURDAY AUGUST 13 1938

PRINCIPAL CONTENTS

Prevention and Control of Puerperal Sepsis p 331

Treatment of Undulant Fever with Prontosil 342

Antitoxin in Malignant Diphtheria A Comparative Test 344

Treatment of Pellagra with Nicotinic Acid 346

Leading Articles p 352

Scientific Sections at Plymouth 361

Correspondence 372

Psychotherapy Congress 369

Surgery in General Practice . Colles's Fracture 357

National Health in Figures 371

Reviews 349

Epidemiology Section 384

WITH SUPPLEMENT AND EPITOME

LONDON

BRITISH MEDICAL ASSOCIATION

TAVISTOCK SQUARE

No 4049 WEEKLY PRICE 1 3

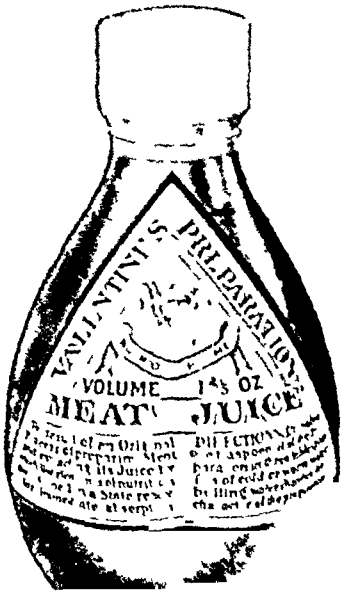
Copyright

REGISTERED AS A NEWSPAPER

Valentine's Meat-Juice

In Typhoid Fever, Diarrhoea and Cholera Infantum, when it is Essential to Sustain the patient without irritating the Digestive Organs, the Ease of Assimilation and Power of Valentine's Meat-Juice to Restore and Strengthen has been demonstrated in Hospital and Private Practice.

THE quickness and power with which VALENTINE'S MEAT-JUICE acts, the manner in which it adapts itself to and quiets the irritable stomach, its agreeable taste, ease of administration and entire assimilation recommend it to physician and patient



Physicians are invited to send for brochures containing clinical reports

For sale by European and American Chemists and Druggists

VALENTINE'S MEAT-JUICE COMPANY,
RICHMOND, VIRGINIA, U S A

WB 302

BRITISH MEDICAL JOURNAL

AUGUST 13 1938

TABLE OF CONTENTS

ADDRESSES AND PAPERS

Prevention and Control of Puerperal Sepsis R W JOHNSTONE M D F R C S Ed 351

Prevention of Puerperal Sepsis Lt H L CASSIE M D D P H 35

Puerperal Sepsis Administrative Aspects A MASSEY M D D P H 357

Puerperal Sepsis Bacteriological Aspects R M FRY M P C S 340

Treatment of Undulant Fever with Prontosil C Z NEUMANN M D 342

Comparative Test of Natural and Concentrated Antitoxin in Malignant Diphtheria B A PETERS M D D T H 344

Treatment of Pellagra with Nicotinic Acid M RACHMILEWITZ M D and HELEN I GLEECK M D 346

SURGICAL SERIES

Colles's Fracture and Chauffeur's Fracture R A FITZSIMONS F R C S 357

CLINICAL MEMORANDA

Basal Narcosis for Tetanus P T O FARRELL F R C I 348

Stable Sodium Nitropruss de Solution for Acetone Bodies in Urine JOHN INGHAM F I C 348

OBITUARY

Salvatore Cæsar F D 377

H M Cockcroft L R C P 377

R J Hearn M D 378

GENERAL ARTICLES AND NEWS

Report of Ministry of Health 371

Psychotherapy Congress (*concluded*) 369

Nosa et Vetera

Some Echoes of Witchcraft 60

PREPARATIONS AND APPLIANCES 351

MEDICAL NOTES IN PARLIAMENT 379

UNIVERSITIES AND COLLEGES 378

MEDICAL NEWS 386

LEADING ARTICLES

Prevention of Puerperal Sepsis 352

Nicotinic Acid for Pellagra 353

ANNOTATIONS

Pneumonitis 4

Selenium as an Industrial Hazard 55

Inheritance of Sebaceous Cysts 355

The Carotid Sinus Reflex 356

Advisory Committee on Blindness 6

Testimonial to Dr Hutchison 6

SUPPLEMENT

Earliest Medicine in England
Professor C SINGER's Lecture

Professional Jurisdiction for the Belgian Medical Profession
By RENÉ SAND M D

Secretaries' Conference

The B M A at Torquay

THE ANNUAL EXHIBITION AT PLYMOUTH
INSURANCE MEDICAL SERVICE
CHARITIES TRUST FUND
CORRESPONDENCE
POSTGRADUATE NEWS
NAVAL, MILITARY AND AIR FORCE APPOINTMENTS
Association Notices Vacancies and Appointments Diary

LETTERS AND ANSWERS

Spasm of Colon 386

Green Stools at 74 386

Teaching of Obstetrics 386

Recovery after 1·900 Grains of Aspirin 386

The Evolutionary Theory 386

EPIDEMIOLOGY SECTION

EPIDEMIOLOGICAL NOTES 384

TABLE OF INFECTIOUS DISEASES AND VITAL STATISTICS 385

CORRESPONDENCE

Abortion and the Law GEOFFREY EVANS M D JAMES YOUNG M D 372

Diabetes and Pulmonary Tuberculosis G D PIRRIE M B 373

Undescended Testicle P M F BISHOP B M DENIS BROWNE F R C S 374

Sulphanilamide for Meningococcal Meningitis H STANLEY BANKS M D 375

Chemotherapy of Gonorrhœa H M HANSCHELL M P C S 375

X Ray Screening in General Practice HILARY ROCHE M D 375

Complications of Gold Therapy MAURICE NEWMAN M D 375

Tuberculin in Diagnosis A E FINCKH M B 376

Blood Groups and Legislation A G NEWELL M D 376

Steinach II Operation for Prostatic Enlargement T HUNTER M D 376

Psychosomatic Illness W HUTCHESON M D 376

The Flying Squad in Maternity Services JOHN ELAM M R C S 377

E F Harrison ALFRED COX M B 377

REVIEWS

System of Medicine and Surgery 349

When to Operate 349

John Keats 349

Ophthalmological Principles 350

Psychotherapy 350

For Novice Ship Surgeons 350

Notes on Books 351

THE SECTIONS

Summary of Proceedings

Medicine 361

Surgery 362

Obstetrics and Gynæcology 363

Orthopædics and Fractures 364

Public Health 365

Physical Medicine and Education 366

Medical Sociology 367

Ophthalmology 368

Exhibitions of Films and Radiographs 369

A KEY TO CURRENT MEDICAL LITERATURE will be found at the end of the JOURNAL

READY AUGUST 15th

FOURTH EDITION, ENTIRELY RESET AND THOROUGHLY REVISED WITH 55 MORE ILLUSTRATIONS AND MANY NEW FIGURES

Demy 8vo Pp viii 996 With 816 illustrations of which 109 are coloured 28s net Postage 8d (Abroad 1s 6d)

A SHORT PRACTICE OF SURGERY

By HAMILTON BAILEY, F.R.C.S.Eng., *and* R. J. McNEILL LOVE, M.S.Lond., F.R.C.S.Eng.

Surgeon Royal Northern Hospital, London
Surgeon and Urologist Essex County Council
Surgeon Italian Hospital
Consulting Surgeon Clacton Hospital and the County Hospital, Chatham
External Examiner in Surgery, University of Bristol

[illegible]

Consulting Surgeon, Cancer Hospital, Manor House Hospital

Hunterian Professor, Royal College of Surgeons

[illegible]

Extract from Preface.—A new feature of this edition is the inclusion of brief case histories, which will be found in small italics at the foot of many of the pages. We feel that they will add to the practical value of the book and that name, otherwise meaningless, will assume some personality.

London: H. K. LEWIS & Co. Ltd., 136, Gower Street, W.C.1
Telephone: [illegible]

MANUAL OF PUBLIC HEALTH

FIRST VOLUME RECENTLY PUBLISHED

LABORATORY PRACTICE
100 pp. 169 Illustrations
21s. net, postage 7d.

SECOND VOLUME JUST PUBLISHED

HYGIENE
340 pp. 31 Illustrations
15s. net, postage 6d.

By

Professor J. H. Currie, M.A., M.D., D.P.H.
Department of Public Health, University of Glasgow

¶ The third volume on Principles and Procedure is in active preparation.

PUBLISHED BY
E. & S. LIVINGSTONE, 16-17, Teviot Place, EDINBURGH

FORENSIC MEDICINE
FIVE VALUABLE BOOKS

TEXTBOOK OF FORENSIC MEDICINE
By SYDNEY SMITH, M.D., F.R.C.P.
Very (6th) *Edition*. 169 Illustrations. 24s.

TAYLOR'S PRINCIPLES AND PRACTICE OF MEDICAL JURISPRUDENCE
9th *Edition*. Edited by SYDNEY SMITH, M.D., F.R.C.P., and W. C. H. COOK, LL.D. 47 Illustrations. 2 Volumes. 63s.

MEDICAL ASPECTS OF CRIME
By W. NORWOOD EAST, M.D., F.R.C.P. 18 Illustrations. 18s.

CLINICAL TOXICOLOGY
By Prof. FRICH FLSCHKE. Translated by C. J. STEWART, M.Sc., Ph.D., and O. DOKKER, Ph.D. 25 Illustrations. 15s.

THE MEDICO LEGAL POST MORTEM IN INDIA
By Major D. P. LAMBERT, M.D., Ch.B., D.P.M.&H. With a Foreword by Prof. SYDNEY SMITH, F.R.C.P. 5s.

J. & A. CHURCHILL, LTD.
104 Gloucester Place, London, W.1

X-RAY CAR SERVICE

PORTABLE X RAYS LTD

POWER ROAD, CHISWICK
TELEPHONE CHISWICK 4006

ANY DAY ANYWHERE ANY NIGHT

FREQUENT MICTURITION

YBWLT ABSORBENT BAGS
Male day pattern 3s.
New Model Female day pattern 4s.

DUPUYTREN BAGS
Male or Female day and night 70s.

SANITUBE
For helpless bedridden patients 7s.

Our bags catch all leakage, easing mind and body. Invisible under clothing, and easily emptied. Now worn world wide. Special pattern for men in hospitals and aviation.

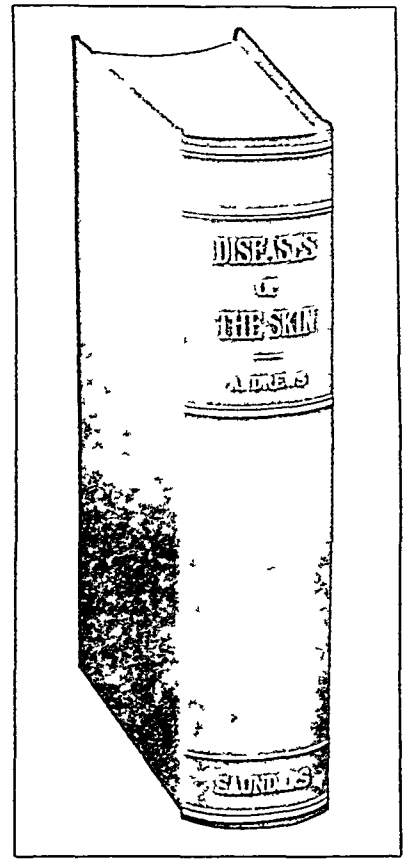
Diagrams etc. on request from
HILLIARD, 123 Douglas Street, Glasgow, C.

NAMEPLATES of [illegible]

Send for Illustrated Price lists and Free Lay
F. B. HALL & CO. 445 New Cross Rd., S.E.14
TELEPHONE [illegible]

NEW (2nd) EDITION of

ANDREWS' DISEASES of THE SKIN



CONTENTS

General Anatomy and Pathology
Symptomatology and General Diagnosis
Roentgen Ray Therapy
Radium Therapy
Dermatoses Due to Physical Cause
Pruritus and Cutaneous Neuroses
Dermatitis Venenata
Dermatitis Medicamentosa
Erythema and Urticaria
Eczema and Allied Conditions
Psoriasis and Allied Diseases
Lichen Planus
Acne Vulgaris
Miscellaneous Pyogenic Infections
Diseases Due to Fungi
Tuberculosis Cutis
Other Diseases Due to Bacilli
Syphilis
Diseases Due to Animal Parasites
Diseases Caused by Filterable Virus
Pemphigus and Dermatitis Herpetiformis
Deficiency Diseases
Hypertrophies and Atrophies
Cutaneous Infiltrations of Product of Metabolism
Diseases of Congenital Origin
Benign Neoplasms of the Skin
Malignant Neoplasms of the Skin
Diseases of the Hematopoietic System
Diseases of the Skin Appendages
Diseases of the Mucous Membranes
Affections of the Cutaneous Blood Vessels
Anomalies of Pigmentation
Tropical Diseases of the Skin

For this new edition of his deservedly popular book Dr Andrews has drastically revised every single page. Many new subjects have been added there are more than 250 new illustrations over 75 diseases that were not in the first edition are taken up and altogether the revision constitutes a new and up to date dermatology for the general practitioner and specialist

By GEORGE CLINTON ANDREWS M D Associate Professor of Dermatology College of Physicians and Surgeons Columbia University Octavo of 899 pages with 938 illustrations Cloth 45s net

NEW—Mallory's Pathological Technique

JUST READY—This *entirely new* book by Dr Frank B Mallory is a *practical manual* of pathological technique It was written in response to a constant demand for such a book and is a decidedly thorough presentation of modern methods and their application

It opens with a concise description of the equipment required in this work then takes up in separate chapters such subjects as preparation and examination of unfixed material fixation decalcification embedding processes dyes solutions and nuclear staining methods cleaning and mounting reagents micro incineration injections etc There is an entire section on special histological methods including methods for special organs bacterial stains and tests for miscellaneous infectious agents There is a 75-page section on postmortem technique and chapters are included on the preservation and photography of gross specimens

By FRANK B MALLORY A M M D S D Consulting Pathologist to the Boston City Hospital Octavo of 434 pages illustrated Cloth 20s net

W B SAUNDERS COMPANY, LTD, 7, Grape Street, LONDON, W C 2

EARLY VEGETABLE DIET for OPTIMUM NUTRITION of INFANTS

It is now widely admitted that vegetable foods should supplement the milk diet of infants as early as possible The difficulty in prescribing these foods at an early age has however hitherto been the fact that the weak digestions of infants cannot successfully deal with the fibrous cellular tissue, which therefore causes intestinal irritation and consequent upset, frequently manifested by diarrhœa

The Libby method of Homogenization disintegrates this tough, indigestible cellular fibre, thus enabling it to be easily eliminated the 'bulk' however being in no way affected This breaking down of the fibrous walls also has the advantage of enabling the full nutriment to be thoroughly assimilated

Libby's Homogenized Vegetable Foods for infants are prepared in six scientifically formulated combinations of Cereal, Vegetables and Fruit These can be prescribed as needed to provide the necessary balance of Vitamins, Minerals and other essentials

The accompanying table shows the comparative results of carefully controlled experiments with supplementary vegetable diet

AVERAGE TOTAL INCREASES IN HEMOGLOBIN AND ERYTHROCYTES AFTER SUPPLEMENTING THE MILK DIET WITH HOMOGENIZED VEGETABLES OR STRAINED VEGETABLES

Food	Per Cent Increase Above Anæmic Level Hæmoglobin	Red Blood Cells
Specially Homogenized Vegetables (carrots, spinach, peas)	89	117
Commercially Strained Vegetables (carrots, spinach, peas)	76	84
Home Strained Vegetables (carrots, spinach, peas)	80	95

Samples together with clinical data and laboratory reports will be gladly supplied upon request to Messrs Libby McNeill & Libby, Ltd, 15, Lime Street London, E C 3

Libby's
HOMOGENIZED FOODS
VEGETABLE - CEREAL - FRUIT - SOUP

IMPORTANT ANNOUNCEMENT

'SUMMIT' Hypodermic Needle now ALL-BRITISH

The sole manufacturing right of the SUMMIT hypodermic needle having recently been taken over by S and R J Everett and Company Limited it is now entirely British

EXCLUSIVE FEATURES OF SUMMIT'

(1) EASY TO WIRE
Clean wire can be conveniently inserted through the point to afford a perfect open bevel

(2) FIRM SILKY FIT
Ensured by a soft but fine metal cone of a specially reinforced mount that [illegible]

(3) EASY TO ATTACH
The form of the Summit mount enables it to be firmly gripped between the thumb and forefinger

(4) LEGIBLE NUMBERING
Owing to the shape and form of the mount the needle size is [illegible]

(5) APPEARANCE
The special metal with which the mount is treated ensures a perfect appearance throughout life of the needle

'SUMMIT' Needles

From all Surgical Instrument Suppliers

Manufacturers and Wholesale Supplies
S & R J EVERETT & CO LTD THORNTON HEATH SURREY
Telephone Thornton Heath 3333 Telegrams Hypodermic Croydon

PURITY AND RELIABILITY

PHIL-SANO ASPIRIN TABLETS

Brand 5 Gr

are of exceptional remedial activity and purity compounded in the most scientific manner to secure therapeutic efficiency The important features of Phil Sano BRITISH MADE ASPIRIN TABLETS are the whiteness of the Tablets the extreme purity of the Aspirin used in their manufacture and their instant disintegrating properties there are no Aspirin Tablets of better or higher quality

Bottles of 25 Tablets 6d
50 10½d
100 1/3
Also packed in Bottles of 1 000 and 500 for Dispensing
Trial Sample will be sent on request
If any difficulty in obtaining supplies they will be sent post free on receipt of remittance

PHIL-SANO LIMITED
106, GREAT RUSSELL STREET, LONDON, W C 1
Telephone Museum 8533 *Codes A B C 5th Edition and Marconi International*

B·M·A Publications

B M A Model Forms (No 1) for Doctor's use when sending a Patient to Hospital

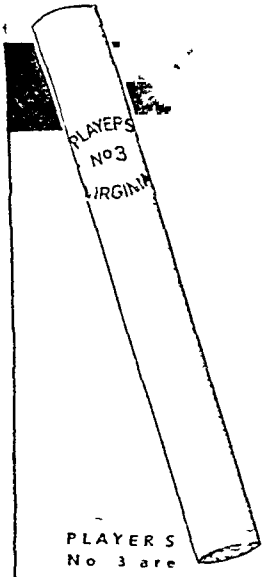
Price 1s per 100 post free

B M A Model Forms (No 2) for use of Hospital when Patient attends without a Doctor's Letter

Price 6d per book of 50 forms

British Medical Association
B M A House, Tavistock Sq, London, W C 1





PLAYER'S No 3 are supplied either plain or cork-tipped so ask for which you prefer

NOTABLE NUMBERS

20 MARYLAND STREET LIVERPOOL — a frequent visitor to this house was the brilliant unhappy sage of Chelsea —Thomas Carlyle

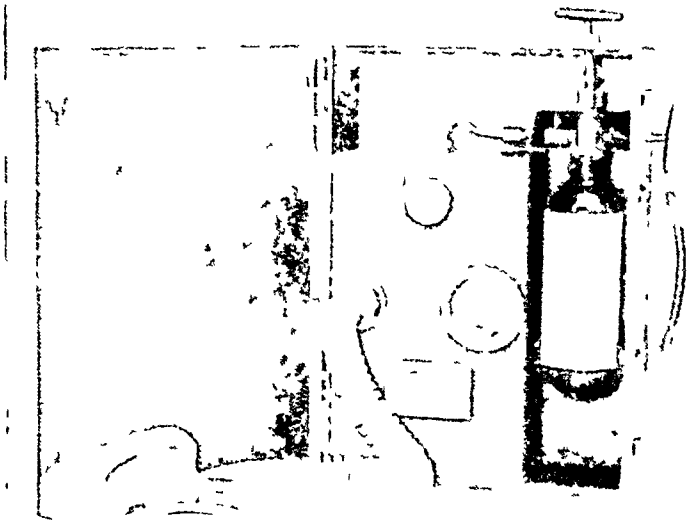
Notable, in matters of smoking, is that other famous number—Player's No 3 It is a number with definite associations the mellowness, the distinctive flavour and aroma of a *finer quality* cigarette

PLAYER'S NUMBER 3
EXTRA QUALITY VIRGINIA

20 FOR 1/4 50 FOR 3/3 50 TINS (plain only) 3/4

3P.50.A.

The "QUEEN CHARLOTTE'S" *portable* GAS AND AIR MACHINE



DESIGNED FOR
SAFETY-LOW COST
PORTABILITY
COMPACTNESS
SIMPLICITY

APPROVED BY THE CENTRAL MIDWIVES BOARD

The Queen Charlottes apparatus has been recognised by the Central Midwives Board as one which may be used by midwives in accordance with the terms of the Boards ruling regarding the administration of Nitrous Oxide and Air by midwives Three models are available which can be supplied to midwives and full particulars are obtainable on application to the address below

STATEMENT AUTHORISED BY CENTRAL MIDWIVES BOARD SEPT 27, 1937

"The Queen Charlotte's Gas Air Analgesia apparatus has been recognised by the Central Midwives Board as an apparatus which may be used by midwives in accordance with the terms of the Board's ruling regarding the administration of Nitrous Oxide and Air by midwives"

The BRITISH OXYGEN Co LTD

MEDICAL SECTION,

EAST LANE, WEMBLEY, MIDDLESEX
TELEPHONE ARNOLD 1234 (10 Lines)

CORSETS AND POSTURE



No. 1

Typical Illustration of posture correction. Picture of Lieutenant-Colonel before and immediately after the application of the Spencer Corrective Support. Interval of a few minutes between pictures. No. 1A.



No. 2



No. 3

Showing Front Elevation

The value of Spencer Supports in correcting posture has long been recognised by thousands of doctors who use them regularly.

When we improve posture through a Spencer Corset or Support we call this INDIVIDUAL DESIGNING. Each Spencer Support is designed to meet the individual needs of the patient from complete measurements and figure description taken by a trained Corsetiere.

The Spencer either the Belt or the Supporting Corset is designed in two sections to give adequate abdominal support and uplift and correct back support.

SUPPORTS FOR

Maternity	Movable Kidney	Hernia	Pendulous Breasts
Enteroptosis	Sacro-iliac Strain	Post-operative	Pendulous Abdomen

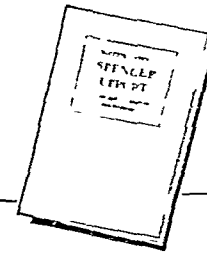
BEWARE OF SUBSTITUTION.—Spencer Corsets fulfil every requirement of a well-designed Support, often in circumstances where lesser appliances prescribed as Spencer Supports or Corsets of another make fail, because the makers do not understand the Spencer principle of individual designing. Insist upon Spencer Support bearing the SPENCER Label.

Trained Spencer Corsetieres are resident throughout the Kingdom. Name of nearest Establishment supplied on request.

A skilful Specialist trained by Spencer Corsetieres will call at any address at your patient's convenience, by appointment, to fit your supports.

Spencer Supports and Corsets are never sold in shops

May we send you this New Professional Booklet describing Spencer Supports and their Accepted Uses?



SPENCER

CORSETS - GIRDLES - BELTS
BRASSIERES - SURGICAL SUPPORTS

Branch Offices and Salons

LONDON GLASGOW BRISTOL LIVERPOOL
BIRMINGHAM EDINBURGH MANCHESTER
(See Local Telephone Directory)

Expert Fitter (Trained Nurse) at your immediate Service

SPENCER CORSETS LIMITED
Spencer House Banbury, Oxon

Please send me your illustrated booklet. I am particularly interested in supports for

Name *Dr.*

Address

Question . . . . .

What gives the most effective abdominal support?

Answer DIRECT anterior posterior pressure

Question *How does it?*

Answer It gives even, positive pressure where the body most needs it

Question *Where is this form of support found at its best?*

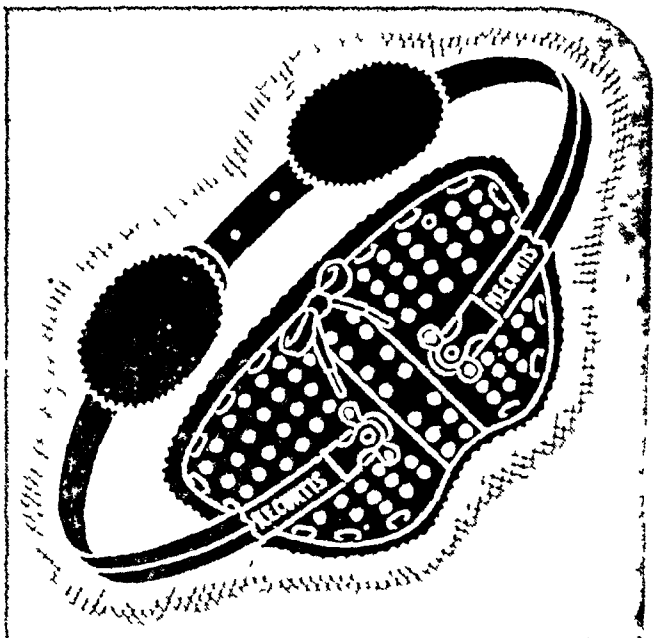
Answer In the Curtis Abdominal Support No. 1

Question *What are its outstanding features?*

Answer No undue constriction of the lower abdomen. Extremely light. Maximum support is combined with complete freedom of the hips. Medically approved in the treatment of all forms of abdominal ptosis—visceroptosis, enteroptosis and gastroptosis—and for the support of scar tissue during consolidation

H. F. CURTIS & SON, LTD.

Mandeville Place, Wigmore Street, London, W.1. Sole Makers of Curtis Appliances, Abdominal Belts and Corsets, Elastic Hosiery, Trusses, Crutches, Surgical Appliances, etc. Telegrams: Curtis, Wesdo, London. Telephone: WELbeck 2021



CURTIS

RTM

ABDOMINAL SUPPORT NO1

KOROMEX METHOD

The Koromex Occlusive Diaphragm is made in a range of sizes to fit each individual patient, pure latex rubber pessaries. Light and comfortable, practically unfelt. Two-year durability guaranteed. Practitioners and birth control clinics, for more certain protection, prefer to use the perfect fitting Koromex Diaphragm with

KOROMEX VACINAL JELLY

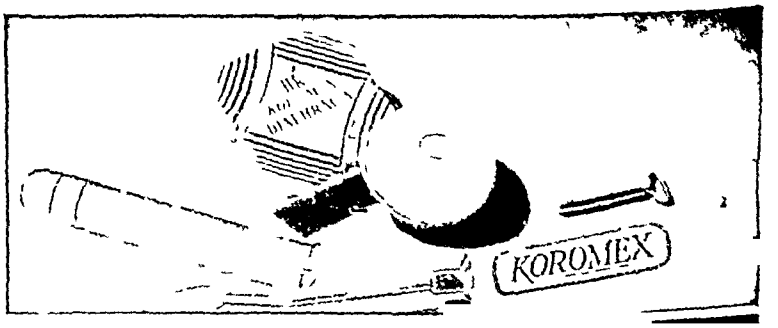
Stainless and prolonged effective spermicide. The carefully gauged viscosity of Koromex Jelly affords the all-important mechanical block. No toxicity or irritation makes the diaphragms easier to insert.

Advise the Koromex Method. Your patient will be grateful.

A sample of Koromex Jelly will be sent on application to medical practitioners also a booklet the Physician's Guide on the technique of fitting the Occlusive Koromex Diaphragm. No charge. Write to

The Highest Record of PROVEN SUCCESS in Contraceptives

○ Evidence of the high degree of efficacy of the Koromex Method is based upon the experience of 234 clinics—140 hospitals—over 50,000 physicians



THE KOROMEX METHOD

KOROMEX DIAPHRAGM + KOROMEX JELLY

● The Koromex Diaphragm appears on the National Birth Control Association's approved list with seven Prentif products, including Condoms, Sheaths, Jellies and Suppositories. Illustrated descriptive Price List on request.

PRENTIF LIMITED, CONTRACEPTIVE SPECIALISTS, LONG'S COURT, ST. MARTIN'S STREET, LONDON, W.C.2

Sole agents in Great Britain for Holland-Rantos Co., Inc., New York

If you are not receiving regularly the Prentif Quarterly Medical Bulletin "Contraceptive Practice" kindly inform us. We shall be pleased to supply missing back numbers and arrange that future issues are specially sent, if requested.

For your attention—A NEW NATURAL FRUIT JUICE

If your patients would like a new fruit juice in their diet you can safely recommend Dole Pineapple Juice the pure, unsweetened juice of luscious Hawaiian Pineapples Besides being a delicious refreshing drink it is a good source of vitamins A, B and C and natural fruit sugars The typical analysis below shows you what Dole Pineapple Juice is composed of



TYPICAL ANALYSIS

Moisture	85.3 %	Crude fibre	0.02 %
Ash	0.4 %	Titratable acidity expressed	0.9
Fat (ether extract)	0.3%	Reducing sugars as invert sugar	12.4
Protein (N × 6.25)	0.3%	Carbohydrate other than sugars (by difference)	0.38

If you would like to taste this tangy drink we will be pleased to send you a sample tin on receipt of your name and address

2000 doctors have already availed themselves of this offer Pure unsweetened packed by the exclusive Dole Fast Seal Vacuum Packing Process



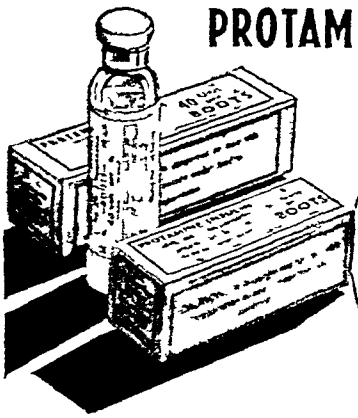
Dole Pineapple Juice comes from Hawaii and is the juice of sun-ripened Pineapples

DOLE HAWAIIAN PINEAPPLE JUICE

J K HUSBAND & CO. LTD, 10 EASTCHEAP, LONDON, E.C.3

FOR THE TREATMENT OF DIABETES

PROTAMINE INSULIN (with Zinc) Suspension-Boots



Supplied as follows

40 units per c.c.	
5 c.c. rubber-capped vials	2/4
10 c.c. rubber capped vials	4/6
80 units per c.c.	
5 c.c. rubber-capped vials	4/6

Prices net.

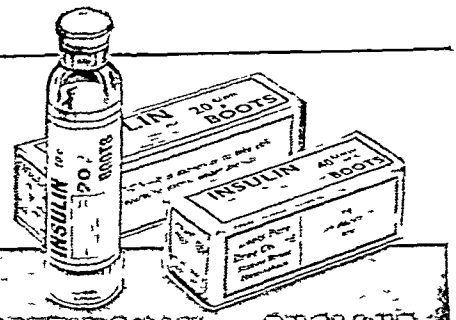
Accurately standardized and tested before issue May be used alone or with Insulin according to the needs of individual patients

Cases of Diabetes of moderate severity can usually be controlled by one injection of Protamine Insulin (with Zinc) Suspension-Boots a day given before breakfast.

INSULIN . . . BOOTS ONE QUALITY ONLY

THE HIGHEST OBTAINABLE—PURITY AND POTENCY GUARANTEED

Literature sent on request



WHOLESALE AND EXPORT DEPARTMENT

BOOTS PURE DRUG CO. LTD. NOTTINGHAM . . . ENGLAND

ACIDOSIS

Osler and McCrae advise the employment of Sodium, Calcium, Potassium and Magnesium Salts for the prevention of Acidosis

Professional samples and literature gladly sent on request

SALVITAE

SALVITAE promotes Elimination and Alkalescence by adequately supplying these salts, thus maintaining the reaction of the blood at practically a fixed and constant point



COATES & COOPER LTD, 94, CLERKENWELL ROAD, LONDON, EC1

DIPHTHERIA PROPHYLACTICS

Made and standardized at

THE EVANS BIOLOGICAL INSTITUTE RUNCORN, CHESHIRE

APT Evans (Alum Precipitated Toxoid)	The first injection should be 0.1 to 0.2 cc and the final injection 0.5 cc after two weeks. For children of eight years and under
TAF Evans (Toxoid Antitoxin Floccules)	TAF should be used when the subject is more than eight years of age
TAM Evans (Toxoid Antitoxin Mixture)	Produces immunity more slowly than APT and TAF
FT Evans (Formol Toxoid)	For children between 1 and 8 years of age

(Special prices and detailed literature will be forwarded to Public Health Authorities)

Evans Sons Lescher & Webb Ltd.

LIVERPOOL and LONDON

A VALUABLE, DOUBLE-ACTION ANTISEPTIC*

Local treatment with Sphagnol Peat Ointment gives rapid relief in the most obstinate cases of psoriasis haemorrhoids eczema and skin eruptions. The reason is that Sphagnol has a twofold action. First of all it soothes and allays irritation and burning sensations secondly the natural antiseptic properties of the peat distillates assist in general treatment. Sphagnol has proved beneficial over and over again where persistent resistance has been encountered.

In case you have had no personal experience of Sphagnol we shall be pleased to send you a clinical size sample for testing if you will write to Peat Products (Sphagnol) Ltd. Dept. B.M.J. 21 Bush Lane London E.C.4

CONTAINS DISTILLATES OF PEAT

*Sphagnol

MEDICAL SOAPS OINTMENT SUPPOSITORIES, ETC

LACTAGOL (Tdestine Calcium Pho phorus) helps to compensate for the constant drain by the foetus upon the reserves of the expectant mother
It is a valuable roborant during convalescence following parturition and exerts a definite galactagogue action on the mammary glands of the nursing mother
Specimens for clinical trial free on application Lactagol Ltd Mitcham Surrey

Expectant and Nursing Mothers thrive upon Lactagol

HEWLETT'S
ANTISEPTIC CREAM
AN EMOLLIENT HEALING CREAM
FOR
BLEPHARITIS, ACNE, ECZEMA,
and all abrasions and irritations of the skin

MEDICAL OPINIONS

I consider that Messrs Hewlett s Antiseptic Cream is the best ointment that can be kept for general purposes Its soothing and healing properties are most marked and I have never seen its equal
E N —— LRCPEd MRCSEng

I think this a most elegant preparation and certainly is excessively useful in skin abrasions
T C E —— MRCS LRCP

I have found great improvement from the use of your Antiseptic Cream in a case of Eczema of the Scalp which had been chronic for 18 months
D K —— LFPSGlasg and LM

Antiseptic Cream is a compound of zinc oleate with boric acid lanoline etc which should serve many useful purposes
—*Bristol Medico Chirurgical Journal*

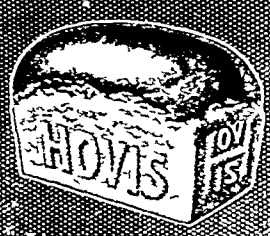
In enamelled collapsible tubes or 1 oz pots labelled only The Ointment To be used as directed

In bulk, 5oz, 10oz, 22oz, 40oz, 4½lb and 7½lb pots

Introduced and prepared only by

C. J. HEWLETT & SON, LTD.,
35/42, Charlotte Road, and 83/85, Curtain Road, LONDON, E C 2

25% ADDED GERM OF WHEAT
HoVIS contains all the elements of a complete food and is very easily absorbed into the system



HOVIS
TRADE MARK

REPLETE IN FATS PROTEINS VITAMIN B

Sheffield

A PRODUCT OF DISTINCTION

ETHER SOLUBLE TAR PASTE



INDICATED IN

ECZEMAS, PRURITUS, PSORIASIS, etc

PRESCRIBE AS

"E.S.T.P." (Martindale)

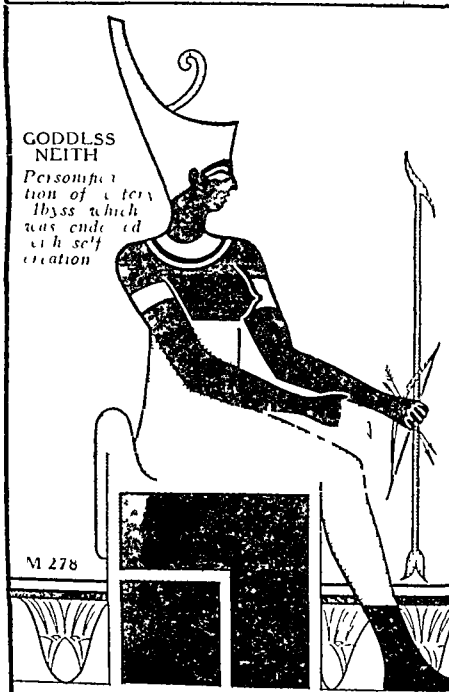
Issued in 2 4 and 8 oz pot

Literature and clinical samples on request

W MARTINDALE

75, NEW CAVENDISH STREET, LONDON, W.1

OVALTINE



IN SICKNESS AND CONVALESCENCE

THE impairment of digestive powers which is commonly met with in the feverish patient combined with the lack of desire for food often aggravates the difficulty of adequately replacing the increased loss of energy and destruction of tissue which occur

Ovaltine provides a satisfactory solution to the problem of alimentation in many cases of sickness and in the stage of convalescence after severe prolonged and debilitating illnesses where an easily assimilable palatable and concentrated nutrient is required It is always acceptable

Ovaltine replaces with advantage the ordinary milk preparations which so often prove distasteful to the invalid Prepared from full-cream milk eggs and malt extract in carefully balanced proportions it provides complete nourishment in the most readily assimilable form

A liberal supply for clinical trial sent free on request

A WANDER LTD 184 Queen's Gate SW7 Works Kings Langley Herts

B.D.H. TETANUS ANTITOXIN

B D H Tetanus Antitoxin is prepared from the serum of horses which have been highly immunised against the toxins of Cl tetani It is standardised in international units in accordance with the Therapeutic Substances Regulations, 1931 It is issued in two strengths, 1000 or more international units per c c for prophylaxis and 3000 international units or more per c c for curative use

As a prophylactic, tetanus antitoxin has been found of extreme value, a dose of at least 1000 or, preferably, 3000 international units intramuscularly, proximal to the lesion, is advised in the case of all wounds infected with manure, soil or dirt, especially in those districts in which tetanus is known to occur In treatment of established tetanus 100,000 to 200,000 units intravenously are recommended

Sample on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

VSS-3

VICHY-CÉLESTINS

THE WORLD RENOWNED NATURAL MINERAL WATER



INDICATIONS

GASTRIC

PRIMARY DYSPEPSIAS
- Hyperpepsia — Intermittent hyperchlorhydria
- Hypopepsia and apepsia — Dyspepsia arising from disturbance of neuromotility
- Intermittent pyloric stenosis not of organic origin

SECONDARY DYSPEPSIAS
- Arthritic dyspepsia
- Toxic dyspepsia (gastro hepatic)
- Dyspepsia due to enteroptosis

MALARIA & TROPICAL DISEASES
URINARY GRAVEL

NATURAL VICHY SALT for Drinking and Baths

INDICATIONS

HEPATIC

- Congestion due to excessive or improper feeding
- Congestion due to cirrhosis (before the cachetic stage)
- The diathetic congestions of diabetic gouty and obese persons
- Congestion due to poisoning (mercury morphine etc)
- Toxic congestion (influenza typhoid fever etc)
- Biliary lithiasis

DIATHESIS

The diabetes of fat people — Arthritic obesity
Uricaemia and gout — Rheumatic gout

VICHY DIGESTIVE PASTILLES
prepared with Natural Vichy Salt

CAUTION —Each bottle from the STATE SPRINGS bears a neck label with the word VICHY ETAT and the name of the SOLE AGENTS

INGRAM & ROYLE, LTD.

Bangor Wharf 45 Belvedere Road, London S E 1 And at Liverpool and Bristol

Samples free to Members of the Medical Profession

TRADE MARK **'EXTOMAK'** BRAND

DESICCATED STOMACH (BENGER)

prepared by special process for medicinal administration

As the result of clinical investigation extending over several years, 'Extomak' has proved to be very effective in the treatment of pernicious anæmia, initially and also in the maintenance stages

PREPARED IN THE BENGER LABORATORIES UNDER STRICT BACTERIOLOGICAL CONTROL

Supplied to the Medical Profession in tins of two sizes —

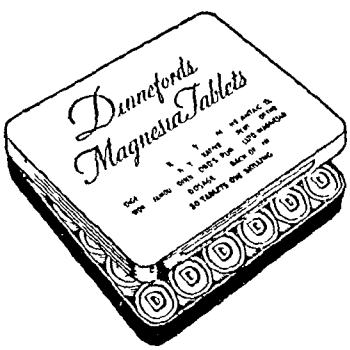
No 1 (approx 6 oz) at 5/- No 2 (approx 12 oz) at 9/6

BENGER'S FOOD, LTD, HOLMES CHAPEL, CHESHIRE

M 39-

CHANGED CONDITIONS

made it necessary!



Modern life means that more and more meals are eaten away from home and so it has become necessary to supply DINNEFORD'S—the standard remedy for indigestion—in tablet form Your patients can get them from any chemist

1/- PER TIN OF 30 TABLETS

DINNEFORD'S TABLETS

MADE BY DINNEFORD & CO LTD 12 CLIPSTONE STREET LONDON, W 1

CFH

Efficient urinary antisepsis

Cystitis usually associated with bacilluria is among the commoner and more distressing conditions which the practitioner is called upon to treat The cloudy and ill-smelling urine the discomfort arising from the irritation of the lining of the bladder and urethra and the consequent general physiological disturbance, create a syndrome familiar to every doctor

In these cases, prompt relief is nearly always afforded by 'Cystopurin (which is a brand of Hexamethylenetetramine with Sodium Acetate) 'Cystopurin is effective in either alkaline or acid media It is excreted both in the bile and in the urine and in each of these fluids exercises its antiseptic qualities In affections of the bladder and the other parts of the urinary passage it acts not only as a germicide but at the same time soothes the inflamed membranes relieves the discomfort, and both increases the flow and removes the cloudiness of the urine

Cystopurin', being prepared in tablet form, is easy of administration It is not dependent for its action upon decomposition by the acid contents of the stomach, and is readily absorbed

'Cystopurin'

(REGISTERED TRADE MARK)

A 'GENATOSAN' PRODUCT

Supplied in bulk and in tubes of 20 tablets for dispensing purposes

Samples and literature available on request to

GENATOSAN LIMITED

Loughborough, Leicestershire

The word CYSTOPURIN is Registered Trade Mark No. 463,161 in Great Britain and in the British Dominions Overseas and foreign countries

Alphidine and Pancreatin

In the Treatment of

Graves' Disease

Palatinoid No 3211, O S & Co with Pulverette 'Alphidine,' O S & Co

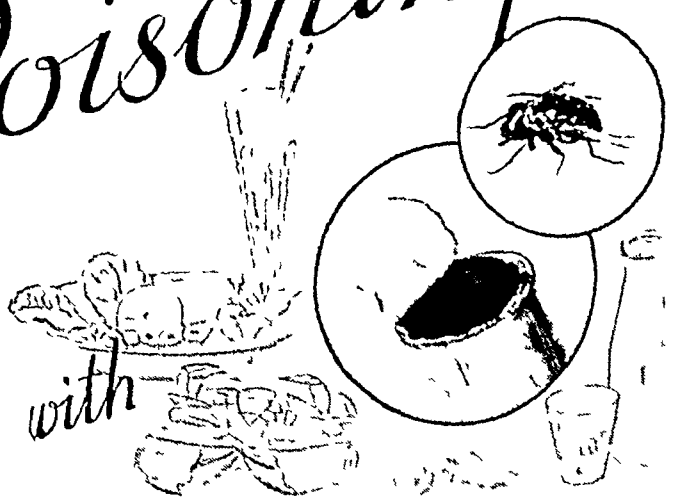
Pancreatin, gr 5	Equals Iodine, gr ½
One thrice daily, before meals	One twice daily, between meals, on two or three days each week

For full particulars see B M J, Oct 2nd, 1937, p 660

Oppenheimer Son & Co. Ltd.

Handforth Laboratories, Clapham Road, LONDON, S W 9

COUNTERACT *Food Poisoning*



Summer heat drought flies contaminated food—and the result—Food Poisoning! Kaylene is the true antidote to Bacterial Toxins and Toxalbumins in contaminated food Its action is rapid and reliable

Kaylene brand of colloidal kaolin has been shown to adsorb he toxic principles of Shell-Fish poisoning, Potato poisoning and Mushroom poisoning—*vide* B M J, 1937, 1, 595

Price 10 oz, 3/-, 4 lbs, 12/6

Samples on request

with

KAYLENE

(Brand of Colloidal Kaolin)

KAYLENE, LTD, *Sole Distributors* ADSORBENTS, LTD, WATERLOO ROAD, LONDON NW 2

ELI LILLY AND COMPANY LIMITED

Pharmaceutical and Biological Products



'LEXTRON'

Liver Stomach Concentrate with Iron and Vitamin B Complex

RAPID convalescence from many debilitating diseases can be brought about with 'Lextron' when secondary anaemia has assumed a conspicuous place in the clinical picture On 'Lextron' the patient receives all the materials essential for blood regeneration

'Lextron' brand liver-stomach concentrate with iron and Vitamin B complex is supplied in bottles of 42, 84, and 500 'Pulvules' brand filled capsules

Prompt Attention Given to Professional Inquiries

2 3 AND 4 DEAN STREET LONDON W 1

Distributing Agents in Britain for

ELI LILLY AND COMPANY, INDIANAPOLIS, U S A

In Dermatological Conditions,

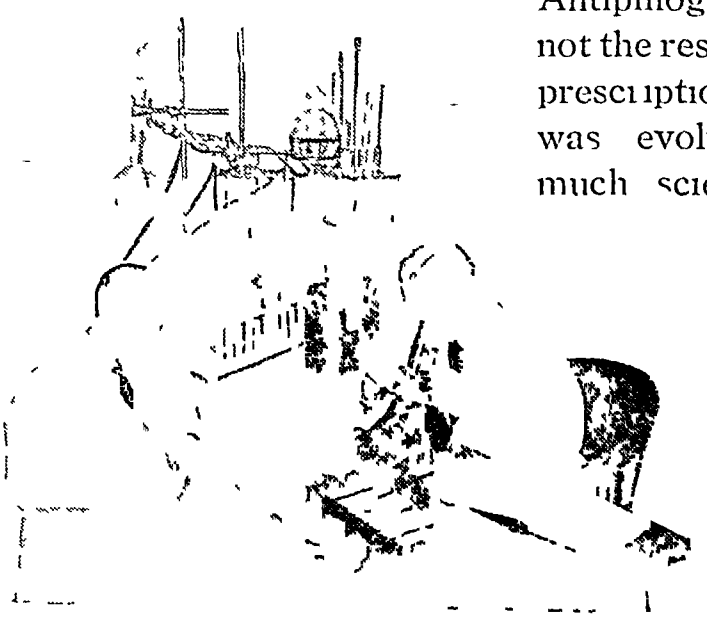
such as *Eczema* *Boils*
Psoriasis *Varicose Ulcers*
Urticaria *Acne*
Herpes Zoster *Vaccination*

prescribe

Antiphlogistine
BRAND TRADE MARK DRESSING

either alone, or, in cases where radiological or other treatment is instituted, as an adjuvant thereto

Osmotic · Decongestive · Bacteriostatic
Antipruritic · Detersive



Antiphlogistine Dressing is not the result of a "chance" prescription—its formula was evolved only after much scientific research

Sample on request

MADE IN ENGLAND

THE DENVER CHEMICAL MFG CO
12, Carlisle Road
London, NW9

Treatment of Varicose Veins by injection



VARICOSE VEIN INJECTION

Because of their convenience and accuracy of dosage and their high standard of purity 'Hypoloid' products are of the utmost value in general practice

The importance of reliable products cannot be too strongly emphasised

TRADE MARK **'HYPOLOID'** BRAND

PRODUCTS

'HYPOLOID' QUININE AND URETHANE

Quinine Dihydrochloride 0.26 gm., and Urethane 0.13 gm., in 2 c.c.

Boxes of 5 ampoules at 2/-

Rubber-capped bottles of 25 c.c. at 3/-

'HYPOLOID' SODIUM MORRHUATE

	5 per cent. solution	10 per cent. solution
2 c.c. ampoules in boxes of 5 at	3/-	3/-
Rubber-capped bottles of 25 c.c. at	3/9	4/2

'HYPOLOID' SODIUM SALICYLATE

20 per cent. in 5 c.c. *Hypoloid ampoules of 5 c.c. in boxes of 5 at* 2/9

London Prices to the Medical Profession

Descriptive literature to Medical Men, on request

BURROUGHS WELLCOME & CO LONDON

Address for cablegrams SNOW HILL BUILDINGS E.C.1

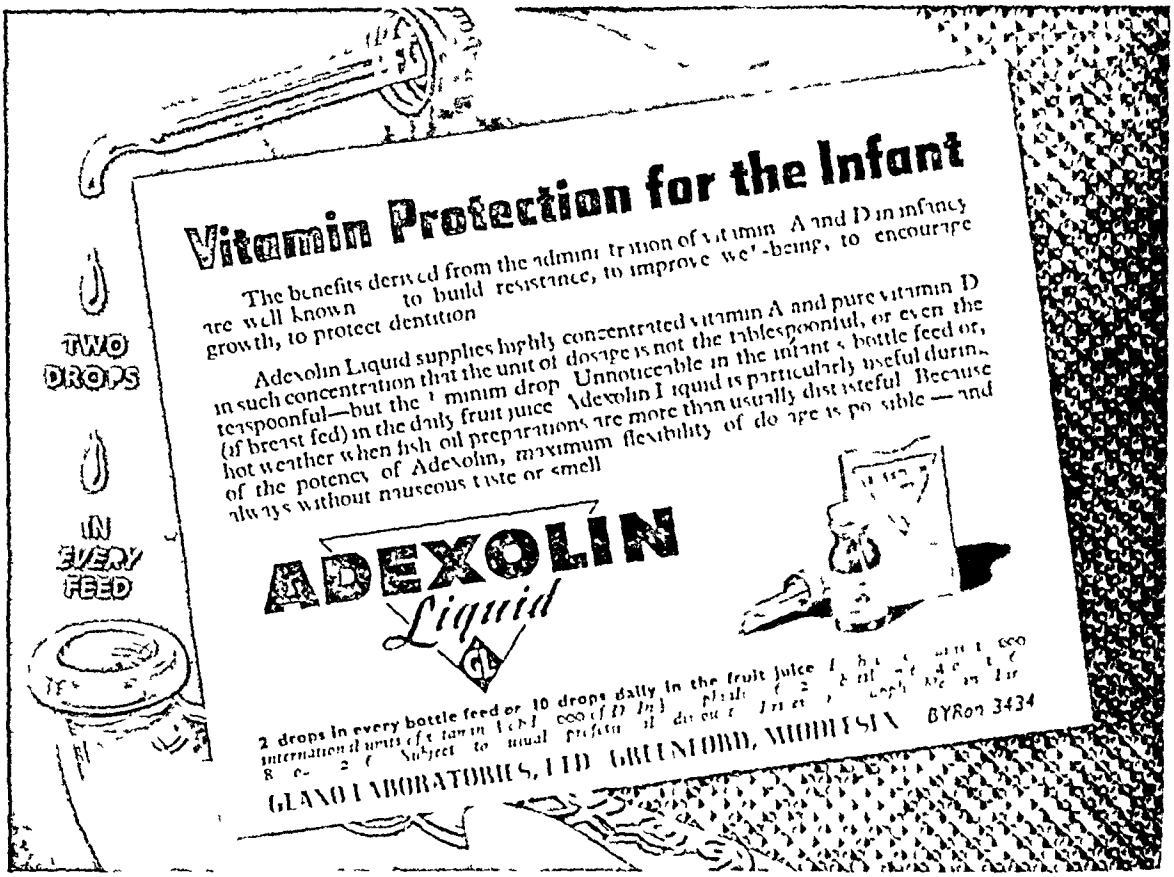
Export Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W.1

Associated Houses

NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

H 3670

COPYRIGHT



Sex-Hormone Therapy

ANTUITRIN 'S' is a solution of the anterior-pituitary-like sex hormone obtained from pregnancy urine The solution possesses both follicle stimulating and luteinizing properties Antuitrin S' is indicated for the treatment of conditions such as menorrhagia and metrorrhagia, climacteric haemorrhage, habitual abortion, and in some cases of sterility In vials of 10 c c

THEELIN (keto-hydroxyoestrin) in aqueous solution is indicated for the relief of the symptoms of the menopause artificial or natural, in mastopathy and in hyperemesis gravidarum etc In ampoules containing 200 International units

THEELIN IN OIL For other indications in which larger doses may be necessary a solution of Theelin in Oil has been introduced In ampoules of three strengths containing 1,000, 2000 or 10000 International units

THEELOL (trihydroxyoestrin) is similar to Theelin in physiological action, but it is stable in the gastro-intestinal tract This property coupled with its greater solubility in water ensures its prompt absorption and therapeutic action after oral administration In bottles of 20 capsules

Further particulars regarding any of these preparations will be sent upon request to —

PARKE, DAVIS & CO., 50, BEAK STREET, LONDON, W.1

Laboratories Hounslow, Middlesex *Inc U.S.A. Liability Ltd*

BRITISH MEDICAL JOURNAL

LONDON SATURDAY AUGUST 13 1938

THE PREVENTION AND CONTROL OF PUERPERAL SEPSIS, INCLUDING ITS MEDICO-LEGAL ASPECTS*

BY

R. W. JOHNSTONE, C.B.E., M.D., F.R.C.S.Ed., F.C.O.G.

Professor of Midwifery and Diseases of Women, University of Edinburgh

There is no question that conditions in regard to puerperal infection have considerably improved during the present generation but we are far from having reached any irreducible minimum in its incidence. What we have achieved is a fairly complete understanding of its causes. We know something about the conditions upon which the patient's resistance depends and that toxæmia, haemorrhage, exhaustion and malnutrition depress it. We know that trauma and haemorrhage diminish the local resistance of the tissues. We know the common sources of the most dangerous organisms and we have learned a good deal regarding the methods of preventing their access.

Types of Infecting Organism

To make my subsequent arguments clear let me say at the outset that broadly speaking there are two types of infecting organism to be guarded against. There are first the organisms commonly found in the skin of and around the vulva, on the hands and clothes and on unsterilized dressings and instruments—for the most part anaerobic and non-haemolytic streptococci, staphylococci and coli-form organisms. These organisms most commonly give rise to infection after labours in which there has been considerable injury of the tissues. They cause a true wound infection and against them our preventive methods are essentially the same as those adopted in surgery. Secondly, there is the haemolytic streptococcus associated with scarlet fever and erysipelas but most commonly with tonsillitis, nasal infections and morbid conditions of the upper air passages generally. The view that this organism is the cause of many puerperal infections and of the vast majority of the fatal cases seems to have been proved by the work of Smith (1927, 1931, 1933), Paine (1931, 1933), Leonard Colebrook (1933, 1938), Dora Colebrook (1935), King (1930) and others. Not only is this type of infection more deadly to the individual patient but as often as not it attacks the woman who has had a normal spontaneous delivery and among recently delivered women it appears to have a degree of contagiousness comparable only to that of small-pox. A great advance in recent years has been the clear demonstration that this organism is practically never present in the birth canal before labour but is conveyed from without and usually by droplet or spray infection from the nose or throat of one or more of those in attendance at the delivery or during the puerperium not excluding the patient herself. The danger is greatest when any of those concerned is actually suffering or has recently suffered from some infection of the nose or throat. After recovery a small proportion estimated at about 7 per cent. in general but probably nearer 20 per cent. during seasons when colds and sore throats are rife continue to be carriers of haemolytic streptococci but there seems to be evidence that in such circumstances the organisms are not so virulent and the risk of their infecting a patient although by no means absent appears to be definitely less serious (Murray, 1930). In medicine as in warfare each newly discovered method of attack is quickly countered by a new method of defence and in this case the defence is twofold: first the use of masks to cover the mouth and nose of all in attendance and secondly the tracing of the cause of the infection by bacteriological examination of the throat and nose of each person who has been in close contact with the patient and if possible the exclusion from obstetric work until after recovery of any person found to be a probable source of the puerperal infection.

One final preliminary statement is that in the last two years there have been two cases in England in which a patient who went into a small maternity hospital or home for her delivery and there contracted puerperal infection has successfully claimed damages from the hospital authorities or doctor concerned because of alleged lack of reasonable care against infection.

It is these recent advances in our knowledge of the nature of the attack and of the means of defence together with the disturbing situation created by the legal actions mentioned which make this subject so suitable for discussion at a time when the State is placing on local authorities an increasing responsibility in regard to midwifery.

Value of Ante-natal Supervision

In trying to lay before you a brief consideration of the points which obstetricians in general regard as important in the prevention and control of this disease I would stress in the first place the value of ante-natal supervision. It must be interpreted in its widest sense and its aim in this connexion must be to build up the patient's resistance. The general health of the patient should be assessed as early as possible during pregnancy and treatment directed to any faults. I have had the opportunity of studying some hundreds of maternal death schedules through the courtesy of Dr. Charlotte Douglas of the Department

* Read in opening a discussion at a joint meeting of the Sections of Obstetrics and Gynæcology and Public Health and Hygiene at the Annual Meeting of the British Medical Association, Plymouth, 1938.

of Health for Scotland and this has impressed upon me the lamentable number of cases of death from puerperal infection in which pregnancy should never have been allowed to occur because coexistent conditions of disease and debility made these women unfit to resist the infection which ultimately destroyed them. Here we impinge upon vast and complex economic and social problems, questions of self-control and birth control, possibly even the vexed question of the law in regard to abortion, which I have no time to discuss.

Apart from attention to general health and any special indications of disease, the antenatal prevention of puerperal infection involves the treatment of septic foci in the body—for example, teeth, tonsils, sores and the cervix uteri. The very real danger of marital intercourse in the later months of pregnancy should be explained to the patient and, if need be, to her husband.

Diet

After this comes the important question of diet. In general it is quality rather than quantity that is at fault, and the ultimate cure is education in the elements of dietetics. Vitamins are greatly in vogue at the present time and there is probably no profession more susceptible to the dictates of fashion than our own. That vitamins, particularly A, B, C, D and E, are essential may be accepted as an axiom, but in patients who are on a reasonably good mixed diet it is probably unnecessary to administer supplementary vitamin preparations. If every pregnant woman would include fresh fruit in her daily diet and add to the fruit fresh green vegetables, dairy produce, and fresh herrings, the needs of the situation would be fully met and incidentally some of our economic difficulties ameliorated. In addition to vitamins the mineral elements of the diet are of great importance as the growth of the foetus makes real demands in respect of these substances which must be supplied from the mother's diet if her own tissues are not to be depleted to an extent which may undermine her powers of resistance. But here again a reasonable mixed diet should suffice, and it is only in cases where a deficiency of, for example, iron is clinically detected that direct medication is desirable.*

The more strictly obstetrical side of antenatal care is preventive in an important degree. By foreseeing causes of danger and difficulty, steps can be taken to ensure a method of delivery calculated to minimize trauma and haemorrhage, to control toxaemia, and to eliminate the risks inevitably associated with delivery in unsuitable surroundings.

The Place of Delivery

This brings me to the question of the *locus* of the delivery where circumstances offer a choice. I see no objection to delivery in the patient's own home provided it is suitable, and provided that the patient is in good general health and that no obstetrical operation of any gravity is likely to be required, but only medical considerations, and not sentiment, should determine the choice. Unless the patient's own home is clean and airy, and she can have a bed and preferably a room to herself, it is not a suitable place for a confinement. Far too many women are still delivered in wholly unsuitable houses and if there is no hospital accommodation for them then we must press for its provision. Other essentials are that sterile outfits of dressings, etc., must be provided either by the patient or by the local authority. Furthermore the danger of contact with members of the household newly returned from infectious diseases hospitals or with running ears or infected throats or sores must be kept clearly in mind and the presence of any such risk should determine removal to hospital. Any comparison of the relative safety of delivery at home and in hospital or a maternity home involves the assumption that in the latter the conditions and the technique are good. This point was made by the judge in one of the legal cases mentioned. In the past most hospital reports have shown a lower general mortality rate in the outdoor cases than *in the indoor cases* and the obvious explanation is that difficult and complicated cases naturally gravitate to the hospitals and so weight their figures adversely. The comparison is therefore fallacious as the two groups of cases are not strictly comparable. What more concerns us to-day is that evidence is accumulating that so far as infection is concerned the statistics of hospitals in which careful bacteriological control is exercised are beginning to show a lower incidence of infection in hospital than in district practice (Colebrook 1938, Rose 1937). I am therefore in favour of institutional midwifery except where the domiciliary conditions regarded from the obstetrical standpoint are really good and in my view fortunately, the social trend in favour of institutional midwifery will probably continue despite any opinions to the contrary.

It therefore behoves us to see to it that all maternity hospitals and homes conform to the high standard in accommodation, personnel and technique which their existence is now legally taken to imply. Overcrowding is too common even in some of our famous hospitals. Accommodation should be available for the complete separation from the very outset of clean and of suspect cases—that is cases which have been examined or handled outside—and for the immediate segregation of all puerperae who present symptoms suggestive of infection. Recognized cases of infection should be transferred at once to an entirely separate unit or a special hospital. In the design of new hospitals these points should be insisted upon as primary essentials.

Maternity Institutions

Maternity homes should be inspected more frequently and more searchingly than has often been the case hitherto by a responsible official of the local authority who has a real practical knowledge of midwifery. Much of the so called inspection at present is merely a formal compliance with the letter of the law.

In every maternity hospital and home one individual should be charged with the ultimate responsibility for distribution of patients to the various wards and the notification to doctors in charge of patients as well as to the local authority of all cases of puerperal pyrexia or infection. In the larger hospitals this should be the resident obstetrical officer, in the smaller hospitals and nursing homes the matron.

Another question arises in regard to the admission of cases of puerperal infection to maternity institutions. Unless a whole separate block is reserved for such cases this seems to me quite wrong. Again, if such cases are housed in a separate block, or in a hospital for infectious diseases, it seems desirable that they should be under the supervision of an obstetrician. This recommendation is not intended as a reflection on the competence of the staff of such hospitals but as a plea for increasing the experience of the obstetrician in a particularly important type

* In connexion with diet in relation to the prevention of puerperal sepsis the interim reports of the unfinished investigations of the Joint Council of Midwifery are most suggestive. See *Public Health* April and November 1937 and March 1938.

of case to which he is often called in consultant What of abortions which are almost always suspect ? Should they be sent to a maternity hospital to a gynaecological ward or to a special ward connected with a maternity hospital? The last seems to me the best plan for again and even more emphatically these cases should always be under the care of an obstetrician

Intra natal Technique

Intra natal technique is the most important point of all for it is during labour that the danger is at its maximum The simple main requirements are a clean vulva clean hands clean dressings clean instruments and the prevention of the contamination of any of these clean things during the labour The attainment of these desiderata means safety anything short of it spells danger A completely aseptic technique is even more unattainable in midwifery than in surgery and there are those who recognizing this rely wholly upon the lavish use of antiseptics and produce fine results in support of their policy But I think the better and more rational plan is to combine both methods—to render aseptic by boiling everything that can be boiled and to apply adequate antiseptic methods to those that cannot Thus gloves gowns sheets dressings and instruments can and should be sterilized the skin of the hands and of the vulva can be rendered reasonably safe by thorough antiseptic treatment

I cannot here enter upon the relative merits of the many antiseptics in use For information upon that point and indeed upon this whole subject I would refer you to the invaluable work of Dr Leonard Colebrook (1938) I would only emphasize that the strict routine observance of a careful technique is much more important than the particular antiseptic used The one essential is that the antiseptic should be used in a strength sufficient to be really and rapidly germicidal Let me rather give you an outline of the technique which we follow in the Royal Maternity Hospital Edinburgh and which I put forward not dogmatically but just as an example

1 At the outset of labour the patient's whole body should be thoroughly washed if time and her general condition permit *In hospital* this is done by a spray bath with the woman sitting on a stool or lying on a slab to prevent the possible entry of soiled water into the gaping vulva of a multipara In the absence of such facilities a bed bath or in an emergency a thorough washing of the lower abdomen vulva and thighs, must suffice

2 The vulva and pubes are shaved again well washed with soap and water and dried Thereafter a soap and water enema is given unless the patient is bleeding or is advanced in labour and after the rectum has been evacuated the whole area is treated with 5 per cent dettol as a lotion or in the form of 30 per cent dettol cream

3 Before any examination and in any case always at the end of the second stage dettol lotion or cream is again applied We more often use dettol blue—that is dettol with an inert pigment—for the skin as it clearly shows the limits of the area treated

4 Before examining or delivering the obstetrician washes his hands thoroughly with warm running water and soap rinses them in methylated spirit dons a sterile cap mask and long sleeved gown and sterile gloves Dettol cream is used as a lubricant for the fingers and for such instruments as the forceps If running water is not available care must be taken that the basins used have been sterilized and the water itself should be boiled wherever there is any dubiety about it

5 The vagina is not treated antiseptically except in the presence of a leucorrhoeal discharge in which case it is douched out with 5 per cent dettol solution immediately before delivery

6 After delivery the vulva buttocks and thighs are swabbed clean with 5 per cent dettol and a sterile gamgee pad applied

Obviously such a technique is not applicable in detail in many of the houses of the poor but given he provision *of a sterile outfit by the local authority something* closely approximating to it is usually possible I would draw attention to L Colebrook's (1938) evidence that dry hands or dry unsterilized gloves can be rendered sterile and even actively antiseptic by rubbing pure dettol or 30 per cent dettol cream into them until they are dry In an emergency this is an invaluable hint

I anticipate that the question of masks will arise in this discussion but if the importance of spray or droplet infection *from the mouth or nose of an infected attendant* or even a healthy carrier upon hands dressings and instruments or upon the vulva itself is admitted then it seems to me that the wearing of a mask is the obvious and inescapable common sense preventive measure The only alternative to a mask is to conduct the labour in absolute silence but an unexpected and irresistible cough or sneeze may betray even the most devout Trappist Moreover the mask to be adequate must consist of *at least* four folds of fine meshed gauze and must itself have been sterilized Many of the masks in use are more figuratively than literally of the nature of lip service to the doctrine enunciated

With this technique the further endeavour to prevent infection during labour lies in the observance of the principles of good midwifery in the conduct of the case in particular in the avoidance of trauma haemorrhage and exhaustion Unnecessary interference is certainly to be deprecated but unnecessary delay is also undesirable and the obstetrician who has conscientiously observed the precautions mentioned need not fear to undertake any minor intervention such as a low forceps operation Major forms of intervention especially those involving the introduction of the hand into the uterus must always remain more dangerous and will always carry some toll of subsequent infection Whenever possible they should be carried out in a hospital where the surroundings the facilities and the number of assistants are more suitable

The Puerperium

In the early days of the puerperium similar precautions must be maintained for there is abundant evidence that some women become infected a day or two after delivery The main principle is again the prevention of infection from the hands nose and throat of the nurse or others attending the patient and to this must now be added the prevention of contagion air borne or otherwise from one patient to another Before giving any attention to the genital area the nurse must scrub her hands and forearms and should don a mask and sterile gloves In hospitals and nursing homes each patient should as far as possible have her own individual outfit and equipment and where this is impossible all articles should be sterilized before use In particular does this apply to bed pans The importance of fresh air and sunshine and the promotion of drainage of the uterus by propping the patient into a sitting position at frequent intervals after the first twenty four hours need only be mentioned

The sphere of drugs in the prophylaxis of infection in the puerperium has received attention from time to time *Quinine* for example has long had a vague but rather unsubstantiated reputation in this respect and in combination with ergot is widely used The recent introduction of sulphanilamide preparations and their striking

success in the therapeutic treatment of streptococcal infections naturally raised the question whether their administration would be correspondingly successful in prophylaxis To test this my colleagues and I in the Royal Maternity Hospital Edinburgh (Johnstone 1938) made a rough-and-ready clinical experiment on a large scale by giving a prophylactic course of these drugs to every patient delivered in the hospital during the year 1937 A comparison of the results of the year's working with those of the previous year showed a reduction in the number of puerperia which were morbid according to the B M A standard from 3·06 per cent in 1936 to 1·9 per cent in 1937 In order to test the real significance of this apparent improvement we are this year using all sulphanilamide drugs only as therapeutic agents in cases of pyrexia in which infection is suspected and the further comparison of our 1938 figures with the two previous years may prove interesting In the meantime I hesitate to make what may prove to be exaggerated claims for the prophylactic use of these drugs although in our experience their administration was apparently beneficial and was seldom if ever, associated with any detriment

Control of Infection

I pass now to the question of the control of infection In the first place a chart of the morning and evening temperature and pulse should be kept during every puerperium and the nurse should make a daily note of the state of the lochia and of any abnormal symptoms Any rise of temperature to 100° F after the first twenty-four hours should be regarded with suspicion and if it recurs within the next twenty-four hours without some obvious extragenital reason the patient if in a hospital or nursing home should be removed forthwith to the segregation room or department This is no counsel of perfection but a most reasonable precaution A high vaginal swab may be taken with advantage and sent to a competent bacteriologist preferably one who has the means of grouping streptococci Here I would interpolate that in our experience the ante partum taking of vaginal swabs has not proved helpful and the general conclusion is that such streptococci as may be found occasionally in the vagina before labour rarely cause serious infection after it I do not deprecate the procedure, but I do not regard it as part of the essential technique, which I am trying to keep down to its simple elements

After segregation of the patient the next step—and one of particular importance in hospitals and maternity homes where infection is for obvious reasons most apt to become epidemic—is the bacteriological investigation of the nose and throat in all contacts with the patient who has developed infection The logical sequel to this is when at all possible the temporary exclusion from obstetrical work of any persons found to be 'carrying' haemolytic streptococci and the segregation of any other patients in the same ward who are harbouring these organisms Here again I would make an interpolation Where there are no symptoms referable to these organisms, the preliminary swabbing of the throat and nose of those about to engage in maternity work, as well as the routine swabbing of those already engaged in it seems to me unnecessary provided a technique such as I have described is conscientiously observed Admittedly the omission of this step falls short of the full and rigid application of our present bacteriological knowledge, but I submit that the full application of that knowledge might well lead us into positions so impracticable as almost to paralyse the work of our hospitals as well as of the single-handed country practitioner Lyons (1936) of Boston has estimated that in winter when infections of the air-passages are common the exclusion of all carriers of haemolytic streptococci—that is of healthy carriers as well as those with recognizable infections—would reduce the staff of a hospital by 30 per cent I believe that even the bacteriologists recognize the impracticability of this situation Moreover if routine test swabbing is to be done how often is it to be done? If fortnightly why not weekly? If weekly, why not daily?

It should however be a rule in every maternity hospital or home that any nurse or ward servant suffering from a sore throat or even from a cold should report that fact to the matron who should arrange for the prompt taking of swabs for bacteriological examination and for relieving such a person from duty in the labour room or puerperal wards until she has recovered and has had two swabs negative to haemolytic streptococci The same principles should be observed by all doctors engaged in midwifery Where these precautions cannot be carried out without grave dislocation of the work to be done—as for example in hospitals with limited staffs or in single-handed practice in country districts—precautions against droplet infection should be intensified and rigidly observed

Air-borne Infection

One last risk deserves consideration—namely air-borne infection A few years ago most of us would have belittled the serious suggestion of such a possibility but recently the work of Cruickshank (1935) W F and M W Wells (1936) and Daryl Hirt (1937) has shown us that the air in rooms occupied by infected patients contains multitudes of virulent organisms This is possibly the explanation of some epidemic outbreaks of sepsis in small hospitals and maternity homes which have no adequate means of segregating infected cases as well as of some sporadic cases in domiciliary practice Incidentally it may also possibly have been the explanation of the infection in the two recent cases in which the patients sued for and were awarded damages In both of these instances a claim case was put into a ward in which there was another patient who had a high temperature and other symptoms which were strongly suggestive of puerperal infection and who ought therefore to have been segregated Personally I do not think we can escape the conclusion that such a procedure does constitute a lack of reasonable precautions in an important respect

These two cases are profoundly important because they introduce an element of the fear of the law into ordinary midwifery practice but we must not allow ourselves to exaggerate the position No sane judge would allow damages against a doctor or an institution simply because the plaintiff had contracted puerperal infection He would require to be satisfied that in some essential point or points there had been a breach in the observance of reasonable precautions At the same time one successful claim is apt to encourage others and we must protect ourselves against vexatious actions The doctor who signs a certificate of insanity or who treats a fracture without having recourse to radiographs does so nowadays at some risk to his peace of mind and his pocket We must not allow any similar paralysing apprehension to enter the field of obstetric practice for lack of a clear statement as to what in the present state of our knowledge, are the simple and reasonable essentials of the proper conduct of a midwifery case And if such a state

ment cannot be derived from a discussion such as this then we may possibly have to look to the Ministry of Health or to some equally authoritative source to frame one

REFERENCES

Colebrook Dorn (1935) Med Res Cncl Spec Rep Ser No 205 London
Colebrook Leonard (1937) *British Medical Journal* 2 713
—— (1938) *Prevention of Puerperal Sepsis and Antisepsis in Midwifery* Sherratt and Hughes Manchester
Cruickshank R (1935) *J Path Bact* 41 67
Hart D (1937) *Irish Stat Gaz* 34 87
Johnstone R W (1938) *British Medical Journal* 1 562
King W W (1930) Ibid 1 53
Lyons C (1936) *New Engl J Med* 215 1027
Murray E Farquhar (1930) *British Medical Journal* 1 814
Paine C G (1931) Ibid 2 1085
—— (1933) Ibid 1 234
Rose J K (1937) *J Obstet Gynaec Brit Emp* 44 278
Smith J (1927) *J Hyg Camb* 26 420
—— (1931) *Causation and Source of Infection in Puerperal Fever* H M Stationery Office
—— (1933) *J Obstet Gynaec Brit Emp* 40 991
Wells W F and M W (1936) *J Amer med Ass* 107 1698

PREVENTION OF PUERPERAL SEPSIS*

BY

ETHEL CASSIE M D D P H

Senior Assistant Medical Officer of Health (Maternity and Child Welfare) Birmingham

No excuse is needed for the detailed consideration of a subject like puerperal sepsis where slight carelessness or even too great enthusiasm on the part of the nursing or medical personnel for remaining on duty may result in tragedy

The Modern View of Puerperal Infection

It is of great interest to notice the complete change of attitude since the war regarding the causes of the condition This shows more clearly than any other fact the progress that has been made and gives us increasing hope for the future When the Public Health Act 1936 officially eliminated the term puerperal fever the end of an epoch was indicated The very points I have been asked to discuss to day emphasize the general acceptance of the modern view of puerperal infection We are no longer content to consider the possibility of infection in relation to the delivery alone It is recognized that during the ante natal period certain definite precautions should be taken

A good deal of stress is laid by some authorities on the importance of dental care It is obvious that a clean mouth is a first step in personal hygiene and the provision of dental treatment in connexion with ante natal clinics is now recognized to be not only advisable but necessary During 1937 8 974 women received treatment at the child welfare dental clinics in Birmingham The majority or about 60 per cent, were sent from the ante natal clinics and represent roughly 50 per cent of those attending the clinics This does not give a complete picture of the need for there is still a good deal of prejudice against dental care The provision of cheap dentures does much to encourage the removal of decayed teeth however and actually 968 women were supplied with dentures in 1937 At the City Maternity Homes the women are so anxious to obtain admission that they submit to having dental care whenever the medical officer considers it necessary this being a condition of admission

The careful examination of every woman suffering from a vaginal discharge with an inspection of the cervix is an essential step in the preventive side of ante natal care and the treatment required must be insisted on The possibility of throat and sinus infections must be remembered also

On the educational side while the preparation of the delivery room is asked for by every district midwife instruction should also be given to report the occurrence of any infective condition in the family not forgetting the child with impetigo or otorrhoea Such conditions should of course receive immediate attention Health talks at ante natal clinics should include information on such points

Ante-natal Care

There is also the very important question of building up resistance It is obvious that an anaemic and badly nourished woman will have a poor chance of recovery if she should be infected and she is more liable to infection A complete system of ante natal care should include the provision of a satisfactory diet Milk alone is obviously not enough although it is so valuable a food The supply of meals in necessitous cases meets the need to some extent but in the *worst* cases only In the diet of a large proportion of working class women iron calcium and vitamins are primarily deficient and these can be supplied as useful supplements

Ante natal care plays its full part in the prevention of sepsis only when every effort is made to obviate malpresentations and disproportions causing difficulties at labour The importance of early induction of labour or of Caesarean section in suitable cases should not be overlooked in this connexion The association of toxaemia and ante partum haemorrhage with sepsis is universally recognized It is not possible to deal successfully with toxaemia outside an institution and ante partum haemorrhage however slight, also requires full investigation Sepsis often follows where repeated small haemorrhages have been allowed to occur

An obvious step is the provision of sterile dressings for district midwifery The maternity packet is now very generally available but it is not yet very generally used I should like to see such sterile dressings supplied in every case and the cost included in the midwife's fee Meanwhile the careful instruction of the expectant mother in the proper preparations for the delivery is essential The supply of drums of sterile dressings to every midwife rather than the use of sterile packets involves a prohibitive cost for transport as well as a high original expenditure but some such provision for emergencies is advisable

The development of ante natal care has proceeded very rapidly during the last ten years and the general standard is constantly rising but even yet there is too little appreciation of the amount of actual ill health requiring investigation and treatment in an institution properly equipped for such work such investigations moreover require to be guided by the physician rather than by the surgeon for pregnancy furnishes more medical than surgical problems

The ante natal clinics must be used to assist the district midwives but there need be no failure in co-operation with general practitioners or hospitals if there is sufficient understanding and good will on both sides

The Spread of Infection

The spread of infection by the midwife or doctor in puerperal sepsis is now more often due to direct infection

* Read in opening a discussion at a joint meeting of the Sections of Public Health and Hygiene and Obstetrics and Gynaecology at the Annual Meeting of the British Medical Association Plymouth 1938

as in early throat, nose, and ear conditions than to dirty instruments or neglect of personal hygiene It is the attendant in the early stages of a sore throat, where there is little more than malaise to suggest danger or again one who has not sufficiently recovered from such a condition who most frequently appears to be responsible for normal labours becoming septic Where inquiries are made, such infections are often found to have been present or for that matter a husband or child may be the origin of the infection though in such cases there is less opportunity for direct contagion Naturally with increased manipulation the possibility of infection is greater

It is essential that the midwife and doctor should regard their own state of health as an important factor and those with any septic condition however mild should feel themselves bound to avoid midwifery Even where some condition like otitis media or a chronic antrum appears completely quiescent there is danger, for with fatigue and strain the infecting organisms reappear This may be observed for instance in the case of a midwife so affected two or three notifications of puerperal pyrexia in her practice will be associated with a rush of work and a discharging ear or a painful sinus Suspension for weeks follows with apparent recovery and after some months the same incidents recur The danger of a healthy individual becoming a carrier for a short time cannot be overlooked

The need for a high standard of personal hygiene is now so clearly understood that it need hardly be referred to, but those responsible for housing midwives should remember that a bathroom is as necessary as a kitchen and that facilities for sterilization of bowls, instruments, etc, are essential A brief summary of the instructions issued to Birmingham City midwives may be of interest, and is available

The Midwifery Service in Birmingham

One of the essentials of a midwifery service is the provision of sufficient relief midwives It is necessary to arrange that the relief midwife does not come into contact with her sick colleague a precaution that is easily forgotten The wearing of masks by midwives, whether acting as maternity nurses or midwives, is now practically universal in Birmingham—only a few independent midwives are not using them The city midwives wear gowns with masks attached The patients raise no objections, and the measure of protection afforded is considered well worth while

With regard to institutional care I should like to mention the very good record established at two of our maternity homes The larger of the two homes with 847 deliveries in 1937, had only thirteen cases of notifiable pyrexia and no case of puerperal sepsis, the second home with 518 deliveries, had not a single case of notifiable pyrexia These are genuine records, and most careful supervision is exercised to see that no rise of temperature is overlooked The aseptic technique employed in these homes has justified itself As regards the methods used I should like to draw attention to a few points

All attendants are gowned and masked throughout all contact whatever with the patient Dettol and flavine are the chief antiseptics used Boiled bed-pans are employed on every occasion, and a second bed-pan is provided for swabbing A gown for the use of the nurse when giving bed-pans and swabbings hangs at each bed Masks are of fourfold gauze with paper between folds, and on removal they are placed in antiseptic lotion Fresh sterile masks are available at the entrance to all wards All bedding is disinfected after each case, as well as beds lockers etc All wards are washed down after each batch of patients Ward floors are never swept, but are polished and kept clean with damp mops to avoid raising dust Nurses do not sort dirty linen which is immediately removed from the vicinity of the wards

Time does not permit of other details but I might add that each patient is provided with a paper bag to hold dirty handkerchiefs etc and that only husbands are allowed to visit No nurse or doctor with the slightest cold or sore throat is permitted to enter the wards If anything the smaller home has observed a more stringent antiseptic technique and this has been justified by the result

Throat and Nose Swabs

The nurses are not accepted at these institutions without a preliminary medical examination and they are all general trained nurses At one time a throat swab was taken and if a haemolytic streptococcus was found the applicant was rejected but the percentage of rejections was so high that this had to be abandoned It must be understood that no typing was carried out Swabbing would only be done at the institution in the presence of several cases of pyrexia and so has not been found necessary in the maternity homes

With regard to throat and nose swabs in district practice it is advisable to take these where several cases of puerperal pyrexia have been notified in a midwife's practice The swabs are almost inevitably positive to the haemolytic streptococcus and it is then necessary to suspend the midwife till two negative swabs are obtained which may mean weeks off duty Typing may help here but when not available attention paid to the throat and nose and the usual holiday in the country undoubtedly benefit the midwife's health Bacteriologists appear to vary in their findings and it is sometimes helpful to try a second expert when the period of off duty is too prolonged Without typing swabs give only a vague indication of the source of infection but in an outbreak with one common attendant swabs are worth while and offer some measure of protection

Notification of Pyrexia

On the occurrence of puerperal pyrexia it is the midwife's duty to send for medical help at once She must then notify the supervising authority through the midwives supervisor that she has been "in contact with a person whether or not a patient suffering from puerperal fever or any other condition which may raise suspicion of infection" in the words of Rule 9

The medical practitioner often misunderstands the situation He considers the pyrexia is not yet notifiable and he mistakenly instructs the midwife that there is no need to inform the supervisor There is, as a matter of fact no connexion the one is a question of keeping the rules of the Central Midwives Board, and the other is a notification No midwife can notify puerperal pyrexia, but having been in contact with it she is bound to obey the rule Our own practice is to instruct the midwife to inform the doctor that she will not be allowed in the ordinary course to continue on the case, and to request him to call in the district nurse whose fee will be met by the local authority Only under very exceptional circumstances would the midwife be permitted to continue in attendance She would then attend no other case

A further safeguard in relation to midwives and spread of infection is the enforcement of a rule that the practising district midwife must not attend miscarriages owing

to the frequency of sepsis in these cases As a matter of fact they seldom would for as a rule they have not been booked so early in pregnancy but there is some danger that the midwife might be called in by a doctor The district nurse is obviously the right person and there appears to be no reason why she should not be used

The District Nurse Midwife

Rural areas are frequently served by a district nurse midwife This is in my opinion a bad practice and is no longer needed with the sufficient use of motor cars and telephones Where distances are too great for this it is surely the duty of the local authority to provide institutional care and a home help service Rural local authorities are too often content to throw up their hands and talk only of the difficulties of long distances meanwhile making no effort to meet them There is also a great tendency to say countrywomen will not accept this and that when they are given no chance to say they will As a matter of fact the patience and long suffering of the rural population are wonderful but are wearing rather thin

Provision for Emergency Cases

The situation in a maternity institution admitting emergencies is often very difficult and there is undoubtedly a higher sepsis rate in such institutions than there would be if the accommodation was of a higher standard

Separate delivery rooms and separate wards with ample single room isolation are essential for satisfactory work with emergencies but are seldom or never available Frequently the institution tries to do more than it has accommodation for and so lowers the general standard No maternity institution moreover can afford to be without isolation rooms for the potentially septic cases and these should be provided even where arrangements are made for the immediate removal of every case of notifiable pyrexia

Conclusion

I would like to emphasize that the prevention of puerperal sepsis depends on intensive and intelligent antenatal care with precautions directed towards safeguarding the patient from infection carried by the attendants both during and after delivery The greatest danger lies in the patient being infected through the attendant's own failure in health and the best safeguard is the building up of the patient's resistance by proper nutrition and the early and efficient treatment of all toxic or debilitating conditions as well as by intelligent anticipation and treatment of obstetric abnormalities At the same time the most stringent precautions should be taken in relation to asepsis dust infection etc since all the ordinary risks of wound infection are constantly present

The results of a careful technique show that institutional care can be rendered free from risks other than those inseparable from midwifery The situation is very different where proper care is not exercised

I should like to add a plea for closer co operation with the public health authorities on the part of general practitioners Notification of puerperal pyrexia is not a meaningless formality it helps to ensure efficient supervision of midwives and gives information of the utmost interest in assessing the value of various precautionary and preventive measures

The present statistics of puerperal pyrexia are valueless for district practice they are fallacious since a very large number of cases are never notified

THE PREVENTION AND CONTROL OF PUERPERAL SEPSIS ADMINISTRATIVE ASPECTS*

BY

A MASSEY, M D, D P H

Medical Officer of Health City of Coventry

Extent and Nature of the Problem

The Report on an Investigation into Maternal Mortality published by the Ministry of Health last year contains interesting figures relating to the role of sepsis in the causation of puerperal mortality In this connexion for example it is shown that in a series of 770 maternal deaths investigated in selected areas puerperal sepsis was deemed to have been the cause in no less than 39 per cent of cases In the country generally it appears that 30 per cent to 40 per cent of all maternal deaths are attributable to sepsis For the year 1937 in England and Wales the maternal mortality rate was 3 11 per 1 000 total births the rate for puerperal sepsis being 0 94 Although figures relating to maternal morbidity are not available it is safe to assume that sepsis is similarly a dominant factor in causation

Maternal Mortality for the Year 1937 in Certain Towns

Town	Maternal Mortality per 1 000 Total Births	From Sepsis	From Other Causes
Barrow in Furness	4 90	0 95	3 95
Bolton	6 10	0 87	5 23
Bootle	3 66	1 83	1 83
Bournemouth	2 85	0 71	2 14
Bristol	3 53	1 12	2 41
Coventry	3 06	0 30	2 76
Darlington	1 68	0 84	0 84
Derby	4 65	1 39	3 27
Dundee	5 12	1 92	3 20
Eastbourne	4 69	1 56	3 13
Edinburgh	4 55	1 17	3 38
Liverpool	2 31	0 58	1 73
Middlesbrough	4 59	1 77	2 82
Stoke-on Trent	4 59	0 84	3 75
Sunderland	3 45	1 06	2 39
Walsall	4 04	2 02	2 02

These considerations underline at the outset the first importance of measures directed to the prevention and control of puerperal sepsis It must be confessed however that hitherto these measures have been attended with but limited success It is notorious that in contrast with a spectacular reduction in infantile mortality little or no impression has been made upon the maternal mortality rate Maternal deaths due to sepsis have in fact increased to some extent in recent years The measures of social economic and environmental amelioration that have lowered the infantile death rate in so marked a fashion have hitherto proved of much less avail against maternal mortality Some investigators indeed, have adduced findings to indicate that the incidence of puerperal sepsis actually tends to increase on ascent of the social

* Read in opening a discussion at a joint meeting of the Sections of Public Health and Hygiene and Obstetrics and Gynæcology at the Annual Meeting of the British Medical Association Plymouth 1938

scale But there are many complex factors here at work, such as, to take a single example, the larger proportion of first confinements among the more well to do classes

Improved standards of general midwifery practice are admitted to constitute the basis of measures for the prevention and control of puerperal sepsis To attain these standards is not entirely a matter of obstetrics but partly also a matter of administration The administrator can do much to raise the standard of skill and method in midwives practice and to improve the conditions under which obstetricians and midwives work and also the human material with which they have to deal To the administrator also falls the task of evolving policy notably, for example, in connexion with the relative claims of institutional and domiciliary midwifery with the conduct of ante natal centres with the enforcement of notification of puerperal pyrexia and like matters Then again—and this is all-important—he is concerned with the education of public opinion on behalf of maternal welfare I will deal briefly with some of these points

Standard of Midwives' Practice

Although the proportion of confinements attended by doctors and midwives respectively varies somewhat widely area by area, it is probable that in the country as a whole some 70 per cent are attended by midwives alone In accordance with the modern trend of thought moreover, it is likely that a still larger proportion of normal confinements will be undertaken by midwives in future Thus it is that in the prevention of puerperal sepsis no measure is more important than that of raising the standard of midwives practice This at once indicates the supreme rationale of the Midwives Act, 1936 which has for its primary objects the improved education and status of midwives, the elimination of unsuitable persons from midwifery practice, and the competent control and supervision of midwives remaining in public or private practice

The schemes of full-time salaried midwives for domiciliary practice now being operated under the 1936 Act by local authorities or by approved voluntary associations under the surveillance of local authorities, have attracted to their service the best of available personnel in the various localities Increasing numbers of residual private practising midwives are capitulating to the lure of compensation as offered them by the Act and under the stress of decreasing practice due to the competition of official services This in time will tend to produce a better type of midwife, under improved control, and should devolve advantageously in the combat with puerperal sepsis Administratively the full time salaried midwife has many advantages relevant to the present theme Important among these is the fact that, unlike her colleague in private practice she has no financial inducement to avoid suspension from duty following contact with infection

An interdiction by local authorities and voluntary associations concerned, in respect of the continuation in their service of midwives after marriage, may well be a necessary measure against puerperal sepsis, for when she has young children of her own, with their liability to scarlet fever, otitis, sore throat, and the like, the married midwife is more than ordinarily liable to convey infection This does not, of course, apply to midwives of middle age, or beyond who were already long married when initially admitted to the service

The Part of the General Practitioner

The increasing tendency for normal confinements to be conducted by midwives restricts the experience in this branch available to medical practitioners, who are nevertheless expected to be equal to all emergencies to which they are summoned by midwives In this connexion it is of course recognized that unskilled or untimely interference is a common cause of puerperal sepsis These and similar considerations have led to the advocacy in some quarters of panels limited to doctors with special experience in midwifery for dealing with midwives emergency cases instead of the present system whereby all medical practitioners are eligible for the work

Notification by medical practitioners of cases of infectious disease is recognized as a necessary condition of control This applies to puerperal pyrexia no less than to other infectious diseases and yet in many areas the notifications of puerperal pyrexia are notoriously incomplete As a result of the Public Health Act 1936 the procedure in regard to the notification of puerperal febrile conditions has been simplified Formerly, for purposes of notification it was necessary to categorize these conditions into either puerperal fever or puerperal pyrexia The effect of the new legislation is that the previous administrative differentiation between puerperal fever and puerperal pyrexia is removed and all puerperal febrile states are notifiable as puerperal pyrexia A more complete system of notification of this condition by medical practitioners is a necessary and ready line of reform in connexion with the control of sepsis

Institutional v. Domiciliary Midwifery

In recent years there has been a progressive increase in the hospitalization of maternity cases The Midwives Act, 1936 may now serve in some degree to check this tendency for one of its objects appears to be that of restoring domiciliary confinements to greater favour This has a bearing upon the prevention and control of sepsis although it is difficult to define or assess In most areas the increasing public demand for institutional confinements has overtaxed available beds and either in overcrowding of cases or a diminution of the routine length of stay in hospital has resulted In this way the risks of puerperal sepsis have been increased Thus it appears that a necessary measure is either substantially to increase maternity bed accommodation or to limit admissions The latter may well be the right as well as the readier line to take, notably in view of the improved domiciliary midwifery services already available as a result of the 1936 Act

Cases for institutional maternity beds might usefully be restricted to (*a*) those showing abnormality as revealed at ante natal investigation, (*b*) primiparae and (*c*) cases from unsatisfactory homes Thus the maternity hospital would deal largely with such types of case as constitute the worst "risk" in connexion with the possible supervention of puerperal sepsis Then again, the admission of emergency cases of potential sepsis has to be considered

These things indicate that the careful planning of accommodation in maternity hospitals and in maternity units attached to general hospitals is a measure of fundamental importance in the prevention and control of puerperal sepsis For this purpose separate isolation blocks are desirable for the accommodation of (*a*) cases of sepsis occurring in the routine practice of the hospital or unit, and (*b*) emergency admissions of actual or possible sepsis In too many maternity hospitals or units the lay out of accommodation is such that difficulty arises in circumscribing infection Nowadays it may well be more important to have ample isolation accommodation for cases of puerperal sepsis than to have small pox hospitals

With regard to the hazard of puerperal sepsis there is some division of views as to whether a maternity hospital

is better as a separate entity or as a unit attached to a general hospital The latter gives greater economy of administration and it is likely that any epidemiological risk that may attach to the arrangement as such can be obviated by proper planning of the unit and by careful internal administration of the hospital

Laboratory Facilities

In controlling puerperal sepsis a combination of epidemiological and bacteriological investigation is usually necessary as for example in the determination of carriers and other agencies of infection It should be just as much a matter of routine practice systematically to investigate an occurrence of puerperal sepsis as it already is in the case of the other major infections Appropriate administrative action—in connexion with maternity hospitals in the suspension of midwives from duty and like matters—depends very often upon bacteriological findings From the administrative point of view therefore adequate laboratory facilities are of obvious importance and should be made available wherever possible in each area In regard to laboratory services in general there is useful scope in many districts in the matter of joint laboratory schemes conducted by the local authority and the local voluntary hospital in partnership

Nutrition of Expectant Mothers

In the attempt to promote in expectant mothers a resistance to infection attention to the nutritional state is clearly of importance For this purpose general powers for the care of mothers are contained in Section 204 of the 1936 Public Health Act This section replaces that part of the 1918 Maternity and Child Welfare Act which dealt with the promotion of maternal health It appears that the word care now introduced is capable of the widest interpretation Most or all maternity and child welfare authorities include in their schemes arrangements for the supply to expectant mothers of liquid milk or dried milk at cost part-cost or free according to the ascertained means in each case In a few areas the schemes also embrace milk meals or dinners for necessitous cases The milk meal consists of milk and bread and butter, and is usually served about 11 a m The dinner is a complete meal produced usually in a municipal kitchen and served at midday To ensure that the expectant mothers themselves actually receive the meals the latter need to be served at prescribed centres under supervision Such measures as these have relevance—indirect but important—in the general combat with puerperal sepsis

Formation of Public Opinion

Public or private agencies working on behalf of maternal welfare cannot achieve the best results without the active co operation of the individuals whom they seek to help The expectant mother herself may often be the final arbiter on the question of whether or not her confinement is to escape contingencies In order to induce her to seek adequate ante natal care and to follow faithfully the advice she receives popular education in these matters is necessary This comes largely within the province of the health administrator although the family practitioner can take a vital part as an educator within the limits of his practice

Medico legal Aspects

In connexion with puerperal sepsis it is important to say a word concerning the liabilities and responsibilities of those in administrative charge of maternity hospitals or domiciliary midwifery services and of those in clinical charge of maternity cases I shall be brief however because a later speaker is to deal with this matter specifically The Lindsey County Council v Marshall case which was carried to an appeal in the House of Lords in 1936 threw much light on the subject notably in so far as concerns responsibility for the conduct of maternity hospitals and concerning the respective liabilities of local authorities and their medical officers

The present position appears to be that any medical practitioner—whether in public or private practice—performing clinical work in the conduct of maternity cases is personally liable for all that flows from his (or her) acts or omissions On the other hand where a medical officer is performing an administrative act or a ministerial act as required by some statute or order of a governing or employing authority the latter would be the defendant or would be joined as a defendant In short it appears that the clinical practitioner stands alone in this matter whereas the administrative medical officer has his employing body behind him Despite the foregoing however there are borderline cases in this connexion which fully tax the legal judgment

In the Lindsey County Council v Marshall case the appeal of the local authority in question was dismissed, and the main grounds for the decision appear to have been that the focal point in the case was an administrative one—namely that at the time the plaintiff was admitted to it the maternity home administered by the county council was not reasonably safe by reason of the prior presence of a case of puerperal sepsis about which the plaintiff was not informed

The responsibility of a local authority or other governing body in connexion with a maternity home appears to be to satisfy itself so far as possible as to (*a*) the suitability and safety of the accommodation provided (*b*) the supply of proper food (*c*) the adequacy of the equipment and (*d*) the reasonable efficiency of the staff it employs The last two points also apply in the case of a domiciliary service of midwives

Conclusion

The part prescribed for me in this discussion has relation to the administrative aspect only and I trust that I have kept the bounds of my allotted sphere The subject under consideration is complex and wide and in respect of omissions I must plead the set limits of time and space

---

The Minister of Health on July 26 opened a new general hospital at Louth Lincolnshire The hospital was formerly a Public Assistance institution which has been converted by the erection of a large ward and alterations to the existing building at a cost of about £71 500 It has accommodation for 200 beds The public health hospitals should co operate with and not rival the voluntary hospitals said Dr Elliot Indeed this principle of consultation is a statutory requirement of the Local Government Act of 1929" He described the great change that had come in the status of the old Poor Law hospitals with the passing of the Local Government Act of 1929 which empowered local councils to appropriate individual institutions to the public health services This process expunged the so-called stigma of the Poor Law and set up a new hospital service of great national importance He noted with approval that in the Lindsey area of Lincolnshire a consultative committee had been set up representative of the voluntary hospitals and the county council which did excellent work in co ordinating the hospital services as a whole

PREVENTION AND CONTROL OF PUERPERAL SEPSIS BACTERIOLOGICAL ASPECTS*

BY

R. M. FRY, M.R.C.S.

Assistant Director of the Bernhard Baron Research Laboratories, Queen Charlotte's Maternity Hospital, London

Under the name of puerperal sepsis we have to include bacterial diseases due to a number of different infecting organisms and dissimilar both clinically and in the manner in which the infection is spread. The organisms concerned in the more severe forms of puerperal sepsis are fortunately few in number. They are:

(i) Haemolytic streptococcus (Lancefield's Group A). Haemolytic streptococci belonging to Groups B, C, and G are much less common, and the infections caused by them are seldom severe.

(ii) Anaerobic streptococci.

(iii) *Bacillus coli*.

(iv) Staphylococcus.

(v) *Bacillus welchii* and other spore-bearing anaerobic bacilli.

(vi) Pneumococcus.

For purposes of prevention and control of sepsis a knowledge of the common sources of the infecting organisms is of more importance than knowledge of the clinical features of the disease.

Two Groups of Organisms

The organisms enumerated above fall into two clearly defined groups. The first group with which I shall deal first in order to dismiss it contains the anaerobic streptococci, *B. coli* and *B. welchii*. These organisms are all normally present in or near the genital tract—the anaerobic streptococci in the vagina, and *B. coli* and *B. welchii* in the faeces and therefore probably contaminating the skin of the perineum. The explanation why such infections are not more common appears to lie in the fact that these three organisms do not multiply readily in normal lochia or serum, but their growth is favoured by the presence of necrotic tissue such as may be found when there has been severe trauma or when fragments of placenta or membranes have been retained. The passage of the organisms into the uterus is of course facilitated by the introduction of hands or instruments into the uterus. The influence of injury or interference on such infections is shown by figures from Queen Charlotte's Hospital Isolation Block. During the four years 1933 to 1936, out of thirty-eight consecutive cases of anaerobic streptococcus septicaemia only four had normal labours without severe trauma or interference such as manual removal of the placenta or self-induced abortion. This is in striking contrast to the haemolytic streptococcus septicaemias during the same four years, when, out of eighty consecutive cases, no fewer than forty-four followed normal delivery with no interference or trauma.

These figures, with similar ones which can be obtained, on a smaller number of cases, for the *B. coli* and *B. welchii* infections, clearly support the view that infections by these organisms are mainly those of complicated obstetrics, and I would suggest that the control of such infections lies more in the hand of the obstetrician than of the bacteriologist. I do not propose to go into the free question of antiseptic technique from the bacteriological point of view. From the medico-legal aspect it is doubtful if infections by these three organisms are of much importance. They do not appear to be commonly transmitted from patient to patient, and in any case proof of such transmission would be hard to obtain in view of the frequency with which they are normally found in or near the genital tract.

In infections due to the other group of organisms—the haemolytic streptococcus, the staphylococcus, and the pneumococcus—we are faced with a very different problem. I propose to deal with the haemolytic streptococcus alone first. It was shown by Lancefield and Hare in 1935 that in a series of 555 vaginal swabs taken from normal women at the time of labour no haemolytic streptococci belonging to Lancefield's Group A were seen. There is as yet no record of these organisms being found in the normal vaginal swab before delivery. It is an interesting fact that of the patients at Queen Charlotte's isolation block infected with the haemolytic streptococcus about 90 per cent. have negative vaginal swabs before discharge from hospital and almost all are negative within a month after discharge. This suggests that the normal genital tract is not a favourable situation for the survival of the haemolytic streptococcus Group A.

In the absence of evidence to the contrary we are justified in assuming that these infections are introduced from some extragenital source. That this is often the case has been shown by the researches of J. Smith and of Dora Colebrook, both of whom found streptococci serologically identical with those infecting the patient in some extragenital source in the patient or attendant in about 75 per cent. of cases examined.

We have then as one of the fundamental principles in the investigation of haemolytic streptococcus infections, to face the fact that practically all are introduced from some extragenital source during labour or in the early days of the puerperium. There are two other important facts which I shall give in the form of figures taken from the records of Queen Charlotte's Isolation Block for the seven years 1931 to 1937. These are (1) of all cases of puerperal pyrexia admitted only 33 per cent. were infected with the haemolytic streptococcus; (2) of all *fatal* cases of puerperal sepsis 70 per cent. were haemolytic streptococcus infections.

Sources of Haemolytic Streptococcus Infections

If we consider the chief possible sources of haemolytic streptococcus infections we find the following three broad groups:

1. Infections from the respiratory tract or rarely some other septic focus, of an attendant or other contact.
2. Infections from the respiratory tract, or some other septic focus, of the patient herself.
3. Infections transmitted from another septic case by attendants, dressings, instruments, or dust.

How may such infections be prevented? I feel strongly that it is only through close co-operation between the obstetrician and the bacteriologist that success can be achieved. If I appear to stress the importance of bacteriological investigation too much it is for two reasons: first that as a bacteriologist I am naturally biased; and secondly, that the two recent well-known cases in which legal action has been taken and heavy damages have been awarded have shown so clearly the dangers of neglecting

* Read in opening a discussion at a joint meeting of the Sections of Obstetrics and Gynaecology and Public Health and Hygiene at the Annual Meeting of the British Medical Association, Plymouth, 1938.

to make such investigations The point for consideration then is to decide what measures to take in order to avoid doing too little on the one hand or on the other hand trying to do too much so that the whole matter of bacteriological investigation becomes impracticable and absurd

Infection from Contacts

In the first of the three groups mentioned above we have infections from attendants or other contacts It is clearly too much to attempt frequent routine examinations of all nurses and doctors engaged in midwifery practice and it is extremely doubtful if any valuable results would be achieved by such measures On the other hand it is essential to take swabs from the nose and throat when there are any symptoms suggesting respiratory tract infection or any history of a recent infection of this kind This should in my opinion apply not only to medical attendants but to any member of the patient's family who is likely to be in the house at or near the time of delivery Not only is respiratory tract infection to be watched for but also any septic focus on the skin and in children especially any aural discharge I would suggest too as a reasonable precaution that a throat swab should be taken from any nurse before she starts maternity work especially if she has been recently engaged in general medical or surgical nursing At Queen Charlotte's Hospital all new nurses and resident medical officers have throat and nose swabs taken before they start their duties

Infection from an Extragenital Source in the Patient

In the second group—that of the infections from the respiratory tract or other focus of the patient herself—we are on more difficult ground It is probably neither necessary nor wise to swab the throats of all patients as a routine but when there is any history suggestive of recent respiratory tract infection this should certainly be done This affords protection for the patient for if the swab be positive special precautions can be taken such as the wearing of a mask by the patient and the sterilization of her hands by dettol cream It is in such cases too that the prophylactic use of sulphanilamide at the beginning of labour might be expected to be of use The doctor may also receive some protection for if the patient should develop puerperal fever no claim for damages would be likely to succeed if there were definite evidence that she had haemolytic streptococci in the throat before delivery

Infection Transmitted from Patient to Patient

In the third group we are faced with the problem of what must be done when a patient develops puerperal sepsis to safeguard the other patients First a vaginal swab must be taken and examined as soon as possible I would emphasize this apparently obvious point particularly because there is a tendency at the present time to swab the throats of all attendants and take no steps to find out the nature of the patient's infection Since it is only in haemolytic streptococcus infections of the patient that the question of infection from the throats of attendants arises and since only about one third of the cases of puerperal sepsis are due to that organism this practice is to say the least irrational While waiting for the report on the vaginal swab the patient must, of course be regarded as a suspect case and be strictly isolated and those in attendance should not attend clean cases If the swab is found to be positive for the haemolytic streptococcus then and then only is it necessary to investigate contacts Apart from this investigation of contacts *efficient* sterilization of the room and everything it contains must be carried out before admission of another case—another obvious point which is sometimes overlooked It is not always recognized that the haemolytic streptococcus can survive in a dried form in dust for a long time This was conclusively demonstrated in 1936 by White who showed that the dust of single bedded rooms in which patients infected with the haemolytic streptococcus were nursed was always infected with that organism She also showed that a human infection could be caused by infected dust and that the streptococci could live in the dust for as long as ten weeks

Throat Carriers

The question naturally arises as to what is to be done with nurses who are found to be throat carriers of haemolytic streptococci In my opinion there is only one possible answer—that they must be kept away from maternity work until negative In view of the natural variations that occur in the amount of growth from a swab two consecutive negative results should be obtained before return to duty is permitted There are I know those who hold different opinions from this who believe that haemolytic streptococci in the throat are of no importance if the throat is clinically normal This view has the advantage of putting the onus on the clinician presumably a laryngologist instead of on the bacteriologist but the dangers from the medico legal point of view must be great It is difficult to imagine the line of defence in an action for damages where it was known that a nurse present at a delivery was a carrier even if a healthy one of haemolytic streptococci

Co-operation between Clinician and Bacteriologist

Finally, I must deal with the question of co operation between clinician and bacteriologist Speed is essential in all these investigations and in order to help the bacteriologist a definite request for an examination for the presence of haemolytic streptococci should be made instead of the usual vague request for bacteriological examination or even more briefly ? orgs It must be remembered that a complete bacteriological examination of a swab from the throat or vagina may take many days a provisional report on the presence or absence of haemolytic streptococci can however nearly always be given in the morning after the day on which the swab is received and the bacteriologist must be prepared to help by giving such provisional reports by telephone If grouping of any streptococci found is to be done a further twenty four hours will be required but the number of cases infected by groups other than Group A is so small that a provisional report of haemolytic streptococci present in large numbers is sufficient evidence on which to take all necessary steps of isolation specific treatment and examinations for the source of infection I may mention here that the haemolytic streptococcus in the vaginal swab in puerperal sepsis is nearly always present in overwhelming numbers or is absent so that there is seldom much doubt as to the nature of the infection

Commentary

It may appear that I have laid great stress on the haemolytic streptococcus infections There are three reasons for this First as already mentioned they are responsible for the majority of fatal cases, secondly they

are the infections in which we know that the organism is introduced from an extragenital source and in which, therefore the possibility of spread from attendants or from patient to patient has to be considered, and thirdly they are the infections for which we have now a specific method of treatment in sulphanilamide and its derivatives so that early diagnosis is important for the patient herself as well as for others who may run the risk of infection transmitted from the same source

From the bacteriological point of view then, the issue is clear We have first to investigate every case of puerperal pyrexia by taking a swab from the vagina (a cervical or intra-uterine swab is not necessary) and examining primarily for haemolytic streptococci May I interpolate at this point my belief that there is no substitute for this examination and that evidence gained from the clinical state of the patient can never give an accurate answer to the all-important question Is this a haemolytic streptococcus infection? Having received a positive report on the swab steps must be taken to find the source of infection, both in the patient herself and in attendants and other contacts The finding of a source in the patient is of little use in preventing the spread to others as she will in any case be isolated but from a medico-legal point of view it may be of use as a line of defence If the vaginal swab is negative for the haemolytic streptococcus no investigation of contacts is necessary since other infections, with the possible exception of the very rare staphylococcal and pneumococcal ones are not generally transmitted from an outside source

This much is clear, but the problem still remains of how to get the necessary examinations carried out quickly and accurately There can be few places in this country that are not within easy reach, by post at least, of a laboratory, but because of the necessity for speed it is essential that the laboratory should contain at least one full-time experienced bacteriologist If haemolytic streptococci are to be "grouped"—and this is important, especially in examination of throat swabs, to avoid suspending nurses unnecessarily—the difficulty is greater still, as the number of laboratories in which this can be done is still small At the Research Laboratories at Queen Charlotte's Hospital we attempted to fill this gap by instituting a service for the examination of any swabs from maternity cases or their contacts for haemolytic streptococci only, and for the grouping of any such organisms found If a few more laboratories would undertake similar work in some of the large towns throughout the country so that practitioners resident anywhere in England could be sure of obtaining accurate cheap, and, above all, quick reports, there would no longer be any excuse for attempting to solve the problems of a bacterial disease by clinical data alone

---

Standard specifications for protective clothing respirators, gloves and other articles of personal safety equipment may result from a meeting called recently at the request of the National Safety First Association and the Associated Slate Quarries The meeting was attended by both makers and users of safety equipment as well as by representatives from employers organizations engineering institutions trade unions voluntary associations and Government departments A resolution was carried asking the General Council of the British Standards Institution to set up a representative industry committee to deal with all personal safety equipment There are already B S I committees dealing with individual articles of safety equipment such as boots and goggles The proposed industry committee would take over control of these committees and would also deal with any future requests for the standardization of personal safety equipment

TREATMENT OF UNDULANT FEVER WITH PRONTOSIL

BY

CHARLES ZAHRA NEUMANN, M.D.

The remedies which it has been proposed to use for the treatment of undulant fever are so numerous and varied that the natural conclusion is that few or none are really consistent in their action Vaccines so far have proved of limited use except in a few cases where they were injected intravenously and where the curative effect may be ascribed to shock therapy In my experience the results of vaccines with few exceptions have been disappointing The severe and uncontrollable reactions accompanying intravenous vaccine therapy militate against the general acceptance of this form of treatment

When trypaflavine was introduced great hopes were entertained and good results were claimed Certainly some patients recovered fairly rapidly after the dye but in others no result was forthcoming The same may be said of mercurochrome Both these drugs are relatively toxic and their direct introduction into the blood stream increases any potential danger I have used fouadin a trivalent antimony preparation in a few cases but the number is as yet too small to arrive at any conclusion Good results have been reported by Manson Bahr and by Young

A great desideratum would be an effective remedy that could be administered orally and that did not exert any undue toxic action If the claims put forward in the cases described below are confirmed then prontosil and its congeners would be ideal remedies in undulant fever

Cases Treated by Injection

In Cases 17 to 20 prontosil was administered intramuscularly, the dosage being one injection of 5 c.cm on alternate days The urine was stained red within a few minutes, which showed that the excretion was very rapid With the dosage adopted, concentration of the drug in the blood was not likely to be high enough to influence the disease, and in three cases the results were disappointing The first of these (Case 17) was that of a youth aged 18, as soon as his Widal reaction proved positive in a titre of 1 in 150 he was given a *melitensis* vaccine every third day in gradually increasing amounts After three weeks he still ran a high fever and I decided to inject prontosil He was given 5 c.cm every other day for another three weeks At the end of one and a half months of persistent treatment the patient was still feverish and suffering from rheumatic pains The other two (Cases 18 and 19) young children 3 and 4 years old, failed to respond after more than three weeks treatment by prontosil injections The fourth case (No 20) was that of a boy of 6 During the first week of his illness his temperature was as high as 104° F, the blood-serum reaction was strongly positive to *Br. melitensis* and he was then treated with intramuscular prontosil injections on alternate days, at the third injection the temperature was 100° F in the evening, and he was completely afebrile on the tenth day of treatment No second wave of pyrexia occurred, although the patient was kept under observation for six months

It will be realized that in three of these cases the results were meagre, while in the fourth the normal

duration of the disease seemed to have been materially curtailed In the light of further experience with prontosil by mouth it is probable that the dosage administered intramuscularly was too small

Oral Treatment

In all sixteen patients were treated with prontosil red orally they were mostly children and the results in the majority were gratifying It must be premised that none of the patients was severely intoxicated and that the average duration of symptoms at the beginning of treatment was a week to ten days In all a strongly positive Widal reaction to *Br melitensis* was obtained The initial dosage for children was four tablets of prontosil daily Youths and adults received six tablets After three or four days according to the gravity of the case and its response to treatment the number of tablets was reduced to three in the case of children and to four or five tablets in adults Usually at the end of a week children were given two tablets and adults three tablets daily and this was continued for a few days *It is advisable to give the drug for several days after* the patient has become afebrile

Children sometimes dislike the red colour of the tablets and it is a good plan to powder these and to mix them with some jam or marmalade which is then spread on a cream cracker Alternatively one can use prontosil album The effect of the drug on the temperature is usually prompt and a daily fall of 1 F may be expected In some cases prontosil acts in an almost specific manner while in others a minority the effect is disappointing If no result is evident within a week the drug will be ineffective even after prolonged administration Why there should be this variation in individual cases cannot be explained

If given early in the course of the disease a great deal of the debility caused by the long duration of the fever is avoided and the patient can often return to school or to work within two or three weeks after treatment has been started It must be remembered that the disability period of undulant fever averages two to six months

No severe toxic effects were observed after the administration of prontosil In a few cases a curious lassitude perhaps more correctly an abnormally quiet attitude was noticed This began about two days after the first dose and lasted for two or three days Anorexia is usually asserted to be one of the toxic sequelae of the drug but as this symptom is very common in undulant fever and does not become worse after taking prontosil little importance need be attached to it In three cases slight vomiting occurred during the treatment and in one case strangury both these symptoms disappeared in a day or two when the dose was diminished In two cases a slight degree of cyanosis of the cheeks was seen In no case was there any ground for alarm and although the dose was with advantage reduced the drug was never entirely suspended

It is important to continue the treatment for a few days after the fever has disappeared In two cases where this was neglected the pyrexia reappeared but it was promptly vanished when prontosil was again given

Analysis of Cases

Most of the patients were treated in the acute stage of the disease and more experience in the chronic cases of undulant fever would be desirable

Case 1—A child aged 4 had been feverish for over a month when first seen His evening temperature oscillated between 101 and 102 F His general condition was good and he was usually active enough to play with his brothers He was given four prontosil tablets daily for four days the number being then reduced to two in the twenty four hours On the third day after the onset of treatment the evening temperature was 99 F on the fifth day it was normal and has remained so ever since There were no rheumatic pains so common a complication of undulant fever

Case 2—A young man aged 28 was seen after four or five days of high fever His blood serum reaction was strongly positive to *Br melitensis* His general condition was fair but occasionally at night he was restless and his mind wandered He was given six tablets of prontosil daily On the second day the temperature had dropped from 104 to 102 5 F By the fourth day the patient said that he felt much better and the temperature was barely 100 F On the sixth day the patient was normal and the prontosil was stopped Two days later the temperature suddenly rose to 102 F whereupon the drug was again administered with the result that within two days the fever disappeared completely and the patient has been free from it since No rheumatic pains or other complications marred an otherwise uneventful convalescence

Cases 3 4 6 7 and 8—These patients varied in age between 3 and 6 years In all the blood serum reaction was positive to *Br melitensis* and the spleen palpable Four tablets were given daily in jam this was reduced to three and subsequently two tablets as the condition of the patients improved None of the cases was seriously intoxicated and recovery was prompt In Case 4 slight cyanosis of the cheeks was observed on the third day this disappeared on reducing the number of tablets to one daily

Case 5—A young man aged 25 had been ill for three months and the fever had lately been oscillating between 100 and 102 F., with apyrexial periods lasting for a week or ten days He complained of rheumatic pains about the ankles and the knees and had lost weight considerably for which his severe anorexia was mainly responsible The spleen was palpable and the blood reacted strongly to *Br melitensis* The usual dosage of prontosil red was prescribed—that is six tablets daily After five days the patient was free from fever His rheumatic pains persisted for a week and no further then gradually disappeared Although he was kept under constant observation for three months no further wave of pyrexia were recorded

Cases 9 10 11 12 and 13—These consisted of children the youngest of which was barely 3 years old and the eldest 10 The latter as well as Case 10—a girl of 7 years old—was given six tablets for three days and four tablets subsequently The average evening temperature among this group varied between 102 and 104 F In a few days the fever chart showed a definite response to the drug and in ten days all the cases were apyrexial In all the first was also the last wave of fever No relapses were observed during the three months of observation

Case 14—A child aged 5 years was afebrile after a week of treatment and to prevent possible toxic effects prontosil was suspended When three days had elapsed the patient developed a slight evening temperature which rose to 102 F the next day Four tablets of the drug were given for a further five days although the temperature had dropped to normal after the second day of treatment

Case 15—A woman of 70 had been suffering from malaise and generally increasing pyrexia for over a week when a Widal reaction confirmed the suspicion that she had undulant fever When prontosil was prescribed she was in poor condition her temperature was 104 F there was a certain amount of bronchial catarrh and traces of albumin were found in her urine with a few hyaline casts In five days the evening temperature fell to 100 F., and on the seventh day she was free from fever for the first time Her general condition improved considerably in the next few days until a severe sciatica developed which lasted for two weeks

during which period there was no fever She was comparatively well for a month when pyelitis set in with eventual heart failure and uraemia

Case 16—A boy aged 12 was diagnosed as suffering from undulant fever and this was confirmed by the positive blood serum reaction His temperature at the beginning of treatment was 104° F and he had a considerable amount of bronchial catarrh this improved with an expectorant and with poultices but the fever remained high and was still 103° F on the evening of the tenth day although he had been given six tablets of prontosil red daily This was now suspended as albuminuria and casts appeared in the urine and it was feared that prontosil, if not the actual cause might still further accentuate the renal condition After a month the boy gradually improved and his appetite returned Albumin disappeared but tachycardia set in during convalescence This condition is fairly common during convalescence it rarely leads to any serious results, but usually persists for two or three weeks Occasionally there would be a rise to 100° or 101° F for three or four days and then an apyrexial period of a week or ten days The total duration of the fever in this case was a little over two months

Table giving Results of Treatment

Case No	Age (years)	Sex	Dosage	Duration of Fever	No of Waves	Remarks
			Intramuscular Injections of Prontosil			
17	18	M	14 inj of 5 c.cm each	2 months	5	Had previous vaccine treatment (intramuscularly)
18	3	M	6 inj	1 month	2	Had previous vaccine treatment (intramuscularly)
19	4	M	8 inj	3 weeks	2	
20	6	M	5 inj	10 days	1	
			Prontosil Red given Orally			
1	4	M	4 tablets daily	6 days	1	
2	28	M	6 tablets daily	10	2	Prontosil suspended at end of fifth day Had a second wave lasting two days
3	6	M	4 tablets daily	8 „	1	Vomiting from second to fourth day
4	5	F		12 „	1	Cyanosis of cheeks on third day
5	25	M	6 tablets daily	5 „		A chronic case—no other waves after the first week
6	5½	F	4 tablets daily	5 „	1	
7	3	F		2 „	1	Vomiting from second to fifth day
8	6	M		6 „	1	
9	4	M		8	1	
10	7	F	6 tablets at first 4 tablets afterwards	10 „	1	Vomiting from third to fifth day
11	10	M		7 „	1	
12	3	M	4 tablets daily	10 „	1	Strangury on fourth day
13	10	F	6 tablets at first then 4 tablets daily	10	1	
14	5	F	4 tablets daily	12 „	2	
15	70	F	6 tablets daily	7 „	1	Died 14 months from end of treatment
16	12	M		2 months	5	Prontosil suspended after ten days

Summary and Conclusion

1 Twenty cases of undulant fever treated with prontosil are reviewed

2 In four the drug was administered by intramuscular injections on alternate days In only one of these cases was the period of the disease perceptibly shortened

3 In the remaining sixteen cases oral administration was carried out In fifteen of them the average duration of the fever was seven days ranging from two to twelve days In one case the drug was apparently ineffective As a rule cases which are untreated become fever free in two to six months, though considerable variations are met with

4 None of the cases was seriously intoxicated, though some had high temperatures

5 Because of the limited number of cases definite conclusions cannot as yet be drawn, but these results make further research desirable

6 Prontosil red and other oral sulphanilamide preparations so far represent the most convenient treatment for undulant fever and if the results described here be confirmed these drugs may eventually find a valuable place in the fight against this crippling and long drawn out disease

Malta May 5, 1938

A COMPARATIVE TEST OF NATURAL AND CONCENTRATED ANTITOXIN IN TREATMENT OF MALIGNANT DIPHTHERIA

BY

B. A. PETERS, M.D., D.P.H

Medical Superintendent Ham Green Hospital and Sanatorium near Bristol Lecturer in Fevers University of Bristol

Owing to the convenience of its administration the use of concentrated diphtheria antitoxin containing only the globulin fraction of the serum of the immunized horse, is probably universal The serum manufacturers claim that by depriving it of all its inert protein and other useless constituents it is less toxic to human beings, and they continue to offer more and more concentrated antitoxins at higher prices Since the appearance of malignant diphtheria in Bristol in 1921 there have been a few cases in which the administration of antitoxin in large doses intravenously failed to save life, even when the patient was treated within forty eight to fifty six hours of onset of the disease It therefore occurred to me to investigate the relative values of natural (whole serum) antitoxin and concentrated (globulin only) serum to see if in the process of concentration the antitoxin had lost any of its therapeutic efficiency Concentrated serum might still neutralize the same quantity of toxin *in vitro* but it might not have the same avidity for combining with toxin *in vivo* especially as the peptization of the globulin is not so perfect when redissolved after precipitation as it is in the unaltered natural serum This can be demonstrated by examining each microscopically with a dark-ground condenser

The cases chosen for this trial are those which on admission were considered by the admitting medical officer to be so gravely ill as to need a large intravenous injection of antitoxin (usually 30,000 units) and 60 to 100 c.cm of 20 per cent glucose, together with 16 000 units intramuscularly I have included only those cases in which it has been possible to give the full dose of antitoxin and glucose considered necessary sometimes, with a restless patient, the needle has slipped out of the vein before the completion of the injection The cases received natural or concentrated antitoxin alternately

As the number of cases suitable for the test has varied between only 11 and 23 per cent of our total admissions,

it has taken six and a half years to amass the data now analysed Since the material was obtained from two sources over a long period the serum of several horses was used thus eliminating a possible error as the serum of different horses varies in its liability to produce reaction The volume of the natural serum was two to three times that of the concentrated serum The mortality rates and complications observed are given in Tables I and II

hyperpyrexia and symptoms of collapse Temperatures up to 107 F have been recorded in this series These reactions are dangerous unless the temperature per rectum is recorded every ten minutes and the usual measures are taken to deal with hyperpyrexia

Misled by the advertisements of serum makers we were very much surprised to find that these severe reactions occurred in 23 per cent of those treated with concen

TABLE I

	Day of Disease on Admission							Total	Grand Total	Death Rate %	Difference %	S.E. of Difference
	1st	2nd	3rd	4th	5th	6th	7th					
Controls (concentrated serum)												
Recovered	1	25	53	44	17	9	4	143	177	18	18·6	4·2	4·2
Died	–	2	17	10	3	1	1	34				
Tests (natural serum)												
Recovered	1	23	50	31	21	2	2	135	175	23	22·8	
Died	–	4	11	13	9	2	1	40				

TABLE II—*Complications of Cases Recovered*

	No. of Cases	Paralyses			Total	%	Difference	S.E. of Difference	Serum Rashes				Rigors, all Cases {Tests 132 / Controls 175}			
		Palate	Palate Pharynx	Pal. Phar. Diaphragm					Total	%	Difference	S.E. of Difference	Total	%	Difference	S.E. of Difference
Control (concentrated serum)	143	5	3	1	56	37·8	+11·9	5·5	8	52·7	+19·9	5·6	42	23·0	−2·19	3·47
Tests (natural serum)	135	30	3	2	35	25·9			47	34·8			2	1·1		

TABLE III

	Day of Death from Onset of Disease													Total
	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	Over 14	
Controls (concentrated serum)	3	3	5	3	3	1	2	1	5	1	–	–	7	34
Tests (natural serum)	1	3	4	2	2	3	4	5	2	3	2	2	7	40

Mortality Rates

The percentage difference in the two series appears to favour the concentrated serum slightly (18·6 per cent compared with 22·8 per cent) but as the difference is only equal to the standard error it cannot be regarded as statistically significant Therefore the two sera appear equal in life saving properties

Paralyses

In this series I have included only the more serious forms (palate pharynx and diaphragm) as ciliary paralysis is difficult to prove unless the patient is old enough to read The difference here appears in favour of the natural serum but as it is only twice the standard error it is not strictly admissible This is also borne out by the fact that fatal paralysis occurred in four of the control series and five of the test series

Late Serum Rashes

These occurred in 52·7 per cent of the control cases and 34·8 per cent of the test series As the difference here is over three times the standard error it is probably significant

Rigors and Hyperpyrexia

The great disadvantage of giving foreign serum intravenously is the occurrence of severe rigors associated with

trated serum and in only 1·1 per cent of those given whole natural serum although the latter cases received far more foreign protein than the former It was observed that rigors occurred with equal frequency in the patients who recovered and in those who died It was also found that in 50 per cent of the fatal cases treated with concentrated serum death ensued within seven days of the onset of illness but only 30 per cent of those treated with natural serum died so early (Table III) suggesting some immediate toxic effect of the concentrated serum However whole horse serum is probably nearer human plasma in its buffering electrolyte content and the physico-chemical state of its protein than a single protein fraction that has been dehydrated and precipitated The colloid chemist tells us that no lyophilic colloid reverts exactly to its former state after rough handling—the phenomenon they term hysteresis These findings are not applicable to all therapeutic horse sera as we found in attempting to carry out a similar series of observations with streptococcal antitoxin natural and concentrated administered intramuscularly to scarlet fever patients using alternate cases as before but without giving hypertonic glucose simultaneously as we did with the diphtheria antitoxin With both types of streptococcal antitoxin serious and alarming reactions occurred in so high a proportion of cases that we did not feel justified in continuing the trial in such a comparatively benign condition as scarlet fever

Commentary

I do not think that the intravenous glucose is the factor concerned, as in several cases where the patient received only natural diphtheria antitoxin without glucose (not included in this series) no reaction occurred It would therefore appear either that streptococcal antitoxin is more toxic than diphtheria antitoxin on intravenous injection or that the sensitivity of patients to foreign protein differs in the two diseases The time taken for the membrane to separate and the duration of the albuminuria—which latter is an index of persisting toxaemia—were also tabulated, but they showed no significant difference with the two types of sera

As a result of this investigation we have decided in future to use natural diphtheria antitoxin for intravenous injection The smaller bulk of the concentrated serum is still to be preferred for intramuscular injection in the milder cases

Conclusions

When given intravenously with 20 per cent glucose, (1) the therapeutic effects of natural and concentrated diphtheria antitoxin on the death rate and paralytic complications are equal, (2) concentrated antitoxin is twenty times as likely to give severe immediate reactions and one and a half times as likely to give late serum rashes as whole natural antitoxin (3) On this account natural diphtheria antitoxin is to be preferred for intravenous injection (4) These findings are not applicable to streptococcal antitoxin

TREATMENT OF PELLAGRA WITH NICOTINIC ACID

BY

M. RACHMILEWITZ, M.D.

AND

HELEN I. GLUECK, M.D.

(From the Out-patient and Medical Department of the Rothschild Hadassah Hospital Jerusalem)

The work of Elvehjem and his associates (1937) on the treatment of canine black-tongue with nicotinic acid, and the resultant cures, have stimulated clinicians to use this substance in the treatment of human pellagra Fouts and his co-workers (1937) reported four cases treated with nicotinic acid These patients, after having been placed on a control diet poor in the pellagra-preventing factor, were observed for three days During this time their condition remained stationary or became worse Treatment was then begun with nicotinic acid in doses varying from 0 5 gramme to 1 gramme daily Within forty-eight hours after the initiation of the treatment all the patients showed distinct improvement in their general condition and the stomatitis was completely healed In two patients suffering from diarrhoea normal stools were obtained on the third and the fifth day respectively The dermatitis disappeared within six to twenty-five days All the patients noticed warmth and tingling of the skin ten minutes after ingestion of the nicotinic acid

Almost simultaneously Spies, Cooper, and Blankenhorn (1938) reported eleven cases of pellagra placed on basic control diets poor in the pellagra-preventive factor The most striking effects were observed on the glossitis and stomatitis which usually disappeared forty eight hours after the beginning of treatment The pellagrous glossitis, stomatitis, ptyalism urethritis, and proctitis did not reappear while the patients received nicotinic acid In one case the glossitis and stomatitis which had disappeared with the use of nicotinic acid recurred when it was discontinued Mild cases of dermatitis in which the epithelium remained intact blanched within twenty four to forty eight hours after the administration of the drug However severe cases of dermatitis in which the lesions were moist, ulcerated and thickened did not seem to benefit by nicotinic acid In several cases there was flushing of the dermal lesions with tingling of the skin shortly after the administration of the drug These authors conclude that 0 5 gramme daily in five doses of 100 mg each is a safe and effective amount in the usual *case of pellagra*

In a further report Spies (1938) describes fifteen cases similarly studied and treated In these the urine was tested for porphyrin In one case the porphyrin disappeared from the urine forty eight hours after the beginning of treatment, only to reappear when the nicotinic acid was discontinued In a later communication Grant Zschiesche and Spies (1938) again confirmed these observations and pointed out that the healing of the dermatitis was completed by the end of the second week

Smith Ruffin, and Smith (1937) report a chronic case of pellagra with typical dermatitis hyperkeratosis of the face diarrhoea, and mild dementia which responded to nicotinic acid Yudkin Hawksley, and Drummond (1938) report a case which was successfully treated with a 'liver filtrate' factor In a later communication Hawksley (1938) records a case ending in recovery after treatment with nicotinic acid He concludes that the liver filtrate factor used in the previously treated case must contain nicotinic acid

We shall briefly describe two cases of pellagra which were successfully treated with nicotinic acid

Case I

A woman aged 62 was admitted to hospital on April 12, 1938, having previously been observed for eight days in the out patient department Four months before admission she began to complain of severe diarrhoea consisting of four to six foul liquid stools daily The diarrhoea persisted in spite of medication The patient then put herself on a diet of white bread, crackers zwieback rice milled cereal, white cheese, and black coffee Sugar, meat, vegetables, fish, butter, eggs, and milk were rigidly excluded from the diet The patient felt weak and listless and lost considerable weight The diarrhoea persisted One month before admission she noticed that the skin on the dorsum of the hands was rough and scaly The lesion progressed rapidly until the dorsum of the hands became fiery red and scaly At the same time she noticed red circles under the eyes, somewhat similar to the skin of the hands One week before admission she began to complain of burning of the tip of the tongue

Physical Examination—The patient was well orientated and co operative She appeared chronically ill and undernourished The skin of the face was dry atrophied, and wrinkled Under the eyes it was reddened rough, and scaly Around the neck there was a wide band of brown pigmentation *The dorsum of the hands was wrinkled fiery* red, and covered with a scaly dermatitis extending from the nail beds to the wrist There were areas of deep brown pigmenta-

tion at the wrists and the carpo metacarpal articulations There was a moderate pigmentation on the dorsum of the feet The tongue showed some atrophy of the papillae at the margin with reddening of the tip The patellar and Achilles reflexes were somewhat hyperactive but no abnormal reflexes were present Vibratory sense was diminished to the knees as was perception of touch the patient being unable to distinguish between the head and point of a pin There was no pain on pressure on the leg muscles The Romberg sign was absent Motor power appeared normal The rest of the examination produced nothing abnormal

Laboratory Data—The stool contained no parasites or ova The urine was normal The red cells numbered 3 900 000 per c mm and the haemoglobin amounted to 75 per cent Sahli The white cells totalled 7 200 per c mm and the differential count was normal Radiographs of the stomach and duodenum revealed nothing of note The gastric juice showed complete achlorhydria

Clinical Course—The patient was put on a basic diet similar to that of Spies sufficient in protein fat and carbohydrates but deficient in the pellagra preventive factor The dermatitis and diarrhoea became more marked weight loss was rapid and the appetite continued poor On the fourth day after admission while continuing the basic diet she was given two 50 mg doses of nicotinic acid by mouth The amount was then increased to 150 mg daily given orally in three 50 mg. doses until discharge from the hospital On the second day of the treatment there was a slight improvement in the dermatitis with desquamation starting in the central portion of the dermal lesions of the hands The tongue was no longer reddened and the marginal papillae appeared normal The appetite improved considerably On the fourth day of treatment the diarrhoea suddenly ceased and throughout her stay in hospital the patient had one normal stool daily Five days after the beginning of treatment she complained of tingling of the finger tips flushing of the face and dizziness The drug was discontinued for two doses but on the sixth day was continued without untoward effect

By the sixth day of treatment the dermatitis of the hands had disappeared except for a small area of pigmentation at the wrists By the tenth day the skin was entirely normal Since the results of the nicotinic acid had been so striking eggs milk puree of vegetables and chicken were added to the basic diet Her only complaint was weakness of the legs and some difficulty in walking The results of neurological examination made at this time were the same as on admission except that vibratory sense was now normal Because of these symptoms from the fourteenth day the patient was given one ampoule of crystalline vitamin B_1 (betaxin) intramuscularly daily until discharged nine days later At discharge the reflexes were still hyperactive but sensation was completely normal She no longer complained of difficulty in walking or weakness in the legs Her weight in spite of the pronounced general improvement remained constant (44 kg) However this woman was seen in the out patient department ten days later and had gained 3 kg in weight with no treatment other than a normal mixed diet

Case II

The patient a porter aged 46 was first seen in the out patient department ten days before admission to hospital When admitted on April 28 1938 it was impossible to obtain a detailed history from him because of his obvious mental confusion depression and anxiety However a history was elicited at a later period of his illness when his mental condition had greatly improved He had been unemployed for five months and during this interval his diet had consisted entirely of unleavened bread rice potatoes lentils and occasional cabbage or boiled egg plant His appetite had become very poor For three months he had felt extremely weak could no longer lift heavy objects and finally could hardly walk He complained of dizziness and dull aching pains over the entire body One month before admission he first noticed that his hands were becoming fiery red and painful This he attributed to constant exposure to the sun He did not complain of diarrhoea or a sore mouth

Physical Examination—The patient was uncooperative disorientated and appeared badly nourished and severely ill His face looked apathetic and listless The dorsum of the hands was covered with thick scaly hyperkeratotic fiery red dermatitis deeply fissured and ulcerated In some areas there were blotches and brown pigmentation The feet showed a similar but less severe dermatitis The orifices of the sebaceous glands about the nose were plugged with horny concretions The tongue was coated no glossitis or papillary atrophy being present The heart sound were distant and of a tick tack quality Neurological examination revealed absent patellar and Achilles reflexes The abdominal reflexes were present Sensory examination was impossible because of the confused mental condition of the patient The gait was ataxic and swaying with small steps The Romberg sign was absent The rest of the examination was not notable

Laboratory Data—The urine was normal but porphyrin was present on admission There were 3 000 000 red cells per c mm when admitted and 4 100 000 on discharge the haemoglobin was 60 per cent Sahli and the differential count was normal The Wassermann reaction was negative The stools contained no parasites or ova The gastric juice showed complete achlorhydria A radiograph of the stomach revealed severe gastritis with thickening of the rugae A radiograph of the heart did not show any enlargement.

Clinical Course—The patient was put on a basic diet similar to that of Case I His appetite was poor and he refused most of his food He was uncooperative and disorientated and urinated on the floor of the ward On the day of admission treatment was begun with 50 mg. of nicotinic acid The next day he was given two doses of 50 mg each After the second dose the patient complained of severe itching over the areas of dermatitis flushing of the face and faintness An urticarial rash appeared over the knees back and arms this persisted for two hours The drug was discontinued for the third and fourth days Meanwhile his dermatitis and mental state became distinctly worse On the fifth day he was given two doses of 10 mg. each on the sixth day 10 mg eight times on the seventh day 50 mg three times and subsequently 50 mg four times daily until discharge No further reactions to the drug were observed On the seventh day after a total dose of 400 mg. of the drug, the dermatitis showed marked improvement The appetite was very good but the mental condition had not improved By the twelfth day of treatment the dermatitis of the hands had completely disappeared except for a small area of pigmentation at the wrists The skin of the nose was now entirely normal The patient's mental condition had shown marked improvement and he was now rational and co operative and walked about the ward In spite of his basic diet he had gained 1 8 kg in weight By the thirteenth day of treatment he was completely normal mentally and his appetite could no longer be satisfied by the pellagra producing diet He was therefore given a regular diet on the fourteenth day Neurological examination still revealed absent knee and Achilles reflexes but the sensory examination appeared normal The patient was now exposed to the direct sunlight for periods of one and a half hours on several occasions The dermatitis did not recur On the eighteenth day the urine in which porphyrin was found on admission and on the eighth day in hospital no longer contained this substance On discharge on the twenty third day he was in excellent health and had gained 3 kg. in weight

Summary

Two cases of pellagra are reported in which the patients while subsisting on a basic pellagra producing diet, were treated with nicotinic acid Both patients recovered from the disease the first by the ninth and the second by the thirteenth day of treatment The average dose varied from 150 to 200 mg orally a day Both patients had

reactions to the drug early in the treatment In Case II the mental symptoms disappeared with treatment

BIBLIOGRAPHY
Beckh, W Ellinger P, and Spies, T D (1937) *Quart J Med* 6, 305
Elvehjem C A Madden, R J, Strong F M, and Whooley, D W (1937) *J Amer chem Soc* 59 1767
Fouts, P J Helmer, O M, Lepkovsky S and Jukes T H (1937) *Proc Soc exp Biol N Y* 37 405
Grant, J M, Zschiesche, E, and Spies T D (1938) *Lancet* 1 939
Hawksley, J C (1938) Ibid 1 944
Smith, D T, Ruffin, J M and Smith S G (1937) *J Amer med Ass* 109, 2054 *Arch intern Med* 59 631
Spies, T D (1938) *Lancet* 1 252
—— Cooper, C and Blankenhorn M A (1938) *J Amer med Ass* 110 622
—— and Aring C D (1938) Ibid 110 1081
Yudkin, S Hawksley J C, and Drummond, J C (1938) *Lancet*, 1, 253

Clinical Memoranda

Basal Narcosis in the Treatment of Tetanus

Recovery from generalized tetanus of short incubation period is rare enough to justify presentation of this case The remarkably beneficial effects of continuous and intermittent basal narcosis (in this particular patient with nembutal) would seem to suggest that this form of treatment is a most valuable means of combating a dread disease

CASE REPORT

A man aged 28, of robust build, was admitted to St Vincent's Hospital, Dublin, on March 24 1938 presenting the classical signs and symptoms of established generalized tetanus, temperature 101° F, pulse 102, respirations 30 The patient, who was fully conscious stated that he had been in perfect health until March 19, when he developed cramps in his legs and pain and stiffness in his jaw and neck which subsequently spread to all parts of his body He remembered having cut his forearm with a shovel on March 12 while handling animal offal in a factory He did not pay any attention to the cut except to apply iodine As the nature of his illness had not been recognized locally no anti tetanic serum had been given before his admission to hospital

Treatment—The wound in the forearm, which was septic, was freely incised and treated with hydrogen peroxide For the first three days in hospital continuous narcosis was maintained with 7½ grains of nembutal, given intravenously at chosen intervals and during this time continuous intravenous drip glucose saline was administered (10 pints) From the fourth day onwards the nembutal was given by mouth in 4½ grain doses so as to produce intermittent narcosis, which allowed the patient to have adequate nourishment, aperients, and plenty of fluids during the day-time As the patient was rather restless on the fifth day two intravenous injections of the drug were necessary Extending over a ten day period a total dosage of 75 grains of nembutal was given by the intravenous route and of 63 grains by the oral route During the same ten day period 240 000 units of anti-tetanic serum were administered 6,000 units intravenously (under chloroform anaesthesia) 20,000 intravenously, and the remainder by the intramuscular route

Progress—All tetanic spasms had ceased by March 28, temperature and pulse were normal on March 30, but residual stiffness did not show signs of passing off until the tenth day of treatment After this the patient made an uninterrupted recovery

Notwithstanding the large quantity of anti-tetanic serum administered in this case the clinical behaviour of the patient was such as to suggest that the outstanding beneficial agent was the prolonged narcosis produced by the nembutal in conjunction with the intravenous drip therapy

The use of basal narcotics in the treatment of tetanus is of course by no means new Avertin was employed for this purpose by Lawen as far back as 1927 since when there have been frequent references in the literature to the use of various narcotic drugs—chiefly barbiturates This present case is placed on record with a view to emphasizing the value of a method of treatment which is easily applied and which offers a considerable prospect of a successful outcome

P T O'FARRELL FRCPI, DPH, DTM
Dublin

Stable Sodium Nitroprusside Solution for Acetone Bodies in Urine

Most of the tests for acetone bodies in the urine are performed by dissolving just before use, a few crystals of sodium nitroprusside in 5 c cm of water and adding a few drops of this solution to the urine containing ammonium sulphate and floating on ammonia This aqueous solution of sodium nitroprusside is very unstable, turning blue when kept for a few hours, so that for practical purposes it has to be freshly prepared every day Unless a large number of urines have to be tested daily much of the sodium nitroprusside is wasted When only one or two urines have to be examined some workers simply place a few crystals—approximately 0·2 gramme—of sodium nitroprusside and a small quantity—about 3 grammes—of ammonium sulphate in a test tube, then add about 5 c cm of the urine direct to the mixed salts and float the ammonia on the top This procedure is also very wasteful of sodium nitroprusside

Sodium nitroprusside is an expensive chemical—over 26s per 500 grammes—and a stable solution would therefore not only be much more convenient for urine testing but would also help to reduce the running costs of the laboratory An aqueous solution of sodium nitroprusside can be rendered quite stable however, merely by the addition of a little concentrated nitric acid, which in no way interferes with the reaction for acetone bodies in the urine This solution will keep indefinitely and so is always ready for use With regard to the ammonium sulphate used in the test it is also more convenient to keep it as a mixed solution with ammonium hydroxide

The reagents for the improved test therefore would be

Solution No I—Ammonium sulphate solution
200 c cm saturated solution of ammonium sulphate,
200 c cm ammonium hydroxide sp gr 0·88

Solution No II—Sodium nitroprusside solution
10 grammes sodium nitroprusside crystals dissolved in
90 c cm distilled water and
1 c cm concentrated nitric acid then added

The Test—To 5 c cm of urine in a test tube add 5 c cm of solution No I and mix Then add 1 c cm of solution No II shake and allow to stand for a minute before judging the colour reaction A deep purple colour will then have appeared if 0·1 per cent or more of acetone bodies is present If only a very faint trace is present the colour will be merely deep red

The saturated solution of ammonium sulphate used in solution No I should be prepared as follows Place 780 grammes of ammonium sulphate in a 2-litre flask and add 1 litre of boiling distilled water Shake immediately until dissolved, then allow to cool at room temperature Decant the supernatant solution (or filter if necessary)

JOHN INGHAM, FIC,
Biochemist to the Medical Unit Welsh National School of Medicine, Cardiff

Reviews

A SYSTEM OF MEDICINE AND SURGERY

The Practitioners Library of Medicine and Surgery Volume XIII Supplement Index Supervising Editor Professor George Blumer M D (Pp 1161 184 figures including 4 coloured illustrations £30 for set of thirteen volumes) London and New York D Appleton Century Company 1938

The thirteenth and supplementary volume which contains an index to the whole publication occupying more than a quarter of the volume is an extremely imposing instalment It contains seventy one chapters corresponding to articles in the previous twelve volumes so as to keep the *Library* up to date and this alternative to a loose-leaf arrangement as it saves the reader the trouble of rearranging the pages is more likely to be popular Among the fifty seven contributors thus concerned with more recent advances there are many of the leaders in American medicine to day Professor Henry Christian of the *Peter Bent Brigham Hospital Boston gives an account* of relapsing febrile non suppurative panniculitis (Weber-Christian disease) and thus joins the distinguished band of those such as Paget von Recklinghausen and Osler who have more than one disease as tributes to their clinical activity Professor Warfield T Longcope of the Johns Hopkins University describes with a number of photographs the generalized form of Boeck's sarcoid (maladie de Besnier Boeck or Hutchinson Boeck disease) but has forgotten to give a reference to his own account in 1936 of this interesting disease in which the bones and lungs are affected as well as the skin Dr L G Rowntree late of the Mayo Clinic and now of the Philadelphia Institute for Medical Research gives under the heading of

The Thymus and the Pineal in Health and Disease an account of the remarkable results which he and his colleagues have obtained by experiments on successive generations of animals thus suggesting that these glands have an internal secretion Professor Musser of Tulane University writes on pyocyaneus infection and Professor Blumer of Yale contributes several articles including one on proctalgia fugax a syndrome of unknown aetiology and pathology

This volume is full of interesting material, and attention may be directed to the reviews of recent advances in diseases of the blood forming organs by Dr R Isaacs on the reticulo-endothelial system by Dr C A Doan to Dr Gwathmey's full review of anaesthesia and to that on the sex hormones by Dr Theodore G Klumpp of Yale

WHEN TO OPERATE

Die Anzeige zum Operativen Eingriff By Dr Med Richard Goldhahn (Pp 474 RM 16 50 bound RM 18) Leipzig Georg Thieme 1938

The idea behind this book by Dr R Goldhahn who holds the post of chief medical officer to a municipal hospital in the busy industrial town of Liegnitz, is a good one especially at a time when it is felt in some quarters that surgical technique has come too much into the forefront of surgical practice and is apparently regarded by some as the be all and end all of the work of a surgeon It is easier to operate well than to know when to operate and —what is perhaps more important—when to withhold one's hand and what reactions and complications to expect from a particular operation in short un bon operateur serait quelquefois un mauvais chirurgien.

Dr Goldhahn's textbook is clearly set out in a series of sections arranged on a regional basis and the dark type on dull paper which makes it attractive is clear and easily read There are no illustrations A bibliography immediately precedes the index at the back of the book but although this includes some hundreds of authors references to English and American authorities are very scarce It is annoying to the foreign reader of this work to be confronted with an attempted nationalization of technical terms thus the mediastinum has become Mittelfell the vermiform appendix Wurmfortsatz, and the duodenum Zwolffingerdarm This makes reading unnecessarily difficult for English and American readers We believe that the more international scientific terms become the better for science and for mankind Osler reminded us that in the halcyon days of the Renaissance there was no nationalism in medicine but a fine catholic spirit made great leaders like Vesalius Eustachius Stensen and others at home in every country in Europe The nomenclature in Dr Goldhahn's work is a retrograde step and we hope that a second edition may be corrected in this respect and may also become more representative of what is best in British and American medicine since both the idea and the general form of the book are good

JOHN KEATS

Keats as Doctor and Patient By W Hale White (Pp 96 5 illustrations including frontispiece 5s net) London New York Toronto Oxford University Press 1938

Sir William Hale White has long been known as a lover of Keats He is consulting physician to Guy's Hospital where Keats received his medical education and thus has access to the school registers and he has an expert's knowledge of consumption His little book therefore on *Keats as Doctor and Patient* contains all that is likely to be known about the poet in these relationships During his student career Keats appears as a strong and healthy minded boy taking notes of Sir Astley Cooper's lectures on anatomy and surgery walking long distances for the sheer enjoyment of the exercise and making friends with all and sundry Having obtained the L S A he never practised or put his medical knowledge to any use but turned at once to poetry by which he intended to make a living He was in good health until August 1818 twenty five months after he had left the hospital when he began to complain of toothache and repeated sore throats Sir William Hale-White is careful to explain that these were not, in his opinion due to any tuberculous infection They were evidence of lowered resistance for Keats was working hard at writing and his hygienic surroundings were unsatisfactory His serious illness began on February 3 1820 when he had haemoptysis after a bitterly cold ride from London to Hampstead on the outside of a coach The disease progressed in the usual way and he died in February 1821 little more than 25 years old He caught consumption almost certainly from his dearly-loved brother Tom with whom he lived for months before the disease killed Tom in 1818 Sir William Hale White points out that throughout his illness Keats had the best medical advice obtainable Dr Robert Bree F R S., and Dr William Lambe who both held high office in the Royal College of Physicians and James Clark afterwards Sir James Clark who became physician to the Prince Consort and wrote the article on tuberculous phthisis in the *Cyclopaedia of Practical Medicine* But the fates were against the recovery of Keats nothing was known about the cause of phthisis bleeding was in fashion and fresh air was considered to be dangerous in the sick room.

The book ends with two letters from Keats—one to his publishers the other to Woodhouse—which show that he was not much affected by the malignant reviews in the *Quarterly* and the *Edinburgh* and that they had certainly no effect in hastening or causing his death as has been generally stated Any worry that he felt was associated with his brother Tom's illness, and not with any attack upon himself Lovers of Keats will welcome the book It corrects many errors about him, and explains his illness in the light of modern medicine

OPHTHALMOLOGICAL PRINCIPLES

Introduction to Ophthalmology By Peter C Kronfeld M D (Pp 331 32 figures 15 tables 3 50 dollars) Springfield Illinois and Baltimore, Maryland Charles C Thomas 1938

Dr Peter Kronfeld professor of ophthalmology in the Peiping (Peking) Union Medical College, has written a book out of the usual rut of eye books Instead of a volume that is full of illustrations and blocks of instruments, and not a few coloured prints, there are very few illustrations Instead of a catalogue of diseases with their interpretation and indications for treatment there is an absence of what may be called systematic cataloguing, details of diagnosis are omitted, and there is nothing or next to nothing, about methods of examination and treatment

The book is what might be called a philosophical disquisition on the principles underlying that portion of ophthalmology which is a necessary part of basic medical education It is intended to be read by the student in conjunction with the short and practical courses to which the teaching of ophthalmology has had to be reduced in the curriculum of many medical schools In effect, in this book the professor discusses with his students what he has shown them in the eye clinic He has undoubtedly achieved his aim It is a book calculated to make his students think If it may be taken as a fair average specimen of the teaching that Chinese students receive in the Peking Medical School, then there can be no doubt that the work of that school is on a high level, and will be a credit to medicine and a blessing to the suffering Chinese Paper, print, and binding are perfect

PSYCHOTHERAPY

Concepts and Problems of Psychotherapy By Leland E Hinsie M D (Pp 199, 5 tables 15s net) London W Heinemann (Medical Books), Ltd, New York Columbia University Press 1938

The continual outpouring of works on medical psychology must fill the reviewing staffs of journals with dismay, but now and then a book stands out which is a real pleasure to read because it is likely to be of outstanding value to the profession and to all interested in the subject Professor Hinsie's belongs to this class It is short, simple, and to the point, and gives information which is essentially valuable He reviews the psycho-analytic approach of Freud and the psycho-biological approach of Adolph Meyer, with a brief note on the contributions of Jung and Adler He shows how Freud, dealing principally with psychoneurotics, seeks by researches in the unconscious division of the mind to reorientate the basis of the personality so as to allow the psychoneurotic, with his drive towards adaptation fundamentally unimpaired, to adapt himself to life to better advantage Meyer, on the other hand, dealing principally with psychotics who do not have that drive to adaptation, is concerned almost exclusively with the conscious mind and, while remaining entirely catholic with regard to theories of pathogenesis, seeks to train the patient to become a proper member of the family and of the community by means of his team of psychiatrist, psychiatric nurse, and social worker and a full organization of intellectual interests, occupation, and recreation

Next comes a statistical survey of therapeutic results which imperfect as it necessarily must be, is of the greatest interest It shows that there is no striking difference between the various therapeutic methods, a recovery rate of about 40 per cent being common to them all Psycho analysts, in spite of their claims to superiority, make no better showing than the rest so far as "cures" are concerned and have the disadvantage of the small number of cases with which they are able to deal and the length of time expended on treatment but no one will deny to them the very great service which they have rendered in the elucidation of the pathology of mental disease

A final chapter shows the difficulties and outlines the requirements in attempting a survey of therapeutic results in any department of medicine and especially in mental illness

FOR NOVICE SHIP SURGEONS

The Ship Surgeon's Handbook By Bryce J Macaulay M D (Pp 66 5s 6d net) Bristol John Wright and Sons Ltd, London Simpkin Marshall Ltd 1938

This booklet of sixty-two pages will be found useful in some degree by doctors who wish to join the Mercantile Marine Its small compass a good part of which is taken up with emergency operations has left the author little room for dealing with many points which arise in medical life at sea There is a good introductory chapter in very general terms of a surgeon's duties the details of which differ in the various shipping companies Not enough emphasis is placed on the need for closely supervising the health of the crew, who on arrival in many ports are subjected to personal inspection by the port health officer Nor is the subject of "Radio pratique" instituted in 1937 by the New York Quarantine Board, referred to The responsibility for this pratique lies on the ship surgeon, and, as was seen last year in the case of a German liner, non observance of its demands led to much loss and trouble

The popularity of ocean travel and the large number of steamships with big passenger and crew lists now crossing the Atlantic require more attention than the author has seen fit to give for the guidance of novice surgeons Cases arise which have to be handled differently from those on land The management of mental derangements to forestall jumping overboard, the best method of disinfecting cabins at sea, the isolation of infectious disease contacts, and the medico-legal aspects of accident claims which can involve the shipping companies in great loss if the surgeon has not been careful to observe and note full particulars, are some of the points with which the author has omitted to deal Co operation and consultation with doctors who happen to be on board in serious emergency cases are a special form of medical ethics about which an experienced ship surgeon like the author could helpfully advise those who find themselves in difficult circumstances of the kind that occur at sea Every ship surgeon takes, or should take, with him reference books, and if the space devoted in this small volume to surgical and medical details were given to the points mentioned in this review the book would gain added importance

Notes on Books

Within the compass of a single volume of 1234 pages Van Nostrand's *Scientific Encyclopaedia* (London Chapman and Hall 50s.) covers the basic sciences of chemistry physics mineralogy botany astronomy and mathematics the applied sciences of navigation aeronautics and medicine and also engineering. The responsibility for each science rests largely upon a single author the result being a unity otherwise difficult to attain. The inquiring reader will find in the volume much to interest and instruct while the trained technician will by the use of the numerous cross references be able to correlate the information he seeks. Naturally with such a wide range of subjects the length of the articles is restricted but for the most part treatment may be considered adequate. The work is clearly printed and well illustrated.

The Doctor Remembers is a posthumous book by Sir JAMES CRICHTON BROWNE (G. Duckworth and Co. 7s. 6d.). Those who remember the attractive reminiscences and anecdotes of Sir James's long and successful life will turn to this further selection with a sure anticipation of finding a storehouse of interesting events. It was completed shortly before his death in February last but it emphasizes how much he observed with an ever active memory and sense of humour. He had a wide acquaintance especially as the index proves among medical men.

The second edition of Dr. ERWIN RISAK'S excellent little book on Clinical Observation (*Der Klinische Blick*. Vienna: Julius Springer. RM. 8·40 bound RM. 6·30 paper) of which the first edition was published last year has been considerably enlarged by the insertion of new sections on the skull mouth neck thorax abdomen sexual organs and anus as well as by other additions.

Preparations and Appliances

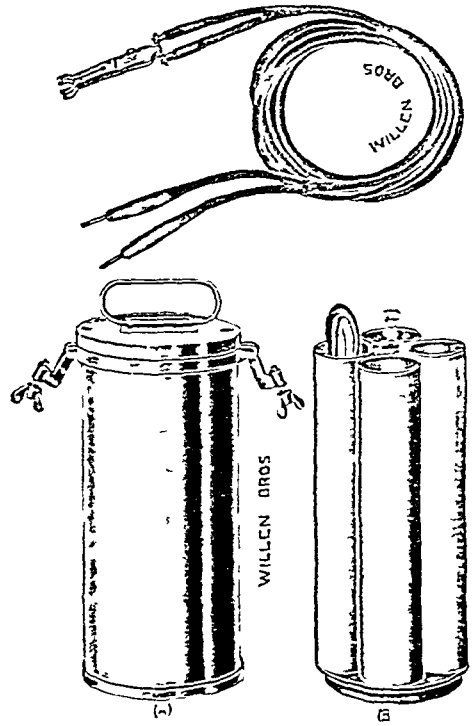
FORMALIN STERILIZER FOR CYSTOSCOPE CABLES

Mr. H. P. WINSBURY WHITE F.R.C.S. (London W.) writes:

The presence of water in some part of the insulating material separating the two pathways which complete the electric circuit from the source of supply to the cystoscopic lamp is one of the commonest causes of a failure of illumination because of short circuiting. For this reason the most practical way of sterilizing those cables which are fabric covered is by means of formalin vapour but this type of cable must be considered unsatisfactory because the fabric may become wet during the cystoscopic examination. Of recent years rubber-covered cables have been in general use but for various reasons certain of them still have the shortcomings of the old fashioned pattern. To be efficient the rubber covering must be reinforced in the weaker places and there must be complete watertight junctions between the cable and the switch and the cable and the battery terminals. Moreover the studs connecting the two plates of the switch should be made entirely of non-conducting material.

There is one pattern on the market which fulfils these requirements and has *withstood the test of two years' use in* my hands including regular sterilization by boiling. I do not doubt that the periods of usefulness of these parts of the cystoscopic armamentarium will be longer if sterilization is effected by formalin vapour. In order to do this conveniently I have devised a formalin sterilizer for endoscopic cables.

The rack has four separate cylindrical compartments (B) of such a size as to take one cable folded in the simplest manner the common floor to the compartments is perforated so as to communicate with a shallow chamber which contains formalin tablets and the floor of which unscrews. The rack lifts in and out of a cylindrical drum (A) the lid of which is kept firmly in position by two thumb screws so as to render the interior airtight. It is easy to remove one cable with the finger without disturbing or even touching any of the others. If it is desired to effect sterilization by boiling after unscrewing the floor of the formalin chamber the rack with its cables can be placed in the sterilizer. Personally I use the appliance as

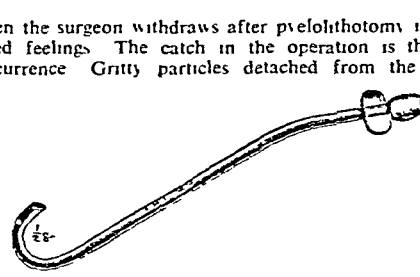


a storage place for spare cables and I feel that it would be very useful for such a purpose in hospitals as well as to those who use several types of endoscopic instruments and always want to have a spare cable at hand. The cables and the sterilizer can be obtained from Messrs. Willen Bros. 44 New Cavendish Street London W.1.

PYELOTOMY FLUSHING NOZZLE

Mr. A. WILFRID ADAMS M.S. F.R.C.S. (Clifton Bristol) writes:

When the surgeon withdraws after pyelolithotomy it is with mingled feelings. The catch in the operation is the dread of recurrence. Gritty particles detached from the stone(s)



during its extraction may remain behind as a contributory cause of further formations. To reduce this risk an efficient irrigator is wanted. It needs to be long to reach the kidney that resists delivery and the end of the nozzle entering the pyelotomy must recurve so that its jet projects upwards and flushes the vault of the renal pelvis. The small calibre of the instrument should offer no hindrance to the recurrent stream which gushes out of the pyelotomy wound carrying the debris with it. These features are incorporated in the pyelotomy flushing nozzle made for me by Messrs. Down Bros. It is made to fit a Record syringe or small tube and funnel

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY AUGUST 13 1938

PREVENTION OF PUERPERAL SEPSIS

No more appropriate subject could have been chosen for discussion at this year's Annual Meeting than the prevention and control of puerperal sepsis The recent achievements in treatment have tended to divert attention from the less spectacular but no less important advances which have been made in knowledge of the causes and mode of spread of the disease The importance of these matters in the administration of maternity homes has been painfully emphasized by recent litigations which have resulted in the award of heavy damages for failure to observe due precautions in treating cases of puerperal pyrexia and in preventing spread of sepsis This subject is of grave concern to every doctor who practises midwifery and the opening papers published elsewhere in this issue will doubtless be read with more than usual interest

Professor R W Johnstone writes from the point of view of the clinician and administrator and his comprehensive and thoughtful paper contains useful suggestions and much sound advice Dr R M Fry contributes a paper on the bacteriology of puerperal sepsis and in a short space gives a clear account of the more important of the recent findings in this field His opinions are based on experience gained as a full-time worker in a hospital dealing exclusively with puerperal sepsis Dr Ethel Cassie and Dr A Massey discuss the problems as they appear to the medical officer of health, and touch on medico-legal matters To readers who wish to pursue this subject further we would specially commend the interesting and scholarly paper on the history of the prevention of puerperal fever by Professor Miles H Phillips [1] and also the article on puerperal infection in relation to midwifery attendants by Messrs J L Miller Wood and F E Camps,[2] together with the subsequent correspondence by Miss Dora Colebrook and others

It is plain that during the last few years much of the confusion regarding the aetiology and mode of spread of puerperal sepsis has been cleared and new facts have come to light which have important bearings on the conduct of midwifery Dr Fry describes two distinct groups of infections one predisposed to by local trauma and presence of devitalized tissues and which is associated with the *B coli B welchii*, or the anaerobic streptococcus This type of sepsis may sometimes cause serious illness but it is not readily conveyed from patient to patient The second type of infection is much more dangerous and is also highly contagious characteristically affecting women who have had 'normal' deliveries as readily as those who have been subjected to obstetrical interference It is caused in the great majority of instances by infection with the "Group A variety of haemolytic streptococci but now and then other forms of haemolytic streptococci, staphylococci or pneumococci are responsible Ample evidence has accumulated to prove that in some 75 per cent of cases the source of this second type of infection is the upper respiratory tract of the attendant midwife doctor, or other "contact" The commonest means by which the organisms are conveyed to the patient would appear to be the fine spray which is unavoidably projected from the mouth on speaking but other less direct means of infection are also important such as the transfer of organisms by fingers which have become contaminated —for example, by use of the handkerchief A nurse or doctor who has recently had tonsillitis or a sinus infection is an obvious danger and must avoid obstetrical work until the throat and nasal secretions are proved to be free from virulent streptococci The issue is clear on this point, but the value of routine swabbing for prophylactic purposes and the attitude to be adopted to the chronic carrier are more complicated questions which are discussed at length in the papers already mentioned and also in an annotation in this *Journal* on July 16 1938 Since no throat can be guaranteed to remain indefinitely in a healthy condition, the use of masks must now be regarded as an essential part of midwifery technique Their use is imperative both during delivery and during the nursing necessary in the puerperium Here it is fitting to quote from Professor Miles Phillips

> "Apart from its use in Caesarean section there has been an astonishing delay in the employment of the face mask in hospitals and, even more so, in domiciliary midwifery practice It is said to reflect that its adoption or more rigid use in this or that institution, on this or that maternity district has so often been and still is the direct consequence of an epidemic more or less rapidly controlled in the hospital itself It would appear that some even await the stimulus of legal proceedings"

It is perhaps pertinent to point out that not all masks are adequate in preventing the transmission of organisms The thin linen veil is of little value in this respect, four or more thicknesses of fine gauze preferably interleaved with paper or cellophane, are necessary When once the mask is

[1] *British Medical Journal* January 1, 1938
[2] Ibid, October 23 1937

adjusted to the face it should not for obvious reasons be fingered the mere provision of a face-piece may actually increase the danger unless it is used in an intelligent and conscientious fashion A puerperal patient who develops pyrexia should at once have a sample of vaginal secretion submitted to bacteriological examination Dr Fry emphasizes that there is no substitute for such investigation and that delay in ascertaining the presence of haemolytic streptococci may have dangerous consequences Evidence positive or negative is of the utmost value for on it depend both the manner of treatment of the patient and the precautions to be observed in preventing the spread of the infection The further classification of the streptococci according to Griffith's types or Lancefield's groups (the latter is the more generally useful system in obstetric work but the two methods are complementary to each other) gives more precise information and is essential in judging the significance of organisms found in the throat swabs of 'contacts' Bacteriological work of this nature is time-consuming and Dr Fry makes a strong plea for the establishment of suitable regional laboratories The diagnosis of streptococcal sepsis and the prompt suspension from midwifery work of a nurse or doctor found to be a carrier of virulent infection raise problems which are essentially similar to those associated with the treatment and control of diphtheria and in such matters the practitioner will doubtless look for equal help from the bacteriological laboratory

The question of air-borne infection has lately received attention In some French surgical clinics there is evidence of a return to Lister's early ideal of a germ free atmosphere and an attempt is made to rid the operating theatre air of dust by electrical precipitation or to render it innocuous by chemical means The importance of dust as a factor in the spread of sepsis has been shown by the fact that the sweepings of rooms in which patients suffering from known types of haemolytic streptococcal infection were nursed have been found to contain the identical organism in virulent form for periods up to ten weeks Such dust has in fact produced human infection With this in mind Dr Cassie advises that the lying in room or ward should be washed polished or cleaned with a damp mop but never dusted Other points in the management of maternity homes—such as sterilization of bed pans—are also discussed in her paper

One woman in every three who dies as the result of childbirth dies from sepsis The most recently available figures show an encouraging trend but it is certain that we are still far from reaching the irreducible minimum in this the most important of any single cause of maternal mortality

NICOTINIC ACID FOR PELLAGRA

In 1911 Funk had prepared in a nearly pure state the substance which cured and prevented beriberi in man and polyneuritis in fowls He called it the beriberi vitamine and thought it was a combination of nicotinic acid with a pyrimidine base As further purification of the active substance was attained both by Funk and by other workers it became evident that nicotinic acid was certainly not the anti neuritic factor and its possible activity in other ways was not investigated In 1914 Goldberger with the aid of various assistants began an investigation of the relation of diet to pellagra It had been obvious for some time that pellagra was rife in the districts where much maize was eaten and by accident it was discovered that the condition known as black tongue in dogs could be produced by the same diets that seemed to lead to pellagra in man Thus the dog became available as an experimental animal for work on this disease By 1926 Goldberger and his co workers had become convinced that pellagra was a deficiency disease and was not due to the presence of any toxic substance in the diet More recently Elvehjem and his co workers[1] have made further studies of 'black tongue' in dogs They found that a liver extract cured this condition and that certain highly active concentrates had chemical properties and solubility relationships which together with the observation that nicotinic acid to some extent stimulated growth in rats suggested that it would be worth while to try this compound on their dogs The result was little short of astonishing The appetite improved immediately the dog showed a growth response similar to that brought about by the liver extract and the diarrhoea disappeared This was repeated on three other dogs the amide apparently being as efficient as the acid Meanwhile Chick and co workers[2-3] had been investigating the Goldberger maize diet and the active principle of autoclaved yeast extract which rendered the diet satisfactory for pigs When the outcome of Elvehjem's work with nicotinic acid was announced two pigs were under their observation which had been fed on the maize diet for several weeks and had been used for testing various yeast fractions which failed to produce any effect These pigs were both the same weight as they had been eleven and seven weeks previously they had severe diarrhoea and refused food Both were in extremely poor physical condition and would probably have died within a few days Injections of 100 mg of nicotinic acid were given at intervals

[1] *J Amer chem Soc* 1937 59 1767
[2] *Biochem J* 1937 31 2065
[3] Ibid., 1938 32 10

of three days one pig receiving two the other three injections Afterwards each had 60 mg a day with food Both pigs recovered promptly The appetite returned within twenty-four hours, the diarrhoea abated and they began to increase in weight The skin became clean and of a healthy colour and fresh hair grew They continued to grow rapidly on the maize diet fortified with nicotinic acid Harris[1] has produced in monkeys a disease (monkey pellagra) analogous to human pellagra which he has cured with nicotinic acid

It remained then to test nicotinic acid for its effect on human pellagra Dr A Hassan has used it on five pellagrins in Egypt two of whom were inmates of an asylum and three of a prison The composition of the daily diet the amount of work done each day and the extent of exposure to sunlight were kept unaltered for all subjects One third of a gramme daily of nicotinic acid benefited all five patients but the asylum patients more than the prison inmates which suggested that pellagra as sometimes encountered may be due to more than one dietary deficiency Other workers also have tried the effect of nicotinic acid on pellagrins Fouts Helmer Lepkovsky and Jukes[2] in the U S A gave 0 5 or 1 0 gramme nicotinic acid daily to four pellagrins in hospital on a diet on which it was known that pellagrins did not improve The response was immediate and they were all cured the recovery being in some details similar to that of the pigs In this week's issue two further cases cured by nicotinic acid are reported by Dr M Rachmilewitz and Dr Helen I Glueck (p 346) That pellagra is sometimes complicated by other deficiencies is proved by Spies and Aring's[3] observation that pellagrins suffering from peripheral neuritis (and not all pellagrins suffer from this) could be relieved quickly by injections of vitamin B_1 Aykroyd and Krishnan[4] have found that stomatitis can easily be cured by giving eggs and yeast autoclaved in an alkaline medium They think that the effective factor in curing this condition is probably the factor which cures pellagra in man and black-tongue in dogs, but stomatitis as usually observed is not a serious condition, whereas pellagra is a formidable disease with a high mortality Sebrell, Onstott, and Hunt[5] have demonstrated that whole whey powder, delactosed whey powder, and American cheese are poor sources of the factor that prevents black-tongue

Thus it is that the course of investigation proceeds Some improvement in laboratory technique leads to the recognition of the existence of an essential factor, chemical work leads to its identification further work leads to a knowledge of its distribution and the clinician applies the findings to the relief of human suffering Perhaps the most noteworthy example of this seen in recent years is the discovery of nicotinic acid as the pellagra-preventive factor for man

[1] *Nature* 1937, 140 1070
[2] *Proc Soc exp Biol N Y* 1937 37 405
[3] *J Amer med Ass* 1938 110 1081
[4] *Indian J med Res* 1938 25, 643
[5] *Publ Hlth Rep Wash* 1938, 53, 72

PNEUMONITIS

The term 'pneumonitis' though criticized by some writers has undoubtedly come to stay In March of this year Morton Gill[1] published an article in which he used the word "pneumonitis" as signifying an inflammatory pulmonary reaction As the aetiology of such a reaction varies Gill divides the condition into three groups—namely (*a*) acute simple pneumonitis (*b*) secondary types and (*c*) chronic pneumonitis Acute simple pneumonitis may occur at any age though most of the cases described were in children and young adults All the patients had pulmonary symptoms but the temperature and pulse and respiration rates were only slightly raised The physical signs included localized areas of impaired resonance and "sticky" rales on auscultation The radiological appearances are not given in detail being described as a localized opacity or heavy shadowing with some enlargement of the hilar glands In all cases the radiological abnormality disappeared within a few weeks In children epituberculosis may simulate pneumonitis but it takes a much longer time to resolve In discussing tuberculosis in young adults Gill refers to Wingfield's[2] "secondary" lesion, which is a localized reaction in a lung allergic to the tubercle bacillus Although radiographically such an allergic reaction may simulate pneumonitis Gill concludes that simple pneumonitis is not a manifestation of tuberculous infection of the lung because x-ray evidence showed that pneumonitis clears up completely, and several of his cases gave a negative Mantoux reaction to 1 1 000 old tuberculin The secondary types of pneumonitis include that which may be caused by influenza and Gill quotes Stuart-Harris,[3] who regards the condition as a "bronchiolitis with patchy atelectasis" Among other examples in this group is the pneumonitis which may be found in association with bronchiectasis and abscess of the lung To include the last is open to discussion, undoubtedly some cases of abscess begin as an acute simple pneumonitis which, instead of resolving, becomes a suppurative pneumonitis, a term which may be regarded as synonymous with abscess of the lung The evidence for the existence of chronic pneumonitis is scanty In a paper on influenzal pneumonitis Woodruff[4] quotes Bowen's[5] statement that in any case of influenza with even apparently insignificant pulmonary symptoms a radiograph will ordinarily show the presence of an exudative process in the lung

[1] *British Medical Journal* 1938 1 504
[2] *Pulmonary Tuberculosis in Practice A Modern Conception* By R C Wingfield London Edward Arnold and Co, 1937
[3] *British Medical Journal* 1937 2 516
[4] *J Mt Sinai Hosp N Y* 1938 5 49
[5] *Amer J Roentgen* 1935, 34, 168

Woodruff gives details of a case of influenza in a man previously engaged in dusty occupations which included working with cement An x ray photograph of the chest revealed a condition of confluent peribronchial infiltration extending from the roots of both lungs into the pulmonary fields The radiograph simulated that of pneumonoconiosis A week later another film showed almost complete disappearance of the infiltration and a fortnight after admission the radiographical appearances were considered normal Our knowledge of pneumonitis especially as regards its pathology is still incomplete The condition has come to be recognized because of the wider use made of x ray examination as part of the routine investigation of diseases of the lung It is important to realize that even in a relatively mild febrile illness with pulmonary symptoms abnormal x ray shadows may appear and may also quickly disappear

SELENIUM AS AN INDUSTRIAL HAZARD

The increasing utilization of selenium and its compounds in industrial processes and the recognition of toxic effects produced in animals by the injection and ingestion of these compounds make it relevant to consider the possible hazards that may be associated with this element in industrial conditions The extent to which selenium exists in the earth's crust is stated by Strock to be 0·005 per cent The principal source of the element at present is from by products in the electrolytic refining of copper and men engaged on this process have been reported as showing symptoms of selenium poisoning with demonstrable quantities of the substance in the urine The primary industries where danger of selenium intoxication may occur are summarized by H C Dudley[1] as follows copper lead and zinc refining roasting of pyrites and in certain districts lime and cement works The secondary industries in which selenium compounds are used are glass and ceramics rubber (vulcanizing and curing processes) steel and brass (alloy furnace fumes) compounding and mixing of pigment for paints and inks, mixing and pressing of plastics melting and casting operations for photo electric cells and in several chemical syntheses The selenium (Se SeO$_2$ SeH$_2$) may attack the worker as dust or fumes and its use in organic combination may make it possible to penetrate through the skin as well as by inhalation and ingestion The soluble compounds of selenium may produce acute or chronic toxic effects and these appear to be proportional to the amount absorbed The acute effects consist primarily of early cellular destruction of the liver parenchyma with later generalized pathological changes throughout the organism Small quantities taken over a long period lead to general debility associated with pathological changes in the liver and kidneys Hydrogen selenide inhaled by guinea pigs causes severe fatty changes in the liver and after a time to *hypertrophy of the spleen* The symptoms recorded among men in copper refineries included pallor gastro intestinal symptoms a garlicky odour in the breath and perspiration nasal and pharyngeal irritation coated tongue metallic taste in the mouth and nervousness and the urine contained selenium These manifestations are in the main the ordinary symptoms of metallic poisoning but the garlicky odour is characteristic and persistent As in all studies of industrial hazards it is essential to establish the physical state in which the selenium may become available to the organism Dusts in a given process may be of such a nature that no soluble selenium compounds are produced Soluble dusts—for example SeO SeO$_2$ H SeO$_3$ H SeO$_4$—and halogen derivatives will be readily absorbed both from the lungs and from the alimentary tract and hence must be regarded as definite industrial risks Although skin absorption has not been established experimentally a case is recorded in which burns from hot acid containing Se$_2$Br were followed by the appearance of selenium in the urine two days later Knowledge is required of the possibility of skin absorption of organic combinations of selenium as they may occur in the processes involved in plasticizers The need for cleanliness and good habits in the works sense among the workers wherever there is a selenium hazard must be appreciated by the industrial physician On the academic side compounds of selenium (sodium selenite) have been shown to inhibit the oxygen uptake of yeast cells and the rate of evolution of carbon dioxide during fermentation of yeast Rats injected with selenium salts show a striking decrease in the ascorbic acid content of the liver and the adrenals The practical importance of these observations requires further elucidation

[1] *Publ Hlth Rep Wash* 1938 53 281

INHERITANCE OF SEBACEOUS CYSTS

Although sebaceous cysts are common even commonplace the research worker has on the whole paid them scant attention For many years it has been suspected that heredity plays an important part in their causation Cockayne in his well known work *Inherited Abnormalities of the Skin* mentions cases of families in which sebaceous tumours of the scalp were common among the female members (although the males were unaffected) and also remarks upon the cases of multiple sebaceous cysts of which notice was first taken by Pringle who gave them the horrible name "sebocystomatosis In this disease numerous small cysts filled with sebum are scattered over the trunk and extremities both males and females may be affected Recently several families each with numerous members affected have been studied three by Monro and one by Ingram and Oldfield Monro[1] who is more interested in the genetic side of the question than the clinical believes that the cysts result from a single dominant Mendelian factor and that individuals suffering from the condition have the gene in *heterozygous form* It is known that there is a great difference in the effect of an abnormality upon its possessor depending upon whether the gene is in heterozygous or homozygous form In the latter event it often happens that the abnormality is so serious that it is incompatible with life Now among Monro's cases was one in which both husband and wife suffered from sebocystomatosis This

[1] *J Genetics* 1937 35 61

pair had three children (among others) who died in infancy, and who were known to be abnormal hence it is possible that the gene which in heterozygous form produces a minor abnormality here may have been present in homozygous form and have caused a gross disorder fatal in childhood It also appears that there may be a genetical relationship between sebaceous cysts and malignant disease In the families affected by the former there were several cases of cancer Whether this is a mere coincidence or not can only be established by the investigation of further families In the family studied by Ingram and Oldfield a father and daughter and two sons were affected, the mother and four other children were free Several cysts were removed from the daughter and were submitted to pathological examination, the results of which suggested that these cysts arise as new formations and are not due to retention and secretion in a hypertrophied sebaceous gland Indeed, in these cases sebaceous glands far from being hypertrophied are often actually atrophied, moreover, in severe acne, a condition in which sebaceous glands are undoubtedly much hypertrophied, cyst formation is extremely rare Thus we find that modern views on the origin of sebaceous cysts support those of Sir James Paget who as long ago as 1870 formed the opinion that most cysts of the scalp were cysts of new formation, and are unfavourable to those of Pringle, who may be regarded as the advocate of the retention theory Ingram and Oldfield come to the same conclusion as Monro, that the factor which determines multiple sebaceous cysts is a dominant rather than a recessive character

THE CAROTID SINUS REFLEX

The effects of stimulation of the carotid sinus are most familiar in connexion with paroxysmal tachycardia, pressure on the sinus having been practised though not always successfully, for the arrest of this abnormal rhythm More recently the carotid sinus has been related to a form of syncope and the possibility of its implication in essential hypertension investigated The effect on the electrocardiogram in normal subjects, and in those with cardiovascular lesions of carotid sinus pressure has been studied by J Lenegre [1] who finds that in young normal subjects there is no appreciable change, or at most there is some change in rate, usually a slowing Positive responses most commonly evoked in elderly people, and especially in the presence of degenerative cardiovascular lesions, are of three main types a bradycardia with or without auriculo-ventricular dissociation alteration in the form of the ventricular complex, and alteration in rhythm Complete arrest of the heart was noted in several instances, and when this lasted for more than five seconds the subject experienced faintness and vertigo, and more rarely there were convulsive movements or loss of consciousness Some of these symptoms may occur apart from bradycardia, and are then attributed to the reflex fall in blood pressure The reflex was found to be readily exhausted and with continued pressure on the sinus the heart would recover its normal rhythm within ten to twenty seconds, and repeated attempts to elicit the reflex would meet with a rapidly diminishing response A pathological carotid sinus reflex—that is one that leads to anything more than a slight alteration in heart rate—is held by Lenegre to depend on the presence of coronary sclerosis with perhaps lesions in the sinus itself playing a lesser part and the changes in cardiac excitability and conductivity result from the effects of bradycardia and lowered arterial tension on a heart already suffering from ischaemia The routine practice of compression of the carotid sinus with the object of revealing latent cardiac sclerosis is recommended but the distressing symptoms that may result, even though transient will surely discourage most physicians from indulging in this diagnostic aid Many will also disagree with the assertion that pressure on the carotid sinus will not arrest paroxysmal tachycardia in young people The author does not say whether or not his experimental subjects were under digitalis though some of the curves published suggest the action of digitalis, the previous administration of this drug may be of importance in determining the effect of carotid sinus pressure

[1] *Arch Mal Cœur* 1938 31 421

ADVISORY COMMITTEE ON BLINDNESS

The Minister of Health has appointed an Advisory Committee on Blindness, including its prevention and treatment The committee will carry on the work hitherto performed by the standing committee on the Prevention of Blindness of the Union of Counties Associations for the Blind, which has ceased to exist The following have been appointed members of the new committee Mr P M Evans, LL D (chairman), Mr H R Bickerton M B Mr J D Magor Cardell, F R C S, Miss Grace Cracknall Dr James Ferguson, Mr Percy Flemming F R C S, Mr N Bishop Harman, F R C S, Dr E K Macdonald Miss Ida Mann, F R C S, Mr R Foster Moore, F R C S Mr G F Mowatt, Sir John Parsons F R S, F R C S, and Mr A H H Sinclair, F R C S Ed The committee has been appointed for a period of three years Mr H G Benjamin will be secretary and Dr A E Hallinan medical secretary

TESTIMONIAL TO DR HUTCHISON

In case any reader may have missed the letter published on July 23 (p 195) we would draw attention to the proposal now afoot for presenting Dr Robert Hutchison with his portrait The election of Dr Hutchison to the Presidency of the Royal College of Physicians of London has given great pleasure to a very wide circle of admirers, to whom he stands "for all that is sound in the practice of medicine and all that is good in tradition" The project will we know, commend itself to old students, friends and societies in London Edinburgh, and the Provinces Personal donations should not exceed three guineas Cheques should be sent to the Manager, National Provincial Bank, 10, Marylebone High Street London, W 1 for the credit of the Robert Hutchison Testimonial Fund

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

COLLES'S FRACTURE AND CHAUFFEUR'S FRACTURE

BY

R. A. FITZSIMONS, F.R.C.S.

I. COLLES'S FRACTURE

Of all fractures this probably is the commonest. Its reduction requires neither expert skill nor elaborate apparatus and the after-care is simple. Accurate reduction leads to excellent results in most cases. Failure of reduction always entails some degree of permanent disability. These considerations make the treatment of Colles's fracture a matter of great importance and general interest. While most frequent in women of middle age and onwards it often occurs in younger people of both sexes. Before the age of about 20 when the lower radial epiphysis fuses with the shaft the corresponding injury is a fracture-separation of the epiphysis. This resembles the adult fracture in all essential features and its treatment is the same.

The fracture occurs within about an inch of the lower end of the radius. The situation of the fracture and the displacement of the lower fragment are determined by the local anatomy and the direction of the causative violence. The lower inch of the radius although expanded to twice the size of the shaft is covered by only a thin shell of cortical bone so that it readily yields to a breaking strain. This weakness of the bone is further accentuated by the strength of the anterior ligaments of the wrist joint reinforced by the tendons passing to the hand which explains the comparative rarity of pure dislocation.

In most cases the fracture is due to a fall on the outstretched hand or some equivalent injury. The force of impact is transmitted through the hand and wrist and bears obliquely on the lower end of the radius. The effect of such a force can best be understood by resolving it into two separate components acting in directions at right angles to each other. In the present instance one component displaces the lower fragment upwards along the axis of the radius and the other displaces it directly backwards and also rotates it backwards. Impaction is common and is due to penetration of the soft cancellous bone by the sharp ends of the broken cortex. Further the position of radial deviation into which the hand is forced at the moment of impact often causes the lower fragment to be displaced and rotated outwards so that traction on the internal lateral ligament may result in a fracture of the styloid process of the ulna or a rupture of the ligament. The hand and carpus remain attached to the lower fragment (Figs. 1 and 2).

To summarize this one can say that in a typical Colles's fracture the lower fragment is displaced upwards backwards and outwards tilted backwards and outwards and the ulnar styloid is broken. By far the most constant element of the deformity is the backward tilt and this also is the most important one to correct. In addition there is always some degree of injury to the soft tissues.

Variations of the typical picture are common. Comminution may be present with fissures running into the joint and often separation of the fragments. The bone may be cracked with little or no displacement. The radial styloid or the posterior lip of the radial articular surface may be fractured the rest of the bone remaining intact. Fracture-dislocation is uncommon displacement is marked and fixation sometimes difficult. An appreciation of these points and some knowledge of the normal radiological anatomy of the wrist are necessary for successful treatment.

Diagnosis is generally easy. Pain and swelling of the wrist following a fall generally signify a Colles's fracture. When there is at the same time any obvious degree of backward or radial displacement of the lower end of the radius and hand and an area of maximum tenderness

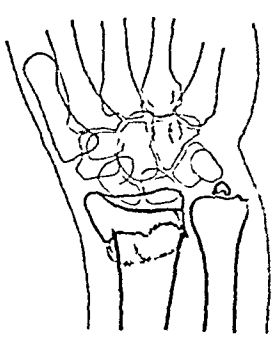


FIG. 1

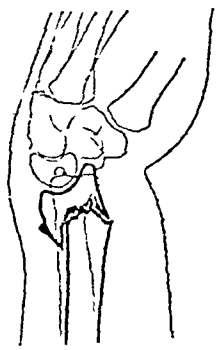


FIG. 2

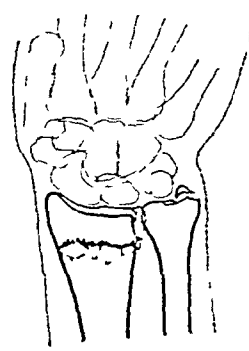


FIG. 3

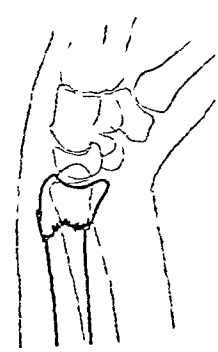


FIG. 4

FIG. 1.—Colles's fracture. Antero-posterior view showing outward rotation and displacement of lower fragment fracture of ulnar styloid radial deviation of hand and abnormal relation of styloid processes.

FIG. 2.—Lateral view showing backward rotation and displacement and dinner fork deformity of wrist and hand.

FIG. 3.—Antero-posterior view after reduction.

FIG. 4.—Lateral view after reduction. The normal anterior concavity of the radius has been restored and the lower articular surface faces slightly forwards as well as downwards.

over the bone just above the joint line, the diagnosis is certain. The classical dinner-fork deformity is found only with severe degrees of backward displacement. Lesser degrees of deformity are often masked by the general swelling, and it is important to realize that, if not corrected, these become much more conspicuous when the swelling subsides. The tip of the radial styloid normally occupies a level about one-third of an inch below that of the ulnar styloid, and an alteration in this relation, caused by the upward displacement of the lower radial fragment, may be felt (Fig. 1). A more constant sign is a loss of the forward concavity over the lower end of the radius, and with average posterior displacement this is usually obvious, even in the presence of swelling (Figs. 2 and 4).

The final diagnosis rests with the radiographs. Cases will occur where no x-ray facilities are available and the question will then arise whether or not the fracture should be reduced before it is radiographed. This should be done if any displacement can be detected clinically, because the physical and mental relief afforded the patient by reducing and immobilizing the fracture more than counterbalances the risk of an error in diagnosis. The risk is always slight, since most injuries which bear any resemblance to Colles's fracture are Colles's fractures. In doubtful cases some temporary immobilization—for example a Carr or improvised splint—will give relief until the radiographs can be seen.

Needless to say all possible fractures must be radiographed after reduction to check the diagnosis if this has not previously been made, to see the position of the fragments, and to satisfy legal requirements. It is only possible to form an approximate estimate of the accuracy of a reduction by clinical means, particularly in the presence of much swelling.

Anaesthesia

The essential surgical requirement is a quiet relaxed patient, any form of anaesthesia which ensures this is a good anaesthetic for the immediate purpose of reducing the fracture, but various other things have to be considered, especially the patient's age and general health. It is impossible, except through sheer good luck, to secure an accurate reduction in a struggling patient.

Local anaesthesia has not yet achieved any great popularity, principally because expert general anaesthesia is available in most treatment centres, but its advantages under certain conditions are so obvious that they deserve to be more widely known. With proper aseptic precautions the method is devoid of risk and can be used where general anaesthesia is for any reason undesirable or unavailable. The patient is not totally incapacitated even for a short period. No special preparation or after-care is required. Repeated manipulations can be carried out with one injection—for example, where x-ray examination shows the position to be unsatisfactory, this procedure usually requires at least two general anaesthesias. Local anaesthesia is unsuitable for nervous patients and children. It is dangerous where absolute asepsis cannot be relied upon, since the solution infiltrates the fracture cavity. It is unsuitable for fractures more than a few days old, when cellular activity is sealing up the spaces between the fragments. Finally, it cannot always be relied upon to produce complete anaesthesia on account of associated injury to soft tissues, which the solution may not reach.

Technique of Local Anaesthesia

The requirements are a sterile 2 per cent. solution of novocain, a 20 c.cm. Record syringe, needles (No. 1 Record), tincture of iodine, and sterile dressings. The novocain solution must be of guaranteed sterility. The safest solutions are those in rubber-capped bottles or sealed glass ampoules, which keep indefinitely. Solutions contained in ordinary corked bottles are always suspect.

The syringe and needles are sterilized, preferably by boiling. The back of the forearm, wrist, and hand are cleaned and swabbed with iodine. The surgeon's hands are sterilized as for any aseptic operation. The position of the fracture line is judged by palpation and previous reference to the x-ray films. The needle attached to the syringe containing the anaesthetic is made to pierce the skin over the back of the radius a little above the estimated line of the fracture and between the long extensor tendon of the thumb and the common extensor tendons, and is then pushed in an oblique direction downwards and forwards until it enters the haematoma cavity. With average backward displacement there is no difficulty in doing this, with minor displacements a few trials may be necessary, but a single skin puncture is sufficient. The tip of the needle is known to be correctly placed when (1) the solution flows readily from the syringe with moderate pressure on the piston, (2) blood can be aspirated into the syringe, (3) the injection does not raise a local swelling as it would do if placed in the superficial tissues. About 15 c.cm. of novocain are injected into the radial fracture, and then a few cubic centimetres around the ulnar styloid. The anaesthetic should be given about five minutes to act, after which the fracture can be reduced.

Reduction and Fixation

For the actual reduction it is desirable, though not essential, to have the help of two assistants, who need not be skilled. Their function is to steady the limb and maintain the reduction while the splint is being applied.

A dorsal unpadded plaster-of-Paris slab is recommended as being both safe and efficient for all cases with average displacement, but for gross displacements an encircling plaster cast is advisable. The distance from about two inches below the elbow to the knuckles is measured, and a dry slab equal to this length is made from a six-inch-wide plaster-of-Paris bandage so that it contains eight folds or thicknesses of muslin. One of the assistants holds and steadies the elbow while the surgeon takes a firm grip of the fingers and exerts vigorous traction in the axis of the forearm, followed by a forced extension movement. This disengages the fragments, whether impacted or not, and the lower fragment can now be felt to move with the hand. While full traction is still maintained the wrist is flexed and the hand forced to the ulnar side and at the same time the lower fragment is taken between the thumb and forefinger of the surgeon's free hand and pressed forwards and towards the ulnar side as strongly as possible. The restoration of the normal anterior concavity of the radius, which is the clinical proof of a satisfactory reduction of the backward displacement, can be felt by the index finger. The patient's hand is now transferred to the second assistant without disturbing the position or the traction. Separation of the fragments of a comminuted fracture, if present, must be corrected at this stage by pressure between the surgeon's hands in the

appropriate plane and where there is radial deviation the final correction of it is now made by lateral pressure

While the limb is still being held by the assistants the plaster is thoroughly wetted in cold water the excess of water squeezed out and the slab applied to the back of the forearm wrist and hand as far as the knuckles The plaster is carefully smoothed out everywhere to adapt it as accurately as possible to the contours of the limb and to prevent creases on its deep aspect which might cause pressure sores The upper end of the plaster extends only about half way around the limb but in the region of the much narrower wrist it extends well on to the flexor surface and care should be taken that it encircles the radial side of the wrist more than the ulnar in order to maintain ulnar adduction The wet plaster is now quickly covered by a few turns of a three inch cotton bandage so that it can be handled more easily The surgeon once more takes the hand still keeping up the traction and again places his thumb this time outside the plaster over the lower fragment pressing it forwards and inwards The plaster still being soft the hand is now placed in its final position usually one of ulnar adduction and about 20 degrees of flexion and held until the plaster has hardened (Fig 5)

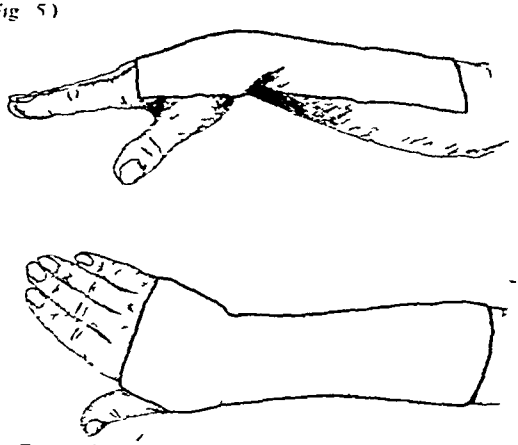


FIG 5.—The usual position of the hand after reduction The plaster slab is shown in outline The dotted lines indicate its anterior limits (Cotton bandage not shown in diagram)

A second cotton bandage is now applied firmly but not tightly beginning at the upper end of the plaster and finishing with a dozen or more turns about the wrist and hand where it passes between the thumb and index metacarpal down to but not going beyond the proximal transverse crease of the palm Plaster or bandages which extend beyond this line limit flexion at the metacarpo phalangeal joints The thumb is left free to move Fixation is completed by a piece of strapping around the wrist and another around the palm

The above technique which takes more time to describe than to perform is applicable to the majority of fractures but has to be modified to suit certain cases When no radial displacement is present in the fracture the position of full ulnar adduction is unnecessary but a slight degree of ulnar adduction is always desirable as this is the physiological position of the hand Where little or no displacement exists it is only necessary to apply a dorsal slab as described with the hand in the neutral position Fractures with gross displacement and also those in which fixation by the dorsal slab has proved unsuccessful generally require an encircling plaster cast The only difference from the routine technique is that in the place of the second cotton bandage a plaster bandage is applied and in exactly the same way This form of fixation gives greater security in all cases but it introduces an added element of danger to the circulation which necessitates closer observation in the post reduction period

In cases with severe backward displacement such as fracture dislocations fixation with full flexion of the wrist is sometimes advisable This should not be maintained beyond about ten days or so because it is a position of strain and it also makes full flexion of the fingers impossible At the end of this time the plaster should be carefully removed the hand brought up to the neutral or slightly flexed position and a new plaster applied It cannot be too strongly emphasized that the reduction of this fracture requires vigorous manipulations and that the great majority of unsuccessful attempts are due to the application of insufficient force rather than to insufficient skill There is no danger of over reduction of backward or outward displacements

Good results can be obtained by the use of rigid splints but plaster of Paris has advantages over all other forms of fixation It adheres to and exerts perfectly uniform pressure on the skin thereby giving a maximum security to the fracture with a minimum danger of damage to the skin and also ensuring that it shall not loosen or become displaced With adequate strength it represents the minimum of bulk and weight so that the arm can be passed through the sleeve and easily used The addition of padding removes these advantages and reduces the efficiency of the splint

Following reduction all fractures must be radiographed in two planes The radiographical evidence of good reduction is (1) in the lateral view the backward displacement and tilt are corrected the anterior concavity of the radius is restored and the lower articular surface of the radius faces slightly forwards as well as downwards (2) in the antero posterior view the outward displacement and tilt are corrected and the styloid processes occupy their correct relative positions (Figs 3 and 4)

Minor degrees of displacement are consistent with good functional results In judging what is a satisfactory position the special circumstances of each case particularly the patient's age and occupation have to be considered and much greater latitude should be observed with elderly than with younger patients in whom an anatomical reposition should be obtained if possible At least one further radiograph should be taken a week or ten days following reduction to see that the correct position has been maintained Later displacements are uncommon

After-care

With average displacements the plaster is retained for a month with severe displacements for six weeks During these times the plaster must not be removed except for the indications I have mentioned After reduction the important instructions to the patient are that the fingers elbow and shoulder shall be used from the first for light work of every kind and that pain or swelling of the hand shall be reported immediately If the patient's co operation cannot be depended upon the movements must be performed daily under the direction of a masseuse A sling if used at all should not be worn for more than a couple of days

The important complication is swelling of the fingers caused by a too tight bandage Slight swelling due to

the trauma is nearly always present, and disappears with time, elevation of the limb, and finger movements. The danger signals are pain, severe swelling, and blueness of the fingers. If these appear the position of the fracture becomes of secondary importance, and pressure must be relieved at once by cutting the plaster. The danger of severe circulatory obstruction is inseparable from the use of an encircling unpadded cast on a swollen limb, and for this reason, as already indicated, it should *not be applied as a routine*. Damage may be caused in a few hours that may not be recovered from in as many weeks, and finger movements may be permanently impaired. *In doubtful cases the only safe thing to do* is to divide the plaster.

There should be a complete range of finger movement and a fair grip a few days after reduction. When the plaster is removed there is nearly always some stiffness of the wrist, which generally recovers rapidly with the patient's own movements. Extension and supination are slower to recover than flexion and pronation, but there is nothing constant about this. The patient's age, the kind of reduction obtained, the presence or absence of swelling, and the patient's ability to co-operate are all important factors, but fractures comparable in all other respects often show considerable differences in the times taken to regain full function.

There is no doubt that physiotherapy helps those patients who are slow to recover movements and also those who complain of slight pain after removal of the plaster. It is doubtful, however, whether it ever influences the ultimate result, and it is quite certain that it *can never give a patient a good wrist and hand where* the initial treatment has been bad. For the majority of patients it is unnecessary, though harmless, except in so far as it tends to obscure what is a clear-cut surgical issue and produce a feeling of divided responsibility between surgeon and physiotherapist.

The sequels of neglect or unsuccessful treatment are various degrees of finger stiffness, weak and painful grip, stiff and painful wrist, and an obvious deformity. The shoulder-joint and elbow-joint may also become stiff from immobilization, as in wearing a sling for too long. The deformity of an unreduced Colles's fracture is an unsightly one, and constantly obtrudes itself on the notice of the patient.

Late Cases

Manual reduction may be attempted with some prospect of success up to about three or four weeks following the injury, after this the use of a wrench or an osteotomy is necessary.

Reversed Colles's or Smith's Fracture

This usually follows a fall on the back of the hand so that the lower radial fragment is displaced forwards. The wrist should be immobilized in dorsiflexion.

II CHAUFFEUR'S FRACTURE

This generally differs from the common types of Colles's fracture only in its aetiology. It may be caused by a sudden forced hyperextension of the wrist or from an actual blow of the starting-handle. Comminution is fairly common, also isolated fractures of the radial styloid process, as from a direct blow. Some of the cases are of the reversed type. Both bones may be broken, either at the lower ends or, occasionally, higher up in the shafts. Treatment, except in the cases of shaft fractures, follows the lines already described.

Nova et Vetera

SOME ECHOES OF WITCHCRAFT

The astonishing story of the town of Hampton in New Hampshire, U.S.A., after 282 years restoring its citizenship to Eunice Goody Cole, tried as a witch in 1656, and according her a martyr's funeral opportunely coincides with the 350th anniversary of the death of one who first regarded witches as mentally sick women.

Johannes Wever, Friend of Witches

Johannes Weyer or Wyer (latinized Wierus) was born in Grave on the Maas, Northern Brabant, in 1515 or 1516. Studying under the sceptical alchemist Cornelius Agrippa at Bonn and afterwards at Paris, he took his medical degree at the age of 22. City physician at Arnheim, and personal physician to Duke Wilhelm of Jülich-Cleve-Berg in a turbulent age he lived a serene life practising his profession and pursuing knowledge. Two of his sons were physicians, of whom one was piously named Galenus. In 1563 appeared his work on the prestidigitatory nature of the devil (De praestigiis daemonum) which was promptly placed on the *Index librorum prohibitorum*. In language essentially composed and even kindly though nevertheless outspoken, he bids the monks leave the management of witches and of the bewitched to the physicians. The pain inflicted on witches is unnecessary cruelty, since their mental anguish is punishment in itself. Among his medical colleagues Wever on the whole found less cruelty but scarcely any more sympathy or understanding. An inquisitive and talented observer he described trichinosis, the English sweating sickness, erysipelas and scurvy. His reputation in medical history securely rests on his humane attitude towards witches, his emphasis on their mental sickness, and his founding of clinical psychopathology. Wever's story was told by Gregory Zilboorg in the Noguchi Lectures 'The Medical Man and the Witch during the Renaissance' (1935) and has more recently been revived by Martin Vogel in the March 17 issue of *Hippokrates*.

Richard Gale, Enemy of Witches

In the December, 1937, number of *the Transactions of the Bibliographical Society* Ethel Seaton gives an account of Richard Galis and the witches of Windsor which, apart from its valuable detective work in bibliography, is interesting because it contains the testimony of the bewitched believer on the one hand and that of his rationalistic father on the other. Gale (Galis) an excitable and credulous fanatic, son of Richard Gale, innkeeper and three times mayor of Windsor, having suffered from the malice of witches, became their implacable enemy. His violent behaviour as self-appointed witch-hunter alienated his father and annoyed the magistrates. Imprisoned in a 'deep dungeon,' in answer to his prayers the chains miraculously fell off his feet. Three months after the hanging of one of the witches in 1579 he brought out a pamphlet written in fervently pious style the main part of which is occupied by an autobiographical account of his personal dealings with the witches. Reginald (Reynold) Scott, the tercentenary of whose birth occurs this year, in his book *The Discoverie of Witchcraft* (1584) alludes to Gale as a madman, and refers to his 'follie lewdness, impudence, and dishonestie.' The most important sourcebook on the history of witchcraft it was written with the object of preventing the persecution of aged and simple persons popularly believed to be witches. Early editions are rare, because James I ordered this work to be destroyed. It is said that from its pages Shakespeare drew inspiration for his portraits of the witches in *Macbeth*.

W. R. B.

Thomas Annandale, who became regius professor of clinical surgery at Edinburgh in 1871, when Lister went to London, was born one hundred years ago. He died in 1907, and at his university his memory is kept green by the Annandale Gold Medal for Clinical Surgery.

ONE HUNDRED AND SIXTH ANNUAL MEETING

of the

British Medical Association

HELD IN PLYMOUTH, JULY, 1938

THE SECTIONS

SUMMARY OF PROCEEDINGS

During the next few months there will be published in the BRITISH MEDICAL JOURNAL *the opening papers communicated to the Scientific Sections of the Annual Meeting at Plymouth. The reports of discussions concluded from last week (p. 313) are intended to give members who were not present a general idea of the proceedings.*

SECTION OF MEDICINE

Friday July 22

Advances in Organotherapy

With DR. F. A. ROLEF in the chair SIR WALTER LANGDON BROWN opened the discussion on recent advances in organotherapy. Recalling Starling's conception in 1905 of a chemical control of the body by hormones he mentioned those subsequent discoveries which had supported this hypothesis. First the recognition of vitamins or exogenous hormones; secondly the principle that a chemical substance was liberated at every nerve ending on stimulation the secretion of adrenaline and pituitrin being only special instances of a general law; and thirdly the discovery by the Needhams and Waddington that Spemann's organizer in the embryo was not cellular but chemical in its activities and that it was closely related to oestrin. Moreover there was considerable overlap between the chemical constitution of certain hormones vitamins and carcinogens. It had been believed in the past that hormones would not act as antigens but the existence of antihormones had been established. A further advance in organotherapy was the realization of the interaction between hormones and mineral metabolism the relation of calcium and phosphorus to parathormone being a notable instance. Zondek's conception of hormones being activated on reaching their destination was connected with this field of metabolic relationships in which further research was required. The postulates for rational organotherapy were that the gland in question should form an internal secretion that the active principle could be extracted and that a method of administration should be available which would admit of its utilization in the body. Organotherapy might then be employed in the following ways: as substitution therapy as a pharmacological agent as antagonist to other hormones to influence general metabolism or in an attempt to utilize antihormonal activity. These substances might also be employed empirically. Sir Walter Langdon Brown emphasized the possible deleterious effects of injudicious organotherapy mentioning examples in relation to thyroid insulin parathormone and oestrin. While oral administration of thyroid was successful this route was not generally available though certain sex hormones in large doses might be useful when given orally. The subcutaneous route was the only effective one for the majority of hormones though they might be given intravenously in emergencies as in diabetic coma. Referring to the problems of receptivity of the tissues the speaker recalled the observation of Zondek that the absorption of a hormone such as thyroxine is decreased in the presence of narcotics such as the barbiturates which adhere to the cell surface and thus displace hormone from it. Perhaps future researches would result in the discovery of simple basal groups which might be effective while escaping disintegration by the digestive juices; possibly newer means of production might result in a reduction of the cost of these preparations.

DR. A. S. PARKES spoke on the relation between method of administration and effectiveness of hormones. He pointed out that the natural action of a gland was not necessarily reproduced by injection of its active principle and there was a distinction to be drawn between the amount given and the amount utilized by the body. Referring to subcutaneous injection of oestrone testosterone and progesterone he considered that three factors should be considered: the rate of absorption the rate of destruction and the rate of excretion. Little was known regarding the last two of these but more work had been done concerning absorption. A substance injected at daily intervals might not be available to the body during a large part of the day. Delayed absorption could be achieved by esterification of the active principle or better still by implantation of it in the form of tablets under the skin. The speaker showed a chart illustrating the influence of the method of administration upon the effectiveness of testosterone when given to rats. Judging the result by the weight of the testes and seminal vesicles he found that the propionate and acetate were both more active than free testosterone. The combined forms could also be given effective at longer intervals than the free testosterone.

Sex Hormones

Professor E. C. DODDS gave his views on the practical use of oestrogenic substances with special reference to synthetic compounds. There was a lack of chemical relationship between the various hormones; some were of protein structure and would if taken by the mouth be converted by the digestive enzymes into amino acids and so rendered inactive. Anterior pituitary and parathyroid hormones were destroyed in this way. Until recently the only hormone which could be given by the mouth was thyroid extract. It was now known that by the introduction of ethinyl groups oestrogenic substances would resist the action of trypsin pepsin and erepsin. Oestriol oestrone oestradiol ethinyl oestradiol and other derivatives had been administered to rats by the subcutaneous and oral routes. Except in the case of oestriol which produced equal effects by the two routes these substances were much more potent when given orally.

DR. S. LEVY SIMPSON described his experience of the therapeutic use of testosterone propionate. He had found that in the castrate rat or monkey this substance would produce a return of the primary and secondary sex characters. There was also a range of activity in female animals the development of the Graafian follicles being inhibited in the monkey a suppression of oestrin secretion had been observed. The speaker had used this substance in the treatment of the human male castrate; these patients (whose deficiency was usually due to tuberculosis or war wounds) were restored in their sexual libido and no longer experienced the hot flushes and migrainous headaches which had previously troubled them. The anabolic effect was also very remarkable: these patients who were usually lean might gain one stone in three weeks when given testosterone propionate 50 mg. thrice weekly. The weight would fall again when the injections were stopped. This substance had also been used for enlargement of the prostate but so far no one had produced conclusive and controlled results to show that it was of value. In women menorrhagia dysmenorrhoea and painful breasts with or without mastitis might be benefited by this preparation. Its use in hyperthyroidism was based upon the expectation that it might reduce the function of the pituitary and so decrease the secretion of pituitary thyrotropic hormone. Contraindications in general were enlargement of the clitoris hirsutism and acne.

DR. G. L. FOSS (Bristol) had used testosterone propionate for the past year. His experience related chiefly to eunuchoidism and menorrhagia. For the former he had found

40 to 60 mg per week an adequate dose, and he had supplemented this with injection Doses of 300 to 1 000 mg had been given for menorrhagia, metrorrhagia, and metrostasis, such doses would give benefit but three weeks might elapse before bleeding ceased With doses of 1 500 to 3,000 mg unwanted side effects in women might occur these were a slight deepening of the voice, acne, clitoral enlargement and growth of hair on the face, this last effect could be reversed by rubbing in an ointment containing oestradiol

Dr S J FOLLEY (Reading), using testosterone propionate had been able to produce mammary development in rats and a growth of teats and breast ducts in guinea pigs In monkeys a duct development of abnormal type was seen, the epithelium being curiously folded Mr V W DIX (London) had treated enlargement of the prostate with testosterone propionate He had found a remission in frequency and other symptoms but agreed with Levy Simpson that it was doubtful whether there was any effect upon the particular variety of prostatic change that occurs in man

Dr ROPER (Exeter) referred to Sir Walter Langdon Brown's remarks on substitution therapy, he considered that in some cases of diabetes there was evidence of recovery in function of the islets as a result of rest

Anterior Pituitary Hormones

Dr A W SPENCE discussed the therapeutics of anterior pituitary and related hormones Thyrotropic hormone was of limited use, it produced the same effect as thyroid extract but in a different way Cretinism and myxoedema were not relieved by it The most important of the anterior pituitary hormones in therapeutics were the gonadotropic hormones whether extracted from the human urine of pregnancy or from the serum of pregnant mares The former preparations were valuable in the treatment of undescended testis but only provided there was no anatomical abnormality Doses of not less than 500 rat units intramuscularly twice a week should be given In the treatment of eunuchoidism the gonadotropic hormones provided a stimulating therapy which could be combined with the replacement effect of testosterone propionate He advised 80 Evans rat units of pregnant mare serum intramuscularly on alternate days, or 500 to 1,000 rat units of pregnancy urine extract intramuscularly twice a week Sterility might be due to hypothyroidism and relieved by suitable substitution therapy, in an uncomplicated case due to failure of the tubules to produce mature spermatozoa gonadotropic hormone might give benefit The same treatment could be employed in women when sterility was thought to be due to failure of ovulation

SECTION OF SURGERY

Friday, July 22

The Septic Hand

Dr H C RUTHERFORD DARLING (Sydney), a Vice-President of the Section presided over a meeting at which Sir DAVID WILKIE (Edinburgh) opened a discussion on the septic hand

There had been Sir David said, an unfortunate tendency to regard infections of the hand as minor surgical maladies But they were of primary importance not only from the aspect of danger to life but because of their potentiality in producing lasting disability in manual workers Much was owed to Bier for his studies of the infective process and to Kanavel for the pathological anatomical pictures Bier's great contribution to treatment was his advocacy of control of the return of blood and lymph from an infected part so that by slight lymph stasis central spread of infection was delayed until immunity was fully under way and the toxins produced were diluted In this country Bier's treatment had been misunderstood, and was taken to imply a well marked venous congestion by elastic pressure Sir David Wilkie thought that Bier's mild passive hyperaemia was a most valuable line of treatment provided it was employed properly Besides this principle of seeking to localize infection while immunity was rising there was now also the powerful aid of sulphonamide He thought that antitoxic serum although overshadowed at present by chemotherapeutic measures, should also always be employed in severe cases of known character

After describing the pathological anatomy of the various hand infections Sir David Wilkie passed to the consideration of those cases of acute streptococcal infection with lymphangitis which might follow upon a punctured wound or scratch The patient should be put to bed and given copious fluids A warm moist dressing should be applied to the limb and a few turns of a thin elastic bandage wound *lightly* round the upper arm This bandage was applied direct to the skin so that a gentle pressure obstructed the superficial veins and lymphatics without producing any blueness or duskiness The secret of successful application was the abolition of pain If pain was increased the bandage was too tight The bandage might be left on continuously for forty eight hours with advantage Treatment with sulphonamide was instituted and 30 c.cm of streptococcal antitoxic serum given after desensitization No incision was made until there was localized pus, except in the case of pulp infections, where earlier incision might be required to prevent necrosis of the phalanx If no improvement was taking place in a pulp infection in forty eight hours then an incision should be made

Immediate Treatment

Mr R KELSON (Liverpool) said that the general view that lymphatic absorption except in the case of the pleura and peritoneum, was a slow process appeared to have been disproved by the experiments of McMaster and Hudack These observers, by intradermic dye injections, had shown rich capillary plexuses one in the papillary stratum of the corium and the other in the lower layers of the corium Within thirty seconds the dye could be seen in the lymphatics 14 to 15 mm away, in forty five seconds 2·5 cm away from the site of injection These experiments showed the necessity for immediate treatment in the case of a prick to delay absorption A handkerchief round the base of the finger or a rubber umbrella ring or locally applied Bier's bandage was suitable McMaster had stated that, while by sucking a wound much material might be removed, much was also distributed locally But mere local congestion was not enough A means of escape for the exudation so evoked should be provided Therefore all pricked fingers should be denuded of epithelium down to the corium around the puncture point This was performed with a razor blade A minute incision should be added if it was thought that the infection had gone deep to the skin, which must be a rare occurrence, since the epithelium cleaned the puncturing agent He thought it was difficult for septicaemia to arise in a wound free from tension By these means an oozing focus was produced Because there was little or no lymph flow in a resting limb immobilization was of great importance He believed that if in lymphangitis there was pain at the site of the puncture a small incision should be made Pus would usually be found It was the surgeon's duty to relieve tension, not to wait for pus, and he advocated incision in all hand infections where after thirty-six hours there was not evidence of the subsidence of all signs and symptoms

Prognosis of Septic Hands

Professor J PATERSON ROSS dealt first with the prognosis with regard to the hand In infections of the pulp one sleepless night warranted incision because of the danger of necrosis of the phalanx This was an exception to his usual rule of waiting for pus The usual result of a tendon sheath infection was a stiff finger which required amputation, but a good result with a mobile finger would be obtained if the sheath was opened up within twenty-four hours, followed by early movements in a hot saline bath He thought that sulphonamide was of value as an adjunct to local treatment because it enabled the patient to move his fingers freely without suffering the severe reactions which used to occur on movement Cellulitis and lymphangitis, though diffuse processes, respected anatomical barriers in the great majority of

cases Where rarely the spread was without respect to the limitations of fascial planes or sheaths the outlook was grave not only for the limb but for the patient's life since there was an obvious constitutional inability to deal with the infection Regarding prognosis as to the patient's life Professor Ross thought that in serious cases it was too often assumed that a virulent organism was to blame Yet in many cases the opposite was true and he thought that a feeble resistance was more often the cause To influence this resistance beneficially fatigue mental and physical had to be avoided The anxious overtired patient had a relatively poor prognosis Similarly a patient with nausea was a poor risk compared to the one who could take his meals It was of importance to maintain resistance by processes of elimination

Mr ZACHARY COPE stressed the economic importance of the septic hand and emphasized the need for rest to the whole upper limb where the hand or a finger was inflamed In diagnosis difficulty might be experienced in distinguishing a thecal infection from a primary osteomyelitis of the underlying phalanx Radiographs should be taken in the atypical case or in the case which did not clear up quickly

Mr A DICKSON WRIGHT advised as a prophylactic measure in infected pricks the immersion of the finger in a pure alcohol bath by use of a rubber finger stall The evacuation of a subungual haematoma by trephining the nail was also a valuable prophylactic procedure Moulded plaster gutter splints gave complete rest A stenosing lymphangitis in the axilla might occur after hand infections and form taut fibrous bands which held the arm to the side Dissections and tenotome incisions were disappointing in this patience and rest were sufficient to cure the condition

Mr CHARLES DONALD said he thought the three chief faults in local treatment were the prolonged use of fomentations not thoroughly wrung out incisions before pus was present and the making of small stinging incisions when pus was present No notice should be taken of finger creases where incision was required It was too generally assumed that lymphangitis and cellulitis were of a streptococcal nature in quite a fair proportion the staphylococcus was the infecting organism Mr JAMES RUSSELL (Glasgow) also advocated the use of the Bier treatment in the early stages and the great need for local and general rest Mr JAMES HARDMAN (Birmingham) said that in fifty out of fifty two pulp infections he had found that one night's loss of sleep meant the presence of pus and that such a criterion for incision was therefore not an exception to the rule of waiting for pus

Mr HAROLD DODD advocated dry heat applications the value of general rest and the use of a tourniquet at operation In the rehabilitation of the stiff blue cold hand he had found the wearing of a thick woollen glove day and night of value The CHAIRMAN emphasized the importance of a general anaesthetic of free and adequate drainage and of a bloodless field at operation

Sir DAVID WILKIE replying said his disagreement with Mr Kennon's procedures was probably more apparent than real The surgeon did not see the cases at the period of which Mr Kennon had mainly spoken He agreed with the remarks about sodden hands and thought that plaster-of Paris was probably not sufficiently used for rest

Surgery of the Heart

Subsequently Mr L F O SHAUGHNESSY gave a short review of the modern surgery of the heart After dealing with the recorded instances of operations for pulmonary embolism and stab wounds of the heart he passed to the curable extrinsic causes of cardiac dysfunction These included dextro and laevo-cardia acquired by fibrosis from chronic lung and pleural disease mediastinal tumours causing either direct pressure on the heart or embarrassing the heart by pressure on the sympathetic and vagus nerves Although these extrinsic causes were rare their occurrence emphasized the need for radiological examination in all types of heart disease Discussing the surgery of the pericardium he was doubtful if its physiological function was as great as had been believed The purely mechanical factor of compression was of considerable importance and timely relief of pericardial exudates gave remarkable alleviation In the late cases of pericarditis it was the consistency of pericardial adhesions rather than their extent which determined the degree of cardiac disturbance There were two groups of cases of chronic adhesive pericarditis In the first group were patients with a large heart visible retraction of the intercostal spaces and often signs of compression of the lower lobe of the left lung For these the operation required was removal of part of the rigid chest wall The second group presented a small heart oedema of the legs ascites and an enlarged liver Actual excision of part of the fibrous pericardium which was encasing the heart and impeding the venous return was required

Turning to the surgery of coronary disease Mr O Shaughnessy said that when an omental graft was used vascular adhesions formed whether the graft was applied to normal myocardium or to the site of a recent or even an old fibrous infarct At the Lambeth Clinic they had performed cardio-omentopexy on twenty occasions Fifteen of these patients suffered from angina and of these five died one on the table one of uraemia three months after operation and three of heart failure two months after operation All the others were greatly improved The other five patients had symptoms of cardiac ischaemia other than angina The most successful case in this group was a woman suffering from hypertensive heart failure Mr O Shaughnessy concluded by discussing the indications for cardio omentopexy

SECTION OF OBSTETRICS AND GYNAECOLOGY

Friday July 22

Chorion Epithelioma

During the first part of the concluding session Miss MABEL RAMSAY (Plymouth) took the chair as Vice President and a paper was read by Mr JAMES RIDDELL (Plymouth) on chorion-epithelioma

Mr Riddell said that this condition was always connected with pregnancy In about one third of cases it followed a hydatidiform mole About 6 to 10 per cent. of moles become malignant Months or even years might elapse before the onset of a chorion-epithelioma The tumour usually occurred in the fundus of the uterus but metastases in the vulva or vagina might be the first obvious growths Secondaries in the brain lungs and heart showed a tendency to regress Formerly it was customary to carry out a hysterectomy for certain cases of mole but the advent of the quantitative Zondek-Aschheim test had rendered this unnecessary After a mole has been evacuated the Z-A test should be repeated at frequent intervals It might remain positive up to two months after evacuation of the mole but more commonly it became negative within a few days It should be remembered that curettage in a patient who was bleeding after the evacuation of a mole carried with it the risk of wide dissemination if a chorion-epithelioma had occurred It was much better in such cases to be guided by the Z A test. If this remained positive after removal of a mole then an exploratory hysterotomy was a much safer procedure Abdominal hysterotomy was best done also in cases of moles where the cervix was closed and in all cases in which doubt arose Several interesting cases were described and discussed

Mr L CARNAC RIVETT (London) pointed out that the reappearance of a positive Z-A test after a negative one was the important point in the diagnosis of a chorion-epithelioma following a mole He also uttered a word of warning against too much reliance being placed on a high quantitative result In a case of twins this was found to be positive in 1 100 dilution He strongly agreed that it was better to perform an abdominal hysterotomy than to curette in cases of doubt. Professor J PRESTON MAXWELL (Peking) remarked that many abortions showed more or less hydatidiform degeneration He agreed that a hysterotomy was better in cases of mole where the cervix was closed The Z A test might remain positive

for three months after a mole was expelled It was the re appearance of a positive result which was the significant finding

Investigation of Sterility

MR ALBERT SHARMAN (Glasgow) read a paper on personal experiences in the investigation of sterility He said it could be roughly estimated that there were about half a million sterile couples in Great Britain Sterility was reckoned by German authorities to cause a deficit of 100 000 births each year Only two aspects of the problem of sterility were dealt with—namely anovulation and tubal blockage In 188 cases of sterility where endometrial biopsy was carried out within five days of menstruation 174 patients had normal premenstrual endometria Thus only 7 4 per cent of this group showed anovulation A large series of normal and abnormal endometria were shown also photomicrographs of daily biopsies on one patient throughout a complete cycle In a series of 309 cases of sterility where the tube was in sufflated it was found that there was complete non patency in 40 per cent a much higher incidence than usually reported The kymographic method of Rubin was utilized for this work The advantages were that the patient did not need to go into hospital and also a permanent record of the case was obtained Lipiodol was a most useful adjunct in diagnosis Several interesting charts illustrating various forms of tubal contraction were shown

Professor J PRESTON MAXWELL (Peking) said that he had used the kymographic method for two years and although very satisfied with it he thought that lipiodol was quite as important in that it showed the exact location of the blockage which was important when operative measures were being considered Professor F J BROWNE also preferred the use of lipiodol which was inserted by the radiologist He thought true anovular menstruation was exceedingly uncommon and had never discovered a true case in a woman bleeding at regular monthly intervals

Hormone Therapy in Gynaecology

Dr M BOYCOTT (London) in a paper on this subject said that the hopes that were entertained of successful hormone therapy had not been realized and all treatment employed was only a form of substitution therapy with all its disadvantages In primary amenorrhoea the production of cyclical bleeding was justifiable only as a means of correcting the patient's mental and physical under-development In secondary amenorrhoea with pituitary failure there was no certain method of pituitary stimulation but giving the patient small doses of oestrone was harmless and often successful Patients showing early myxoedematous failure were those who responded best to treatment He did not consider it justifiable to attempt to re establish regular bleeding in patients with ovarian failure and it was unnecessary to treat amenorrhoea with a psychological cause by hormones as it was usually spontaneously corrected To avoid further depression of the pituitary intermittent oestrone therapy must be used and the dose of oestrone which was all given in the first half of the cycle only could be regularly diminished Treatment with progesterone would shorten the duration of menorrhagia of puberty but he had found both progesterone and luteinizing hormone ineffective in menopausal menorrhagias and in metropathia haemorrhagica The treatment of habitual abortion with progesterone, though it had no rational basis, was often successful when begun as soon as the Friedman test was positive An attempt was being made to correlate a low gonadotropic hormone production with this condition Hormone assay was a lengthy business but Dr Boycott felt it was desirable as a method for the direction and control of treatment It limited the number of cases dealt with and a long time must pass before sufficient material would accumulate to allow any dogmatic statement on treatment or progress

Dr JAMES RIDDELL (Plymouth) referred to the difficulties of hormone therapy in panel practice The cost of hormones was so high that it was impossible to treat all cases The problem of hirsutes in the female was a difficult and tragic one and the results of oestrin therapy in these cases were apt to be disappointing Dr S M DAVIDSON (Plymouth) described a very interesting case of extreme hypoplasia treated by oestrin Treatment had resulted in the growth of the uterus vulva and breasts with a marked improvement in the mental state of the patient Dr BAILEY (Plymouth) mentioned that the use of oestrin was often very beneficial in mental involutional states

SECTION OF ORTHOPAEDICS AND FRACTURES

Friday July 22

Fractures involving the Knee-joint

With the President of the Section Mr C M KENNEDY (Plymouth) in the chair Mr H OSMOND CLARKE (Manchester) opened the discussion on fractures involving the knee joint excluding the patella

Mr Clarke thought it likely that these fractures, hitherto uncommon might soon be seen more frequently as the commonest cause was a blow from the bumper (American fender) of a motor car At Manchester it was found that this group constituted 0 67 per cent of all fractures ninety four cases had been observed during a period of eight years —twenty in the femur and seventy-four in the tibia The femoral condylar fractures gave little trouble fifteen of them being mere cracks and none of them comminuted Fractures of the tibial spine of which there were fifteen occurred in patients between the ages of 10 and 19 The fragment was torn away by the anterior cruciate ligament strain on the ligament occurred not as was usually supposed in hyper extension of the joint but by the femur being driven backwards on the tibia with the knee in a position of flexion Closed reduction was always possible and the joint was held by plaster in full extension for from six to eight weeks The *bête noire* of knee joint fractures and unfortunately, the commonest of them all was the fracture of the tibial tuberosity In five cases both tuberosities were broken in four the medial and in forty eight the lateral These fractures occurred in people round about the age of 50, an age when agility in jay walking tended to decrease It was not surprising to find a predominance of lateral tuberosity fractures for this was the exposed side of the leg and a blow falling antero laterally caused abduction of the tibia on the femur and splitting or fragmentation and depression of the lateral tuberosity The spreading (vertical split) type of fracture presented no particular difficulty replacement by compression with a redresseur followed by plaster fixation being sufficient There was nothing to suggest that the external meniscus was ever an obstacle to reduction A large depressed fragment called for operative replacement with as little disturbance as possible of the neighbouring ligamentous and tendinous attachments The difficulty came in dealing with the relatively frequent cases in which the lateral tuberosity was pulped as well as depressed—presumably due to the fibula being driven medially Open operation was disappointing for one found a mass of fragments of articular cartilage and bone Adduction of the tibia and compression of the fragments in the hope that some sort of plateau would re form, was probably the best treatment Since there was no hope of producing a smooth surface for articulation with the lateral femoral condyle the lateral meniscus ought certainly to be preserved

Mr CHARLES E KINDERSLEY (Bath) described a method of dealing with the difficult fractures of the tibial tuberosities He pointed out that comminution of the lateral tuberosity was followed by a scattering of fragments not only laterally but anteriorly and posteriorly For this reason he advocated circular compression at the site of fracture After applying traction to the limb through a pin transfixing the os calcis he elevated any obviously depressed fragments with an instrument inserted through a puncture wound Circular compression was then achieved with a rubber bandage applied from below upwards this squeezed the fragments up into place A few blows with a heavy hammer disengaged any half impacted fragments and allowed the bandage to squeeze

them into place Remarkable reconstruction of the tibial plateau had been obtained by this method and the end results in the first three cases were excellent

It was also the experience of Mr A M A MOORE that fractures into the knee joint were relatively uncommon In a series of 6 106 fresh fractures he had found only thirty one of which one third were femoral and the remainder tibial He dealt with the femoral condylar fractures by pin track through the upper end of the tibia aspiration of the enormous effusion that so often was present and replacement of the fragment either manually or with a redresseur or in a difficult case by inserting the point of a Steinmann's pin and levering the fragment into position After subsidence of the swelling a plaster was applied for a period of about eight weeks The immediate results of this treatment were gratifying but it remained to be seen whether osteo arthritis would develop later

A New Technique

Professor JOSEPH S BARR (Boston Mass) described an operation which was of value for fractures of the lateral tuberosity of the tibia where there was a cortical fragment of some size The knee was rested for ten days after the patient was admitted and then explored through an antero lateral incision The lateral meniscus which was usually damaged was removed the origin of the anterior tibial muscles was reflected from before backwards until the anterior fracture line was reached The lateral fragment was displaced outwards and such smaller fragments as might be present were built up to form a reasonably smooth joint plateau The lateral fragment was replaced and held in position by means of a Sherman bolt passed through to the medial surface where through a separate small incision a nut was screwed on Before the wound was closed the knee was flexed and the lateral joint surface of the tibia inspected After immobilization for one week active movements were permitted in a hinged Thomas splint Six cases had been treated by this method and the results were gratifying

Mr K H PRIDIE (Bristol) had been able to treat malunion of a femoral condylar fracture by open replacement of the fragment and fixation with a Sherman screw For fractures in the region of the knee generally he preferred traction and early movement to fixation in plaster A troublesome and apparently inexplicable sequel of these injuries was painful hyperaesthesia over the upper end of the tibiae Mr S T IRWIN (Belfast) had also had difficulties with depressed fractures of the lateral tuberosity of the tibia and he was grateful to Dr Barr for describing a satisfactory method for open reduction Mr CLARKE in reply said he thought that Kindersley's method was probably the best where comminution was the chief feature of a fracture of the lateral tibial tuberosity and Barr's operation where there was a fairly large fragment He too had seen patients with troublesome hyperaesthesia over the upper end of the tibia and he suspected that it might be due to minor damage to the external popliteal nerve

Acute Poliomyelitis

A paper on the diagnosis and treatment of acute poliomyelitis was read by Miss MAUD E FORRESTER BROWN (Bath) The time was overdue she said for us to appreciate that this disease should be borne in mind whenever a child was seen in the early stages of a febrile illness Such local signs as abdominal pain and diarrhoea might herald the onset of the disease and it had recently been observed that transient effusion in a joint might be an early sign A most valuable account was given of other early signs particularly those that led to establishing the diagnosis Splints rather than plaster were recommended for a position of physiological rest for muscles Serum and electrical treatment were of no known value The paper was discussed by Mr D O BROWN (Melbourne) and Dr L O BETTS (Adelaide) Mr H O CLARKE (Manchester) asked if there was any harm in moving the joints of a paralysed limb once a day in order to avoid stiffness the speaker answered that it was her regular practice and she thought that its effects were entirely beneficial

Mr GEOFFREY J LILLIE (Exeter) reported the results of eighty two spinal manipulations In the majority the complaint was one of pain in the lumbo sacral region In fifty-seven cases there was an abnormality of posture and radiographic evidence of arthritis in seventeen The results were on the whole not dramatic Pain was relieved immediately in eleven cases and after an interval in twenty four there was improvement in twenty-eight and no change in nineteen Observations made by Burrows and Coltart on a series of cases treated at St Bartholomew's Hospital led to similar findings The conclusion was that manipulation for pain in the back not due to serious organic trouble was a valuable procedure though by no means a panacea

Mr H J SEDDON read a paper on the diagnosis of early tuberculous arthritis of the knee by examination of an inguinal lymph gland Positive findings were obtained in fourteen out of seventeen undoubted cases of tuberculous disease In ten cases subsequently shown to be non tuberculous uniformly negative examinations were reported The value of the method was chiefly in its simplicity though a negative finding did not unfortunately exclude tuberculous disease

SECTION OF PUBLIC HEALTH

Friday July 22

Development of the Hospital System

With Dr T PEIRSON (Plymouth) a Vice President in the chair a discussion on the future development of the hospital system was opened by Mr R H P ORDE (Honorary Secretary British Hospitals Association) who dealt with the subject from the viewpoint of the voluntary hospitals and Dr A S M MACGREGOR (Glasgow) who spoke from the point of view of the municipal hospitals Their papers will appear in the *Supplement* to the *Journal* in due course

Dr W S MACDONALD (Leeds) who spoke from the point of the general practitioner said that the general practitioner was the Cinderella of the hospital system so far as hospital boards and consultants of the large general and teaching hospitals were concerned the cottage hospitals still recognized that the general practitioner was essential to their existence He supported the view that the central hospital of the future should be used almost entirely for consultation and diagnosis and that treatment should be relegated to places where accommodation was not so precious In the field of medicine and midwifery the experience of the general practitioner should be conserved by using him as a clinical assistant under the guidance of consultants the patients interests would be better served in this way and the hospital service would become a more personal one The services of the general practitioner should be used to deal with the problem of the chronic and subacute cases in hospital practice He hoped that in the future the fields of research would not be limited to academic centres

In his unavoidable absence Dr T N V POTTS's paper giving the point of view of a county medical officer was read by Dr E HUGHES Dr Potts discussed the extent to which new general hospital beds appeared to be required as this was a matter of great importance not only to the local authorities but to the voluntary hospitals He said that extension should not be undertaken in a haphazard manner but should be based on a considered policy the local authority and the voluntary institution having constant regard to each other's programmes Most hospital boards and local authorities in planning new hospitals were influenced to a great extent by finance by the hospital waiting lists—an unreliable criterion—and by the variable information obtained as to pressure on beds in existing hospitals He then gave figures showing the number of beds per 1 000 of the population and the contemplated extensions of sixteen county boroughs (population 200 000 to 400 000) and concluded from these figures that this country was very much behind others in the provision of hospital beds In his opinion on an average no less than six general hospital beds per 1 000 of population were needed to cope with the present-day toll of ill health He emphasized

the necessity for considering the extent to which such new general hospital beds should be provided by the local authority on the one hand and by the local voluntary hospitals on the other and described the action taken in this respect by the West Riding County Council

General Practitioner Visiting Staffs

Dr S W SWINDELLS (Grimsby) commented on the increasing number of patients passing from the general practitioner to the whole-time hospital official A policy must be adopted that would result in a hospital system under which the general practitioner, as one of a team would *take* not *send* his cases into hospital using what specialized assistance was necessary or available Apart from those cases admitted for specialized investigation or treatment there were many which were sent into hospital because the doctor could not observe, investigate or treat them in the patients homes though such care might be well within his province A practitioner visiting staff would be financially economical compared with a whole time salaried resident staff Dr C LANDER (Gillingham Dorset) drew a parallel between the voluntary hospital to day and the voluntary schools in 1820 Voluntary education was superseded by State education and he thought that the voluntary hospital system would not long survive He commented on the term voluntary, when in most cases a charge was made for treatment He did not like the idea of an essential service being dependent on charity and was in favour of a State service Mr J ARMSTRONG (Ballymena) declared that all the speakers had confirmed his belief that national health should be a primary charge on the national resources Isolated efforts to provide for national health (voluntary hospitals, municipal hospitals, etc) hindered full recognition of this The logical thing was a system of State hospitals which would absorb all types of institutions and lead to elimination of overlapping and to standardization of methods, etc With good will the doctor in charge of a district hospital could make that hospital a centre of contact for the members of the profession

Dr D SAGE SUTHERLAND (Manchester) referred to the place of the infectious diseases hospital, and advocated a scheme of regional co ordination of fever hospitals He felt that in this way opportunity would be afforded for retaining the medical staff and the more highly skilled members of the nursing staff for a longer period in the fever hospital service Dr W ASTEN (Bournemouth) said he was mainly concerned with the administrative aspects of the question The Voluntary Hospital Commission had indicated that the voluntary and the municipal hospital must work side by side He was in favour of full co operation in hospital administration He commented on the disparity in various areas between hospital accommodation in relation to population

Dr C E S FLEMMING (Bradford on Avon) thought that the voluntary hospitals would not last long—in spite of the public desire for their continuance—if they did not do all they could to co operate with the municipal hospital service The general practitioner was the backbone of medical practice, but in the hospital service he was a backbone without ligaments or muscles he was, however, essential Dr Flemming commented on the lack of facilities outside hospital for the newly qualified man to carry into practice the high standard of technical clinical knowledge he had acquired in the training schools and his professional hopes and ambitions were destroyed He declared that the general practitioner should be provided with institutional beds somehow or other otherwise his clinical knowledge and technical training would in part be wasted, and the public denied the full benefit of medical skill to which they were entitled

Dr W ALLEN DALEY President of the Section emphasized the importance of full co operation between the voluntary and municipal hospitals Before providing new accommodation there should be mutual consultation He deprecated the tendency of voluntary hospitals to find the capital for new beds without making adequate provision for cost of maintenance In connexion with the regional provision of hospitals he suggested that the same area should be covered by both public health services and general hospital services, and advised that the hospitals should be used so far as possible to provide the various clinic services of the public health departments Except for fever hospitals and sanatoria the special departments—maternity ophthalmic etc—were better as sections of a large general hospital than as separate self contained entities Finally he referred to modern developments in the treatment of acute infectious disease and the prevention of cross infections and expressed the view that it was impossible to do justice to the patient in a small fever hospital In that field of work regionalism was essential

SECTION OF PHYSICAL MEDICINE AND EDUCATION

Friday July 22 (at Torquay)

The Basis of National Fitness

With the President Dr V I CARVER (Torquay) in the chair Professor T P CATHCART (Glasgow) read a paper on the physiological approach to national fitness, his paper appeared in the *Journal* of August 6 (p 273)

Mr V E PORRITT speaking on fitness and the average man defined fitness as a state of being well adapted The average man had so far failed to react to the National Fitness Campaign which had been launched at a difficult time but the idea was lying fallow for a period as did most new ideas in this conservative country The next move must necessarily rest mainly with the general practitioners and consist of gradual education of interest in personal fitness housing children's recreations physical training under medical supervision and particularly social recreation out of doors He suggested that every branch of the B M A should have one meeting with a qualified speaker to discuss the best method of stimulating interest and that every practitioner should inquire into the recreations of his patients Fitness depended on what a citizen did to and for himself

Dr I P LOCKHART (Nottingham) discussing fitness and the industrial worker said that the essentials were good management good leadership and good wages Work could be looked upon as a form of occupational therapy and pride of craft was essential to contentment He then outlined various subjects deserving study in relation to industrial workers—for young persons medical supervision protection from exposure and acquisition of specific skill for women proper footwear proper midday meals and abolition of the no breakfast habit, and for the industrial worker generally protection from noise and dust suitable working clothes, family allowances, Sunday games, and the provision of creches

Physique of Recruits

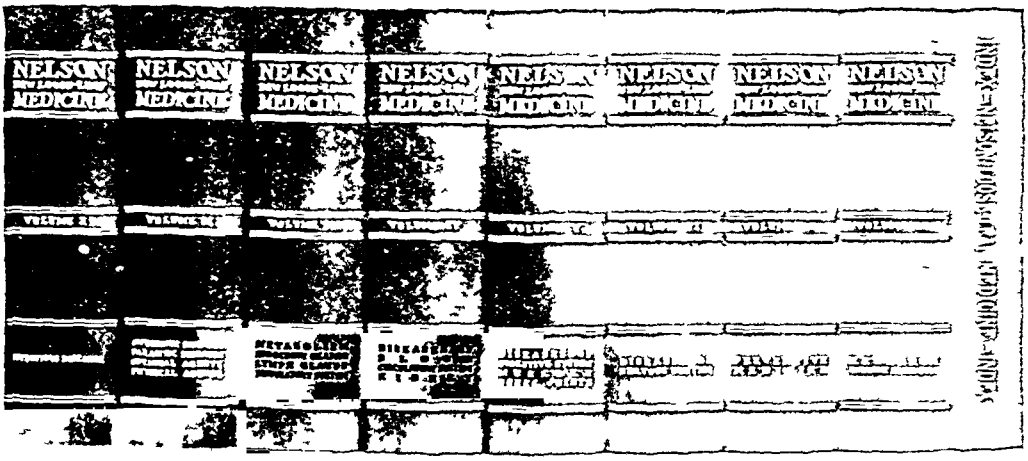
Major General H H A EMERSON Director of Hygiene War Office spoke on fitness and the Services Any man of suitable age was accepted as a recruit unless suffering from a serious incurable defect and only 2 per cent were later discharged on medical grounds During their first three months training they usually gained about 9 lb in weight, one third of an inch in height 16 per cent increase in power of grip and were smartened up in every direction Each man was watched as an individual and special corrective exercises employed as required Both satisfactory environment and education were necessary to produce fitness, and both were present at the training depot

Fitness and the Marine Health Resort

Sir HENRY GAUVAIN (Alton) discussing fitness and the marine health resorts said the health of residents at marine health resorts tended to become stabilized at a normal level but to the visitor the sea was a strong stimulus increasing the basal metabolic rate very greatly A normal individual should take his holiday in August and the benefit would carry him well into the winter In the early spring the body received the stimulus of increased light and this stimulus continued until about June After that there was a tendency to stagnation, and by August a further stimulus was desirable A few

SUPPLEMENT TO THE
BRITISH MEDICAL JOURNAL
LONDON SATURDAY AUGUST 13 1938 No 1759

EARLIEST MEDICINE IN ENGLAND
THE ANNUAL MEETING
NATIONAL HEALTH INSURANCE



Nelson New Loose-Leaf Medicine – Surgery – X-Ray

A NEW PRACTICAL SYSTEM—ALWAYS UP TO DATE

KEPT ALWAYS NEW BY 250 OR MORE REPLACEMENT PAGES
ISSUED EVERY SIX MONTHS • THESE VOLUMES CAN NEVER GROW OLD

Request for free illustrated 32-page booklet

PLEASE SEND ME WITHOUT OBLIGATION DETAILED PROSPECTUS AND FULL PARTICULARS OF YOUR *SUBSCRIPTION* PLAN FOR
☐ MEDICINE (9 VOL) ☐ SURGERY (9 VOL)
☐ DIAGNOSTIC ROENTGENOLOGY (1 VOL)
(*MARK PUBLICATION* about which you wish information)

Name
Address
Please write in Block Letter

35-36, Paternoster Row ALFRED G HASSING London E C 4
European Agent for Medical Loose-Leaf Publications Published by Thomas Nelson & Sons

THE MEDICAL DEFENCE UNION

President ERIC L PEARCE GOULD M Ch F R C S (Eng)

Telephone MUSeum 133[illegible]

THE OLDEST AND LARGEST MEDICAL DEFENCE ORGANISATION

Annual Subscription £1 Assets exceed £100,000 — MEMBERSHIP EXCEEDS 20,000 — Entrance Fee 10 Established over 50 years

No entrance fee to those joining within twelve months of registration

Each member is provided with UNLIMITED INDEMNITY (subject to the Articles of Association) against Damage and Costs awarded in any case undertaken by the Council on his behalf

A single subscription for members wholly retired from practice
Special facilities for the protection of the estate of a deceased member

Full particulars from Secretary (Dr ROBT FORBES) The Medical Defence Union Ltd 49 Bedford Square, W C 1

Testimony by members of the Medical Profession . . .

Read what a doctor says —

" 'Ty phoo' tea is delicious and has given every satisfaction, being free from the irritating effect on the stomach which is inseparable from ordinary tea Those patients to whom I have recommended it amply bear out my own views "

The above is one of many hundreds of testimonials received

Medical men and women, throughout the country, are recommending our pure " Ty phoo " tea as indicated by the daily despatch of hundreds of samples which doctors direct us to send to their patients

Delicious

"Ty-phoo" TEA is so mild that it does not cause indigestion

Over 18 000 DOCTORS use "TY PHOO" in their own homes

Further,

you save by using " Ty phoo," for being so rich in " leaf-edge " it " goes just half as far again " as coarse astringent tea

Write to

Sumner's Ty-phoo Tea Ltd , Birmingham, 5, for a FREE sample

(This offer applies only to the British Isles We regret that we cannot send ' Ty phoo tea abroad)

Ergoapiol-(Smith)

A Menstrual Regulator . . .

When the periods are irregular, due to constitutional causes, ERGOAPIOL (Smith) is a reliable prescription Containing apiol (M H S special) together with ergot, aloin and oil of savin of the highest quality, this preparation effectively stimulates uterine tone and controls menstrual and postpartum bleeding

In cases of *Amenorrhea, Dysmenorrhea, Menorrhagia* and *Metrorrhagia,* Ergoapiol serves as a good uterine tonic and hemostatic Valuable in obstetrics after delivery of the child and for the menstrual irregularity of the *Menopause*

Prescribe 1 to 2 capsules 3 or 4 times daily Supplied only in packages of 20 capsules Literature on request

As a safeguard against imposition the letters MHS are embossed on the inner surface of each capsule *visible only* when the capsule is cut in half at seam as shown

M.H.S.

MARTIN H. SMITH COMPANY NEW YORK, N.Y., U.S.A.

THOS. CHRISTY & CO., LTD., 4-11 OLD SWAN LANE, LONDON, E.C. 4, ENGLAND

SUPPLEMENT TO THE
BRITISH MEDICAL JOURNAL
LONDON SATURDAY AUGUST 13 1938

CONTENTS

The Earliest Medicine in England Professor C. Singer - p 129
A Professional Jurisdiction for the Belgian Medical Profession Rene Sand, M D - - - - - 130
Annual Meeting of the B M A Honorary Secretaries Conference - - - - - - - - - 131
Annual Exhibition at Plymouth - - - - - - 133
The B M A at Torquay - - - - - - - - 134
Postgraduate News and Diary - - - - - - 135
The Insurance Medical Service Week by Week - - - 135
Correspondence
Wandsworth and a State Medical Service Sir Henry Brackenbury M D - - - - - p 136
Night Duty under a General Medical Service Stanley C Alcock M B - - - - - - - 136
Naval Military, and Air Force Appointments - - 136
Association Intelligence Diary and Notices - - - 137
Vacancies and Appointments - - - 139

THE EARLIEST MEDICINE IN ENGLAND

PROFESSOR C SINGER'S LECTURE

The Popular Lecture in connexion with the Plymouth Meeting of the British Medical Association was delivered to a large audience in the Guildhall on July 22 by Dr CHARLES SINGER Professor of the History of Medicine in the University of London Dr H G DAIN presided and introduced the lecturer

Professor Singer whose subject was The Earliest Medicine in England began by quoting Kipling

> Wonderful little when all is said—
> Wonderful little our fathers knew
> Most of their medicines killed you dead
> All their knowledge was quite untrue

The earliest medicine in England should of course be Celtic medicine but unfortunately the records of that had disappeared The British with whom Caesar had so much trouble—Boadicea Caractacus and the rest—were too recent immigrants and hardly had a culture of their own nor did they absorb the culture of the previous inhabitants Celtic medicine properly speaking hardly existed not even Celtic superstition Such medical works as had survived in Celtic languages were substantially translations from the Anglo Saxon It was therefore Anglo Saxon medicine he proposed to talk about that evening

What were the sources of knowledge of this subject? A hopeful source would seem to be folklore and folk habits Over quite a long time stories from peasants in out-of-the-way parts of the country were collected but the results were disappointing There were many medical superstitions and habits among our country folk but prolonged examination proved that they were not really of very early origin Now and again a glimpse of Anglo Saxon folk medicine was obtained from monuments—as for example from the tenth century fertility figure in the church at Oakley Wiltshire Far and away the best source was the actual written documents Some twenty or twenty five medical documents dated from Anglo Saxon times some of them written in Anglo Saxon some in Latin For the most part these MSS were written in a sprawling hand with well formed letters but when magicians wrote their magic on paper they were reluctant to write it completely and intentionally left out certain words or letters That was the chief difficulty in reading the MSS

The Anglo-Saxon Doctor

What kind of people practised medicine in Anglo Saxon times? The idea had got about that they always came from monasteries because it was believed (not quite accurately) that the only people who could read or write were the monks But pictures of Anglo Saxon medical men which Professor Singer showed his audience revealed that they were not tonsured a feature about them indeed was their abundant locks Moreover in many medical MSS certain remedies were set out for the use of which the calling in of a priest was necessary which could not have been the case had the man giving the remedy been a priest It was more than probable that the Anglo Saxon leech like the Celtic belonged to a special family of leeches Such families were known in the Highlands and also in Wales where one of them only became extinct in the eighteenth century In Anglo Saxon England there were almost no towns the biggest was Winchester with a population perhaps of 5 000 There were no roads and in the absence of towns and roads it would be impossible for the medical man as known to day to make a living It seemed probable that the medical men were farmers who had gained a reputation for their skill in remedies and were consulted by their friends and neighbours from time to time and that these farmers passed on their knowledge to their sons

The best picture of the way in which these people worked came from a German source which was less remote from Anglo Saxon England than might be thought In one document prepared in Germany in which the illustrations were clearly under Anglo-Saxon influence doctors were seen actually at work Nearly all their remedies when not magical were of vegetable origin Weights were not given except in the form that one substance should be twice the weight of the other Some of their anatomy and physiology was derived faintly from the Greek no doubt through ecclesiastical transmission It was the working hypothesis of the Greek men of science that the body had four humours corresponding to the four elements of matter, and by

the mingling of these humours the complexion or constitution was determined This idea was adopted in a distorted form in the Anglo-Saxon The four humours were also associated with the four seasons of the year and the Anglo-Saxons played with the idea and weaved it into all kinds of absurd and imaginary schemes It was strange how little bits of classical ideas crept almost by accident into Anglo-Saxon writings The Anglo-Saxon doctor did not put much stock in theory Most of his books were made up of remedies He was a practical man—and the practical man, said Professor Singer, was the most dangerous of all practitioners

Influences on Anglo-Saxon Medicine

On studying these remedies Professor Singer was able to divide them, according to their sources, into eight groups Some owed their origin to Greek medicine, others to ecclesiastical influence, others again were derived from Salerno, a very few were native Teutonic, fewer still had a Celtic tinge, some of the herbal lore suggested an origin in Southern Italy, some had a Byzantine origin, and a certain residuum came from pagan Rome

As an illustration of the first of these sources he mentioned the centaur, which was copied into Anglo Saxon herbals As for ecclesiastical sources, illuminating sidelights were often found in marginal inscriptions in missals A good one was from an eleventh century MS prescribing as a means of stopping bleeding the marking of a cross in blood on the forehead, and to the prescription were added two words which were the central words of the Greek mass A good many of the Anglo Saxon drawings in herbals were taken from Salernian sources, these included the story of the uprooting of the mandrake, which in its Anglo-Saxon form passed direct into Anglo-Norman medicine Native Teutonic magic had certain characteristics which rendered it unmistakable when it came into the Anglo Saxon Here the belief was expressed that there were certain venoms or poisons blowing about in the air and causing disease, also that these venoms were arranged, like other evil things, in groups of nine They were associated with the serpent, or sometimes in the Anglo-Saxon with the worm, and it was also considered that many diseases were due to what was called in the Anglo-Saxon elf-shot The idea of poisons blowing about in the air corresponded to the German word *Blase'* from which came our word ' blast, both a blowing of wind and an oath The pernicious influence of the figure nine had passed into all kinds of modern folklore, it was well illustrated in *King Lear* and in the incantations of the witches in *Macbeth*

> Weary seven nights nine times nine
> Shall he dwindle, peak, and pine

As to the "elf-shot,' the word "elf" had quite a different meaning in Anglo-Saxon times, and often meant Satan or the devil, a terrifying being, whose darts were felt as a stitch or sharp pain By Shakespeare the elves had become merely mischievous imps, and the *Midsummer Night's Dream* would have been incomprehensible to an Anglo-Saxon audience

Finally, by some queer chance or misunderstanding, Anglo-Saxon texts were found to include certain pagan Roman charms which must have been brought over by Latin ecclesiastics under the mistaken idea that they were Christian The lecturer read one such invocation, pointing out that it was clearly pagan, and that the ecclesiastic who had brought it had mistaken a pagan goddess for the Virgin Mary Among saints frequently invoked in Anglo-Saxon charms was St Columcille, abbot of Iona, and St Germanus, who gave his name to St Germans in Cornwall

---

One-third of the medical profession in Yugoslavia are in practice in the three principal towns of Belgrade Zagreb and Ljubljana The Government has therefore decided that for the first two years after qualification all doctors must practise for two years in places with less than 4 000 inhabitants

A PROFESSIONAL JURISDICTION FOR THE BELGIAN MEDICAL PROFESSION

BY

RENE SAND, M D

Ministry of Public Health Brussels

In Belgium, as elsewhere, medical practitioners are submitted to the civil jurisdiction for legal contests with their patients and to the criminal jurisdiction for trespasses against the law The practice of the art of healing by unqualified persons is repressed by the Courts

There was, however no jurisdiction to combat the offences committed by some doctors against professional ethics such as advertising themselves, advertising quick cures for venereal diseases rheumatism, or cancer, exploiting their patients in various ways, and, generally speaking failing in that honesty which it is so essential to keep between doctors as well as between doctor and patient

Ordre des Medecins

To prevent and punish these abuses a law has been passed recently in Belgium establishing an official professional jurisdiction under the name of Ordre des Medecins The text was prepared by the Federation Medicale Belge which includes about 4,000 of the 6 000 practising physicians The Minister of Health, M Arthur Wauters supported the proposal so effectively that it was passed by the Senate and the House with hardly a dissenting voice Thus a long cherished claim of the medical profession has been satisfied

For the purpose of obtaining an authorization to practise, every doctor is required to register with the Ordre, and this can only be refused if the applicant has proved himself morally unworthy There is a right of appeal against the decision to exclude

Duties of Provincial Councils

In each one of the nine Provinces a Council, elected by the medical practitioners from among themselves, investigates and passes judgment on every case submitted to it A professional judge advises the Council, but has no vote

> The Council is entrusted with a mandate to maintain the rules of medical ethics, the honour the discretion, and dignity of the members of the Ordre in the exercise or at the occasion of the exercise of their profession
>
> The Council deals with questions of fees in three cases only (1) when the amount claimed constitutes a serious breach of medical ethics, (2) when both parties agree to submit the case to the Ordre, (3) when the Courts apply to the Ordre for advice
>
> No sanction can be based on religious philosophical political linguistic, or syndicalist motives, nor on the fact that a doctor has contracted with an agency organizing medical care for a group of persons'

This means that the Ordre cannot intervene between the doctors and the sick funds, the public assistance authorities, etc

Court of Appeal and Superior Council

Above the Provincial Councils sits a Court of Appeal, composed of three Presidents of Provincial Councils drawn by lot, and three professional judges On the other side, the Superior Council of the Ordre des Medecins gives advice on general questions, and classifies the judgments passed by the Provincial Councils and the

Court of Appeal so as to build up gradually a co ordinated jurisprudence

The Superior Council is elected by the Provincial Councils with the addition of a professor from each one of the four medical schools existing in Belgium in fact the professor of forensic medicine will be chosen The Council is presided over by a professional judge

The sanctions applicable are admonition censure reprimand suspension of the right to practise for a maximum of two years and permanent suspension of this right This last penalty requires a majority of two thirds in the Council and eventually in the Court of Appeal

The professional jurisdiction seems thus to give every reasonable guarantee to the doctors of Belgium as well as to the public It will no doubt check certain abuses for which very few physicians were responsible but which were a reflection on the whole profession

Annual Meeting of the B M A

HONORARY SECRETARIES' CONFERENCE

The Conference of Honorary Secretaries took place during the Plymouth Meeting on July 20 in the City Council Chamber Dr B E A BATT (West Suffolk) presided

Dr G C ANDERSON (Secretary of the Association) gave a brief address confined to one point He said that the office had had experience during the past year or two of incidents occurring in the Divisions of which it would have liked to have had some prior information An example was a dispute arising in a locality on some hospital matter and the action taken locally had proceeded to a somewhat advanced stage before the office was informed about it It would save a great deal of difficulty if Divisions and Branches would ask early for advice He begged honorary secretaries to report as early as possible on any developments in their locality in the hospital or public health sphere

The Film as Propaganda

Dr H. A NATHAN (Kensington) drew attention to the important part played by the film in propaganda No professional body or organization of interests could afford to overlook its possibilities as a medium for publicity and enlightenment He instanced the success of the pictures made and exhibited on behalf of the National Ophthalmic Treatment Board their function being to explain simply and convincingly, that a medical eye specialist was the only person fully qualified to examine and prescribe for the eyes as living organs of the body In general these films were shown to cinema goers as part of the normal programme and as the cinema going public in this country approximated to nearly twenty millions a week the propaganda value of the N O T B films could not be over-estimated

Films might be employed to advantage in other ways on behalf of the medical profession First of all to counteract the harm done by newspaper reports that were misinformed or otherwise undesirable No one would deny that the general practitioner stood in need of publicity of the right sort Short impressive films exhibited throughout the country could do much to educate the public by giving a sincere picture of the general practitioner as he really was Another direction in which the film might be usefully employed was in teaching the public to realize that counter prescribing by chemists and mail order cures were far from satisfactory and might be dangerous to patients It was time that the public was made to understand that it was unwise to seek advice on health matters from the chemist—a shopkeeper whose primary aim was to secure profits from the sale of patent medicines toilet accessories and cameras and who in any case was not qualified to diagnose disease or to prescribe

There could be useful propaganda by films for recruiting new members of the Association especially among medical students A film illustrating the advantages of the public medical service might demonstrate how people of limited means instead of flying to the quack could get expert medical attention from their family doctor Thousands of intelligent men and women could be reached through the medium of films shown at meetings of literary societies rotary clubs etc Opportunity was here afforded of going deeply into the subject of the doctor's training and work and it could be done in such a way as to convince any audience that on health the doctor's advice was the only advice worthy of consideration Dr Nathan instanced a number of propaganda films serving the purposes of medicine and science which had already been produced—the Pasteur film was one example—and the various subjects including safe milk and national fitness to which the film could be adapted for the use of the profession All such films should be censored or inspected by a bureau of the Association and when passed might bear an inscription to that effect The bureau could also be available for film companies when seeking advice concerning the production of medical and educational films Finally a film illustrating the work of headquarters might do much to answer the repeated query What does the B M A do for me? He moved that the Council be asked to consider the advisability of establishing a film library for the use of Divisions and Branches

In some discussion on Dr Nathan's paper Dr ALASTAIR FRENCH (Metropolitan Counties) said that it was a question of money and it did not seem to him a job for the local professional organization to educate the public It was for this purpose that the Public Relations Department of the Association was created Dr O T J CLAYRE (Southern) thought there was a case for the Council's consideration Dr E V CLAYDON (Eastbourne) took up a remark made by Dr Nathan that novels in which the doctor was faithfully depicted might usefully be put on the screen There was often so much difference between the written book and the film version that he was a little afraid of the idea

The SECRETARY said that he represented the Council on the Medical Panel of the British Film Institute which had made a catalogue of medical films Perhaps there was an inclination to talk too glibly about film production The film produced by the N O T B Eyes Right only ran for three or four minutes but it cost £750 There were two different aspects of the question one the establishment at headquarters of a library of scientific films of interest to the Divisions and the other the making of a propaganda film The latter he thought, would involve an expenditure which the Council would hardly be prepared to sanction Mr McADAM ECCLES commented on the usefulness of a bureau at headquarters at which any member could apply for information in regard to medical films An incidental matter but not unimportant was the provision of projectors at headquarters which could be hired by Divisions Dr MORRIS (Lambeth and Southwark) pointed out the need for deciding as between the different sizes of film—35 mm and 16 mm Dr NATHAN thought that the expense of a propaganda film could be met from the same fund which bore the burden of the publicity campaign He also appealed to amateur cinematographers in the Association to let headquarters have a copy of their films

The motion asking the Council to consider the subject was carried unanimously

Publicity Propaganda and the Local Units

Mr A W HASLETT (Public Relations Officer) opened a brief discussion on the bearings of the new publicity propaganda of the Association on the local units He described the events leading up to the creation of the

Public Relations Department The profession had suffered to some extent from its own aloofness, and the individual practitioner could not as a rule give Press interviews In local areas publicity on behalf of the profession might be called for on occasion, but it was incumbent upon the Division to get in close touch with headquarters

In the course of a brief discussion a number of questions were asked and answered Dr INGLIS CAMERON (Glasgow) asked whether the attention of those responsible for publicity had been drawn to films and wireless Mr HASLETT replied that the B B C was notified of any material which was sent out from the Association to the Press, and talks had been attached to the news bulletin Films had not yet come within his department's scope

Liaison between Divisions

Dr R H ROBINSON (Torquay) asked the conference to express the view that greater facilities should be afforded for the interchange of information between honorary secretaries concerning divisional activities He urged that all Divisions should be encouraged to print their annual reports in a uniform size and style as far as possible, and he exhibited a specimen of his own Division report, which was a four page document of *Supplement* size and conveyed its information succinctly and with plentiful headings In this way Divisional reports would be available for secretaries of other Divisions, and much useful interchange of information would result

Dr J C MATTHEWS (Chairman, Organization Committee) said that the Committee on Peripheral Organization had discussed methods whereby one Division would be enabled to know what another Division was doing The suggestions which Dr Robinson had brought forward would receive consideration at the hands of the Organization Committee next session Dr L KILROE (Rochdale) said that the Branch Council meetings might be usefully turned into meetings of divisional secretaries Dr CLAYRE (Southern) said that in his Branch all the Divisions invited the Branch secretary to attend their meetings

Dr ROBINSON moved that greater facilities should be afforded for the interchange of information between honorary secretaries concerning divisional activities and that one means of doing this would be by the interchange of annual reports This was agreed to

Medico-Political Work of Divisions

Dr A KEITH GIBSON (Regional Secretary, Metropolitan Area) presented a memorandum on the medico-political work of Divisions One of his suggestions was that there should be published in a convenient form at the latest useful date all the motions for the Annual Representative Meeting received up to that time, together with the relevant paragraphs of the Annual Report of Council This should be issued to the secretaries in sufficient number for distribution to members likely to be interested, and a Division meeting could be summoned to which a number of members would come already knowing what was going forward and perhaps what was being done in other Divisions, so that more adequate instruction could be given to representatives and interest in medico-political work promoted Dr NATHAN (Kensington) referred to the work in his Division of a General Practice Subcommittee Every time a man made a grouse he was elected to that subcommittee!

The CHAIRMAN OF COUNCIL said that the Annual Report purported to contain one year's work of Council The first meeting of the Council was held immediately after the Annual Representative Meeting Committees would begin their work in September and October, and an immense amount would be done in the winter months If members only knew the pressure of work on the office they would congratulate it on being able to produce most of it in the Annual Report by April It was impossible, as one member had suggested, to get the Annual Report through at an earlier stage A MEMBER suggested that the Annual Report should be issued at the end of the year, the new Council functioning as from January This would give the Divisions six months to consider the report Mr BISHOP HARMAN suggested that some interest might be given to divisional meetings called to discuss the report if one member were specifically assigned the task of attacking it and another of defending it Dr W PATERSON suggested that the Council be asked to consider the possibility of publishing in the *Supplement* as late as possible all the motions and amendments received instead of publishing them week by week as at present Dr MATTHEWS promised that this would have consideration

Other Business

Dr R H ROBINSON asked that the Organization Committee be requested to consider the adequacy of the present arrangements for bringing to the notice of the Branch Councils information concerning candidates for election to the Association Dr MATTHEWS promised that this also would be considered by the Organization Committee

Dr L KILROE (Rochdale) was elected Chairman of the Conference for 1939, and Dr ALASTAIR FRENCH (Metropolitan Counties Branch and West Middlesex Division) Deputy Chairman

SECRETARIES' DINNER

After the conference the honorary secretaries assembled for dinner at the Continental Hotel, Dr BATT again presiding The chairman's health was proposed by Dr BARBARA ABERCROMBIE who spoke as one of the most junior of honorary secretaries, her tenure of office dating back for only six months Dr BATT, on the other hand, spoke as a veteran whose service as divisional secretary extended back to 1912, with an interval while on active service during the war Dr Batt proposed the health of the permanent staff of the Association Dr ANDERSON in replying, said that he wished the honorary secretaries to bear in mind not himself and his medical colleagues, but the staff behind the scenes who worked most willingly and efficiently in the Association's service It was a loyal staff of good friends who pulled wonderfully well together and made his own job as director of the staff a very happy one

There were the usual calls—and embarrassed responses—for other members of the staff present, including the Deputy Secretary, Dr Hill, the Assistant Secretaries, Dr Macrae and Dr Potter, the Public Relations Officer, Mr Haslett, the Scottish Secretary, Dr Craig the Metropolitan Regional Secretary, Dr Gibson, and also for the 'genius of the Plymouth Meeting,' Mr Mayne Only the fact that most of those present were due at the civic reception at the Guildhall at an early hour stemmed the flow of oratory

SUPPLEMENTARY REPORT OF COUNCIL HONG KONG BRANCH

The paragraph under the heading of Hong Kong in the Supplementary Report of Council (*Supplement* June 18, p 378) should have stated that the B M A activities have been quiet during the year owing to the heavy work undertaken by medical practitioners in connexion with cholera *typhoid* [not typhus] etc

ANNUAL EXHIBITION AT PLYMOUTH

SECOND NOTICE

[The preliminary article on the Exhibition appeared in the SUPPLEMENT of July 9 (p 30)]

The Drill Hall at Millbay which housed the Exhibition and the Reception Room may be barn like in its exterior but commercial art made it surprisingly attractive within In the old days when the technique of showmanship was less well understood the Exhibition may well have been an austere and even grim feature of the Annual Meeting but now almost every one of its eighty or a hundred stands offers some beguilement to the eye A number of stands also appealed to the taste such were Cadbury's with their cocoa Gaymer's with their cyder the HAG caffein free coffee and the various displays of tonic waters —Ingram and Royle Schweppes Alexander Riddle and Co and Rayner and Co Czechoslovakia the storm centre of Europe had a special stand drawing attention to the way in which Nature has endowed it with six hundred mineral springs and the British Health Resorts Association a newcomer to the Exhibition produced photographic evidence of the charms of the coast and inland resorts of this country

Newcomers

A number of the exhibitors were newcomers to the Exhibition In the preliminary article we mentioned that there were being shown for the first time the standardized preparations of the British Cod liver Oil Producers (Hull) Ltd the footwear of Dowie and Marshall (an old firm on whose stand was an enlarged reproduction of a letter proving that in his day they provided foot comfort for the sage of Chelsea) and the homogenized foods for babies prepared by Libby McNeill and Libby Among others exhibiting for the first time was the Chartered Society of Massage and Medical Gymnastics with demonstrations and film showings The Vernon Spencer hearing aids principally in a three-valve model supplied in two forms for the user's convenience and surprisingly small and light in weight were fresh to the Exhibition as also was the exhibit of Tampax Ltd—a long fibred surgical cotton sterilized and highly compressed for hygienic purposes during menstruation The stand of S Maw Son and Sons was described in the earlier notice but a later inclusion here which was of special interest to visitors was the Bragg Paul pulsator Other new exhibitors were the Automobile Association and Pickford's Travel Service and the electricity and gas undertakings of Plymouth

Surgical Appliances

The Holborn Surgical Instrument Company showed three constructions which have recently been described and illustrated in the *Journal* The first was a simple traction table for hip-nailing operations (October 16 1937 p 751) the second an improved ear syringe and trough (December 18 1937 p 1226) and the third an instrument devised for the special purpose of induction of labour by the Drew Smythe catheter method (April 16 1938 p 848) The Genito Urinary Manufacturing Company gave prominence to instruments for chest surgery which also have at various times been noticed in the *Journal* Their Brompton Hospital models of operating and instrument tables were again shown and they had a full range of cystoscopes and cysto urethroscopes bearing the names of a dozen well known surgeons The John Weiss and Son exhibit was divided into two sections one of them occupied with surgical instruments in general especially the smaller patterns and the other with ophthalmic instruments among which a new model of the Schiotz tonometer and of Cruise's repositor were to be noted

The makers of apparatus for the ophthalmologist were ingenious as ever Theodore Hamblin in addition to sets of contact lenses had a comprehensive section devoted to apparatus for orthoptic training and muscle testing Attention was specially drawn to the strabismuscope Melson Wingate also had a fine display of ophthalmological instruments with ophthalmoscopes giving a fundus view completely free from shadow also a range of goggles and eyewear for every purpose

Short and Mason Ltd in addition to their well known sphygmomanometer and their thermographs (or recording thermometers) showed their passive vascular exerciser which was described in the account of the Belfast Exhibition last year A portable *x* ray installation—the whole equipment fitting into two canvas cases weighing altogether forty nine pounds—was shown by Kohl's Scientific Instruments Hanovia Ltd had their special sun lamps in operation and in a graphic exhibit with models and photographs showed the progress of the manufacture of their lamp from the original block of quartz

Supports Dressings, Ligatures, Beds

The Camp surgical supports are a well known feature of successive Exhibitions They were shown as constructed to post operative maternity and post natal use and also for use in general practice The supports are both rigid and adaptable easy in manipulation and based on anatomical principles H E Curtis and Son also exhibited their wide range of abdominal appliances including belts corsets and trusses for hernia The patterns all appeared excellent

Elastoplast adhesive bandages and plasters were exhibited by T J Smith and Nephew Ltd The doctor's elastoplast set is a metal case containing about one hundred dressings or dressing strips of various shapes and sizes Cuxson Gerrard and Co showed various plaster bandages and surgical plasters including a new type of plaster of Paris bandage the feature of which is its rapid absorption of moisture and non detachment of the plaster from the bandage material when dipped in water so that a firm and perfect cast is formed This firm also showed sterilized ligatures as did the ligature department of the London Hospital whose product is well known

The frequency of road accidents has led Thermega Ltd to devise a specially strengthened electric blanket for ambulance use This can if necessary be transferred from the ambulance to the hospital bed and plugged up again to maintain the warmth and avoid so far as possible the cold following the shock until the patient has received attention The Denver Chemical Manufacturing Company again showed their antiphlogistine dressings a familiar feature at successive Exhibitions Hoskins and Sewell once more demonstrated the science of bed making and an inspection of their various devices for comfort left one wondering why seeing that one third of the normal life is passed in bed so little attention has been given until recent years to making the bed fit the sleeper

Pharmaceutical and Biological Products

Among the new products at the stand of Boots Pure Drug Company were gastomag (magnesium trisilicate) for the treatment of hyperacidity and rusven (Russell's viper venom) a powerful blood coagulant for local application in the control of external bleeding The sulphanilamide of this firm's manufacture was shown also supersan a non-poisonous and non irritant general antiseptic Attention was drawn to the range of sex hormone preparations

Of the Burroughs Wellcome display we gave some account in an earlier notice but mention should be made of the diphtheria antitoxin globulins which combine the advantage of increased concentration (4 000 Ehrlich units or more per c.cm.) with reduced protein content A noteworthy introduction was a calcium mandelate compound for use in urinary tract infections It lacks the

disagreeable taste characteristic of sodium or ammonium mandelate, and has a ready miscibility

The well-known Bayer products were again shown, and the firm, who have made many pioneer introductions in the field of chemotherapy, staged an effective exhibit illustrating fifty years of Bayer progress Among the new preparations was "bioferol," based on haemoglobin and liver extract and "elityran" a new thyroid product An interesting display was made by the Glaxo Laboratories, in which their 'examen liver extract shown for the first time last year, was again prominent A series of dissolved vaccines prepared according to a new technique developed in the laboratories was shown also a number of vitamin preparations, as well as the firm's ostocalcium tablets, which have lately been improved both in flavour and friability and increased in calcium content

The stand of Eli Lilly and Company was interesting for its wide range of high quality products including on the pharmaceutical side a crystalline material isolated from ergot, also a liver extract consisting of the fraction of liver sometimes spoken of as fraction G offered in powdered form for oral administration and in solution for intramuscular injection One new feature at the stand of Roche Products, Ltd, was 'nestrovite a preparation of vitamins issued as emulsion and as tablets the result of prolonged researches undertaken to provide the four indispensable vitamins (A B_1, C, and D) in a form both pleasant to take and medicinally reliable Pharmaceutical Specialties (May & Baker) showed two sulphanilamide products, "soluseptasine' for injection and 'prosepta sine for oral administration Another preparation shown here was "vinesthene, an inhalation anaesthetic for minor operations requiring a short but profound narcosis

A wide range of preparations was shown by Continental Laboratories, Ltd, including a 'serenol, which contains no barbiturate A firm boasting a history of over 100 years, C J Hewlett and Son had a very modern exhibit of what might be called the old-fashioned pharmacy with creams, ointments, lotions, and so forth A feature was made of P A B S (Hewlett's), under which title the firm has introduced its own brand of para-aminobenzene-sulphonamide W R Warner and Co again showed their "veracolate," a compound containing bile salts, with cascara, phenolphthalein, and a minute amount of capsicum Attention was also drawn to their haemorrhoidal suppositories for local emollient and protective action in inflammatory conditions of the ano rectal region Anadin, Ltd, and Bisodol, Ltd, shared a stand devoted to their respective preparations, the one an anodyne tablet and the other a digestant consisting of a number of ingredients in finely divided form Kaylene Ltd, exhibited their colloidal kaolin and its derivatives, one of these being "carbokaylene," offered as combining the detoxicating action of kaylene with the properties of highly activated vegetable charcoal

Books and Pamphlets

The bookstands as always afforded a pleasant relief The Oxford University Press had an excellent selection of their own publications and those of the Clarendon Press and the Presses of American universities One work was the second edition of Barrington Ward's *Abdominal Surgery of Children* and another the tenth edition of the *Manual of Bacteriology* by Muir and Ritchie Baillière, Tindall and Cox showed a large number of recent medical books published in this country and in America by various firms Other publishers stands were mentioned in the preliminary notice

The British Medical Association showed, in addition to the *British Medical Journal* and the special journals, the various publications it has issued, including the *Doctors Cookery Book* the reports of the Association special committees, and the various "grey books outlining Association policy The British Medical Bureau and the Medical Insurance Agency each had a stand at which their staffs were available for consultation, and the Agency had also enlisted the services of an expert automobile engineer, prepared to give advice on car problems, and a banking official for information and counsel on investment and similar matters The Exhibition was fully up to the standard of previous years, and it was a pity if the many diversions of Annual Meeting week in Plymouth prevented some visitors from giving it the attention it deserved

THE B M A AT TORQUAY

CIVIC DINNER

On the last Friday of the Annual Meeting the Mayor and Corporation of Torquay entertained a large number of the principal officers and delegates of the British Medical Association at dinner at the Imperial Hotel Dr Colin Lindsay President of the Association, Lord Burghley President of the Amateur Athletic Association, Sir Kaye Le Fleming Chairman of Council, and Dr G C Anderson, Secretary were among those present

Proposing the toast of the British Medical Association, the MAYOR (Alderman the Rev I Pugh) said he had followed with interest the deliberations at Plymouth which he was sure had been as profitable as on previous occasions He referred to the growth of the Association since 1832 There were he said many aspects of health which had shown vast changes during the past century, and the future was bright with the prospect of further progress particularly in the prevention of disease His work in life had brought him on many occasions into contact with medical men, and he esteemed the family doctor as the invaluable friend and adviser of all But the country owed a great debt to doctors for work outside their professional duties in philanthropical organizations, in literature, in local government, and in Parliament

Dr COLIN LINDSAY, responding, said the meeting had been an unqualified success and he acknowledged the hospitality the Association had received from all the South-West of England The benefit to members of the profession of these meetings in perfect harmony, upon which they could look back with pleasure, was incalculable

AIMS OF THE NATIONAL FITNESS COUNCIL

The toast of the Physical Fitness Campaign was proposed by the DEPUTY MAYOR (Colonel R Ward, *M C*), who referred to the changes in England which had followed the industrial revolution These changes, he said, together with the increasing leisure of the people, had focused attention on the problem of physical culture, which each part of the world was trying to solve in its own particular way, the British way being that of voluntary effort He coupled with his toast the name of Lord Burghley, who had upheld the honour of England on many Olympic fields and was not only an athlete but a leader

Lord BURGHLEY in reply, said the National Fitness Council was concerned especially with young persons after they had left school and gone into industry The work of the council was entrusted to people with experience in sport and in professional and social organizations One part was concerned with applications for grants to assist in providing swimming baths, community centres, playing fields, clubs, gymnasia, camping sites youth hostels, etc Applications at present amounted to 3½ million pounds, of which grants of £400,000 had been made The council also aimed at maintaining the tradition of voluntary service and helping existing voluntary organizations and co-ordinating work A college had already been planned for teaching and for research Another part of the council's work was propaganda, and in this they were really selling ideals rather than goods, it demanded the willing co operation of individual young men and women and it was breaking new ground He believed it would

be successful because people now realized that to be healthy was to be happy and because the State was only the individual written larger and the efficiency of each person in his actual work was a duty to the community

Physical Fitness Display

A display of physical fitness was given in the afternoon at Torquay in connexion with the meeting of the Section of Physical Medicine and Physical Education and was attended by some 500 spectators The first part was a demonstration by Plymouth pupils of the Margaret Morris Institute led by Miss Rhoda Luxton the aims of the institute were briefly described by a member of the London staff Miss Betty Simpson who also controlled the display and explained the various evolutions including the attention given to posture walking rhythm and graceful natural movements The second part was a demonstration by thirty recruits from the Physical Development Depot by permission of the Army Council and arranged by Major General H H A Emerson D S O M B The recruits wore coloured shorts red or blue which bore a letter of the alphabet the men were paired and the corresponding letter on red and blue showed the difference between an entrant to the Depot and one who had spent some time there Each spectator received a list of the recruits giving the age weight height and chest measurements of each man on arrival at the Depot and the present weight and chest measurements of the senior recruits this was accompanied by some general information including points of interest from their medical history Colonel Proctor speaking at a microphone explained that these were not picked men but just a routine sample had the display taken place a month previously he said there would have been an even greater contrast Some of the recruits who had had their tonsils removed at school seemed to remain malnourished but showed progress after reaching the Depot Each was studied individually and there was a full medical overhaul with specialist facilities whenever this was indicated All the exercises were undertaken so far as possible in the open air and as gymnasium apparatus could not be taken out into the field these were improvised and very successfully with thick bamboo canes

It was a most interesting and instructive demonstration of what is being done for these men All who were privileged to watch it must have been impressed with the contrast in health and physique between the entrants and the senior recruits

POSTGRADUATE NEWS

The Fellowship of Medicine announces that a course in physiology in preparation for the Primary F R C S examination will take place on Mondays Wednesdays and Fridays at 5·30 p m from August 15 to November 4 Instruction will consist of lecture demonstrations and a paper of questions is set each week The following courses have been arranged rheumatism and hydrotherapy at Royal Bath Hospital Harrogate on September 16 17 and 18 (morning) ophthalmology at Royal Westminster Ophthalmic Hospital September 24 and 25 plastic surgery September 14 and 15 children's diseases (for D C H candidates) at Infants Hospital September 19 to 24 proctology at Gordon Hospital September 26 to 30 diseases of the heart and chest (for M R C P candidates) at Royal Chest Hospital Mondays Wednesdays and Fridays at 8 p m from September 12 to 30 Courses are open only to members and associates of the Fellowship of Medicine 1 Wimpole Street W 1

WEEKLY POSTGRADUATE DIARY

EDINBURGH POSTGRADUATE LECTURES.—At Edinburgh Royal Infirmary *Thurs* 4·30 p m Prof A J Clark F R S Therapeutic Actions of Barbiturates

THE INSURANCE MEDICAL SERVICE WEEK BY WEEK

Vaccination

A question has been raised by a practitioner as to his liability to perform vaccination as part of medical benefit in a case in which he had recommended the patient's admission to an orthopaedic hospital and it is a requirement of the hospital that all patients must be vaccinated before admission The Panel Committee for the area has been consulted and has expressed the view that in the circumstances vaccination comes within the scope of medical benefit The Panel Committee in this case has presumably drawn a distinction between a routine requirement by the hospital and a similar requirement on the part of a prospective employer In the latter case where a person is vaccinated solely in order to satisfy the prospective employer's requirements the insurance practitioner would be justified in charging a fee

The general position with regard to vaccination was laid down by the Department many years ago and is quoted on page 64 of *Medical Insurance Practice* as follows

It is for the practitioner to decide in the first instance whether any particular form of treatment preventive or otherwise is in the interests of the patient's health but in general he would be expected to give the same treatment that he would advise one of his private patients to undergo in similar circumstances In the view of the Minister the fact that the treatment could be obtained from a public vaccinator would not in itself justify an insurance practitioner refusing to vaccinate one of his insured patients who desired him to perform the operation

Practitioners' Expenses in Attending a Hearing

It would appear from a recent report that the expenses of a practitioner attending before a medical service subcommittee in those rare instances where such expenses are claimed are not paid on a very generous basis A subcommittee reported that it had received a communication from the doctor concerned claiming 10s 6d for himself and 10s 6d for his deputy The cost of travelling by rail from the residence of each of the practitioners and making the return journey was apparently 10d and the committee resolved that the sum of 10d should be paid to each of the practitioners concerned

Practitioners' Lists

Statistics are not ordinarily to be found in this column but the following extracts from the annual reports of the London and Glasgow Insurance Committees may be of general interest

THE LONDON MEDICAL LIST

The number of practitioners admitted to the list during the year was 196 and the names of 215 practitioners were withdrawn during the same period The figures appended indicate the number of practitioners in the insurance medical service at December 31 over a series of years

1913 1 462 *1918* 1 427 1923 1 650 1928 2 092 19 3 2 178 1934 2 174 1935 2 136 1936 2 162 1937 2 155

The Allocation Scheme provides that a practitioner carrying on practice otherwise than in partnership shall not be permitted to have more than 2 500 insured persons on his list In the case of two or more insurance practitioners carrying on practice in partnership the number on the list of any one of such practitioners shall not exceed 3 000 and the average of the numbers on the lists of both or all the partners shall not exceed 2 500

An insurance practitioner or partnership of insurance practitioners employing one or more assistants may be permitted a higher limit provided that the additional number shall not exceed 1 500 in respect of each assistant

In the following table particulars are given of the sizes of the lists of insurance practitioners It should be borne in mind that assistants do not have lists of their own and that in the larger lists the principal would have an assistant In other cases a practitioner in partnership (with or without an

assistant) may have a larger number than the average by reason of another partner having less than the average

Insured Persons on List 1937

0	58	2 501–2 750	51
1– 250	598	2 751–3,000	19
251– 500	206	3,001–3 250	14
501– 750	185	3,251–3 500	16
751–1 000	186	3 501–3 750	6
1 001–1 250	154	3 751–4 000	7
1 251–1 500	125	4 001–4,250	8
1 501–1 750	117	4 251–4 500	3
1 751–2 000	97	4,501–4,750	1
2 001–2 250	90		
2 251–2 500	67	Total	2 008

'Average number of insured persons per list (excluding assistants and limited lists) 1937 993 average per practitioner 1937, 866

GLASGOW MEDICAL LIST

'The number of practitioners on the medical list of the committee on January 1 1938 was 483 (421 men and 62 women), being a decrease during the year of 14 During the year 31 practitioners retired from the medical list and 9 died The number of additions to the list was 26 Of the 483 practitioners on the list 367 are resident within and 116 outwith the city These 483 practitioners have 667 consulting rooms—562 in and 105 outwith this area Ten practitioners have notified the committee that they practise homoeopathy The number of medical partnerships in the area is 67 affecting 137 practitioners Sixty-five are partnerships of two practitioners one of three practitioners and one partnership of four practitioners

There are 18 practitioners required to employ assistants owing to the number of insured persons on their lists exceeding 2 000 the number allowed under the provisions of the Allocation Scheme to be on the list of a single handed practitioner There are also 32 other practitioners who although not required by the Allocation Scheme employ assistants

The following statement shows the number of insured persons on the lists of practitioners

5	practitioners	have no insured persons on their lists		
66	,	have lists of from	1– 50	insured persons
21		,	51– 100	,,
32	,	,	101– 200	,
36	,,	,,	201– 400	,
42		,	401– 600	,
26		,	601– 800	,,
32	,	,	801–1,000	,,
40	,		1 001–1 200	,
39		,	1 201–1 400	,
37	,,	,	1 401–1 600	,,
33			1 601–1 800	,
39	,	,,	1,801–2 000	,
26	,	, ,,	2 001–2 500	,,
9	,,	, ,,	2 501–3 000	,,
483				

'The Allocation Scheme of the committee provides that the number of insured persons on the list of a single handed practitioner shall not exceed 2 000 and in the case of a practitioner with a whole-time assistant 3 000

Naval, Military, and Air Force Appointments

ROYAL NAVAL MEDICAL SERVICE

Surgeon Captain D G D Fergusson to the *Caledonia* in charge of *Sick Quarters*

Surgeon Commander W B Macleod to the *Pembroke* for Royal Naval Barracks

Surgeon Lieutenant Commander F M Duthie to the *Drake* for Royal Naval Barracks

Surgeon Lieutenants F H Lamb to the *Pembroke* for Royal Naval Barracks S C S Cooke to the *Pembroke* for Royal Naval Barracks (August 22) and to the *Nubian* (undated) R M Bremner to the *Vernon* R E Lauder to the *Royal Oak* W Wilson to the *Barham*

ROYAL NAVAL VOLUNTEER RESERVE

Surgeon Sublieutenant G R Dodds to be Surgeon Lieutenant

ROYAL ARMY MEDICAL CORPS

Majors C L Day and D C McC Ettles have been confirmed in their ranks

Captain L R H Kettlitge to be Major (provisional)

Lieutenant R A Smart to be Captain with seniority October 23 1937

Lieutenant (on probation) D W Bell has been seconded under the provisions of Article 213, Royal Warrant for Pay and Promotion 1931

ROYAL AIR FORCE MEDICAL SERVICE

Squadron Leader G S Strachan to R A F Station Manby for duty as Medical Officer

Flight Lieutenant C Crowley to be Squadron Leader

Flying Officers C D Clements F V Maclaine J R McWhirter (seniorities May 3 1937) and P A Wilkinson (seniority July 1 1937) to be Flight Lieutenants

ROYAL AIR FORCE VOLUNTEER RESERVE

J F Bromley to be Flight Lieutenant

W MacP Cross, J A Munns and T C Wilson to be Flying Officers

TERRITORIAL ARMY

ROYAL ARMY MEDICAL CORPS

Lieutenants H B Collins and J E Wells to be Captains

TERRITORIAL ARMY RESERVE OF OFFICERS ROYAL ARMY MEDICAL CORPS

Major A McDowall *from Active List* to be Major

Second Lieutenant J D R Murray to be Major (Substituted for notification in the *London Gazette* of July 12 1938)

W A Robb to be Major

INDIAN MEDICAL SERVICE

Lieutenant Colonel N S Sodhi M C to be Colonel

Lieutenant Colonel S S Vazifdar has retired from the Service

The services of Major H W Mulligan have been placed at the disposal of the Government of Madras for appointment as Director, Pasteur Institute Coonoor

Lieutenant (on probation) A F Goode has relinquished his probationary appointment

Correspondence

WANDSWORTH AND A STATE MEDICAL SERVICE

SIR—I have been away from home since the Plymouth meeting and have not yet seen any *Journal* since then I am now told that you have reported quite correctly, that in my remarks on motions by Glasgow and Kensington on the subject of a State medical service I associated the Wandsworth Division with these in their attitude towards such a service I am very glad to know that you have received a correction from Wandsworth The error was entirely mine and was inexcusable No doubt I owe an apology both to Wandsworth and to Kensington for having mistaken the constituency of one of the latter's representatives But to Wandsworth and its representatives my apology cannot be too complete To have attributed to them such an opinion was an almost unforgivable error I can only hope that this acknowledgment may be held to mitigate the offence At any rate I rejoice to know that only two Divisions and not three have been led astray—I hope only temporarily—by the uncertain connotation which still attaches to the phrase 'a State medical service'—I am etc,

Truro, Cornwall, August 3 HENRY B BRACKENBURY

NIGHT DUTY UNDER A GENERAL MEDICAL SERVICE

SIR—There is one point I would like to raise with regard to the proposed national health service It seems curious to me that in discussing a national health service the position of the general practitioner in terms of other workers has not been considered On one point only I as a general practitioner, view this extended service with horror, and that is night work It must be realized that the millions of people to be included in this scheme will no longer have the bogy of an extra fee for night work and also that these people not being the workers who are the healthiest members of the community will be drawn from the aged the married women and the children, who require a great deal more attention than the workers I must make it clear that while I wish to be paid adequately for my services I do not wish to gain by these penalizing night fees I do however wish to give up night work and live as every other worker with certain hours on duty and certain hours off I wish to work so many hours a week—the same as anyone else Should the general practitioner's Utopia ever be created without night-work, I hope

it will be made illegal (as in the case of the Shops Act) for a doctor on day duty to work after hours. Otherwise kind friends would ask us to go at night as a special favour and soon things would be *in statu quo*. I suppose there are about 2,000 people to every general practitioner in this country and if each should call the doctor at night only once a year the latter would have nearly forty night calls a week. This is not the case at present but the slightest laxity in custom can easily lead to a doctor's life becoming impossible.

How could this be dealt with? In districts where the population is sufficiently large young doctors could be employed on permanent night duty. They would be regarded in much the same light as house physicians and house surgeons and would take up the appointment to gain experience or while they were reading for an examination. They would only spend their early years in this work. There must be some work for these men and with the increase in the number and size of partnerships the number of locumtenents required will become less and less. They would not have a great deal of work to do because the public knowing its own doctor to be unavailable at night would send for him in good time on many more occasions than it does at present. These night doctors could deal with the work of many practices. They would see the patient at night and hand him over at 9 a.m. the next day to the appropriate doctor. The payment of these men could be made with little or no loss to the doctors concerned—a small deduction from the capitation fee and a payment for each private case. This expense could be offset by the doctors since it would no longer be necessary for him to live in the town where rents and rates are high and it would no longer be necessary to keep extra maids so that the house should not be left day or night. He could live in the country and surely no man needs peace, fresh air and sunshine more. He would have a small office in the town. Finally I would suggest that the doctors' hours should be the same as those observed in shops.—I am, etc.

Reading, August 2. STANLEY C. ALCOCK.

British Medical Association

OFFICES BRITISH MEDICAL ASSOCIATION HOUSE TAVISTOCK SQUARE LONDON W.C.1

Addresses, etc.

SECRETARY (Telegrams: Medisecra, Westcent, London).

EDITOR BRITISH MEDICAL JOURNAL (Telegrams: Aitiology, Westcent, London).

SUBSCRIPTIONS, ADVERTISEMENTS, etc. (Telegrams: Medisecra, Westcent, London).

Telephone numbers of British Medical Association and British Medical Journal: Euston 2111 (*internal exchange five lines*).

SCOTTISH SECRETARY: 7 Drumsheugh Gardens, Edinburgh (Telegrams: Associate, Edinburgh; Tel. 24361 Edinburgh).

Irish Free State Medical Union (I.M.A. and B.M.A.): 18 Kildare Street, Dublin (Telegrams: Bacillus, Dublin; Tel. 62550 Dublin).

Diary of Central Meetings

SEPTEMBER

22 Thurs. Insurance Acts Committee, 11.30 a.m.

Group of Orthopaedic Surgeons of the Association

Notice is hereby given of the formation by the Council of a Group of Orthopaedic Surgeons which shall be composed of all those members of the Association who are predominantly engaged in the practice of orthopaedic surgery. Members of the Association who claim to conform to this definition are requested to apply to the Secretary, B.M.A. House, Tavistock Square, W.C.1, not later than September 17, 1938, for a form of application for membership of the Group. The first general meeting of the Group will be held at a date to be subsequently announced in the *Supplement*.

G. C. ANDERSON,
Secretary.

August 13.

B.M.A. CHARITIES TRUST FUND

The following subscriptions and donations were received by the B.M.A. Charities Trust Fund during the period January 1 to April 30, 1938, for allocation to medical charities at the discretion of the Trustees of the Fund (the Council of the Association):

£100—Derbyshire Panel Committee. Portsmouth Division (proceeds of dance). York Local Medical and Panel Committee.
£77 17s. 1d.—Southport Division (proceeds of annual dance held by ladies of the Division).
£60—Cardiff Division (proceeds of dinner and dance).
£37 16s. 5d.—South West Essex Division (proceeds of dance).
£15 15s.—H. M. Davies.
£12 5s. 10d.—Lindsey Local Medical and Panel Committee.
£10 10s.—H. M. Halliday.
£10—Cuthbess Panel Committee. J. B. Lowe.
£8 8s.—North Middlesex Division.
£5 15s. 6d.—W. E. C. Wynne. M. J. Wynne.
£5 5s.—Anon. A. T. Bleach. A. H. Burgess. D. R. Clarke. A. F. Dickson. J. Husband Clutton. G. S. Lund. P. Macdonald. R. G. McGowan. R. L. Newell. West Middlesex Division (proceeds of dance). C. F. Williamson.
£5—E. Duff Gray. J. Humphrey Owen. J. A. Vaughan.
£4 4s.—The Hon. W. S. Maclay.
£3 3s. 10d.—A. C. S. Waters. J. A. Hislop and W. J. Frith.
£3—Irene F. Callender.
£3 10s.—North East Ulster Division.
£3 8s. 6d.—W. S. Ormiston.
£3 6s. 8d.—Warrington Division.
£3 3s.—R. T. Brain. G. L. Buckley. P. C. Colls. J. G. Curnock. R. O. Eades. C. C. Easterbrook. Captain G. K. Graham. E. Gresham. F. E. Ingall. G. L. Keynes. J. H. Paul. S. G. Platts. Major E. Underhill.
£3 1s. 6d.—A. Bernard and W. A. D. Lawson.
£3—Miss Ruth H. Western.
£2 19s. 1d.—J. W. S. Wilson and J. I. Williams.
£2 13s. 6d.—C. H. Gunson.
£2 10s.—Surgeon Lieutenant J. G. More Nisbet.
£2 4s. 9d.—S. J. Watson.
£2 2s. 11d.—H. L. Groom.
£2 2s.—J. C. Adam. W. S. Adams. G. C. Anderson. C. Andrew. F. L. Angior. A. Baldi. Margaret Bell. A. J. Ballantyne. J. B. Bennett. M. W. Blackwood. N. A. Boswell. J. W. Brash. H. S. Brown. H. Caiger. D. Calwell. J. Carr. H. Carson. J. A. Charlie. Major General T. S. Coates. Lieutenant Colonel C. J. Coppinger. R. W. Craig. H. Guy Dain. D. Davidson. Lieutenant Colonel A. M. Dick. T. W. N. Dunn. D. Evans. Lieutenant Colonel C. H. Fielding. L. S. Fry. J. B. Fulton. Gateshead Local Medical and Panel Committee. Janet M. Gibson. J. Gordon. A. C. Hallowes. W. A. Hay. H. W. Hills. W. A. Hislop. S. Hoyte. F. C. Hunt. J. W. A. Hunter. H. G. M. Henry. R. F. V. Hodge. W. F. Jackson. A. L. Jaeger. W. L. Johnson. D. I. Jones. Surgeon Lieutenant Commander C. N. H. Joynt. Dorothy L. M. Keats. Squadron Leader J. Kemp. L. Kilroe. R. Langdon Down. E. E. Laslett. Surgeon Captain L. Lindop. Colonel J. R. Lunham. F. J. McGlade. Helen M. M. Mackay. D. D. Mackintosh. L. F. Marks and Parker. W. Marks. J. Milne. A. M. A. Moore. A. Moss. R. E. Moyes. J. R. Munro. P. K. Muspratt. J. Nelson. W. Parker. K. O. Parsons. A. M. Pollock. H. W. Pooler. D. Ramage. Lieutenant Colonel W. D. Ritchie. N. J. L. Rollason. I. Ridge Jones. J. A. N. Scott. G. C. Shaffner. H. Simmons. P. G. Simpson. A. F. S. Stalibden. J. Sneddon. H. S. Souter. E. J. Staddon. F. A. R. Stammers. G. Stapleton. W. Stirling. G. S. Strachan. Lieutenant Colonel A. Street. A. E. Struthers. D. M. Sutherland. E. G. Y. Thom. J. M. Thomson. G. S. Trower. W. A. Tweddle. C. W. Walker. Dorothea E. Walpole. A. E. R. Weaver. G. M. Wesswood. C. H. Wight. R. J. Willan. J. R. Williams. D. C. Wilson. S. P. Wilson. W. F. Wilson. T. N. Wood. W. H. O. Woods. A. H. Zair.
£2—Colonel C. C. Murison. Major A. V. O'Brien. A. de W. Snowden.
£1 17s.—C. H. Laver. R. Sandeman.
£1 11s. 6d.—A. N. Bousfield. Sir Henry Brackenbury. G. E. Dodds. K. Glyn Jones. M. C. R. Grahame. Lieutenant Colonel R. H. Lee. J. I. Lesh. Elizabeth M. V. H. B. Maclennan. C. S. Pantin. F. J. Pyper. Surgeon Lieutenant T. J. Roberts. N. S. Turnbull. P. H. Ward. C. M. Wilson.
£1 9s. 6d.—N. Chilton. R. P. Mitchell.
£1 7s. 8d.—W. G. T. Macfie.
£1 7s. 7d.—A. Lyndon.
£1 6s.—Mrs. J. L. T. Birkett. C. Thomas.
£1 3s. 9d.—J. B. Bamford.
£1 2s. 7d.—C. W. Howe. W. M. Wilson.
£1 2s. 6d.—D. M. Bladon.
£1 2s. 2d.—W. H. Carlisle.
£1 2s.—H. I. C. Balfour. D. J. Rose.
£1 1s. 11d.—S. Governor.
£1 1s. 9d.—J. Dwyer.
£1 1s. 6d.—R. L. J. Le Clezio.
£1 1s.—P. H. Abercrombie. Harriet E. Acheson. J. H. Adam. N. F. Adeney. J. B. Alderson. E. A. Allibone. A. Anderson. H. M. Anderson. Lieutenant-Colonel H. S. Anderson. M. Anderson. P. V. Anderson. S. E. H. Anderson. W. Anderson. W. B. G. Angus. C. S. Appleyard. R. G. Apthorpe. B. McC. Armour. J. L. Armour. W. G. Arthur. W. F. Athwater. R. D. Aveward. W. C. Aylward.

C W C Bain, C B Bamford, H Banks, K E Barlow, J Batterham, H S Beadles, T Benton, S P Bidson, A S Beer, E C Begg, H J Bell, F P Bennett, Major R A Bennett, A R Berrie, T Berril, E Biddle, M A M Bigby, F W H Bigley, C N Binney, C A Birts, C D Bishop, H I Blackie, R Bleasdale, G W Blomfield, W R Blore, D M Boohan, E S Bompas B F M Bond, G H H Booth, H B B Boucher, J G Bourdillon, M Bowman, A Boyd, G J Boyd, J D Boyd, R Boyd, S A Boyd, W M Boyd, J C Boyde, S Bradbury, J Bradley, J V Bradley R Bradley, F Braid, A G Brand, W H Brasil, F R Bray, E J Brewis, C E Brierley, E E Brierley, J S Briggs M Briscoe, P M Brodie, R K Brooks, N Brostoff, C Brown, C V Brown E V Brown, F A Brown, J Brown, J A Brown Major J P Brown, S N Browne and Barbara J Browne R Bruce, Hon O B Buckley P J Burke, Olive K Burnett R H Burnett, R McC Burnie H F Burtt, L Burvill Holmes T H Butler, Bertha M Butters, R J Buxton, J A Byrne, J C Byrne

A J Caird, G Y Caldwell, J Caldwell, A N Cameron, Dorothy Campbell, G Campbell J Campbell, J G Campbell K S Campbell, L M R Campbell, R H Campbell, C P Campion W H Carse, E Casson E Catford, P T Catto, C J Cellan Jones, V Chadwick, G P Chandler, E Chapple, R J K Chatty, D S Cherry, W McM Chesney, J C K Chilcott A J Chillingworth, J W Chrichton H Christal S V E Christison, D G Churcher E A Clark, E B Clark J C Clark, B R Clarke, J Clay T J Clayton, W F Clewer, H J Clutterbuck Alex L Cobban T S Cochrane, W R Cockshut, W D Coghill J Cohen P C Collyns A B Connell M Connon, R G Cooke C R Cooke Taylor F H Cookson, M Coplans, J G Cormie V Cotton Cornwall, Nancy M Coutts A Cox, E L Cox, J Craig J Crawford F T H Croft Lieutenant-Colonel R G G Croly, B A Crook, S Crown H C Crouch, A P Cummings, W T Cunning, G M Currie

S H Daukes J P Davie, E M Davies, J C Davies, L Davies, P O Davies T R Davies, R Y Dawburn A C Dawes, T D Deighton J A Delmege J T D Ewart, M Dia J H Dick L M Dickson M G H Dickson W L Dickson, J T Dier, A V Dill H C Dixon, M V M Dodds H D Dodwell C S D Don H G Donald, J H Donnell E F Dott, N McO Dott A S Drummond H H du Louby H Duck, G E Evelyn Dudderidge, G Dudley, A Duguid, Lieutenant Colonel A W Duncan, J Dunlop M R Dunlop G H Duthie W G P Dyson

P H C Eardley, R Eddie D C Edington, N L Edward, A C Edwards, E S Edwards, F H Edwards W P Elford, G E Elkington A H Elliott, C Elliott H H Elliott A O English H English, A Evans D C Evans, E C Evans F A Evans, M W H Evans R J Evans T Evans

D C Fairbairn H Fairbairn C F Fairlie A T Falwasser, Ruth Fennell, W J B Fergus A S Ferguson, J Fettes, A Finigan, Isobel M Finlayson J L Firth F P Fisher R Fisher, Arthur M M Fitzgerald, G A Fleming C G Fletcher C H Flory, W Foote A Forbes T J L Forbes, R K Ford C W Foit J M Fosbrooke Major M F Foulds, S F Fournere, P H C Fowell, M Fraser, T Fraser, H R Frederick, J O French C Frier D Frost Lieutenant Colonel G H Frost A C Fry V Fry D Fyfe

H W Gabe R P Gammie J H Gann, F W Garrad R J S Garrow, H N Garrus P C Garson, H S Gaussen W E Gemmell, E A Gerrard W W Gerrard, T Gibson M L Gilchrist, J L Gilks, J M C Gill R U Gillan and Geraldine Gillan, J J Gilmore, H Girling T J E Gittins A Glen, L Goldman, F J Gomez, G M Goodwille, G A C Gordon, M H M Gordon R G Gordon, S G Graham J V L Grant W Grant, W D Grantham R Green, W Gregor A Gregory R J Gregory, C B Grieve D Grieve C A Griffiths, J L A Grout, C A Gunson

C J Hackett L L Hadley, C E Hagenbach, J E Hailstone, F Hall J Hamilton J W Hamilton W J Hamilton J E Hancock G B Harland, J R Harper D J Harries, J N J Hartley J K Hasler, T Hawley W E Hayes J G F Heal H E Heapy P M Heath D J Hemingway J Henderson Mary K Henderson A S Herbert R H Herman F Herriman-Johnson G M A Herzfield, E F Hill H C Hill, J F Hill, R A P Hill, F G Hinks, B Hirson H F Hiscocks T H Hobbes S Hobson G A Hoffman Elizabeth Holland A Hollinsworth, H W H Holmes, N Holmes A C Holms M Hook C A Horder, J G F Hosken H W Howeson H Hudson W Hudson H E Hughes Davies Lieutenant Colonel E V Hugo J G Hume A E Hunter, D M Hunter S Hunter, D A Hutcheson M M L Hutchinson R C Hutchinson W J Hutchinson B Hutchinson, A E Hyatt

I G Innes

D B Jack A K James G C W James, E Jamieson, F E Jardine L M Jeffries J P J Jenkins G A Johnston, Professor T B Johnston B R Johnston Emma M Johnstone A T Jones D J Jones D N R Jones H H Jones

J S Kamester D M Kapp, J J Kempton C R Kenchington Eric Kenderdine Ernest Kenderdine C S Kerr D L Kerr A B Kettle H B Kilroe J M King P S Kinlick K F Kitchen F J Kitt N Kramer J L Kydd A H Kynaston

J Y Laidlaw Sir P P Laidlaw A H Laird Mary D Lambie, C R Lane R Lang L B Langmead A M Laurie A G K Ledger Sir Kaye Le Fleming S B Legge G Leighton B M Lewis E Lewis E W Lewis H W Lewis Phillips W A Lister J Lipetz J W Little L P Lockhart J P Lockhart Mummery J L Lochhead, A Lomas T C Lonie B F Lovibond, L Lowe, W C Lowry, Lieutenant Colonel W E C Lunn Rockliffe John L Lush A Lyal W J Lytle

D A P Macalister, Major General Sir Robert McCarrison, J F McConchie, J S McConnachie, P J McConnon and J J Gerny, A C H McCullagh A A S McDonald, J R McDonald, K M Macdonald, J McDougall I L McEwan, P F McFarlane R M Macfarlane G Macfeat, J McA McGill, A R Macgregor S W MacGregor, A MacInnes, N McInnes, A I McIntyre C W M Mackay, P W McKeag, J J McKenna, E McKerrow, I Mackinlay H D McKinnon Lieutenant Colonel J Mackinnon Helen M McKnight, J McLaughlin, Sir Lewis Maclean G D McLean, J Maclean, R McLean, I A M Macleod, R Macleod J J McMillan, M H Macnicol, A MacNiven W W McPhail H C McQuaide J G Macqueen L MacQueen E C G Maddock Q Madge, T G Maitland J H Malloy Captain M M Mansfield H I Marriner, P H Martin, A T Mason J C Matthews, D B Maunsell C Mayhew, A W C Mellor L Menee, H G V Menee, G Millar, T McW Millar Lieutenant Colonel A Miller, J B Miller, J C Miller, W H Milligan C G S Milne, J I Milnes S M Milner, F J Milward Anne Mitchell J M Mitchell, L M V Mitchell R S Mitchell F G Mogg W J Moir J C Moor, E M Moore T F Moran, J Mel Morgan, T W Morgan, W G Morgan, Lieutenant Colonel J Morison, W Morrison, L W Morris, J M Morris Captain I H C Morton R Morton, H H Moyle, A R Munro W A Murray, W G Murray

M L Newhouse, D A Nicoll, J S Nicolson, G S P Noble

A Ofenheim, L Oliphant, G M F Olive, L W Ormerod

L L Orton P M Overton R D Owen

A F Page, A O Parker F B Parson A S Paterson J J Paterson W Paterson T Paton J Patrick, T W Pattinson C H Paul, H D Pavlere, W J Payne, F Y Pearson, J W Peden A A F Peel J H S Peterkin J M Petrie C C Phillip P W Phillip Professor R M F Picken, R A D Pope H R Potter, W H Prentice R F Price T L Price J A Pridham, T A P Proctor, Nora Proctor Sims, C G Pugh

H E Quick

F Radcliffe, M W Ramsden, G Rankine M O Raven, H Rawsthorne, Helen E Redway, E J Rees R D Reid, F A Richards, J E Richards W G Richards G Richmond, L F Richmond S M Riddick K M Riddle H J Riley J R R Ritchie R W Ritchie, S Ritson, F H Robbins A C Roberts L D Roberts L O Roberts R I Roberts J K A Robertson, W J D Robertson John Robinson Joseph Robinson M Robinson J D Robertson G D Roches H C Rollin H D Rollinson A W M Rooke E M Rooke W S Rooke A D Rope, Colonel L T Rose Hutchinson A McK Ross J A Ross, Jean A Ross T D Ross R P Rosser, A T F Rowley, R S Rudland, M W Rushforth

A Said C H Sansome E M Sexton, H Scholefield C G Schurr, C F T Scott, G W Scott Captain W H Scriven, T A Seekings, S F Seelig, A Selkirk, Captain M Sendik, C Shepherd, E G Sherwood, J F D Shrewsbury, J A Simon J B Simpson, J V A Simpson, J Sinclair, Surgeon Commander J C Sinclair, W A Sinclair, K C S Skene Lieutenant Colonel F R B Skrimshire, J A Small, E G Smallbone H D Smart E B Smith, H Smith, F F Smith H G T Smith J F Smith, S Smith F G Smyth, H K Smyth W R Snodgrass E Solly, B Solomons, E Somerville and A C Hallowes I F Somerville W G Southern, B Southwell R Spears D B Spence D L Spence, P B Spurgin, F E Stabler, C S Staddon, A E Staffurth, J F H Smallman, R A Stark W H Steele W Stephenson, J B Stevens L Stevenson R A Stuart, E P Stibbe, J A Stirling Major E G Stocker, K H Stokes Sir J Stratheirn G J Summers, W F Sumner Anne Sutherland, R Sutherland, G Swapp, W S Syme, A Symon

F W Ta'Bois, W H Talfourd Jones, C E Tangye, F E Taylor A Vera Taylor C Taylor, H Taylor, M R Taylor, Surgeon Lieutenant W B Taylor, J W T Thomas R Thomas T B Thomas W E Thomas, W Thomas W H Thomas, C M Thompson, T Thompson Hancock, G R Thomson, J M Thomson R H Thomson, W Thomson, F J Thorne, W G Thwaites, S V Tinsley J A Tomb A H Topping G C Trotter, N E Trouton, Victoria S Tryon, A D Turnbull, J N Turnbull C F Turner, R H Turner, W E Turner, N S Twist J M Tyrrell

A Urquhart, D A Urquhart

G C Vaughan, F L Vaux V C Veitch

A W Wakefield L S Wakefield, H Walden C W Walker, E H Walker E R C Walker G T Walker, H F Walker, R L Walker, A T Wallace, W Warburton C A G Ward E H Watkins E M Watkins H A Watney, D Watson, H D Watson H K Watson H F Wattsford, E R Webb A M Webber, Lieutenant Colonel W J Webster, E A Welsh West Middlesex Division, Lucie B Wevill, S Whalley A E White, C F White E S White R G White F E Whitehead Major N E Whitehead Dorothy F Whiteford J Whitelaw, Lieutenant Colonel A Whitemore C H Whittle E M G Whittle, H F Wiggin, D M Wilkins, D Williams G C Williams, H N Williams J McG Williams V G Williams A B Williamson, A S Wilson, D McG Wilson, J Wilson J T Wilson L F Wilson R E Wilson, Squadron Leader T W Wilson W B Wilson W M Wilson W R Wilson T N Wilthew E Wingate J Wishart W H Wishart E Wordley, E A Worley, C Wroth, H C Wyman

£1—C Atkinson D Baird and Matilda D Baird D Bolton E W C Bradfield, E Braithwaite E C Braithwaite, C R Crystal

Olive Falk P L Giuseppi M Golden J Harkness R S Harvey Lieutenant-Colonel M J Helgate H E Ali Ibrahim Pasha J A L Innes D P Lambert R H D Laverty I Lucas J M McInnes J F Murray A E Nicholl T Paton R H Pearce S V P Pill G S Robertson O N Roussel R Sampson M M Steven on O F Sydenham H W Toms J G S Turner L E Wiernm W H Westcholme

19s 4d—F G A Beckett
19s d—A Pain
18s 6d—Louise H Wilson
17s 6d—D E Young
17s—A Connal P N Cook G J G Davidson Doris A Dean Hilda M Denholm Young J R Garson S K Guthrie A S Hatch J Kelman J M Loftus C J Machren J H Otty W F Roper J Smith F H Stevenson W S Urquhart

15s 6d—T R Davies
15s 0d—K S Maurice Smith
14s—J A W Robertson
13s 6d—H B Martin
13s 0d—G H Lucas
12s 6d—R W Armour
11s 2d—C T Norris
10s—R L Osmaston
10s 7d—J R F Poppiewell
10s 6d—J B Adamson R M Ainsworth J S Aldridge J S Alman M N Andrews N Angel Major General R W Anthony G Ashton N L Auchterlonie

L A Bacon H C J and K D Ball J Ballentine R T Bannister P L Barlow A S Barr J Barr A M F Batty E A Baxendine P W G Baxter O R Binyon R Blair P L Bond A M V Bonhote Captain J W Bowden W Boyd P G Brain Major J E Brooks W D T Brunvate A F Bryson J L Burn H Burrows

K Cameron M E M Carter A G Chamberlain M C Chappel H M Cohn W M Cole R T Cooke R G Crawford C M Cusden M Cutner R J and H G K Cyriax

J Dalziel H J Davidson J D Dear F M Deighton G W S de Jersey A Dobby A R Doyle G T Drummond

L T Eden I F W Edwards W Edwards A C J Elwin J A S Emslie W J A Erskine A L Evans H A Evans M F M Evans

H D Fairman J C Fiddes J M Fleming T P Evans H M Garlick W Gibson J D Gillies H W Gothard A S Gough Lieutenant-Colonel R B Graham B S Grant J W Gray H J Green E N Gregg G R Gribbon M W Grunstein V Gurewich

A W Hall K R C Hallowes R H Harding J G Heathcote A G Hemsley J Henderson A B Henry A C Hill J L Hill H S Hoge E Holmes J R R Holmes W G R Hore M J Houghton D M Howse J Hunter M Hunter G Hurrell

J B Jack D S Jackson A N Jones J D Jones R F Jordon

A M Keith Kathleen C M Kennedy W L Kennedy J Kerr J D O Kerr B M Knight

Surgeon Lieutenant R W G Lancashire I Lapman J Leckie W J Lloyd Dr and Mrs D B M Lothian M G L Lucas J S Lyle

C B McArthur I B McCrae J M Macfarquhar N A A McIntosh W Mackay T S McKean W McKendrick A V Mackenzie Evelyn T D MacLagen A I MacMahon E J R MacMahon A M C Macpherson G McPherson K Madders W Mailer T Malims E G L Mark Phyllis Marsh P S Martin W M Martin Dora Mason E W G Masterman L M Mayburn G E M Meyer G W Milledge T M Miller G Mitchell S D Mitchell Florence S R Moore C G Morgans D R M Morrison J R Mountain T Y Muir J A Milligan A J Murray W A Murray

R A Newsom W W Nicol B R Nisbet

A Ogg Ethel E M Ogilvie

Captain G R C Palmer W Park W G Parker M W Peterson D S Patten S G Peill R A Piachaud E Pigeon J H Power D S Pracy J Prentice A C Price

C F H Quick

L Rees E C Roberts L W Roberts P L C Rothschild Lieutenant-Colonel J V Savage K J L Scott W R Scott S K Sen A Shapiro W Simpson H C Sinderson Pasha D A Smith Olga F Smyth E H Snell M R Sore Surgeon Commander L P Spero A B Stenhouse C Stewart G M Stirling H Thistlethwaite A K Thomas J and A H T Thomson A T Till H S Townsend C A Travers L H Travers D M H Tripp

W R van Lanegenberg

A Waller A S Wallis V H Wardle J Watt J W Wayte G V Webster H G Webster A S Wiefield R Wiggins A J Will G Williamson A J Wilson D Wilson D Wood W C Wood R F Wyatt

10s—Surgeon Lieutenant Commander G D J Ball R A Barlow A M Barron D L Baxter M N Blake J W Bradburn R A Brown J C Brownlee D S Bryan Brown Margaret E Bryson M M Burton Kathleen F Butterfield A A Caruthers L H Chandler D Collinshaw S W R Colver K J Davis D L C Day Louise E Fraser N M Goodman D G J Gordon E D Y Grasby D D Grayson W E Haigh Major M R W Hart A Hawkyard Esme M J Hill Erica M Hutton D Mel Johnson J W Jones E A Keith J R Keith J J Kelly J D McCallum J A McClintock Lieutenant C E McCloghry G V T McMichael W E Mathie G P Middleton Laura M D Mill Professor J C Mor F Muriel Morris Mary F Munro W P H Murden W L Peacock D M Pullen W C Ramsbotham C Richardson R M Saleh A Salmon Captain W J Sheehan M Smellie O M Somerville D B Soutar N H Stein E M Strong G C Taylor A K Traill H M Twining J L A Webster E V E Whidborne H White J M Wrigfield Molly B Wilson M E Wilson A H M Young

Miscellaneous contributions of less than 10s each total £6 1s 2d

VACANCIES

All advertisements should be addressed to the Advertisement Manager and NOT to the Editor

RESIDENT POSTS

BARNSLEY COUNTY BOROUGH—Assistant M O H Salary £500 £25 £700 p a

BATH ROYAL UNITED HOSPITAL—H S Salary £150 p a

BIRMINGHAM AND MIDLAND EYE HOSPITAL—Surgical Officer Salary £200 p a

BIRMINGHAM CITY—(1) J A M O (male) for the Mental Hospitals Department Rubery Hill and Hollymoor Division Salary £200 £250 p a (2) Whole-time J M O s (males) at Selly Oak Hospital Salaries £200 p a each

BRADFORD CITY—H P s and H S s to the Municipal General Hospital Salaries £150 p a each

BRISTOL EYE HOSPITAL—J H S Salary £100 p a

CARLISLE CUMBERLAND INFIRMARY—Surgical Officer (male unmarried) Salary £250 p a

CENTRAL LONDON OPHTHALMIC HOSPITAL Judd Street W C—(1) Senior H S (2) J H S Salaries £120 and £100 p a respectively

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL—H S to the Ophthalmic and Ear Nose and Throat Departments Salary £150 p a

DERBY COUNTY BOROUGH—A M O s (males) for Derby City Hospital Salaries £200 p a each

DOVER ROYAL VICTORIA HOSPITAL—M O Salary £150 p a

EAST HAM MEMORIAL HOSPITAL Shrewsbury Road E—H P (male) Salary £150 p a

HALIFAX COUNTY BOROUGH—J M O (male) for Halifax General Hospital Salary £250 p a

HARTLEPOOLS HOSPITAL—H S Salary £150 p a

HERTFORD COUNTY HOSPITAL—H P (male) Salary £150 p a

HOLT KELLING SANATORIUM—Medical Superintendent Salary £800 p a

HUDDERSFIELD ROYAL INFIRMARY—Surgical Officer (male) Salary £225 £250 p a

HULL ROYAL INFIRMARY—H P (male) to the Sutton Branch Hospital Salary £160 p a

ILFORD WEST HAM HOSPITAL FOR MENTAL AND NERVOUS DISORDERS Goodmayes—J A M O (male unmarried) Salary £200 £250 £450 p a

INFANTS HOSPITAL Vincent Square S W—H P Salary £100 p a

ISLE OF MAN NOBLE'S ISLE OF MAN HOSPITAL AND DISPENSARY Douglas—H S (male unmarried) Salary £175 p a

JERSEY GENERAL HOSPITAL AND POOR LAW INFIRMARY—(1) H S (2) C O and H P Males Salaries £175 p a each

LANCASHIRE COUNTY COUNCIL—(1) Surgical Officer and (2) M O for Whiston County Hospital near Prescot Unmarried Salary £400 p a each

LANCASTER ROYAL LANCASTER INFIRMARY—(1) Senior H S (2) Second H S Salaries £200 p a and £175 p a respectively

LEAMINGTON SPA WARNEFORD GENERAL HOSPITAL—H P Salary £150 p a

LEICESTER ROYAL INFIRMARY—Radiologist Salary £200 p a

LIVERPOOL CITY—A M O for Fazakerley Sanatorium Salary £250 p a

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL—(1) H S (2) H P Males unmarried Salaries £150 p a and £125 p a respectively

LUTON BUTE HOSPITAL—H S (male) Salary £150 p a

MANCHESTER CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE—M O to the Radiotherapy Department Salary £150 p a

MANCHESTER NORTHERN HOSPITAL—Surgical Officer Salary £150 p a

MANCHESTER ROYAL EYE HOSPITAL—J H S Salary £120 p a

MANCHESTER ROYAL INFIRMARY—M O Salary £250 p a

MERTHYR GENERAL HOSPITAL—H S Salary £150 p a

MILLER GENERAL HOSPITAL Greenwich Road S E—(1) H P (2) H S Males unmarried Salaries £100 p a each

NEWCASTLE UPON TYNE ROYAL VICTORIA INFIRMARY—Senior Accident Room H S Salary £150 p a

NORTH SHIELDS TYNEMOUTH VICTORIA JUBILEE INFIRMARY—H S (male) Salary £150 p a

NORWICH JENNY LIND HOSPITAL FOR CHILDREN—M O Salary £120

OXFORD RADCLIFFE INFIRMARY—(1) Hon P to the Department of Physical Medicine (2) R S O Salary £150 p a (3) Three H P s (4) Obstetric H P (5) H S to the Ear Nose and Throat Department (6) Three H S s Males Salaries £120 p a each

PLYMOUTH PRINCE OF WALES S HOSPITAL Greenbank Road—(1) Anæsthetist and H S to the Special Departments (2) Two H S s Salaries £120 p a each

PRESTON COUNTY BOROUGH—A M O (female) for Shiroe Green Hospital Salary £300 p a

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY—Surgical Officer (male, unmarried) Salary £300 p a

PRINCE OF WALES S GENERAL HOSPITAL N—(1) J H P (2) Two J H S s Males unmarried Salaries £90 p a each

ROCHDALE INFIRMARY AND DISPENSARY—(1) Senior H S Salary £250 p a (2) H P (male) Salary £150 p a

ROSS AND CROMARTY COUNTY COUNCIL—M O (male) for Lewis Sanatorium and Infectious Diseases Hospital Salary £250 p a

ROTHERHAM HOSPITAL—Casualty H S (male) Salary £150 p a

ROYAL EYE HOSPITAL St George s Circus, S E—(1) Senior H S (2) Two Assistant H S s Salaries £150 p a and £100 p a each respectively

ROYAL FREE HOSPITAL Gray s Inn Road, W C—C O (female) Salary £150 p a

ST ALBANS HILL END HOSPITAL AND CLINIC FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS—H P Salary £165 p a

SALVATION ARMY MOTHERS HOSPITAL Lower Clapton Road, E—J M O Salary £80 p a

SHEFFIELD CHILDREN S HOSPITAL—H P (male unmarried) Salary £100 p a

SHEFFIELD JESSOP HOSPITAL FOR WOMEN—Anæsthetist (female) Salary £100 p a

SHREWSBURY ROYAL SALOP INFIRMARY—Surgical Officer Salary £250 p a

SOUTHEND ON SEA GENERAL HOSPITAL—(1) Anæsthetist (2) H S Males Salaries £125 p a and £100 p a respectively

SOUTHPORT GENERAL INFIRMARY—J H S (unmarried) Salary £150 p a

STOKE ON TRENT NORTH STAFFORDSHIRE ROYAL INFIRMARY—(1) Second H P (2) H S for the Aural and Ophthalmic Department Salaries £150 p a each

STROUD GENERAL HOSPITAL—M O Salary £200 p a

SURREY COUNTY COUNCIL—(1) First A M O for Epsom County Hospital (2) Two J A M O s (males, unmarried) for the County Council Mental Hospitals Service Salaries £350 £25 £450 p a each (3) J A M O for Surrey County Sanatorium, Milford Salary £250 p a

TAUNTON AND SOMERSET HOSPITAL—Two H S s Salaries £125 p a each

WARWICK WARWICKSHIRE AND COVENTRY JOINT COMMITTEE FOR TUBERCULOSIS—J A M O for the King Edward VII Memorial Sanatorium, Hertford Hill Salary £250 p a

WEST HARTLEPOOL COUNTY BOROUGH—A M O (female) for Howbeck Infirmary Salary £350 £25 £450 p a

WEST RIDING OF YORKSHIRE COUNTY COUNCIL—J A M O for Scalebor Park Mental Hospital Salary £350 £25 £450 p a

WORTHING HOSPITAL—(1) H P (2) H S Males Salaries £130 p a each

YORK DISPENSARY—M O (female, unmarried) Salary £200 p a

NON-RESIDENT POSTS

BRADFORD CITY—Assistant School M O Salary £750 £50 £937 10s p a

BUCKINGHAMSHIRE COUNTY COUNCIL—(1) Deputy County M O H and School M O (2) Assistant County M O H and Assistant School M O Salaries £725 £25 £800 p a and £500 £25 £700 p a respectively

CARDIFF KING EDWARD VII WELSH NATIONAL MEMORIAL ASSOCIATION—Three Half time Assistant Tuberculosis Officers for the Cardiff, Newport and Pontypridd areas respectively Salaries £250 p a each

DARLINGTON COUNTY BOROUGH—Assistant M O H Salary £550 £25 £700 p a

DEPTFORD METROPOLITAN BOROUGH—Dental S at the Central Child Welfare Clinic and Tuberculosis Dispensary Salary £60 p a

DEWSBURY COUNTY BOROUGH—Assistant M O H and Assistant School M O Salary £500 £25 £700 p a

DREADNOUGHT HOSPITAL Greenwich S E—Half time Receiving Room Officer (male) Salary £150 p a

EASTBOURNE ROYAL EYE HOSPITAL Pevensey Road—H S Salary £100 p a

EDMONTON BOROUGH—Assistant M O H and School M O Salary £550 £25 £700 p a

KENT EDUCATION COMMITTEE—Whole time Assistant School M O (Ophthalmic) Salary £700 p a

LANCASHIRE COUNTY COUNCIL—Part time Visiting Radiologist for Whiston County Hospital near Prescot Salary £3 3s per session

LIVERPOOL COUNTY BOROUGH—Assistant School M O (female) Salary £500 £25 £700 p a

MANCHESTER ROYAL INFIRMARY—Two Medical Chief Assistants Salaries £300 p a each

MILLER GENERAL HOSPITAL Greenwich Road S E—C O (male) Salary £150 p a

MONMOUTHSHIRE COUNTY COUNCIL—A M O Salary £500 £25 £750 p a

NEWCASTLE UPON TYNE ROYAL VICTORIA INFIRMARY—Two Medical Registrars Salaries £250 p a each

PRINCE OF WALES S GENERAL HOSPITAL N—Hon Clinical Assistant

RADNORSHIRE COUNTY COUNCIL—County M O H (male) Salary £800 £25 £900 p a

UNCLASSIFIED

BELFAST QUEEN S UNIVERSITY—John Dunville Research Fellowship in Experimental Pathology Salary £500 p a

BRADFORD ROYAL INFIRMARY—Hon S

BRIGHTON NEW SUSSEX HOSPITAL FOR WOMEN AND CHILDREN—Hon Ophthalmic S

CHICHESTER ROYAL WEST SUSSEX HOSPITAL—Hon Anæsthetist

EDINBURGH ROYAL COLLEGE OF SURGEONS OF EDINBURGH—Conservator of the Museum and Director of Postgraduate Studies Salary £1 000 p a

HOSPITAL FOR SICK CHILDREN Great Ormond Street W C—Eunice Oakes Research Fellowship Salary £700 p a

INDIA GOVERNMENT—Professor (female) of Maternity and Child Welfare at the All India Institute of Hygiene and Public Health Calcutta Salary Rs 1 050 Rs 50 Rs 1 350 per calendar month

LITHGOW KING GEORGE S SANATORIUM FOR SAILORS—A M O (unmarried) Salary £200 p a

LONDON COUNTY COUNCIL—Assistant Pathologist to the Central Histological Laboratory, Archway Hospital, N Salary £650 £25 £800 p a

LONDON UNIVERSITY—University Chair of Radiology tenable at the Royal Cancer Hospital Salary £2 000 p a

MANCHESTER DUCHESS OF YORK HOSPITAL FOR BABIES—(1) Aural Registrar (2) Clinical Assistant to the Out patient Department

READING ROYAL BERKSHIRE HOSPITAL—Assistant Radiologist Salary £400 £500 p a, according to qualifications

SOUTH AFRICA UNION OF—(1) Senior Professional Officer (Physiology) (2) Senior Professional Officer (Biochemistry) Salaries £700 £25 £800 p a each

SUNDERLAND COUNTY BOROUGH—Deputy Medical Superintendent for Cherry Knowle Salary £550 £25 £650 p a

EXAMINING FACTORY SURGEONS—The following vacant appointments are announced Mells (Somersetshire) Cliffe (Warwickshire) Applications to the Chief Inspector of Factories, Home Office, Whitehall S W 1, by August 23

MEDICAL REFEREE UNDER THE WORKMEN S COMPENSATION ACT 1925 for the New Milton, Scarborough and Whitby County Court Districts (Circuit No 16) Applications to the Private Secretary, Home Office Whitehall, by September 3

To ensure notice in this column advertisements must be received not later than the first post on Tuesday mornings

Notifications of offices vacant in universities medical colleges and of vacant resident and other appointments at hospitals will be found at pages 31 32 33 34 35 36 37 38 39 42 and 43 of our advertisement columns and advertisements as to partnerships assistantships and locumtenencies at pages 40 and 41

APPOINTMENTS

BACK FREDERICK M B, B S, D P M, Medical Superintendent Sunderland Mental Hospital, Ryhope Co Durham

GRAY JOHN E M B, B S Junior Surgical Registrar, Royal Victoria Infirmary, Newcastle upon Tyne

O REILLY T J M D Medical Registrar, St John Clinic and Institute of Physical Medicine London

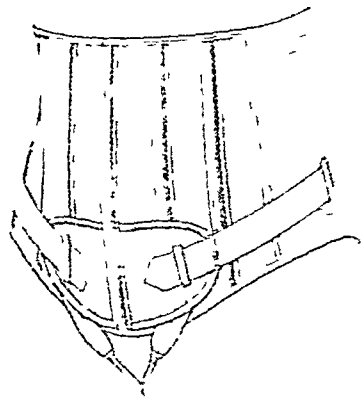
EXAMINING FACTORY SURGEONS—W C Sharp M B Ch B for the Cleland District (Lanarkshire) Jean W Symington M D for the Johnstone District (Renfrewshire) E S White M R C S L R C P for the Bath District (Somersetshire) T F Greenwood, M R C S, for the Horncastle District (Lincolnshire)

SALTAIR SURGICAL SERVICE

Guarantee
"We guarantee to alter exchange or accept the return of any appliance without cost ordered by the Medical Profession if not found Suitable within fourteen days from date of supply"
Salt and Son Ltd.

SALT'S VISCEROPTOSIS BELT

POSITIVE SUPPORT FOR THE ENTIRE VISCERA



● Salt's Visceroptosis Belt not only affords uplift to the lower abdomen it actually provides comfortable and complete support for the **whole of the viscera**

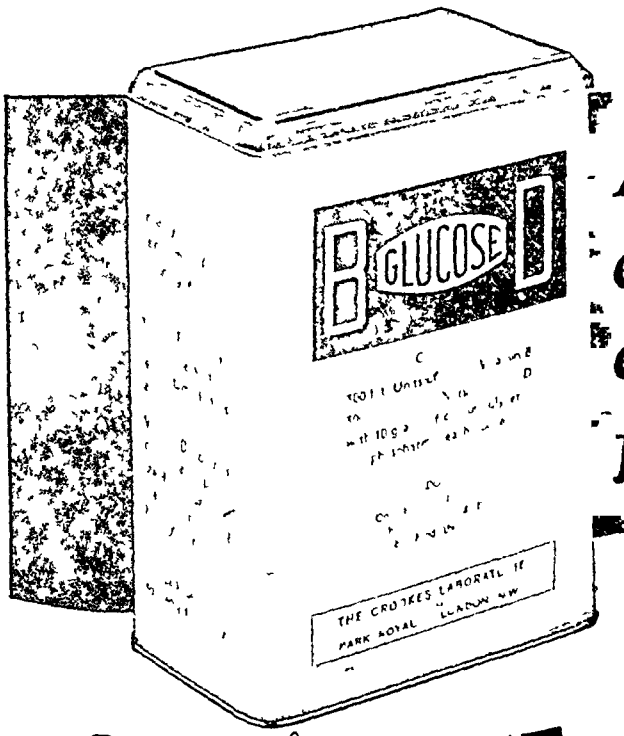
For the foregoing reason this particular Belt is also extensively used for post-operative cases where support above the umbilicus is required

Its consistent efficiency obviates the necessity for corsets in many cases

Upon request we shall be pleased to send the latest edition of Salt's Corset and Belt Book to any medical man This book gives full details and Measure/Order Forms for all SALTAIR individually-made Appliances

SURGICAL SERVICE SALTAIR

SALT & SON LTD BIRMINGHAM 2



A pleasant easily assimilable energising food....

Crookes' Glucose B.D.

MAY BE TAKEN IN FRUIT JUICE, FOOD OR TEA

Each ounce of Crookes' Glucose B D contains—

Vitamin B 1	300 Int Units
Vitamin D 3 (Natural)	300 Int Units
Calcium Glycerophosphate	10 Grains

VITAMIN B 1

to stimulate the appetite, render more efficient the digestion of food in the intestine, assure normal growth and energy in children and correct lassitude, nervous symptoms and poor appetite in adults

VITAMIN D

to promote normal growth, bone and teeth formation in children and in later life to correct Calcium and phosphorus metabolism due to a lowering of the phosphorus content of the body set up by faulty absorption

CALCIUM GLYCEROPHOSPHATE

in conjunction with Vitamin D ensures maintenance of the correct Calcium-Phosphorus balance

GLUCOSE

—the most readily available of all energising food-stuffs—present in its finest medicinal form

PRICES
16-oz tins - - - 2/6
Special quotations for quantity

SPECIMENS SENT UPON APPLICATION

THE CROOKES LABORATORIES (British Colloids Ltd.), PARK ROYAL, LONDON, N.W 10

Telephone Willesden 6313 (5 lines) Telegrams Collosols, Harles, London

T.G.S.

Published by the Proprietors the British Medical Association Tavistock Square, London W C 1, and printed by Eyre and Spottiswoode Limited East Harding St Fleet St London E C 4 Printed in Great Britain Entered as Second Class at New York U S A Post Office

normal individuals however refused to react and they usually disliked the sea and were better elsewhere Sea bathing itself if followed by a glowing feeling was most beneficial but it should not be overdone in the early stages and by those whose reaction was poor A bathe was followed with advantage by warmth friction and sunlight Sir Henry preferred to have the very sick and children under 5 years for an initial period at Alton before moving them to Hayling Island because if they were over stimulated their appetite might increase but their digestion could not cope with the food They lost weight became irritable and often ran a slight fever

Dr J INGLIS CAMERON (Glasgow) stressed the psychological aspect and demonstrated the value of elliptical movements to produce suppleness rather than strength Surgeon Lieutenant Commander L J CORBETT R N (Portsmouth) stated that in the Navy the medical officer was paid to keep men fit Not enough stress was laid on the correct starting position for exercises In his experience javelin throwing was the most efficacious method of producing the perfect female figure and poise He was astonished at the rapid improvement in the physique of recruits under training and the increase in exercise tolerance and vital capacity Ten minutes in the open air was the routine spell of physical training but medical supervision and graduation of exercise were most essential Profesor W P KENNEDY (Baghdad) pleaded for education of the public on the working of the body and in simple physiology

Dr B V DUNN (Torquay) had noticed more obstetrical difficulties in the extremely athletic mother than in the average woman Dr DOREEN NIXON (Bristol) said she found lectures on personal hygiene were more popular than those on general hygiene Cold bathing was of no harm during menstruation if followed by a glowing reaction Dr K R C HALLOWES (Torquay) stressed the importance of making patients feel they were improving, and hence the value of occupational therapy in conjunction with physiotherapy He advised women not to bathe in the sea the day before and the first day after menstruation Sea air was of value without sun and therefore shelters were to be recommended

Dr A R NELIGAN (Droitwich) mentioned the importance of posture training and the fostering of pride in position and use of the body He advocated the use of a badge in schools to mark those who had attained good poise Dr A E CARVER (Torquay) emphasized the necessity for the individual having a will to be fit this needed gradual education He believed that a custom of regular medical overhaul would destroy the lay fear of this ordeal He advocated two meals a day for many older people

SECTION OF MEDICAL SOCIOLOGY

Friday July 22

Co-operation in Public Health

With Professor CHARLES SINGER President in the chair Sir WILLIAM WILLCOX opened a discussion on Co operation in Public Health Administration His paper was in part a recapitulation of his arguments in opening a similar discussion recently in the Kensington Division (*Supplement* July 2 p 6) The medical officer he said must be supreme but he needed the close co operation not only of specialist experts but of the general practitioners of his district Co-operation would be facilitated by the appointment of a consultative medical advisory committee consisting of representatives of the local practitioners the medical officer of health to be chairman At post natal child welfare and immunization centres to take these as examples there were many opportunities for the general practitioner to be of enormous help and it was important that practitioners consultants as well as general practitioners should equip themselves for their responsibilities With regard to the consultation on hospital services as laid down by Section 13 of the Local Government Act 1929 he drew attention to the lead given by London Manchester and Liverpool Everything possible should be done to close the gulf which had existed between municipal and voluntary hospitals

Position of the M O H

Professor R M F PICKEN (University of Wales) said that if the issue were simply co operation between medical officers and private practitioners it would be easily adjusted They were all trained in the same school spoke the same language and tended to fraternize But the officer was part of a machine which he must strive to make efficient If his authority determined that things were to be done in a certain way he must loyally see that that was done even though the method was not generally acceptable to his profession It was unthinkable that he should conspire with his medical colleagues to undermine the decisions of his council Parliament had placed on local authorities an increasing burden of clinical responsibility often the result of propaganda by the profession itself all of which was making it increasingly difficult to draw a clear cut line between the province of the medical officer and that of the general practitioner If medical benefit had covered dependants from the beginning some of the departmental activities might never have been necessary The atmosphere of suspicion created by these modern developments could be made less fiery by any means which would foster co operation between medical officers and the rest of the profession The most valuable of the existing advancements for such co operation was the interpenetration central and local between the executive bodies of the Association and the Society of Medical Officers of Health

The General Practitioner and Midwifery

Dr J A BROWN (Birmingham) said that it was not realized by medical officers of health and the authorities which employed them that every doctor working on a contract basis was an assistant medical officer The difference was that the medical officer as commonly understood aimed at individual health through communal health and the general practitioner at communal health through individual health The obvious machinery for local co-operation was the British Medical Association through the Divisions the boundaries of which were usually coterminous with those of the local authorities It would not be a difficult thing for the local authorities to hand over to the general practitioner all the purely medical work done for expectant mothers at the ante natal centre this work could be done at the surgery or at the patient home the welfare centre being available as a consultation clinic in difficult cases In return the general practitioner must be prepared to fill in gaps which might exist in his knowledge of ante natal and post natal care and to perfect and carry out an ante natal scheme in conjunction with and to the satisfaction of the medical officer of health The proper adviser for the expectant mother and the best attendant at confinement was the patient's own doctor

Co-operation in Practice

Dr G N GEBBIE (M O H Hull) gave instances of co operation in his locality Most of the members of his staff were members of the British Medical Association and he himself was on the council of the East Riding Branch In areas where co operation with the British Medical Association existed there was no need for the appointment of a special medical committee to deal with a sudden public health emergency The health administrator was now asking himself whether the passing of the *Physical Training and Recreation* Act did not inaugurate a new epoch In the past the endeavour had been to make healthy the unhealthy in the future it must be to make the healthy fully efficient This new phase meant a changed outlook for the public health administrator and for the general practitioner also Co-operation of the whole profession was essential if it was to lead as it should the movement towards positive health The public health administrator must realize that he was first and foremost a medical man and a member of a great profession The general practitioner although a member of one of the most individualistic of professions must envisage the community and not the individual patient as the unit.

Difficulties in Co-operation

SIR KAYE LE FLEMING (Chairman of Council) drew attention to some outstanding difficulties in bringing about co operation In his belief a large number of public health authorities did not know they had any power to co operate at all Many authorities failed to realize how deeply underlying many of their problems was a medical issue Some local health authorities were extremely unwilling to have doctors sitting on their committees Their members often knew really nothing about health they relied on their medical officer and did not mind exposing their ignorance to him but they did not want other medical men sitting with them Perhaps also they disbelieved that the general practitioner was in a position to supply them with information and help There were faults upon the general practitioners side also He would not apportion the blame for the lack of the spirit of co operation which prevailed The root cause was that the medical student in his education was never taught anything of his responsibilities towards members of his own profession He looked forward to the day when those responsible for the training of medical students would say to them, 'When you go out into practice you have no right to sit alone in your own little circle seeing how much money you can make by attending patients who are ill You will remember that you have duties to the profession as a whole to the public as a whole and to the State

DR PETER MACDONALD (York) did not share the pessimism of the last speaker Many of those who had been concerned for some time with the relations between the profession and representatives of the local authorities believed that the atmosphere of suspicion had practically disappeared so far as general practitioners and medical officers of health were concerned had largely disappeared as between the profession and the Ministry and was disappearing rapidly as regards the relations between the profession and the local authorities

DR J W BONE (Luton) said that he had spent a good deal of time trying to get established a scheme of pathological services in his locality with a laboratory in the hospital but after long discussions with the authorities they had insisted on a laboratory in the basement of the town hall In regard to maternity services the aim seemed to be to get nearly all the cases into maternity hospitals with whole time officers, with specialists perhaps coming from thirty or forty miles away while men who had spent their whole career doing midwifery had no place in the scheme Would it be deemed the acme of co operation for the private practitioner to commit suicide?

A Lay View

COUNCILLOR H M MEDLAND (Plymouth) a Vice President of the Section said that he felt as if he had come into a syndicalist society of people who believed in the profession running everything themselves In Plymouth on setting up a municipal hospital, they had been extremely anxious to get the co operation of everybody concerned Representatives of the medical committee of the voluntary hospitals said that they would be delighted to help which they did by asking the municipal hospital first to take all the chronic bronchitis cases then the very bad rheumatic cases then the cases of advanced cancer That was the sort of co operation they offered His experience of pathological departments was that it had never been possible to make them go until the public health committee had been induced to foot the bill by more than half In maternity and child welfare services the doctors had missed the boat He did not see why doctors should expect to be co opted on public health committees without going through the hurly-burly of popular election The voluntary hospitals would fail unless they had municipal assistance and if they took such contributions they must expect to concede representation on their management

DR T RUDDOCK-WEST (M O H Norfolk) said that in his area co operation was very much in evidence He himself knew practically every general practitioner Almost all the welfare work was done by general practitioners There was no difficulty about co option on committees He believed in continuity the same practitioner so far as possible should do the ante natal work and the maternity and child welfare work DR LETITIA FAIRFIELD said she had been an official throughout her career but never a bureaucrat The patient's welfare was the crucial test DR J BENNETT (Warrington) said that he had been eighteen years in the public health service but his bias was in favour of the general practitioner At the same time in working maternity and other schemes, practitioners were not always above reproach He instanced a maternity home intended for difficult cases but to which practitioners sent many normals

SIR WILLIAM WILLCOX in reply said that he was in favour of co option of medical men on subcommittees but not on the councils themselves for such seats they should run the gauntlet of popular election He hoped the outcome of the discussion would be that the Branches and Divisions would get into communication with medical officers of health in their different districts and talk the matter over as to how co operation could best be brought about Professor PICKEN also in reply said that while co operation was an admirable word so much time could be spent in trying to work out methods that the spirit of the thing faded away The solution of the whole problem would be found in that admirable document—'Proposals for a General Medical Service for the Nation

MR R R BLEWETT of St Day Cornwall addressed the Section on Some Medical and Social Changes in a Derelict Mining Area A report of his remarks and some comments thereon appeared in the *Journal* of August 6 (p 293)

SECTION OF OPHTHALMOLOGY

Friday July 22

Corneal Transplantation

With DR C B F TIVY (Plymouth) a Vice President in the chair MR J W TUDOR THOMAS (Cardiff) read a paper on corneal transplantation giving results of fifty six operations on forty-eight eyes a series extending over nearly eight years and showing 65·2 per cent of successes If only cases that could be regarded as favourable from the operative point of view were considered 92·3 per cent of successes were obtained Since 1936 he had used a modified technique and the results on a comparable basis were better all favourable cases were successes

SIR STEWART DUKE-ELDER and MR H CAIGER (Sheffield) expressed their gratification at the results and MR A RUCE GUNN related his personal experiences with one case of corneal grafting

Pathology of Glaucoma

The President SIR STEWART DUKE ELDER took the chair to introduce Professor K WESSELY of Munich who read a paper on some special problems in the pathology of glaucoma He drew attention to the difficulties in diagnosing glaucoma *in high myopia* The appearances of the disk in myopia tended to mask cupping the attenuated sclera interfered with tonometer readings and choroidal atrophy with the mapping out of field defects These difficulties could be overcome by stereoscopic ophthalmoscopy repeated tonometry and special care with perimetry He described in some detail thirty one cases of glaucoma in myopes, mostly of 10 to 20 D More important than the recognition of the fact that glaucoma occurs in myopes was the fact that myopic eyes were especially predisposed to it In anisometropia glaucoma tended to occur in the myopic eye only and there seemed to be a special predisposition in myopic eyes with aphakia He drew attention to a transient acute glaucoma frequently seen two to six weeks after operation for cataract in myopes and urged the sparing use of mydriatics in the post operative treatment of such cases Theoretically there was some basis for the view that high myopia was a kind of *buphthalmos* Another group of glaucomatous conditions that he discussed

was the rise of tension seen in haemorrhagic studies of the eye. The old view that the glaucoma was secondary was probably not valid. It was more likely that the two processes had a common factor.

The PRESIDENT emphasized the points brought out by Professor Wessely who he said had brought a wide philosophical outlook to the problems of glaucoma. Too much influenced by the teachings of Priestley Smith ophthalmologists tended to overlook glaucoma in myopes. It was well to recognize that glaucoma was not one disease but a symptom of a variety of conditions and that blockage of filtration was not the only cause. Professor A. J. BALLANTYNE (Glasgow) suggested that the glaucoma of high myopia might be secondary to chronic uveitis itself a part of the myopic process. Dr MARK GARDNER (Melbourne) gave the details of a case which supported the views of Professor Wessely as to the association of the glaucomatous processes with vascular disturbances. Mr W. S. BURR (Plymouth) had found that a glaucoma iridectomy prior to lens extraction in high myopia avoided the complications of glaucoma. In regard to glaucoma associated with arteriosclerosis he held that such patients were unsatisfactory subjects from the general point of view.

Contact Lenses

Mr A. RUGG GUNN read a paper on the Contact Lens Centre, its purpose and policy. He explained the workings of the centre which was now responsible for some of the finest work in this field. It was not run on any profit making basis; such surplus as was likely to be accumulated would be utilized to further the training of people for this work, for a Samaritan fund and to encourage further research. These activities were under the supervision of an advisory committee consisting of some of the leading figures in ophthalmology. Miss IDA MANN stressed the value of the centre as a research base. Others who took part in the discussion were Mr W. S. BURR (Plymouth), Mr J. M. BICKERTON, Dr MARK GARDNER (Melbourne), and Dr C. B. F. TIVY (Plymouth).

Miss IDA MANN showed a number of patients wearing contact lenses both of the Zeiss pattern and individually fitted. The patients illustrated the conditions for which such lenses could be used: high myopia, monocular aphakia, keratoconus, corneal scarring, and high hypermetropia. There was good tolerance in all cases; some patients wearing the lenses up to fourteen hours a day, and showing improvement in visual acuity over ordinary spectacles.

Vital Staining of the Fundus

Mr ARNOLD SORSBY in a paper on vital staining of the fundus gave an account of the experimental work that he and his colleagues had conducted to establish the clinical possibilities of vital staining in ophthalmoscopy. The difficulties that had to be overcome were the blood-brain barrier and the toxicity of vital dyes. When staining of the brain was obtained experimentally no retinal staining could be seen owing to the reduction of the dye to the leuco-base. In rabbits with retinal degeneration produced experimentally retinal staining was always present. The preliminary clinical use of this procedure had established its feasibility and had shown this to be possible in a variety of conditions of which the localization of holes and retinal detachment was an example. Mr J. W. TUDOR THOMAS (Cardiff) and Sir STEWART DUKE-ELDER asked about the possibility of avoiding general staining by using the dye locally. In reply Mr SORSBY stressed the difficulties and uncertainties yet to be overcome.

Mr A. L. CANDLER (Exeter) read a paper by himself and Mr N. L. CAPENER (Exeter) on the avian nictitating membrane. After briefly describing the anatomy and histology of this structure they showed that the membrane was protective and also that certain birds such as ducks and penguins completely closed the membranes when under water and saw clearly through them. Photographs taken through the membrane of ducks were shown. This profusely illustrated paper was discussed by the PRESIDENT, Mr A. RUGG GUNN, Mr R. W. PAYNE (Plymouth), and Mr J. M. BICKERTON.

EXHIBITIONS OF FILMS AND RADIOGRAPHS

A most interesting addition to the Scientific Sections at the Annual Meeting at Plymouth was a show of cinema films mainly in colour which was given on the afternoons of Wednesday, Thursday, and Friday, July 20, 21, and 22. The full list of films which were projected by Kodak, Ltd., with the name of the demonstrator was as follows: In the Section of Gynaecology and Obstetrics: Resuscitation of the Newborn, Dame Louise McIlroy. Section of Medicine: Parenteral Liver Therapy in Subacute Combined Degeneration of the Cord; Polyneuritis with Special Reference to Vitamin B, Dr. C. C. Lingley. Section of Pathology: Psittacosis Virus: A Study of Tissue Culture (With the late R. G. Canti), Dr. J. O. W. Bland. Section of Pharmacology: Variations to Anaesthetics in a Mouse Colony, Professor A. J. Clark. Section of Physiology: Difficulties of Posture and Equilibrium in Blind Children, Dr. Phyllis Kerridge. Section of Surgery: Surgery of the Heart, Mr. L. O'Shaughnessy; Sympathectomy for Hyperpiesis, Mr. A. Dickson Wright; Partial Thyroidectomy for Thyrotoxicosis, Mr. G. Armitage; Abdomino-perineal Resection of the Rectum, Mr. A. Lawrence Abel. There were also films on the Action of the Muscles of the Foot, Mr. C. Lambrinudi; Occupational Therapy in Rheumatoid Arthritis, Dr. Elizabeth Casson and Plaster Jacket for Sciatica, Mr. N. Capener.

Mr E. O. Goss, honorary radiographer to the Meeting, had also arranged an exhibition of radiographs and clinical photographs. Many of the photographs were in colour and were entirely his own work.

PSYCHOTHERAPY CONGRESS AT OXFORD

The following report of the tenth International Medical Congress for Psychotherapy held at Oxford from July 29 to August 2 is a continuation of that published last week at page 298.

Disorders of Adolescence

Dr EMANUEL MILLER opened the morning session on August 1 with a paper on the disorders of adolescence. This period was marked, he said, by an overflow of instinctual pressure where ego defences were weak or the development of a moral tyranny from within which was met by neurosis formation. Character traits might be hardened. The mental reactions might be petrified and the mind stay in a state of suspended animation. Society became a projection screen for the tragi-comedy of adolescent interpretation. The neurotic mechanisms were nearer to the surface than at other periods, clearer and more admixed with psychotic qualities. The problems arose out of the struggle of the maturation of functions that of the super-ego with the growing sexual and aggressive demands. Society must meet the aspirations which this phase of temporary disintegration tended to produce. Dr E. H. LARKIN suggested that psychotherapists tended wrongly to treat adolescence as being necessarily pathological. The attempt to get away from a primitive bigoted super-ego tyranny into the freer and more fruitful democracy of a religious system was not a pathological process. Dr LOWENFELD suggested that when the endocrine functions of puberty came into operation the whole primary system of the mind became recharged and the adolescent strove to express every part of it which had not yet been expressed and so to gain mastery of it. A varied society and a rich therapy could give him the material for this expression and enable him to adapt the primary material to the needs of his own personality and of the social life.

An Open Clinic for the Maladjusted

Dr IRA S. WILE (New York) explained the working of the Open Clinic for problems of juvenile behaviour. The child

and its parents took part in an open conference with the clinic officers and a large audience drawn from all classes and callings of society—the parents of the children attending the clinic, and interested persons The behaviour problem was thus regarded as a maladjustment between the child and his milieu The family was seen as part of the social organization and the discussion transferred the responsibility to the large group representative of society itself A new system of ethical values grew up from which everyone concerned would profit The Open Clinic served as a mouthpiece of society Emotional tensions were drained away from the child and its parents and an opportunity was given for effective suggestive therapeutics in the presence of the mass Dr VAN DER HOOP asked whether the psychic examination was like the clinical examination 'to the waist only' Dr WILE replied that it was total and that all sexual questions were brought fully into the light

Love, Maturation, and Monogamy

Dr VON HATTINGBERG speaking on love as a process of maturation said that love was an indispensable function in the development of the personality Its importance had increased with the increase of consciousness This method of development was one of the basic ideas of analytical psychology and the silence of the literature about it was remarkable It took place only step by step and needed intimate human contact with the sexual partner as a vital stimulation Love had the task of making good the harm done by hyperconsciousness It made bearable the unavoidable growing pains caused by consciousness and the inner conflict between the nameless groups of forces aroused by the love passion Love expressed the hidden repressed childish side of the personality and provided a kind of reserve for the expression of primitive tendencies The relationship of conscious individuals in marriage developed into an analytical situation The repeated upheavals provoked by the reciprocal inner disturbance of the partners could lead to the realization by each of his personality This possibility gave a psychological background to the ethical demand for an indissoluble monogamous marriage

Dr O H WOODCOCK mentioned the contribution of Adler to the subject he had regarded marriage as a constructive task demanding equality between the sexes and monogamy as indispensable for full maturation

Stage Fright

Dr F VOLGYESI (Hungary) in a paper on stage fright and neuroses in professional life said that this class of neuroses clearly demonstrated a long series of neurological and glandular reactions and interrelations It could involve organic causes or short circuiting within the insulation of the sympathetic system, congenital abnormalities and accidental factors It offered a particularly favourable field for hypnosis and suggestion In a study of over 25 000 cases he had gained an insight into the mechanism As Pavlov had shown every nervous irritation first excited isolated nerve tracts and centres but if energy were accumulated or the excitement were very intense it would irradiate adjacent centres and become general The whole body might ache with the generalized tension Professional neuroses primarily represented associative disturbances caused by psychological factors in the temporal and frontal lobes Therapy must aim at interrupting the subjective phobia leading to the feeling of panic and breaking the vicious circle at producing an intimate and confidential relationship with the patient and at training the patient to discipline himself by turning his attention from the fixed idea and opening other channels for the stored energy He must see his troubles in their true proportion and harmonize his neurotic feelings with the outer world

A paper by Professor ERWIN STRANSKY (Vienna) on the relationship of subordination and authority in psychotherapy was read in his absence Dr H NEUGARTEN (Germany) explained the phenomena of psychotherapeutic reorientation and religious rebirth

Psychotherapy in Organic Disease

Dr B STOKVIS (Holland) dealt with psychotherapy for patients with circulatory disease The circulatory system like every other somatic system he said had a psychological as well as a physical function Most sufferers from circulatory disorder needed psychotherapy especially if the physical condition were overlaid with neurosis or depended on spasm He described the use of the electromagnetic tensograph for measuring essential hypertonia continuously and showed the psychic factors in its causation Active relaxation and Schultz's autosuggestive methods were valuable but the important requirement was a good rapport between physician and patient

Dr A T M WILSON in an address on the psychogenic factor in haematemesis gave the results of a study of fifty cases of acute peptic ulcer or chronic peptic ulcer with complication Of fifty-eight haematemeses forty-five had been preceded by some gross alteration in the patient's life of a kind likely to produce emotional stress In ten of the remainder there was evidence of precedent gross emotional stress The resulting psychological tensions were such as to threaten security—independence or dependence Precocious and apparently successful assumption of adult responsibility had often been concerned in the development of their characteristic traits and strong primitive moral values Haemorrhage often relieved the tension for several days The selection of the gastric function as the site of the symptoms might result from similar tensions in very early phases of development Enjoyment and use of anxiety and a martyred attitude were common This might be resistant to psychotherapy but the ulcer producing conversion might be broken down without much difficulty The patient must first be helped to convince himself of the sequence of external and internal events

Dr D ANSAC (Yugoslavia) contributed a study of psychotherapeutic possibilities in organic disease illustrated by two cases The first patient a young woman suffering from a severe disseminated encephalomyelitis was treated by hypnosis for neurotic symptoms and extensive movements of the leg were obtained with and later without, hypnosis When the treatment was interrupted the symptoms became worse The second case was one of hemiplegia with motor aphasia in a rich man who at first made little progress but was later much improved by emulating the superior progress of a workman who suffered from a similar condition Psychic components were too seldom looked for and dealt with The effects of organic injury could often be overcome

Dr W BROWN said that such a trauma would certainly increase suggestibility Certain cases of disseminated sclerosis and paralysis responded to hypnosis with relaxation treatment. An organic neurological disturbance was always accompanied by a psychological overlap Self-understanding through analysis gave help but every case of organic trouble would benefit by autosuggestion and progressive relaxation

Dr CLIFFORD ALLEN tracing the relation of the psyche to the endocrine glands pointed out the reciprocal action of the psyche and the glandular system In his opinion all hypersecretory endocrine disease in which there was no neoplastic disease was psychogenic Similarly the glandular functions could be inhibited by psychic factors

Professor JUNG closed the conference by answering in detail a number of questions which had been submitted to him in writing During the conference the University of Oxford conferred upon Professor Jung an honorary doctorate of science and on his return in his robes to the congress hall delegates stood and applauded Dr H Crichton Miller said that their applause expressed their appreciation and that of Oxford and the world of his great services to psychotherapy

On July 30 the Vice Chancellor of the University Mr A D Lindsay held an evening reception in the Ashmolean Museum On the morning of Sunday July 31 delegates and their relatives went on an excursion to Henley and Wargrave and made a river trip in motor boats On Monday evening the Mayor and Mayoress of Oxford gave a dance in the Town Hall

THE NATIONAL HEALTH IN FIGURES

ANNUAL REPORT OF THE MINISTRY

In a foreword to the Annual Report of the Ministry of Health[1] Dr Walter Elliot compares conditions as they were a hundred years ago when Edwin Chadwick began his reforming work with what they are to-day The general death rate has been halved the infantile death rate reduced to one third the tuberculosis death rate to one sixth In 1838 over 1,200 persons per million died of typhoid over 1 000 per million of smallpox over 20 per million of cholera The typhoid death rate is now down to 5 per million and from smallpox and cholera no deaths were recorded in 1937 Dr Elliot adds We are only beginning to realize how much can be done even in the case of those who are at present considered normal and fit

Vital Statistics

But, after all this is the nineteenth annual report of the Ministry and the record of the post war era though less dramatic than that of a century is perhaps more encouraging Take 1921 as a convenient date The general death rate was then 11 3 it is now 9 3 The infant mortality has fallen during those years from 83 per thousand live births to 57 the tuberculosis mortality from 1 117 per thousand of the population to 0 657 The figures for Wales the subject of a separate section are slightly in advance of those for England—a general death rate of 10 5 an infant mortality rate of 63 and a tuberculosis death rate of 0 862

The report embodies the usual tables relating to tuberculosis venereal diseases enteric fever, and cancer The notifications of new cases of tuberculosis are slightly up both in England and in Wales A decrease in the incidence of syphilis but not of gonorrhoea is noted Despite the Croydon outbreak the notified cases of enteric fever fell from 2 490 in 1936 to 2,149 in 1937 but the first figure was swollen by the Bournemouth outbreak of that year The number of deaths from enteric was 206 a rate of 0 005 per thousand which is about the average of the last eight years The total number of deaths from cancer in England in 1937 was 66 965 the highest figure yet recorded—an increase of some three hundred on the previous year It is stated that plans are being worked out in 81 areas for co operation between local authorities and the radium centres at voluntary hospitals with a view to making the treatment at the centres more widely available The notifications of diphtheria, pneumonia dysentery, and puerperal pyrexia or sepsis are up on the year those of erysipelas and scarlet fever are down

Maternity Services

The Ministry expresses itself well satisfied with the result of its two pushes —the Fitter Britain exhibit at Glasgow and the National Health Campaign The full effect of the latter cannot yet be assessed but it is said to be reflected in the figures of attendances at infant welfare centres and ante natal clinics These figures for 1937 show a considerable increase though the campaign did not begin until the autumn of that year The children under 1 year of age attending the centres reached a number equalling 63 per cent of the total of notified births (as compared with 60 5 the previous year) while the percentage of expectant mothers attending the ante natal clinics reached 54 1, again a record figure (against 48 8 the year before) The maternal mortality in England fell to 3 11 per thousand births comparing with 3 6 in 1936 and 3 9 in 1935 The proportion ascribed to puerperal sepsis is 0.94 compared with 1 34 in 1936 In Wales the maternal mortality was 4 54 considerably higher than the English figure although a noteworthy reduction on the Welsh figures for the previous six years which have always been over 5 0 and in 19 reached 6 6

It is too soon again to estimate the effect of the Midwives Act but in the country generally the work of establishing a salaried service of fully qualified midwives available for attendance on mothers in their own homes at a cost commensurate with their means has been substantially achieved During the year 649 additional maternity beds (including ante natal beds) were provided by the local authorities and the number of municipal maternity homes was increased by three Consulting services enabling midwives to call in a doctor at need have been established by 340 authorities out of a total of 365 and mobile emergency units available for women who cannot safely be removed to hospital have been completed by 56 authorities while 184 have put into operation the service of home helps

Public Health and Hospital Policy

Ten years ago the Royal Commission on Local Government laid it down that medical officers of health should wherever possible be whole time officers in the public service and should not engage in private practice further that in areas where the duties were not sufficient to occupy a whole time officer the county council should be required to make proposals for the combination of areas for this purpose The present report says that the Ministry has taken every opportunity to urge local authorities to follow this course Arrangements have been formulated in all except nine of the counties in England and in certain instances the Ministry has not hesitated to use its power of requiring the formulation of a scheme which was more or less in default formulating it himself Just under half of the county districts of England are now served by officers who are restricted as to private practice and of the officers including temporary officers approved during the year under review 93 will not practise privately At the end of March last out of the total of just over 1 000 medical officers of health in England 425 did so engage

The report mentions that a survey of the whole of the hospital and institutional facilities of the country has been in progress Sir George Chrystal the Secretary of the Ministry, told the Press representatives at a reception at which he expounded the Annual Report that this survey had now been completed and was likely to yield most useful results not only in the event of war which was its primary purpose, but in the normal planning of institutional facilities

The report states that the appropriation as general hospitals under public health powers of the institutions taken over from the old boards of guardians is making progress although in the counties where there are special difficulties the progress is slow Out of the 109 hospitals with a total of 57 318 beds so far appropriated only 22 belong to the counties (excluding for this purpose the county of London) and half this number are in the metropolitan counties of Middlesex and Surrey It is hoped however that the time is not far distant when the majority of beds in local authority hospitals will be provided under public health powers In patient admissions to these hospitals are increasing by about 50 000 a year and out patient attendances (very largely in the nature of attendances for continuation treatment of patients previously admitted to the wards) increased by not far short of a quarter of a million Major surgical operations done at these hospitals and institutions numbered 131 000 an increase of 10 000 on the year One does not expect to find current controversy mirrored in a report of this description but co-operation between voluntary and local authority hospitals is declared to be growing—as a result sometimes of the setting up of committees for formal consultation in connexion with particular schemes at others of the establishment of joint consultative com-

[1] H M Stationery Office Cmd 5801 (5s net)

mittees aiming at a liaison of a more continuous character or, again of joint hospital boards such as have come into being in Manchester and in Oxford and district

National Health Insurance

The insurance practitioner comes in for his usual 'pat on the back' after he has been reminded of his kick downstairs (that is not the Ministry's expression) in the refusal of the Court of Inquiry to raise the capitation fee A review of the disciplinary proceedings says the report gives every reason for thinking that there has been no deterioration in the high standard of service reached by insurance doctors and chemists though with regard to the chemists to be sure, there is an increased number of cases (161 as compared with 119 the previous year) in which money has had to be withheld on account of breaches of the terms of service, mostly substantial inaccuracies in the dispensing of test prescriptions In only one case during the year was a representation made by an Insurance Committee that the continuance of a doctor on the medical list was likely to be prejudicial to the efficiency of the service, and even in this one instance the representation was later withdrawn In only 92 cases in England and 16 in Wales was remuneration withheld from practitioners on account of infringement of terms of service, and only in a very small number of these did the patient suffer from the doctor's negligence in attendance the majority of derelictions were failure to keep proper medical records or to furnish information required by regional medical officers or some non-observance of the medical certification rules The largest sum withheld (in two instances in England) was £50 A form of irregularity which the Welsh Board of Health views with grave concern is the issue of certificates of incapacity by a practitioner when he has not seen the patient In one case this was judged so seriously that a heavy fine, again £50, was imposed

The cases of excessive prescribing come into a different category The regional medical officers paid 861 visits to doctors whose prescribing appeared to call for explanation but in only six cases did the Minister feel it necessary to refer formally to Panel Committees the question whether the doctors' prescribing had imposed charges on the available funds in excess of what was reasonably necessary, and in all of them it was found that such excess had been imposed But altogether it is a wonderful record of absence of serious complaint, and it must be remembered that the insured population of England and Wales now numbers 17¾ million persons as compared with 11¼ million when National Health Insurance came in a quarter of a century ago Two developments during 1937 from which much is hoped are the extension of benefit to juvenile contributors—the 14–16 class—and the scheme for postgraduate study for insurance practitioners

Miscellaneous Items

There is much else in the Annual Report of the Ministry to make it one of the indispensable documents of the year for the social student There are sections dealing with the Ministry's action in respect to foods and drugs, with sanitary services, with public assistance, with housing and town planning On the subject of nutrition it is mentioned that quantitative surveys on family diets are being carried out on the recommendation of the Advisory Committee on Nutrition of which Lord Luke is chairman in half a dozen rural districts, and it is believed some valuable data will be collected to supplement the Ministry of Labour survey on family budgets A reflection of the National Health and Fitness Campaign may perhaps be found in the fact that the public open space purchased during the year measured 12,113 acres as compared with 9,059 the previous year, and that the loans sanctioned for public baths and swimming pools amounted to over a million pounds as compared with a little more than three-quarters of a million in 1936

Correspondence

Abortion and the Law

SIR,—Mr Alick Bourne's letter in the *Journal* of July 30 (p 254) clears a confusion that was in my mind at least Before the case was tried it seemed to me that Mr Bourne had acted for the sake of a cause thereby risking his professional reputation and his freedom When the case was tried the fight for a principle seemed to be dropped Instead the case turned on the jury's opinion as to whether or not Mr Bourne was justified in terminating a pregnancy in a certain child And now one understands from his letter that the real issue after all is a principle He is standing for a further definition of the present law to the end that abortion may be legally recognized not only when *there is a danger to life but also when* there is a serious danger to health I believe that there is a large body of moderate opinion in the profession that is opposed to the views set forth by Mr Bourne, and I would like to state an alternative case in the following terms

The law as it stands is satisfactory Abortion is legally recognized when life is in danger and this interpretation of the law has always been recognized and acted on It is in keeping with general medical practice for we doctors are primarily concerned with life and death In simple terms it is our duty and our object to preserve life Life is more important than health Many a life that has been saved from the jaws of death has afterwards been a good life, even though health has not been recovered In fact we do not take the prospect of health into account when we are trying to save a life

The very uncertainty of the law as it now stands is an advantage It places a great responsibility on the members of the medical profession and it leaves the decision as to the life or death of a foetus to their discretion There is no doubt that some of us on account of a lack of courage or for some other reason fail to maintain the high standard expected of us If a man falls below the standard of integrity that he has set himself he may find himself in a difficulty and he may be greatly worried But that the members of our profession have in the past generally acted well in the opinion both of their colleagues and of the people is proved to my mind by the fact that I remember no single occasion on which a doctor of good repute has had to stand his trial by jury for unlawfully terminating a pregnancy

If the law is to be altered by a further definition it will be no easier for us doctors to interpret than it is now There may be as little difference between one case and another as there is between the numbers 1, 2 and 3 A further definition will leave us with the same difficulty of judging between 2 3, and 4 And because the definition is more exact we shall be more likely to break the law in such action as we take

If, nevertheless the powers that be determine to frame a law that is more explicit, and so restrict both the freedom and responsibility of doctors, then I enter an earnest plea that they will keep to such primary considerations as life and death, whether it be in terms of a life that may be lost or a life that may be wrecked and refrain from introducing any phrase that suggests as a primary consideration a danger to health To qualify the danger by the word "serious" will make for difficulties The human heart *often quails on the brink of great adventures* The first month or two of a pregnancy may be the beginning of

the greatest adventure in a person's life and the addition of the word "serious," as suggested by Mr Bourne to qualify anticipated danger will lead to trouble.—I am etc,

London W 1 August 1 GEOFFREY EVANS

SIR,—To those who are in general agreement with your leading article on the Bourne trial it must seem that Dr F M R Walshe (*Journal* August 6 p 315) has misinterpreted the significance of the verdict. This is surely not affected in any way by the consideration to which he has directed his powerful polemics—namely whether and how far danger to health connotes danger to life. The important fact is that the verdict has clarified the position in law of the doctor who induces abortion on adequate grounds based upon danger to health. In the past the doctor who has carried out abortion for reasons other than danger to life as this is ordinarily understood—that is imminent or serious danger of death—has had no security in law. The verdict has now regularized a long standing medical practice. This is a different issue from that inherent in Dr Walshe's statement that to the aphorism life depends upon health the inference that danger to health necessarily connotes danger to life is a *non sequitur*.

While as I suggest this raises another and quite different issue it is perhaps relevant to point out that it would be difficult to cite influences which damage the health of the pregnant woman which do not at the same time connote not certain death but a real mortality risk. The essential medical problem remains as it was before the verdict—namely what measure of danger to health and life is an adequate indication? This like all such problems must remain a matter of discussion and in general will be determined by the average good sense of the profession. Neither is it easy to follow Dr Walshe in his view that the verdict should make this responsibility of the profession more difficult than it already is unless we admit that it may be exploited for illicit and extremist purposes. But this is not so much a medical as a sociological implication.

Finally, I wonder if we have been quite honest with ourselves in regard to the question of rape. It can hardly be in doubt that as the natural and indeed only court of appeal in circumstances of a heartrending nature the obstetrician is sometimes influenced by humanitarian considerations in performing abortion on such ravished children. The medical indications, though obvious may in themselves be less urgent than are found in many married women for whom such relief is refused. Are we not correct in assuming that the public conscience is prepared for a law to deal specifically with the tragic case of the raped child?—I am etc.

London W 12 August 8 JAMES YOUNG

SIR,—The recent case in which Mr A W Bourne was involved received wide publicity in the lay press and was also the subject of two leading articles in your issues of July 23 and 30. May I as a general practitioner be allowed to say that personally I cannot see that the position is any clearer to us now than it was before this case was heard. I have always been clear in my own mind as to what constituted genuine and perfectly legal grounds for terminating a pregnancy in a woman and such a course would never be entered upon without the concurrence at least of two other independent medical men of whom one at least should possess higher qualifications and greater experience in surgery or gynaecology. I imagine that all my colleagues and others in general practice are equally clear in this matter and in order to observe the law and strict medical etiquette would act as I have indicated.

It may be that in a really advanced stage of civilization the law will be different and that then no woman will be forced to become a mother unless she is willing and anxious so to be. Many advanced and serious thinkers in various fields hold this view to-day and I am very much inclined to it myself. However it is not for us medical men to make or to modify the laws of the land (apart from pressing for necessary reforms as citizens) but being in a special degree of relationship and trust with the State to observe the laws as we find them to-day.

We practitioners understand our duty and our position quite clearly we are not to connive at or to procure miscarriage simply because the patient desires to be rid of an inconvenient pregnancy. Mr Bourne's case was an exceptional one and I cannot see how it has clarified or defined our position any better at all. It is difficult to see that absolute consistency prevailed throughout the entire length of this case or that the same grounds were taken for clearing out this girl of 14½ all the way through. To be logical it should be remembered that in the earlier instance Mr Bourne accepted the case from Dr Joe Malleson and agreed to terminate pregnancy before he had even seen the child. It is impossible to resist the conclusion that Mr Bourne acted *ab initio* on purely sentimental moral and sympathetic grounds. But he did not stand his trial on those grounds at all. He defended himself on the grounds of it being medically desirable and necessary to terminate the girl's pregnancy—a very different matter. Every member of the jury would naturally wish his (or her) daughter in a similar plight to be accorded the same relief. No witnesses were called by the Attorney General to uphold the view that the child might quite well and safely have been allowed to go to term.—I am etc,

CHARLES A H FRANKLYN
Lincoln August 2 M D M.R.C.S

Diabetes and Pulmonary Tuberculosis

SIR,—If I may be allowed to add a note to Dr S Roodhouse Gloyne's article in the *Journal* of July 30 (p 218) I should be grateful because in this country there has been very little apparent interest in this problem.

At the end of 1934 of the 1 000 diabetics who had attended the clinic at King's College Hospital forty two had pulmonary tuberculosis, two of these had developed diabetes while under treatment for the tuberculosis making an incidence of 4 per cent in those with diabetes. The mean incidence of figures published at this time among diabetics was in the U.S.A. 2 6 per cent in the Argentine 5 2 per cent in Austria 7 6 per cent.

The present rise in the number of deaths from diabetes and the decline from tuberculosis, mentioned by Dr Gloyne can be contrasted with war time experience when there was a decrease in the mortality from diabetes and an increase in the mortality from tuberculosis (Registrar-General's *Statistical Review for 1934* p 101). Is it fantastic to compare the malnutrition enforced by a blockade with that produced by an insufficient supply of insulin? Though what alteration from the normal is responsible for the encouragement of the seed is still a matter for discussion. It is to be hoped that the higher carbohydrate diets and other methods of treatment of both diseases will reduce the mortality.

The tendency of the diabetic to develop tuberculosis should not be forgotten and, as the onset appears to pro-

duce fewer symptoms than usual it might be worth while making a periodic radiological examination in all diabetics to find it as soon as possible in the 4 per cent or so who are likely to develop it—I am, etc

Southampton August 1 G D PIRRIE

Undescended Testicle

SIR—I was not only impressed with the clarity and logical reasoning of Mr Denis Browne's article on this subject in the *Journal* of July 23 (p 168) but I was also grateful to him for introducing me to the "superficial inguinal pouch" Having read this article I determined to review all the cases I had treated with 'pregnyl' in the light of his classification

I have felt for some time that there would be less misunderstanding between the surgeon and the endocrinologist if the anatomical position of the testicle in the cases treated could be more accurately defined My experience of the surgical treatment of this condition is limited to the period when I served as assistant house-surgeon and later as house surgeon at this hospital eight years ago My impression is that, at that date, such treatment yielded satisfactory results in by no means 100 per cent of cases My knowledge of the effect of leaving these cases untreated is confined to conversations with the medical officers attached to certain public schools This has led me to accept the view that endocrine treatment, in a certain number of cases is redundant I feel that many would agree with me that a symposium on the management of undescended testicle written by an anatomist or surgical anatomist a school medical officer a surgeon and an endocrinologist would be a valuable contribution to the subject

During the past five years I have been interested in the condition exclusively from the point of view of its treatment with luteinizing gonadotropic extracts and my experience has led me to believe that about 70 per cent of suitably selected cases[1] result in the testicle appearing and remaining in the scrotum, and that in 50 per cent of the successful cases this occurs within three months of the commencement of such treatment On two occasions, in both of which endocrine therapy has failed to induce descent of the testicle I have noted effects to which some would have taken exception—namely, enlargement of the penis in one case and priapism in another Perhaps I was immodest in failing to be alarmed by the first complication Fortunately the second was so transient as to trouble my conscience for only a month

So seriously did I receive Mr Browne's article that I was disappointed to learn from his reply to your annotator that he had entrenched himself in a "carefully prepared position" and that his paper was therefore presumably designed to be provocative I was prepared to accept his deprecation of treatment with gonadotropic extracts as a sign of the earnestness of his convictions but now I am glad that he has admitted that it was 'sweeping' and "in opposition to the findings of other workers,' and I feel justified, therefore in reminding him of those cases of general impairment of pituitary function usually classified under the title of Frohlich's syndrome in which treatment with gonadotropic preparations is particularly effective in inducing descent of the testicle

Finally I was sorry to see him raise the unanswerable argument of the possible adverse effects of endocrine treatment in the remote future It was surprising to find a man with his capacity for clear thought resort to such a red herring All the considerable knowledge which we possess of the effect of endocrine preparations leads us to suppose that it is purely transient, otherwise why would we administer them in twice- or thrice-weekly doses? We have no reason to suppose that gonadotropic extracts are any exception to this impression If Mr Browne views with suspicion the effect of such endocrine extracts until they have been in use for sixty years he must wait another forty-four years before his conscience should allow him to employ insulin and thirteen years before he is convinced of the importance of Murray's treatment of a case of myxoedema with thyroid extract in 1891—I am etc

P M F BISHOP

Endocrine Clinic Guy's Hospital S E 1
August 6

*** In his letter published last week at page 318 Mr Denis Browne ascribes two arguments to the author of the annotation which appeared with his article in the *Journal* of July 23 He writes "The first is that a testicle in the inguinal canal can be felt because the tendon of the external oblique is not always tense Reference to the annotation will it is hoped convince Mr Browne that what was disagreed with was his statement that "a testis that is in the inguinal canal cannot be felt through the skin Mr John Hosford's letter (also published last week at p 318) gave further evidence of the validity of our criticism of Mr Denis Browne's statement The second argument which Mr Browne ascribes to the author of the annotation is 'that it is impossible to tell on examination whether a suprapubic testis is in the canal or in the subcutaneous tissues The actual words printed were "It seems more reasonable to classify non scrotal testicles as (1) those that can be felt—which may be, but are probably not in the inguinal canal—and (2) those that cannot be felt which may be anywhere —ED *B M J*

SIR—Mr John Hosford's query (*Journal* August 6 p 318) about the testicle which can be felt before operation above the pubis and which at operation is found in the inguinal canal is answered both in my original paper and in my subsequent letter It belongs, of course to one or other of the 'emergent' types

It is interesting to me, however as showing the way in which misconceptions have arisen in the past and will continue in the future I may be wrong in the conclusions I have come to but the first step to proving me wrong is to understand what those conclusions are I do not think anyone can do this who has not first identified by examination all the types I describe and subsequently made careful bloodless dissections of them at operation The opportunity for doing this in the normal categories occurs in herniotomies in children, when the superficial inguinal pouch can be studied It makes a very pretty demonstration, suitable for post graduate classes to expose the fascia of Scarpa push up the testicle under it, open the pouch and define its boundaries But, as in many other demonstrations which I am accustomed to make, it should be accompanied by a warning to be very careful how knowledge of this kind is used in examinations Mr Hosford is surprised that his classes do not recognize the superficial inguinal position as an ectopia How many of their examiners do?

I apologize for referring to the testis as the testicle not to mention calling the testicle the testis It is what Mr H W Fowler in his *Modern English Usage* calls in Elegant Variation—a common fault of unskilful writers —I am etc,

London, W 1, August 8 DENIS BROWNE

[1] My definition of 'suitably selected cases' is expressed elsewhere (*Lancet* 1937 1 598)

Sulphanilamide for Meningococcal Meningitis

SIR,—The letter of Major J. J. O'Meara in the *Journal* of August 6 (p. 317) indicates some doubt as to the efficacy of sulphanilamide in the fulminating sporadic type of meningococcal meningitis. In one of the two cases which he quotes treatment with serum and soluseptasine (May and Baker) was given. Now Whitby (*Lancet* 1937, 1, 1517) showed that the benzylsulphonamide preparations proseptasine and soluseptasine were *inactive* in experimental *meningococcal* infections. In a recent article (*Lancet* 1938, 2, 8) I pointed out this fact and also gave some indications for dosage of sulphanilamide in this disease. The series described contained a considerable number of sporadic fulminating cases with haemorrhagic rashes.—I am, etc.

H. STANLEY BANKS,
Medical Superintendent,
Park Hospital.

Hither Green, S.E.13, August 6.

Chemotherapy of Gonorrhoea

SIR,—Your annotation of August 6 (p. 294) rather emphasizes the toxic effects of uleron in cases of gonorrhoea.

During the last seven months I have given uleron to 200 cases of gonorrhoea in the male—all ambulatory cases under observation by me at three- to four-day intervals. The dosage has been 3 grammes in twenty-four hours (1 gramme every eight hours approximately) for five consecutive days, omission of uleron for two to four days, and repeating the five days' Stoss with same dosage. Patients were told not to eat eggs or take Epsom salts; no other instructions. The great majority have received three such Stoss. One patient only has shown any suspicion of toxic effect, and that was a case of photosensitive dermatitis like solar erythema, though not exposed to sunlight. A further twelve cases have received 4 grammes in the first twenty-four hours of the five days' Stoss. None has shown any toxic effect.

In my hands uleron has proved more effective and safer in gonorrhoea in the male than had sulphanilamide (prontosil album)—ninety-nine cases. Uleron is effective in early gonococcal infections five to fourteen days old, but even more effective in infections of twenty-one days and over.

In staphylococcal infections—boils and three cases of carbuncle—uleron in the above dosage for five consecutive days has been effective and without toxic effects.—I am, etc.

H. M. HANSCHELL,
Honorary Medical Superintendent and Medical Officer i/c Venereal Diseases Department, Royal Albert Dock Hospital.

London, E.16, August 6.

X-Ray Screening in General Practice

SIR,—With regard to the interesting and helpful commentary by Dr. J. V. Sparks in your correspondence columns of July 30 (p. 256) dealing with the use of fluoroscopy in examinations of the chest, I believe that early lesions in the lungs would be more frequently detected by screening if greater attention were paid to certain important factors.

A screen of first-class quality is obviously required. A small focus tube is helpful in the elucidation of detail. X-ray penetration may have to be increased in the obese, the very muscular, and in deep-chested subjects. The patient may have to be examined in different positions, special care being taken to eliminate the shadow of the scapulae. After a general view of the chest with wide-open diaphragms, then comparing the same zones on either side with a slightly smaller opening, it is generally advisable to examine any suspected region with a small aperture.

Most important of all factors, however, is the necessity for taking adequate care to adapt fully the eyes to the darkness of the screening room. It is I believe failure in this regard which probably accounts for the majority of the cases in which Dr. Sparks states that early lesions of the lungs are not often visualized by screen examinations. With full adaptation of the eyes and optimal technical conditions I have seen clearly on the screen quite small nodular infiltrations limited in extent and small Assmann's foci which were not at all dense.

As I am employing radioscopy constantly, I take care when engaged in this work to secure sufficient adaptation of the eyes by wearing red goggles for at least twenty minutes before beginning screening, and at any time when I am obliged to leave the x-ray room between cases. When my eyes properly adapted for screening I have rarely had any surprises from subsequent radiography.—I am, etc.

Montana, Switzerland, August 4. HILARY ROCHE.

Complications of Gold Therapy

SIR,—Having used chrysotherapy for the treatment of rheumatoid arthritis since 1932, I entirely disagree with Dr. H. Warren Crowe's statement in his letter in the *Journal* of July 30 (p. 261) that vaccines yield as good results as gold therapy. I have long since given up the treatment of rheumatoid arthritis with vaccines because of the extremely disappointing results, whereas with chryso therapy practically all cases have shown beneficial results, some almost miraculous. Patients crippled and bedridden who could only get about in bath chairs or on crutches have been able to walk unaided and in many cases even resume their household duties and other occupations. Some of these patients were at first treated by vaccine therapy according to Dr. Crowe's method with negative results and then they were subjected to chrysotherapy with remarkable improvement.

With regard to reactions in my experience those cases that produced reactions did better than those that did not, so that one should adjust the dosage to produce some reaction. Severe reactions can usually be avoided by simultaneous injection of calcium gluconate. In over 100 cases of rheumatoid arthritis treated by chrysotherapy I have never had any gold abscess and therefore no "gold abscesses which fail to heal for months" as Dr. Crowe states. With regard to his statement that "one often has the greatest difficulty in persuading an entirely suitable patient to agree to chrysotherapy," most of my time is spent in dissuading patients who come to me requesting gold treatment for their arthritis but whom I consider are not cases of true rheumatoid arthritis and therefore not suitable for chrysotherapy.

Finally, at the recent discussion on rheumatoid arthritis at Plymouth I noticed that all the principal speakers were unanimously of opinion that chrysotherapy was the only effective treatment for this condition and most of them had given up vaccine therapy because of its disappointing results.—I am, etc.

London, W.1, July 30. MAURICE NEWMAN.

Tuberculin in Diagnosis

SIR—Dr J R Forbes (*May 21 p 1311*) states "I have been unable to find any convincing grounds for believing that a positive test is of any value in indicating the presence or absence of active tuberculous disease May I quote Professor Sahli "As much as I consider the early diagnosis of tuberculosis of importance, as much as I am a firm believer in the therapeutic value of tuberculin, yet I am anxious to state emphatically that I condemn absolutely the diagnostic injections of tuberculin The experience of many workers, as reviewed by Wolff-Eisner, proves that the result of the so called diagnostic injections, be it positive or negative, proves nothing

Professor Sahli, in a footnote, also states "That great value is given to diagnostic tuberculin injections in veterinary work is due to the fact that in veterinary work it is sufficient to prove that an infection had taken place, whereas in human medicine it is a question of the nature and of the activity of the disease —I am, etc,

Sydney, July 12 A E FINCKH

Blood Groups and Legislation

SIR—Public opinion on the question of the usefulness of blood grouping in paternity cases has been aroused It is reported that Lord Merthyr intends to introduce legislation to make such tests compulsory in paternity cases to include twelve groups instead of the international standard groups of O, A, B, and AB and to recognize only pathologists working in certain laboratories In my opinion the British Medical Association should make some definite statement on this question in the interests of science, the profession and all those concerned There are many points on which only those who have been working at the subject for some years—serologists, biochemists, and physiologists—can give definite information, but there are some questions which require decision of more general interest alike to the public and our profession

1 *Legislation*—Has the time come for legislation and if so what form should this take?

2 *Grouping*—What system of grouping is to be recognized? Can we safely go beyond the four groups and if so what other groups are to be included? The four groups themselves give six subgroups Matta would have seven main groups Several parents of A_1 group were found who had given birth to O children (heterozygotes) so to what extent could any medical man say AB tests are 'infallible'? Landsteiner and others have found agglutinin A_2 acting on O cells Bauer's theory of inheritance was introduced to explain the existence of O children in some cases of AB parents As to the M and N agglutinogens they are independent of A and B but since they can be present or absent in each group how far can they be recognized as of sufficient value for medico-legal purposes? Can they not be normal constituents of the red cells and be present or absent according to the state of health or disease in an individual at the particular time of the investigation?

3 *Statistics*—These are not generally agreed upon and while the mother may have a 5 to 2 chance in her favour with certain statistics of the four groups to what extent will this be altered alone or in combination with the M and N grouping if these are allowed?

4 *Sera*—I think it would be generally agreed that only certain laboratories or research institutes or workers should be recognized to supply these

5 *Who should Give Evidence?*—It has been suggested that a panel of pathologists only should be recognized Surely it is a new departure in legislation to penalize science and the profession generally by such discrimination? If reliable sera are available there can be no reason why others should not perform the tests in the interests of everybody The courts can be left to judge of the quality of the evidence produced Pathologists are by no means the best available persons for the job

6 *Reports*—With the range of groups and subgroups it will be advisable to determine what should go into these Are the temperatures at which the test was carried out to be included or not?

From this it will be seen that there is need for the British Medical Association to set up some committee of investigation to settle these questions in the interests of the profession and the public—I am etc

Ilford, July 23 A G NEWELL M D

Steinach II Operation for Prostatic Enlargement

SIR—In view of Mr Kenneth Walker's unfavourable opinion of Steinach II operation for prostatic enlargement (*Journal July 9 p 53*) two successful cases deserve record

1 The patient is 72 years old For some years he was getting up five to six or eight times each night Several times he had complete obstruction and had to be relieved by catheter The condition culminated in complete obstruction which persisted An indwelling catheter was fixed for some days without improvement Steinach II was done in May 1937 For one day after operation the catheter had to be passed Since then he has passed urine naturally and he can now sleep from 9 p m to 8 a m The improvement has been well maintained Micturition is normal Residual urine now is 1¾ oz General health is better than it has been for years

2 The patient is 79 years old For some years he had nocturnal frequency and once or twice had had temporary complete obstruction Latterly the frequency had been so great that he was being worn out by lack of sleep *Complete* obstruction with overflow incontinence came on in October 1937 Steinach II was done under local anaesthesia October 1937 At first there was no improvement An indwelling catheter was used for some days Three weeks after operation he was discharged from hospital having been taught to use a catheter He began to pass urine naturally six weeks after operation Four months after operation all urinary trouble had passed off and he could micturate freely This improvement has been fully maintained up to date He sleeps from 10 p m to 5 or 5.30 a m His general health has much improved

—I am, etc T HUNTER C I E, M D,
Ludlow July 28 Lieutenant Colonel I M S (retd)

"Psychosomatic Illness"

SIR—Whether the rising incidence of psychosomatic disease is real or only apparent seems to be a debatable question, but there is one factor on which stress might be laid as a predisposing cause of anxiety and an intensifying factor in many illnesses I refer to the manner in which the patient's disease is presented to his consciousness by the physician in attendance Too often the latter is content simply to label the patient with a medical term which means nothing to him—so far as any useful information as to the nature of his complaint is concerned—but which may be the cause of a great deal of unnecessary worry and concern

Patients as a general rule even the most stable minded, are morbidly apprehensive about their diseases and fear the worst Any vague ache or pain is magnified and dwelt on, and often the patient's mental conception of his disease might well be described as a "chamber of horrors In the case of an anxious and worrying type of patient a *superstructure of psychoneurotic symptoms* may be imposed on the basis of some quite simple but misunderstood condition How many women suffering

from simple mastitis have worried themselves into a condition of ill health because they fear they may have cancer and don't disclose this fact to their doctor? How many patients with some simple heart defect fear they may drop dead at any moment? And how many of these people have gone and read up their diseases in medical books always taking care to apply the worst interpretation to their own case?

A mild psychological investigation into the state of my patient's mind with the object of elucidating how he regards his particular illness would not be amiss in many cases at any rate if necessary the symptoms should be assessed at their proper value and a simple explanation of the trouble given to the patient in so far as possible non medical terms The ultimate factor in fighting disease is the patient himself and he can surely do this to better advantage if he knows exactly how he stands and is not left to grapple with his disease in the darkness of his own ignorance and fear—I am etc

Reading July 27 W HUTCHESON M D

The "Flying Squad" in Maternity Services

SIR—Professor E Farquhar Murray is to be congratulated on the excellent results obtained by his emergency unit as reported in the *Journal* of August 6 (p 313) but it must be admitted that the very existence of a flying squad *is in itself an admission of failure* Cases most urgently in need of the services of a flying squad Professor Farquhar Murray tells us, are those in which there was shock and post partum or ante partum haemorrhage also cases of threatened or actual eclampsia difficult labour or failed forceps That difficult labour should be allowed to take place in the patient's own home or that failed forceps cases should need the help of an emergency unit is a serious indictment of our maternity services

Sir Ewen Maclean is reported on page 304 of the same issue as having said that local authorities could have in large measure that reduction in maternal mortality which they were willing to pay for and it is evident that if local authorities were willing to provide hospital accommodation for all maternity cases where the slightest abnormality existed or might arise the flying squad would seldom if ever be called to assist the practitioner attending a patient in her own home With all abnormal cases in hospital there would only remain the possible emergency of haemorrhage to which the flying squad might be called, and haemorrhage associated with the absolutely normal confinement must be rare indeed—I am etc

New Barnet August 6 JOHN ELAM

E F Harrison

SIR—I was very glad to see in the *Journal* of August 6 (p 295) the tribute to E F Harrison in view of his long and honourable connexion with the *Journal* Perhaps the following reminiscences may be of interest to some of your readers

I first met Harrison when I was in practice and he was a traveller for a drug firm—in which position he was obviously a *misfit* I next heard of him on the laboratory staff of Burroughs and Wellcome and was delighted when I came on the B M A staff to find that he was doing the analyses for the *Journal's* Secret Remedies series Before the Select Committee of the House of Commons on that subject he was our chief witness and made a profound impression by his high standard of accuracy and his obvious desire to claim no more for his analyses than was justified Shortly after the war broke out he came into my office in a very ill fitting khaki uniform He had joined one of those ill defined corps which were intended for men past their first youth and he told me his duties were mainly of a domestic nature such as cleaning out barracks *He* was the last man to complain but when I next saw Sir Alfred Keogh at the War Office I told him it was a pity the Army couldn't make better use of really fine expert workers I hope my mention of Harrison had something to do with his next move for when I next saw him he was busy with anti gas work and was happy It was a real grief to his friends when he fell a victim in the influenza epidemic of 1918 for there is little doubt that still greater honours awaited the man who so rapidly rose from a humble private to be lieutenant-colonel with a C M G

It is pleasing to recall that Harrison said more than once that the confidence reposed in him by Sir Dawson Williams had been of the greatest assistance to him in establishing him as undoubtedly the greatest authority on certain forms of chemical analysis The Pharmaceutical Society honoured his memory by establishing an annual Harrison Lecture Nobody who met H even casually could fail to be impressed by his strong personality his tenacity of purpose and above all by his transparent honesty and sincerity—I am etc

London W C 1 August 6 ALFRED C

Obituary

SALVATORE CASSAR M D

The Malta Branch of the British Medical Association has suffered a serious loss by the death on July 20 of Professor Salvatore Cassar M D, emeritus professor of surgery in the Royal University of Malta and consulting surgeon to the Central Civil Hospital, and one of the oldest members of the Branch

He was born on October 5 1861 he qualified in 1886 and after serving as resident in the Central Hospital was appointed junior surgeon In 1900 he succeeded to the chair of surgery and was made senior surgeon to the hospital appointments which he held up to October 1926 when he retired on reaching the age limit Professor Cassar's career as a surgeon coincided with the revolution in surgery brought about by the introduction of Listerian methods and it is due to him that antisepsis and asepsis were firmly established in Malta even before they were accepted in other and perhaps more important centres He took a leading part in the conduct of affairs of the university and was always an ardent advocate of all that meant progress and development Upon the grant of self government he took a leading part in organizing the profession and also entered the political field He joined the Constitutional Party and was elected a member of the Senate of which he became the vice president

Professor Cassar joined the British Medical Association in 1889 and throughout his career maintained a very active interest in the Malta Branch and kept up his interest to the very last He served almost continuously as a member of the Branch Council and occupied the presidential chair on many occasions

Dr HERBERT MIDGLEY COCKCROFT who died on July 9 aged 63 was a well known and popular figure in the district of Yorkshire known as Mashamshire. A student

of Owens College, Manchester he obtained the Scottish triple qualification in 1899 He then returned to his native town of Masham to continue his father's practice there and in 1901 was appointed medical officer to the district council and medical officer of health During the greater part of the war he served with a temporary commission as captain R A M C, and was awarded the Military Cross On returning to civil life he became commandant of the Masham Branch of the British Legion and was for many years chairman of the local sports committee Dr Cockcroft was elected a member of the Harrogate Division of the British Medical Association in 1901

Dr REGINALD JOHN HEARN who died on July 13, had been a member of the Marylebone Division of the British Medical Association for the past eighteen years At Cambridge he took his B A in the Natural Sciences Tripos of 1911 and then entered Guy's Hospital Qualifying as L M S S A in 1914, he graduated M A M B, B Ch Camb in 1918 and proceeded M D in 1921, having by that time been called to the Bar by the Middle Temple He had served throughout the war as captain R A M C and afterwards with a commission in the R A F Medical Service At Guy's he held a number of junior posts resident and non-resident and for some time worked in dermatology and venereal diseases He was also interested in diseases of the nervous system, and acted as neurology specialist under the Ministry of Pensions Dr Hearn was for some years physician in charge of out-patients at the Westminster Skin Hospital and assistant deputy to Mr Ingleby Oddie, coroner for Central London In 1922 he published in these columns a paper giving the results of treatment in syphilis of the nervous system

Universities and Colleges

UNIVERSITY OF OXFORD

In Convocation on July 30, presided over by the Vice-Chancellor, the honorary degree of D Sc was conferred on Dr Charles Gustave Jung Professor of Psychology in the University of Zurich on the occasion of his presidency of the tenth International Medical Congress for Psychotherapy

The following medical degrees were conferred in congregation on the same day

M D—H F Moseley

B M—W D Brinton S H Llewellyn Smith, J B Longmore R R Wethered, A M L Isabella (Society of Oxford Home Students)

UNIVERSITY OF CAMBRIDGE

The Appointments Committee of the Faculty of Medicine has appointed F R Berridge, M B, B Chir of Trinity College, Assistant in Research in Radiology (diagnostic) to the Regius Professor of Physic, and A Paterson M B Ch B D Psych, of the University of Edinburgh Assistant in Research in Psychiatry to the Regius Professor of Physic both for three years from October 1, 1938

At the last Congregation of the academical year held on July 30 the Vice Chancellor Professor H R Dean, conferred the following medical degrees

M D—M Hynes M L Rosenheim *By proxy* T F McN Scott

M B B Chir—A J Daly A C F Green, W W Wiggins Davies B J O Winfield M D Young J W Wood, R W W Brown D M Carding J E *Hardwick Smith* P L *Mollison*, R D Caton, M J Clow, W Goulstone P A K Jones G B Leyton A G McPherson J A R Miles W A M Miller, D E Yarrow S G Hamilton L R Holt J Laughlin J S Pritt E Cronin R S Alexander R M Johnstone, J Smith J Yudkin R R Wilson A P Norman W E Owens N Vere-Hodge H F Whalley G M Wright D Foskett E L N Rhodes *By proxy* G N Hunt, P J Wormald, R O Murray B H Price, H Stott P L Candler J H B Round J S Pritchard, A J Wilton C H Bartlett R B Leech J G B Platts

UNIVERSITY OF LONDON

The Senate on July 20 awarded the degree of Ph D in Pathology (non clinical) to H Burrows and the degrees of Ph D in Hygiene (non clinical) to Wei Yung Lee and C G Warner

The following candidates have been approved at the examination indicated

M D—*Branch I (Medicine)* Helen Baker R H P Clark J R Forbes R V Harris N M Jacoby H Nicholson W A Oliver J B Robinson W J Stokes S J L Taylor P C Wickremesinghe *Branch II (Pathology)* I A Cathie C V Harrison S F Marshall E M Ward *Branch III (Psychological Medicine)* K Soddy Maeve Whelan *Branch IV (Midwifery and Diseases of Women)* H G E Arthure (University Medal) A Barber, E D Y Grisby *Branch V (Hygiene)* F W Gilbert

UNIVERSITY OF MANCHESTER

Mr F H Bentley M B F R C S, has been appointed Assistant Director of the Surgical Research Laboratory

UNIVERSITY OF ABERDEEN

The King has approved the appointment of Dr Robert Douglas Lockhart Professor of Anatomy in the University of Birmingham, to be Regius Professor of Anatomy in the University of Aberdeen in place of Professor A Low, resigned

ROYAL COLLEGE OF PHYSICIANS OF LONDON

At a meeting of the Royal College of Physicians of London held on July 28 with the President Dr Robert Hutchison in the chair, the following were elected officers for the ensuing year *Censors* C E Lakin G E Beaumont W E Hume A Feiling *Treasurer* Sir Charles McM Wilson *Registrar* H Letheby Tidy *Harveian Librarian* Arnold Chaplin, *Assistant Registrar* R Hilton

The President and Fellows decided that a memorial to the late Registrar Sir Raymond Crawfurd should be placed in the College

Unanimous votes of thanks were passed to Dr Sidney Phillips for his services to the College as Treasurer and to Dr Charles Newman for his services as Assistant Registrar

The following appointments were announced Mr Cyril Radcliffe K C as Senior Standing Counsel to the College, Dr R A Young as Harveian Orator and Dr J C Spence as Bradshaw Lecturer for 1939 Dr A W Stott as a member of the Joint Consultative Committee Dr A E Clark Kennedy as a representative on the Committee of Management of the Conjoint Board

The Bisset Hawkins Medal was awarded to Professor Major Greenwood F R S for his researches in statistics

The Murchison Scholarship was awarded to David Kendall M B

It was announced that a replica of the President's caduceus would be presented to the Royal Australasian College of Physicians and Dr Morley Fletcher was appointed to represent the College at the inaugural meeting of the Royal Australasian College

The following candidates having satisfied the Censors Board, were admitted Members of the College

A Ali, M B Bomb, I S Buchman, M B Lond, R H P Clark M B Lond N F Coghill M B Camb, H A Dewar, M B Durh Muriel J L Frazer, M D Belf, G G Gillam M B Lond E W Hart, M B Camb S A Henry, M D Camb F D M Livingstone M B Camb, the Hon W S Maclay M D Camb W P Mallinson B M Oxf, P E C Manson Bahr M B Camb, V R Naidu M B Mysore, H Nicholson, M D Lond, W A Oliver, M B Lond W W Payne M D Lond, J W Pierce M B Lond, W M Porteous M B New Zeal J M Ranking M B Camb, D E Rodger, M D McGill, J C Sinclair M D Toronto, T C Sutherland M B New Zeal W S Sutton, M B Liverp O H J M Telling B M Oxf, J W Todd M B Lond, P H Willcox, M B Camb

Licences and Diplomas

Licences to practise were granted to 185 candidates (including thirty-four women), whose names are published in the report of the meeting of the Royal College of Surgeons of England in this issue, as are the names of the recipients of the Diplomas in Tropical Medicine and Hygiene (twenty), Ophthalmic Medicine and Surgery (twenty five), and Medical Radiology (three) Diplomas in Anæsthetics were granted to the successful candidates whose names were published in the reports of the meetings of the Royal College of Surgeons of England in the *Journal* of June 25 (p 1395) (twenty-four) and in the *Journal* of July 30 (p 265) (seven) Diplomas in Public Health (twelve) Psychological Medicine (seventeen), and Laryngology and Otology (seven) were granted

to the successful candidates whose names were published in the report of the meeting of the Royal College of Surgeons of England in the *Journal* of July 30 (p 265)

ROYAL COLLEGE OF SURGEONS OF ENGLAND

An ordinary meeting of the Council of the Royal College of Surgeons of England was held on July 28 with the President, Mr Hugh Lett, in the chair

The cordial congratulations of the Council were given to Sir Holburt Waring and Sir James Walton on receiving the Order of Officer of the Legion of Honour

The Council accepted with grateful thanks the very valuable gift by Sir William Willcox of a chair which was formerly the property of John Hunter

Mr W Sampson Handley was reappointed to the Executive Committee of the Imperial Cancer Research Fund

Diplomas

Diplomas of Membership were granted to the following candidates who have passed the final examination in pathology medicine surgery and midwifery of the Conjoint Examining Board in England

Mignon B S M Alexander J MacC Almond A G Apley L D Arden A G Arnold J B Atkins Beryl Badham R B T Baldwin H H Barst Romana G Bartelot O D Beresford C V Berry R T Bevan Natalie S Blumenfeld E J Bowmer B R Bray D A G Brown D J A Brown Amelia E Burch N C Barnley Jones A E Burton J Burton K A Butler H D Ll Campion G D Carter Katherine H Child N G Chitnis H D Cockburn Gwendoline E Cockrem L H Cooper M P M Cooray R I G Coupland R J N Crozier T W B Cull K H S Dalliwall A J Daly G E David H D Davies R G Davies A F W Davis M V H Denton Dorothy F M Dickinson W M Diggle W L Donohue Mary P W Dowding J A C Edwards E O Evans J B Evans J A P Evans B R Fink H Foster W F Frazer P S Fuller H Gardner Ysobel M Garland G H K Gentle A Giordani Mabel L Glenny L Goodman M R Grace C L Greenbury Margaret M H Halliday Fatheya Hamed G J Harnisson W J Hay G M Heap E A Hedberg J P Henry A G Heppleston E J F Hinde Isobel T Hinde C H Hoskyn R N Houlding A Howard G O Hughes G Ll Humphreys Barbara J Hussey B A Irvine I G Isaac S R Jadhav Winifred N K Jagger J I P James S R James D H Johnston Iola Ll T Jones M T I Jones P H Kendall A H Khan J B Kinmonth J C Kitchin Guan Bee Krustrachue D R Levinson A W Little W V Livingston Eluned M Lloyd Davies S Locket R J J Lockhart Violet L Lutwyche Margaret P Lyon Eileen M R McKee G T B Mackinnell-Childs Margaret E M McLaughlin A G McPherson D E Macrae P F Malim H Matthews A H Mayne B E Miles J Mills W F Mindham Elizabeth M Mitchell T J Montgomerie T R Morley S Mottershead M L Mundy J D N Nabarro L Nanckievill R E Newman L A Nichols Irene Nye G Oppenheimer E N Owen Ll P Owen J L Palestrant P W J Parkes Elfriede K J Paterson B M Phillips T J A Phillips W Phillips J G B Platts C Ponnambalam J S Prichard J H Rake R Ramsay Barbara J Raven W J Rees G I Rees-Jones W Reverson H M Rice J F Rickards D L Ridout Nancy E Robbins Margaret J Rowley L Saunders A Shannon P H Shorthouse P S Silver J R Simpson C S Smith R C Southern R H Spicer Margaret J Stafford G R Staley R W Stevenson N G Straschun A R D Stuart V K Summers R B Terry D S Theron D M Thomson Cecile P Thrupp J Todd P Unwin K W Vandy A M Wadsworth Joan Wagstaff Annie M B Walker Mary E Ward J Watson J M Watson G L Way A L J Webb Dorothy J Webber R Welply H Whitmore J H Whittles L L Whytehead C F H Wiessner W W Wiggins Davies A J Wilson P Wilson R G B Woollatt B M Wright G M Wright

Diplomas were granted jointly with the Royal College of Physicians of London as follows

DIPLOMA IN TROPICAL MEDICINE AND HYGIENE.—G A Armstrong A K Choudhuri Hilla Damry M A J Fandi G Fraser Ivanoel Gibbins G R Handy Ruth M Harris A G Hemsley R A Hughes H M McGladdery B B G Nehaul Alexandrina M M Parker R Sandler A R Shah G E S Stewart M Trivedi R J Vakil R C Vevaina A B Weir

OPHTHALMIC MEDICINE AND SURGERY.—M Y Alurkar J D Cotelingam G C Dansey Browning, T Das R E Dave J G R Dillane M H Gomaah J R Henderson Doreen A Hungerford M U Khan S W T Lee I S McGregor A R McKelvie T C Meurer M A Nair A H Osmond H Pearlman F J A Pockley P C Sen B S Sharma Jane A M Shepherd T P N Sinha M B R Sunderrao W O G Taylor M O Youssef

MEDICAL RADIOLOGY.—G E Church N A Lawler H C Simchowitz.

The following hospitals were recognized under paragraphs 21 and 23 of the Fellowship regulations Llandough Hospital Cardiff (first and second house surgeons) Northampton General Hospital (first and second house surgeons) Victoria Hospital Blackpool (house surgeon to Unit No 1) Royal Lancaster Infirmary (conditional recognition) (first and second house surgeons) The following hospitals given temporary recognition up to the present were given further recognition for the periods specified Grimsby and District Hospital (senior and junior house surgeons till July 1939) Warneford Leamington and South Warwickshire General Hospital (resident house surgeon till July 1939) Prince of Wales's Hospital Plymouth and Devonport (senior house surgeon till December 1938) Cornelia and East Dorset Hospital Poole (first house surgeon till December 1938)

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH

A quarterly meeting of the Royal College of Physicians of Edinburgh was held on July 19 with the President Dr Alexander Goodall in the chair

Dr Frederick George Gibbs (Edinburgh) Dr Samuel Rowland Burston (Adelaide Australia) and Dr Henry Anstey Cookson (Sunderland) were elected Fellows

CONJOINT BOARD IN SCOTLAND

The following candidates having passed the requisite examinations have been admitted L R C P Ed L R C S Ed, L R F P and S Glas

Geraldine C W Ames G Andrew G Andrew L M Arnold S Arnold B S Baswani Hertha Bass E Bischof wer C G Blum G N Brumberger D Bunet F R Cadigan F D Campbell S Childs A B Cowan M D Edward L Fell C Finder A T Freeland Maria Fulleylove H A Genesch E W Goldstein R Herzberg E A Hirsch Emmy Honigsberger S J Kohle H G Koretz Susanne Koretz J N Lennox J Lipschutz T McConnell J F M Kenna M W Magdi J Malan C Mandelstam E L Morel A Naddell L Nathan R C Neumann J Parker H S Paterson H B Pozzo H R P E Ramesar J Rosenbaum H Rothman R J Rowland L Sasso N J Shaaban Cecile Shapiro T Skeoch S Sommer E Spencer J D Swan Teodora Taslakova W A L Tucker I S Walker J L W Walls J G Waugh C M N William

SOCIETY OF APOTHECARIES OF LONDON

The following candidates have passed in the subjects indicated

SURGERY.—V M Attenborough H J Dismorr V W J Hetreed E V Irwin R Lipkin A E Rampling F Schwartz J A Taylor M Tombuk C Webb

MEDICINE.—F B Akerovd W J Bold H R Butler P H Davies R E D Ellis W A Groom J M Hardy R Lipkin T J Thomas T W Weston C W Williams

FORENSIC MEDICINE.—F B Akerovd W J Bold H R Butler P H Davies R E D Ellis W A Groom J M Hardy R Lipkin T J Thomas J W Weston

MIDWIFERY.—P Baker V W J Hetreed I J Mathias C E Winterstein

The diploma of the Society has been granted to F B Akerovd V M Attenborough W J Bold R E D Ellis W A Groom R Lipkin F Schwartz J A Taylor C Webb

Medical Notes in Parliament

On July 29 a Royal Commission signified the Royal Assent to all Bills awaiting it including the Finance Act Young Persons Employment Act Nursing Homes Registration (Scotland) Act Food and Drugs Act and the Divorce (Scotland) Act Statutes which have passed earlier in the session include among Government legislation the Air Raid Precautions Act Blind Persons Act Holidays with Pay Act three Housing Acts Mental Deficiency Act Milk (Extension and Amendment) Act, National Health Insurance (Amendment) Act National Health Insurance (Juvenile Contributors and Young Persons) Act Population (Statistics) Act and the Superannuation (Various Services) Act The Limitation Bill and the Marriage (Scotland) Bill await further examination and will presumably be dropped for this session

Private Members Bills which have reached the Statute Book include the Baking Industry (Hours of Work) Act

Children and Young Persons Act, Dogs (Amendment) Act, Infanticide Act, Nursing Homes Registration (Scotland) Act, Prevention and Treatment of Blindness (Scotland) Act, Registration of Stillbirths (Scotland) Act, Street Playgrounds Act, and Workmen's Compensation (Amendment) Act Private Members' Bills which have not passed are the Contraceptives Regulation Bill, the Local Authorities (Hours of Employment in connexion with Hospitals and Institutions) Bill, and the Prohibition of Vivisection on Dogs (Scotland) Bill The first two have been dropped

Before the Nursing Homes Registration (Scotland) Act received the Royal Assent the House of Commons accepted, as an agreed compromise, the House of Lords amendment authorizing the Department of Health for Scotland to exempt Christian Science homes from the Act

Both Houses have adjourned till November 1, unless summoned earlier for urgent business The King's Speech will be read on November 8

Milk (Extension and Amendment) Bill

In the House of Lords on July 19 the EARL OF FEVERSHAM moved the second reading of the Milk (Extension and Amendment) Bill

Lord MARLEY asked whether pasteurized milk was provided for children in the schools and if not what steps were taken to ensure that the milk provided was clean and not likely to cause any illness He said it was a tragedy that there should be any delay in the provision of milk for expectant and nursing mothers

The EARL OF FEVERSHAM said that according to the returns made to the Board of Education at the end of last March 2 672 000 children in elementary schools in England and Wales were taking milk under the milk-in-schools scheme That was 161 000 more than on the corresponding date last year Both the source and quality of the milk supplied had to be approved by the medical officer of health in the area Where possible in the larger urban areas and the great cities the medical officer of health insisted on pasteurized milk where it was available In those areas served by rural districts pasteurization was not always possible and the milk of attested herds was used Under the Bill an increased sum for milk was being devoted to schemes organized by local authorities not only for children attending elementary schools but for nursing and expectant mothers It was a feature of the Bill that in order to accelerate this service an extra £250 000 was being provided until the Government's long term proposals could be placed before Parliament

The Bill was read a second time

Mental Patients in Divorce Proceedings

On July 19 Mr SORENSEN asked the Minister of Health whether his attention had been drawn to the recent statement of the chairman of the Board of Control at the annual meeting of the Mental Hospitals Association respecting mental patients affected by divorce proceedings and obligations on the part of a medical superintendent definitely to express his opinion in reply to questions by petitioners or petitioners' solicitors whether a patient was or was not curable and whether he proposed to circularize mental hospital committees to this effect

Mr BERNAYS said he understood that the Mental Hospitals Association circulated to their members a communication on this subject from the Board of Control last January On the information before him the Minister of Health was doubtful whether it was necessary to issue a circular to mental hospital committees

Grants to Edinburgh and Glasgow Universities

On July 19 Mr G MORRISON asked the Secretary of State for Scotland whether he could make a statement on the report of the Special Committee under the chairmanship of Lord Alness on the application by the Scottish universities for grants from the Education (Scotland) Fund Mr COLVILLE replied that after careful consideration of the terms of the report he had decided that in accordance with certain of its recommendations grants of £4 000 and £12,000 should be paid from the Education (Scotland) Fund to the Universities of Edinburgh and Glasgow respectively before July 31 the end of their present financial year With regard to 1938–9 and future years he hoped that the state of the Fund would also make it possible for him to give effect to the recommendations of the report The payments in the current year to the Universities of Edinburgh and Glasgow must not be regarded as in any sense implying acceptance of the principle that the Scottish universities might rely on the Education (Scotland) Fund to meet any future deficiencies which they might incur The claims of each university on the Fund must be considered each year in the light of the financial and other circumstances that might arise and of the annual reports which it would under statute be the duty of each university receiving assistance to submit to him

Health of Mine Workers

In committee of the House of Commons on July 25 the vote for the Mines Department was considered Captain CROOKSHANK referred to the work of the Safety in Mines Research Board He said that the programme of pit head baths was going rapidly forward Apart from official work a great deal was being done by all sorts of technical bodies which were constantly making investigations and discussing them at their meetings Noise seemed to him to-day to be one of the urgent problems that had to be considered A great many miners felt that with the coming of the machine they did not hear the natural noises which in the past acted as warnings to them Much research could therefore be done into this problem He was not able to state when the report on the investigations into silicosis was likely to be produced The inquiry was being pressed on however

Medical Refugees and the Colonial Medical Service

On July 25 Sir ERNEST GRAHAM LITTLE asked the Secretary of State for the Colonies whether in view of the large number of able and qualified doctors at present refugees from Greater Germany he would consider the possibility of appointing some of them to subsidiary positions in the Colonial Medical Service

Mr MALCOLM MACDONALD said it was not quite clear what posts Sir Ernest Graham Little had in mind when he referred to subsidiary positions in the Colonial Medical Service Admission to the Unified Colonial Medical Service was necessarily confined, broadly speaking to persons of British nationality though a person born or ordinarily resident in a Colony, Protectorate or Mandated Territory was not excluded If the reference was to minor posts in the local health services it had been the settled policy for some time to train the inhabitants of the various Dependencies to undertake this type of work and eventually to take over the higher branches of medical and public health work as they became qualified to do so He did not think it was practicable to envisage any general scheme by which foreign medical practitioners could be incorporated in the State medical services of the Colonial Dependencies

Sir ERNEST GRAHAM LITTLE further asked the Secretary of State for the Colonies whether he was aware that whereas the number of persons to each qualified doctor in Great Britain was approximately 1 000 in some parts of the British Colonies the proportion was as high as 100 000 to one, and whether in these circumstances he had under consideration any plans for increasing the personnel of the Colonial Medical Service

Mr MALCOLM MACDONALD replied that the ultimate objective at which the Colonial Office was aiming in developing the medical services of the Colonial Dependencies was to bring the best modern medical resources within the reach of the whole of the peoples of the Dependencies It would be impossible in most cases to give accurate figures regarding the proportion of qualified medical practitioners to the population in each Dependency without reference to the Colonial

Governments Nor indeed would such figures give a reliable picture of the position since a single Dependency might contain areas at very different stages of development There was no doubt that in some areas we were very far from having attained the objective which he had defined On the other hand there were many places where ample medical facilities both public and private were available The public health services of the Dependencies were being continually developed as funds and circumstances permitted but having regard to the large areas and populations to be covered it was clear that the eventual attainment of the objective must depend not on an indefinite increase in the number of imported medical officers but on the progressive training of medical staffs drawn from the local inhabitants The policy of training such staffs was being actively pursued wherever possible

In the meantime the responsibility for the education of the local populations in the many aspects of preventive medicine for the organization of the public health services and for the treatment of disease rested principally on the members of the Colonial Medical Service and there could be no doubt that for many years to come that Service would continue to call for a steady flow of recruits of the best personal and professional type from this country The present state of recruitment for the Service was satisfactory and it could not be said that the demand substantially exceeded the supply of fully suitable candidates. There had been some recent difficulty in recruiting for service in the West African Dependencies but he had no reason to suppose that this difficulty was other than temporary

Working Hours of Nurses

On July 26 Mr BULL asked the Minister of Health whether his Department had considered the working of the ninety six hour fortnight for nursing staffs in general with special reference to the London County Council scheme if he was aware that aspects of this scheme so far as night duty was concerned were resented by the staff and if he would consider the possibility of evolving some agreed system of hours affecting all nurses which local authorities could introduce without essential modification

Dr ELLIOT said that his attention had been drawn to the decision of the London County Council to introduce a ninety six hour working fortnight for nurses in their employment but he was unable to make any general statement on this subject pending the issue of a report by the Interdepartmental Committee which was considering the conditions of service of nurses

Grants for Cancer Research

Mr W GREEN on July 26 asked the Chancellor of the Duchy of Lancaster as representing the Lord President of the Council the amount of public grant made during the last twelve months towards the cost of cancer research involving experiments on living animals and the amount granted in respect of such research not involving such experiments Earl WINTERTON said that the amount expended by the Medical Research Council from public funds during the last financial year on investigations into the nature and cause of malignant disease and methods for its treatment was approximately £6 000 in addition to which valuable quantities of radium were lent to hospitals for this purpose It was not practicable to give separately the cost of such parts of this work as involved experiments on animals

Health and Hygiene in British Ships

On July 26 Mr WINDSOR asked the President of the Board of Trade if during 1937 of 6 664 vessels subjected to sanitary inspection by the Hull and Goole port health authority 1 670 were found to have defects whether he would consider the advisability of strengthening existing powers for ensuring proper standards of maritime hygiene initiate measures to secure a more rigid compliance on the part of shipowners with the rulings of responsible medical authorities and take steps to secure the observation of essential standards of cleanliness in all British ships

Mr OLIVER STANLEY said that the port health authorities had full powers under the Public Health Acts to require the abatement or themselves abate on ships within their districts insanitary conditions or other nuisances injurious to health The duty of seeing that crews quarters were kept in a fit condition fell primarily on the master as representative of the owners The Shipping Federation and the National Union of Seamen had recently set up a joint committee to consider methods of improving the standard of comfort and cleanliness in crews accommodation As regards structural defects close co operation was maintained between officers of port health authorities and Board of Trade surveyors and in appropriate cases suitable measures were taken under the Merchant Shipping Acts

Tuberculosis in the Grinding Industry

During the discussion on Home Office administration in the House of Commons on July 27 when a motion was made for the second reading of the Appropriation Bill Mr MARSHALL said the whole scheme of the Metal Industries Silicosis Order was too narrow All allied diseases such as pulmonary tuberculosis were excluded If the present eliminatory process caused by introduction of new tools in the grinding industry went on very few workers would come under the scheme in a few years The silicosis scheme centred on the metal grinders of Sheffield where the medical officer of health Dr Rennie reported that cases among 4 600 grinders numbered 149 Among these grinders the death rate from respiratory tuberculosis was four times the rate for all persons over 15 in Sheffield although the new abrasive wheel which was to bring about a revolution in the industry had been in operation in many cutlery factories in Sheffield for twenty five years There were more cases of tuberculosis among Sheffield grinders than among the miners and stonemasons in the city Phthisis fibrosis and tuberculosis were all rampant among grinders and the decrease had been much less than the decrease among the general population Yet the silico is scheme excluded men who had worked for three years on the abrasive wheel File grinders were excluded because safe guards were provided in their case The Home Secretary should investigate the matter with a view to bringing in the men who suffered from these diseases and could prove that the disease arose out of their employment

Mr TOMLINSON spoke of workers in Lancashire who were affected by dust in the card rooms He said the medical explanation of what took place in the sufferer as the result of the inhalation of this dust had varied very little over a period of years The difficulty of dealing with the question was said by representatives of the Home Office to be due to the fact that it was not possible to draw a line between the individual who contracted the disease in the card room and the individual who might contract a similar disease outside Other persons contended that this line could be drawn and he hoped that as a result of his raising the question that afternoon some relief could be brought to the sufferers

Mr JOHN spoke of the difficulty of a miner securing certification for nystagmus He said the medical referee at present was judge jury and court of appeal in one A man might be certified by his own doctor and by the certifying surgeon to be suffering from nystagmus but if the medical referee certified that the man was not so suffering, that decision was final Even the British Medical Association said that was too much responsibility for one man and that there ought to be at least three men forming a Board

Earl WINTERTON replying to the debate said the officials of the Home Office and the Home Secretary were alive to the importance of silicosis The disablement cases certified by the Medical Board in the refractories industries were less than five in each of the last five years except one year when there were seven The figures for potteries had fallen in the same five years from 70 to 41 and for stonemasons outside the

sandstone industry from 72 to 56 The figures for metal grinding were 8 in 1937 Prevention in coal mining and sandstone quarrying was a matter for the Mines Department The extension of the Factories Act to cover builders yards and building operations would permit further regulations There were legislative difficulties in the way of bringing the Sheffield class of little masters under the Act It seemed hard that workmen still employed in grinding after June, 1927 might get compensation if they became affected, while workmen not employed after that date were outside the scheme, but it would be difficult to make the scheme retrospective

The question of men in the grinding industry who suffered from a mixture of silicosis and tuberculosis was intertwined with one matter which was under consideration and another which was *sub judice* A committee had been appointed by the Medical Research Council which was inquiring into the incidence of pulmonary diseases other than those which could be definitely diagnosed as silicosis The report of that committee would not be available until the middle of next year and the question was also mixed up with workmen's compensation The Home Office recently placed before representatives of employers and trade unions revised proposals for amending the silicosis scheme These included extension of examinations to workers in additional processes in the pottery industry particularly in the manufacture of earthenware The Home Office had no evidence to show that the silicosis compensation scheme should be extended to slate workers in North Wales but the Mines Department was inquiring into the working conditions and in the light of the results it would be considered whether a further medical inquiry should be undertaken It would be difficult before the middle of next year to get the results of the inquiry being made under the auspices of the Medical Research Council into diseases of a pneumonic character in mines There had been 5 000 cases investigated and it would be necessary to examine the workers at another colliery

The Stewart Committee had presented a report in January containing recommendations on miner's nystagmus He could not say whether the whole or part of that report would be implemented The question of card room operators was extremely difficult from a medical point of view in ascertaining whether the workmen suffered from bronchitis or asthma due to dust or due to natural causes The committee appointed last year to go into the matter had heard evidence had carried out statistical investigations, and was now considering its report

The debate was concluded and the Appropriation Bill was read a second time

Scottish Department of Health

Mr COLVILLE answering Sir Samuel Chapman on July 28 said the Departmental Committee on Scottish Administration, of which Sir John Gilmour was chairman, recommended four main Scottish Departments each in charge of a Secretary directly responsible to the Secretary of State Health would be one Department The Board of Control would be reconstituted with a full time instead of a part-time chairman, and its work as well as that of the Registrar General, brought more closely into relation with the Department of Health The day to day administration of these Departments would be conducted from Edinburgh The Government was in general agreement with these regulations and would introduce legislation early next session

Major Stuart Blackmore

Dr HADEN GUEST asked on July 28 whether Sir Samuel Hoare was aware of the circumstances leading to the death of Major Stuart Blackmore chief medical adviser Air Raid Precautions Department Home Office as a result of overwork and other adverse conditions and that Major Blackmore left a widow and two children and whether he would inquire into all the circumstances and into the propriety of recommending special provision for the dependants

Sir SAMUEL HOARE said in reply that Major Blackmore was a valued servant of the Air Raid Precautions Department of which he had been chief medical officer since early in 1936 and his recent death was a great loss to the Department It was not possible to make any grant to the widow from public funds No pension was payable to the widow of any civil servant whether established or unestablished and a gratuity was only payable in the case of an unestablished officer where at the time of his death he had not less than fifteen years service

Dr HADEN GUEST asserted that certificates showed that in the opinion of the doctors who attended Dr Blackmore the unusual circumstances of his work contributed materially to his death Dr Guest asked Sir Samuel to investigate why seven days before Major Blackmore's death a letter was sent to him informing him that his pay had been stopped—a knock-out blow to a man on his death bed

Sir SAMUEL HOARE said that in respect of the dependants he was bound by statute law He would look into the point about pay Major Blackmore was ill upon several occasions during his employment by the Air Raid Precautions Department and those who knew the circumstances of the case at the time would say that the Home Office treated the case with the greatest sympathy

Mental Hospital Accommodation in Lancashire

Answering Mr Porritt on July 29, Dr ELLIOT said the number of patients in the Lancashire mental hospitals on January 1 last was 14 339 Proposals had been approved to increase the accommodation at four of the mental hospitals by 965 beds and other proposals were under consideration for adding a further 300 beds Plans were also being prepared for a new mental hospital of 1 000 beds The patients in the mental hospitals in Lancashire in each of the last five years on December 31 were

	Males	Females	Total
1933	6 174	7 532	13 706
1934	6 310	7 618	13 928
1935	6 294	7 589	13 883
1936	6 368	7 707	14 075
1937	6 444	7 895	14 339

The patients who recovered sufficiently during those years to be discharged were

	Males	Females	Total
1933	395	519	914
1934	384	558	942
1934	379	526	905
1936	353	507	860
1937	311	462	773
Total	1 822	2 572	4 394

Dr Elliot further informed Mr Porritt that the weekly hours of duty expected from the nurses in the mental hospitals in Lancashire were fifty-two exclusive of time off duty for meals The proportion of nurses to patients was approximately one nurse to eleven patients by day and one nurse to fifty-six patients by night

Mr PORRITT asserted that there was a great shortage of nurses in these institutions and that the proportion to patients should be one in six Dr ELLIOTT agreed that there was a shortage in many institutions

Jamaican Medical Service Appointment

Mr CREECH JONES asked on July 28 whether the attention of the Secretary of State for the Colonies had been drawn to an advertisement for a doctor born in the United Kingdom and of European parentage to serve in Government medical service in Jamaica whether it was the policy of His Majesty's Government that discrimination should be established in this and other appointments in the West Indian colonial services, and on what grounds this discrimination was advertised

Mr MALCOLM MACDONALD in his reply assumed Mr Jones referred to the advertisement for a health officer in the Government Medical Service in Jamaica which appeared in the *British Medical Journal* and the *Lancet* of May 28 1938 That advertisement stated that candidates must be British subjects of European parentage because the Governor in reporting the vacancy stated that there was no suitable qualified officer available in the Colony It was assumed therefore that no useful purpose would be served by inviting applications from Jamaicans Far from there being any discrimination against the appointment of West Indians in the local government services in the West Indies it was the settled policy to utilize the services of local persons for appointments for which they were suitable and qualified

Incidence of Tuberculosis in the Gold Coast—On July 20 Mr MALCOLM MACDONALD said that in the report of the Gold Coast Medical Department for 1936 the senior medical officer in the Western Provinces described the incidence of pulmonary tuberculosis in the mining area as abnormally high A new hospital equipped with high power x ray apparatus had been built at Tarkwa Two officers of the Medical Department working in close collaboration with the mines medical officers had been posted to Tarkwa to conduct an investigation into the incidence of tuberculosis and silicosis

Diphtheria Incidence and Mortality after Inoculation—On July 25 Mr WEDDERBURN informed Mr McGOVERN that in Edinburgh out of approximately 27 000 children inoculated against diphtheria since 1924 140 had suffered from diphtheria and three had died In Aberdeen out of approximately 4,500 children so inoculated since September 1936 twenty three had suffered from diphtheria and none had died Information relating to Dundee and Glasgow was not available

Availability of Atebrin and Plasmoquine—Mr D ADAMS on July 26 asked the Secretary of State for War what proportion of the new drugs now being employed in combating malaria in the British tropical Empire especially atebrin and plasmoquine came from countries outside the British Empire and whether stores of these drugs were maintained with a view to ensuring that in the event of war tropical territories and the British Army would be safeguarded from disease epidemics Mr HORE BELISHA said that there was no technical difficulty in making these drugs which came from outside the British Empire Stocks were held and quantities were reviewed from time to time The question whether stocks were maintained for use by the civil populations of tropical territories was one for the governments of those territories

Health Services in Trinidad—On July 26 Mr MALCOLM MACDONALD replying to Mr Creech Jones said that progress had been made towards implementing the recommendations of the Trinidad Commission He circulated an account of the progress made in which it was stated that under the heading Medical and Health Services a draft Ordinance had been prepared to transfer the executive functions of the Central Board of Health to the Director of Medical Services As regarded housing the Governor contemplated the establishment of a town planning and housing authority which would carry out a far reaching plan of slum clearance Legislation was being drafted for this purpose

Mentally Defective Children in Lancashire—The number of children ascertained to be mentally defective within the meaning of the Education Act, 1921 on December 31 1929 was 4 848 or 0 67 per cent of the average number on the registers of the public elementary schools in Lancashire and on December 31 1937 (the latest date for which figures are available) 3 702 or 0 56 per cent of the average number on the registers These figures do not include children of school age notified to the mental deficiency authority as uneducable or on other grounds

Bandages in Prison Surgery—Mr COLVILLE told Mr David on on July 29 that cotton bandages used at Barlinnie prison for retaining dressings and found to be unsoiled after use were sent to the laundry where they were steeped in lysol and then thoroughly washed before being returned to the surgery for further use His information was that the conditions were hygienic but he would look into the point Soiled bandages were burned and no bandage which had been in contact with a wound was used again Gauze bandages were not used twice Replying to Mr Gallacher Mr Colville said that when a prisoner at Barlinnie was given medicine in his cell his own spoon was used It medicine was given in the surgery or washed the spoon was washed and dried with a towel on each occasion. Prisoners with infectious diseases were isolated and their own spoons used and then sterilized In the subsequent debate Mr Colville announced that it was expected that the new Criminal Lunatic Asylum for Scotland and the State Institution for Detectives would be ready for occupation next year

Regional Medical References—The number of incapacity and consultation references made by approved societies during 1937 to the regional medical staff in England and Wales was Dr Elliot states 459 606 During the year 128 621 insured persons received declaring off certificates before the date fixed for examination while 91 305 did not attend for examination 27 828 insured persons were examined and in the opinion of the examining officers 15,212 were incapable of work and 62 616 were not incapable of work

Working Hours of L.C.C. Nurses—Dr ELLIOT states that the London County Council decided on May 18 last that as from July 1 a ninety six hour fortnight should be substituted for the existing hours of work of nurses The scheme has been put into operation at a number of hospitals but it has not yet been possible to recruit the numbers of staff necessary to put it into full operation

Silicosis in Tin Miners—Between June 1 1931 and May 31 1938 the Silicosis Medical Board certified fifty tin miners to be disabled by the disease and certified in thirty seven cases that death was due to the disease In twenty five of the fatal cases the workmen had previously been certified to be disabled For the year ending May 31 1938 there were five fatal cases (four of which had previously been certified as disabled) and ten cases of disablement

Notes in Brief

On March 31 1938 as compared with October 1 1937 in spite of a fall of 28 000 in the number of children in the schools of England and Wales there was an increase of 74 000 in the number receiving free milk and of 99 000 in the number paying for milk

In 1937 the fatal accident rate to persons under 18 in coal mines was 0 89 per 1 000 employed and the reportable injury rate 5 86 per 1 000 The comparable rates in respect of persons of 18 years and over were for fatal accidents 1 09 per 1 000 and for reportable injuries 4 02 per 1 000

In 1937 compensation was paid under the Workmen's Compensation Acts for these new cases of industrial disease nystagmus 1 165 or 1 5 per 1 000 persons employed beat hand 1 212 or 1 5 per 1 000 beat knee 4 848 or 6 1 per 1 000 beat elbow 700 or 0 9 per 1 000 synovitis, 373 or 0.5 per 1 000 and other diseases 129 or 0.2 per 1 000 None of the cases was fatal

Sir Samuel Hoare stated on July 28 that he had received the report of the committee appointed to consider the evacuation of the civil population from certain areas in time of war He would take the matter up at once

Of 58,547 applicants for entry into the Royal Navy and Royal Marines for the year ended March 1938 22 029 were rejected on medical and dental grounds

In England and Wales during the six months ended March 31 last 181,944 houses were built which is a record for any half year

The number of disability pensioners at March 31 1938 was approximately 434 700

In England and Wales the majority of local education authorities who are conducting courses of instruction for

unemployed boys and girls have made arrangements for medical inspection either monthly or at more frequent intervals In Scotland until the passage of the Unemployment Insurance Act 1938 the powers of education authorities with regard to medical services at courses of instruction were limited to a general power to provide medical supervision It has not yet been possible for any authorities in Scotland to make arrangements under the new Act

EPIDEMIOLOGICAL NOTES

Poliomyelitis

The seasonal rise in England and Wales in the prevalence of acute poliomyelitis noted in the last two issues of the *Journal* continues, although the situation calls for no undue alarm During the week under review 41 cases were notified, compared with 19 in the previous week while in the corresponding week last year 17 cases were recorded Of the 41 cases one-half occurred in twenty different areas, ranging from Northumberland to Cornwall, while in no town were more than four cases notified during the week In the past three weeks 83 cases were notified with 9 deaths Cases were notified during the last three weeks in Braintree 17 (1 death) Halstead 19 Swansea 5 (1 death), Pontyates 4 (1 death), Farnham 4 (3 deaths), Grimsby and Cleethorpes 7 Reading 3 (1 death), Felstead 6, Worthing 9 (2 deaths) Ipswich 4 Ealing 1 Shildon 4 Although, generally speaking, the disease has been described as of average severity and in some areas distinctly mild the occurrence of 9 deaths among 83 cases notified points to the presence of infection of considerable and varying severity

Most deaths are due to respiratory failure from bulbar involvement, but the use of mechanical methods of artificial respiration has undoubtedly lowered the number of deaths Difficulties in connexion with the transport of respirators and the availability of electrical supply of suitable voltage can usually be overcome, but it is sometimes preferable to remove a patient to the machine rather than transport the apparatus to the patient, provided artificial respiration can be operated during the journey To most forms of apparatus a device is attached whereby the bellows may be operated by hand for considerable periods in case of an emergency The Bragg-Paul respirator is more readily transported and, generally speaking is easier to operate from the point of view of the control and nursing of the patient, while technical difficulties in working the apparatus have been overcome in recent models (See correspondence on the Bragg-Paul pulsator in the *Journal* of July 30, p 254) As regards prophylaxis, the avoidance of undue fatigue and exposure to infection, combined with the use of gargles, are the important matters Injection of immune serum (human or animal) need only be considered in very special circumstances where the disease is rife and exposure intimate The horse serum prepared at the Lister Institute (marketed by Messrs Allen and Hanburys, Ltd) has been shown to be more potent than convalescent serum and being readily available, should be used for prophylaxis While in treatment immune serum has not been proved definitely to be of value, it may be given to early cases in the pre-paralytic stage of the disease confirmed by the findings in the cerebrospinal fluid Convalescent serum when used should be administered by the intravenous route or combined intravenous and intrathecal routes

Typhoid Fever

During the week under review 32 cases of enteric fever were notified, compared with 19 in the previous week and 33 in the corresponding week last year The 32 cases were widely scattered in England and Wales the chief counties affected being Essex, 7 cases, West Riding, 5 cases In the week ended August 6 an outbreak occurred at Farnworth Lancashire in which 23 confirmed cases have been reported to date the number under observation is 14 So far there have been 2 deaths All the cases occurred in the New Bury area and are confined to a small group of houses in which several members of a single family have been involved in one or two instances Pending the results of bacteriological investigations the health authorities advise that both milk and water should be boiled The disease appears to have been of a serious type there having been 2 deaths among 23 cases

Diphtheria and Scarlet Fever*

Notifications of diphtheria in England and Wales during the week under review fell from 1 031 to 1 007 and in London from 155 to 154 There was also a drop in the notifications for Scotland—106 as against 123—but in Eire a slight rise was noted—46 compared with 45 in the previous week in Northern Ireland there was a considerable decrease 14 cases being notified compared with 37 in the previous week Deaths from diphtheria in the 126 Great Towns of England and Wales fell from 27 to 19 while in London they remained at 3 of the 19 deaths recorded in the 126 Great Towns 3 (0) occurred in Manchester and 2 each in South Shields (2) and Swansea (0) There were 4 deaths from diphtheria in the 16 principal towns of Scotland during the week—3 (3) in Glasgow and 1 (0) in Kilmarnock There was a drop in the notifications of scarlet fever in England and Wales and in London during the week under review—1 553, compared with 1 791 and 128 compared with 191 respectively both these figures were below the median values for the last nine years There were 5 deaths from scarlet fever in the 126 Great Towns during the week—1 each in London (1) Brighton (0) East bourne (0), Nottingham (0) Sunderland (0)

Primary and Influenzal Pneumonia

There was a decided increase in the notifications of primary and influenzal pneumonia in England and Wales during the week under review—589 as against 493—and in London—43 as against 33, both these figures are considerably in excess of the median values for the last nine years

Measles and Whooping-cough

Measles was responsible for 5 deaths in the 126 Great Towns of England and Wales during the week under review compared with 6 in the previous week of these 1 (2) occurred in London 2 (0) in West Ham and 1 each in Hendon (0) and Leeds (0) The average daily admissions to the L C C fever hospitals were 8 as against 11 in the previous week Notifications dropped in five of the metropolitan boroughs in which measles is notifiable remained the same in three, and rose in three Fulham 11 (7), St Pancras 10 (9) Stepney 2 (1) In Scotland the figures for measles dropped appreciably—62 compared with 117 in the previous week of these 31 (46) occurred in Kirkcaldy 20 (36) in Dunfermline 4 (5) in Dundee There were 14 cases of measles in Northern Ireland during the week all in Belfast In the 126 Great Towns of England and Wales there were 7 deaths from whooping cough during the week—the same as in the previous week only 1 of these occurred in London In Scotland 25 cases of whooping cough were recorded—18 (14) of which were in Glasgow—and 1 death (in Glasgow)

Cholera

During the week ended July 30, 121 cases of cholera and 244 deaths from this disease were reported in Shanghai, and in Hong Kong 25 cases with 26 deaths Increases in the incidence of cholera were noted in the Central Provinces—4 961 cases with 2 398 deaths—in Madras (Presidency)—374 cases with 170 deaths—and in the United Provinces—924 cases with 407 deaths

* In these paragraphs except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

No 0

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended July 30 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths and of Deaths recorded under each infectious disease are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 1[illegible] principal towns in Eire (e) The 10 principal towns (9 in 1937) in Northern Ireland

A dash — denotes no cases a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929–37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	26	1	10	2	1	11	2	10		—		
Deaths		1	3				—	2				
Diphtheria	1 007	154	106	46	14	890	92	150	6	25	918	156
Deaths	19	3	4	2	—	22	1	2	3	—		
Dysentery	36	5	31		—	25	11	12	3	—		
Deaths				—	—				—	—		
Encephalitis lethargica acute	2	—	—		—	1	—	—		—		
Deaths		—					—					
Enteric (typhoid and paratyphoid) fever	32	4	4	3	—	33	—	4	6	5	53	7
Deaths	—	—	1	—	—	2	—	1	1	—		
Erysipelas			42	2	4			45	1	5		
Deaths		—					1					
Infective enteritis or diarrhoea under 2 years												
Deaths	42	22	9	4	3	40	13	8	9	5		
Measles			62		14			48		—		
Deaths	5	1	1	2	1	7	—	—	1	—		
Ophthalmia neonatorum	98	5	51		—	101	4	54		—		
Deaths												
Pneumonia influenzal‡	589	43	15		2	381	34	2		—	464	38
Deaths (from Influenza)	16	1	1	3	—	8	1	—	—	—		
Pneumonia primary			110	6				89	1			
Deaths		17		8	7		15		6	3		
Polio-encephalitis acute	—	—				3	1					
Deaths		—					—					
Poliomyelitis acute	41	3	4		—	17	1	2		—		
Deaths		—					—					
Puerperal fever	5*	5	18	1	1	31	4	17		—		
Deaths		1†					1†					
Puerperal pyrexia	182	17	25		—	102	15	23		—		
Deaths												
Relapsing fever	—	—			—	—	—	—		—		
Deaths												
Scarlet fever	1 553	128	271	64	49	1 593	142	282	63	49	1 627	225
Deaths	5	1	1	—	—	2	—	1	—	—		
Small pox	—	—	—		—	—	—	—		—		
Deaths	—	—		—	—	—	—		—	—		
Typhus fever	—	—	—	—	—	—	—	—	—	—		
Deaths				—	—				—	—		
Whooping-cough			25		15			50		3		
Deaths	7	—	1	1	—	9	2	4	1	—		
Deaths (0–1 year)	272	49	52	34	11	296	59	55	24	20		
Infant mortality rate (per 1 000 live births)	45	40				50	49					
Deaths (excluding stillbirths)	3 814	718	511	160	109	3 727	683	557	155	104		
Annual death rate (per 1 000 persons living)	9 4	9 1	10 4	10 8	9 7	9 2	8 6	11 4	10 6	10 0		
Live births	6 819	1 248	888	373	294	7 085	1 220	849	317	235		
Annual rate per 1 000 persons living	16 8	15 9	18 1	25 3	26 1	17 5	15 4	17 4	21 6	22 5		
Stillbirths	249	33				288	53					
Rate per 1 000 total births (including stillborn)	35	26				39	42					

After October 1 1937 puerperal fever was made notifiable only in the administrative county of London.
† Death from puerperal sepsis.
‡ Includes primary form in figures for England and Wales London (administrative county) and Northern Ireland.

Medical News

In our advertisement columns this week applications are invited for the following posts University of London Chair of Radiology tenable at the Royal Cancer Hospital at a salary of £2 000 per annum and Conservator of the Museum and Director of Postgraduate Studies at the Royal College of Surgeons of Edinburgh at a salary of £1,000

The address of the Imperial Cancer Research Fund is now Burtonhole Lane, The Ridgeway Mill Hill N W 7 telephone, Mill Hill 3544

An Imperial Veterinary Conference will be held at the Royal Veterinary College Camden Town London, N W 1, from August 15 to 19 The subjects to be discussed will include the work of the Imperial Bureau of Animal Health foot-and mouth disease and certain other virus diseases Johne's disease bovine mastitis caseous lymphadenitis of sheep, sheep blowflies, fowl paralysis and chronic bovine haematuria

The official *Reichsgazette* of August 3 contains a decree depriving all Jewish doctors in Germany of their permit to practise medicine in that country and Austria with effect from September 30 next The Ministry of the Interior is given power to make exceptions in the case of doctors who served in the German Army during the war who are reduced to indigence by the new order After October 1 revocable permission will be given to certain Jewish doctors to treat Jewish patients only Landlords are required to give notice by August 15 to Jewish medical tenants who will have to leave their quarters by September 30 unless there is difficulty in replacing them with new tenants The effect of the decree will be felt most acutely in Vienna, where before the *Anschluss* over 50 per cent of all the practising doctors were Jewish Henceforth no Jewish practitioner deprived of his means of livelihood will be allowed to re enter the profession

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone, unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary, B M A House Tavistock Square W C 1 on receipt of proofs Authors overseas should indicate on MSS if reprints are required, as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary B M A House, Tavistock Square W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are
EDITOR OF THE *BRITISH MEDICAL JOURNAL, Aitiology Westcent London*
SECRETARY *Medisecra Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Irish Free State Medical Union (I M A and B M A) 18 Kildare Street Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Spasm of Colon

"M B OXON writes Are there any records of this condition being due to *B coli*? In this particular case no relief is given to the condition which troubles the patient chiefly by waking him up in the early hours of the morning by belladonna nerve sedatives or dieting This patient has for some years been subject to attacks of *B coli* bacillaemia which occur on the average once in twelve months Hence the question

Green Stools at 74

Dr J BARCROFT ANDERSON writes in reply to the inquiry published last week His 'Mewt' excluded mild aluminium poisoning as the cause of the green stools symptoms of occasional gastritis, notably some pain, especially at night ?

LETTERS, NOTES, ETC

Teaching of Obstetrics

Dr LEON KAHAN (Stepney) writes May I comment on Dr Edith Summerskill's statement in the House of Commons as it appeared in the lay press concerning the teaching of obstetrics in this country? I was taught obstetrics in a leading London hospital twenty five years ago and I and my colleagues had plenty of practical work all of us conducting thirty cases independently About twenty years later my son was taught midwifery at the same *hospital* and the method of teaching was the same Compared with other European universities (where I spent some time) the teaching of midwifery in this country is excellent particularly on the practical side It is a great pity that Dr Summerskill was not so fortunate and apparently according to her own statement did not show too much interest in her work Childbirth and child-bearing are natural functions and I suggest that any general practitioner is capable of attending confinements satisfactorily provided sufficient care is taken to prevent complications and if the latter do arise that they are dealt with carefully and promptly

Recovery after 1,500 Grains of Aspirin

Dr G S W EVANS (High Wycombe) writes The instances of aspirin poisoning recently described prompt me to relate the following experience One day about noon an agitated man rushed into a shop where I was making a purchase and urged me to accompany him to an adjacent house where his son had swallowed 300 aspirin tablets There on a couch lay a youth of about 20 in a semi comatose condition and the production of empty bottles *confirmed* the fact that he had taken 1 500 grains of aspirin *It* seemed that the performance of this feat had occupied *two* hours *or more* I was able to induce the patient to drink an ounce of mustard in water and thus brought on profuse vomiting which continued during his conveyance to hospital where I believe the stomach was washed out For some days afterwards the boy suffered from tinnitus flashes of light before the eyes irregularity of the heart and a full of blood pressure but he recovered I am indebted to Dr English of Crewe for the details of the progress of the patient in hospital

The Evolutionary Theory

Surgeon Rear Admiral C M BRADNELL writes The accusations of forgery and faking repeatedly made against Haeckel are so unjustifiable that I hope you will permit me a second reply to Colonel G F Rowcroft, *D S O* (*Journal* June 25 p 1406) Haeckel admittedly schematized a few of his representations of embryos not for purposes of deception however but in order to help students and others by emphasizing essential features and impressing points of similarity in the different classes of vertebrate *embryos* Alongside his own drawings and diagrams he frequently placed those of other embryologists by way of corroboration To be logical to and consistent with these anti evolutionist contentions we should have to regard every illustrated book on astronomy, physiology, or other branch of science as epitomes of fraud Even the excellent photographs and skiagrams so often depicted in the pages of the *British Medical Journal* would fall within this category for they have forced into two dimensions of space objects that in reality occupied three! When Dr Brass—upon whose own scientific work Professors Hertwig and Keibel passed severe strictures—first published his accusations against Haeckel the latter, declining at first to take them seriously ironically replied that 'six or eight per cent" of his illustrations had been thus 'falsified, but, as he stated later in the *Berliner Volkszeitung* of December 29, 1908 these so called 'falsifications were what practically all scientific men did when illustrating their works In conclusion may I recall that when, immediately following Dr Brass's accusation forty-six of Germany's leading scientists signed a protest repudiating the charge one of them the eminent embryologist Professor Rabl pointed out in the *Frankfurterzeitung* of March 15, 1909 that Dr Brass himself had been guilty of the very practice which he had so unjustly endeavoured to foist upon Professor Haeckel

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Deutsche Medizinische Wochenschrift

Leipzig vol 64 June 3 1938

Twenty Five Years of Treatment of Trigeminal Neuralgia with Gasserian Injections—F Härtel
Significance of Meteorism in Pneumonia—O H Mayrhofer and Schulz
Death after Bismuth Treatment with Remarks on a Localized Serological Index for Treatment of Syphilis—H Arntz
Familial Factors Malformed Children Heredity Researches in 109 Families into the Factor Nature—P Dahr and W Bussmann
Local Cure of Trigeminal Neuralgia by Injections of Alcohol—D Kulenkampff
Can Extraneous Factors Appreciably Influence Development of Multiple Sclerosis?—H Sturzberg
Reflex Pain due to Myogelosis—A Reichardt
What Must the General Practitioner Know of Electrocardiography?—G Biedermann
Principles of Evaluation of Biologically Potent Substances—H v Schelling

Meteorism in Pneumonia—An account is given of what is done in a public hospital in Konigsberg Prussia to break the vicious circle which arises when meteorism develops in the course of a pneumonia It is stated that in the overwhelming majority of fatal cases of croupous pneumonia meteorism begins and is refractory to treatment

Edinburgh Medical Journal

Edinburgh vol 45 April 1938

Suicide—D K Henderson
Modern Anaesthesia and the General Practitioner of To-morrow—I Gillies
Mixed Tumours of Salivary Glands—W F Harvey E K Dawson and J R M Innes
Myocardial Infarction Pathological Study—R M Murray Lyon
Moscow Skiff of by Institute—D Band
Preventive Medicine and Control and Treatment of Tuberculosis as seen in Soviet Russia—W T Munro
Surgical Treatment of Cardiac Pain—J Paterson-Ross
Case of Unruptured Tubal Pregnancy continuing to Full Term—H Miller

Myocardial Infarction—Murray Lyon reports that evidence of myocardial infarction was found in 110 cases out of 3 200 consecutive necropsies an incidence of 3 44 per cent An unusually high proportion of female cases was found—36 4 per cent Thrombosis was the cause of the infarction in all cases except three of mitral stenosis in which embolism had occurred The right ventricle was involved in only five out of 122 infarcts Approximately three fourths of the male cases had been diagnosed before death but only half the female cases About half the patients died within one month of their acute attack

Edinburgh vol 45 May 1938

Medical Practice of the Future—J Purves-Stewart
Psychological Problem of Venereal Disease—R C L Batcheler
Lung and Pleura Certain Anatomical Facts in Relation to Disease—A Fergus Hewat
Nasal Sinusitis and Mental Disorder—A B Smith and C McD Ross
Benign Intrathoracic Tumours—E Bloch
Milk Supply—A S M Macgregor
Highland and Islands Medical Service—A Sheater
Treatment of Chronic Cervicitis—G D Matthew

Nasal Sinusitis and Mental Disorder—As the result of complete examination of the nose throat and ears in 818 cases of mental disorder Smith and Ross found that 12 per cent of these patients suffered from nasal sinusitis They found no evidence that nasal sinus infection plays any fundamental part in the causation of the majority of cases of mental disorder

Journal of the American Medical Association

Chicago vol 110 June 4 1938

Excretion of Sulphanilamide—J D Stewart G Rake and J G Allen
Use of Sulphanilamide after Transurethral Prostatectomy—H Gauvain H A Zide and G Thompson
Use of Benzedrine Sulphate in Post-encephalitic Parkinsonism—P L Davis and W B Stewart
Fracture of Atlas in Automobile Accidents—H F Plaut
Fatality Rates in Cerebrospinal Meningitis—G W Loth
Vitamin C in Blood Spinal Fluid and Urine—H Wortis J Liebmann and E Wortis
Cystic Hygroma of Neck—B L Fleming
Studies in Evaluation of Mammography—R A Reisford S D Mesrow
Limitations and Dangers of Mammography by Contrast Media—S A Robinson and E M M Fetterolf
Multiple Peripheral Neuropathy in Multiple Neuritis—I S Wechsler
Vitamin A Requirements and Practical Recommendations for Vitamin A Intake—L E Poeltzer

Klinische Wochenschrift

Berlin vol 17 June 4 1938

Function and Significance of Mineral Substances—H Glatzel
Hormonal Changes in Newborn Infant—E Philipp
Effect of X Rays on Structure and Function of Anterior Lobe of Pituitary—P Crumbecht F Keller and A Loeser
Reducing Capacity of Dehydroascorbic Acid in Healthy Individuals and Patients suffering from Chronic Haemorrhagic Intestinal Affections—H Lund and A Elmby
Practical Importance of Bio-electrical Groups—R Keller
Island-cell Adenoma successfully Removed by Operation—G W Paraskevas and K Kinder
Effect of Allylformate on Fatigue Curve of Isolated Cardiac Muscle of Frog—B Zawadzki
Comparative Therapeutic Investigations on Effect of Nerium (Oleander) on Cardiovascular Affections—H Becker Freyseng
Humoral Transmission of Cellular Changes—B Esler
Behavioural Effect of Complex Molecular Compounds of Albuminous Substances—B Esler

Effect of X Rays on Anterior Pituitary—The anatomical structure of the hypophysis is not affected even by very intensive irradiation There is also no appreciable change in the thyrotropic and gonadotropic hormones of the pituitary after a single irradiation

Lancet

London vol 234 June 4 1938

Causation and Treatment of Dermatitis—R Hallam
Sulphanilamide in Treatment of Meningococcal Meningitis—E C O Jewesbury
Surgical Treatment of Pituitary Basophilism—A R D Pattison and W G A Swan
Active Immunization against Epidemic Influenza by Elementary Body Suspensions heated at 57° C—R W Fairbrother
Reticulocyte Response in Albino Rats after Injection of Gastric Juice—G Plaut

Sulphanilamide—Six particularly severe cases of meningococcal meningitis are described successfully treated by sulphanilamide in combination with antiserum or antitoxin Recent reports from America and England are summarized. The question of the best route for administration of the drug, like that of the advisability of giving it in addition to antiserum or antitoxin still remains undecided

Pituitary Basophilism—The writers summarize the symptoms of pituitary basophilism mention the extrapituitary conditions which may simulate it and recall the cytoplasmic changes described in those presenting the syndrome in the non-neoplastic ripe basophil cells The importance of searching, in the first place for an adrenal cortical tumour is emphasized Two cases of Cushing's syndrome in young women are described in which improvement followed the insertion of radon seeds into the sella turcica

Medical Journal of Australia

Sydney vol 1 May 14 1938

Medical Men as Exposers—L Dureau
Cateterism of Cervix from Viewpoint of General Practitioner—F B Crane
Physical Therapy in Oto-Laryngology—E Gutterdge
Adhesions in and around Joints—N Little.
Migraine from the Allergic Viewpoint—C Sippe
Note on Effect of Thoracic Administration on an Implanted Tumour of the Mouse—W Meppett.

Medizinische Klinik

Berlin vol 34 June 3 1938

Problem of Viruses —K Herzberg
Task of General Practitioner in Cases of Haemoptysis —O Schedtler W Starlinger Cobet G Schroder and A Biemeister
Aetiology of Chronic Bronchiectasis —W Neumann
Spontaneous Pneumothorax —H Alexander
*Radiographic Demonstration of Pulmonary Tuberculosis in Pleurisy with Effusion —I Kuhlmann
Gold diasporal Therapy in Tuberculosis —A Sattler
Agranulocytic Reaction —K Kummerling

Pleurisy with Effusion —This paper stresses the importance of small, mostly infraclavicular and posteriorly situated tuberculous foci in cases of apparently primary pleurisy An outline of the most suitable radiographic technique for the demonstration of these foci is described Pleural puncture has become superfluous thanks to systematic radiographic examination

Medizinische Welt

Berlin vol 12 June 4 1938

Problems of Nutrition in Infection with Examples from Rheumatic Polyarthritis —H Lotze
Serological Blood Picture during Termination of Syphilitic Infection —P W Schmidt
*The Gulf Disease —B zu Jeddeloh
Otogenous Sinus Thrombosis and its Cerebral Complications —H Richter
Lowered Cardiac Vitality and Complete Cardiac Failure —K Barth
Eifelfango Treatment in Orthopaedics —K Ullmann
Treatment of Chronic Eczema of External Ear —G Ullrich

The Gulf Disease —B zu Jeddeloh describes a disease involving damage of the skeletal musculature which occurs chiefly round the eastern bays and gulfs of Germany Of some 500 notified cases only twenty-five lived more than a mile from the sea The aetiology is unknown, and its elucidation is particularly difficult as no cases have occurred since 1933 Gulf disease begins suddenly with pain in all the muscles, movement is impossible The general condition is excellent, there is no fever or catarrhal infection of the respiratory passages The muscles remain soft and are tender No histological changes in the muscles were found in many cases at necropsy but a nephrosis is present The urine is coffee brown owing to myochrome, albumin is present creatine is increased and cylinders are found The prognosis in most cases is good

Munchener Medizinische Wochenschrift

Munich vol 85 June 3 1938

Co operation between Tuberculosis Dispensary Hospital Ward and Sanatorium —Griesbach
Results of Planned Anti tuberculosis Campaigns —L Schuler
Treatment of Haemoptysis in Tuberculosis —F Roll
*Occurrence of Chlorosis in the Male —W Beckert
Cause of Labour Pains and their Importance in Management of Labour —W Wolf
Treatment of Pain after Tonsillectomy —G Heddaeus
New Principle in Treatment of Idiopathic Trigeminal Neuralgia —O Meyer
Observations on a Scarlet Fever Epidemic in Pinneberg (1937) —O Boyksen
Familial Occurrence of Echinococcus Disease —G Marangos
Treatment of Empyema —R Klahn
Conglomeration and Sedimentation Rate of Erythrocytes —G Niedegken

Chlorosis in the Male —Beckert observed two male adolescents with typical chlorosis The symptoms results of clinical examination blood picture and cure after iron therapy were all exactly as seen in chlorosis No cause for the anaemia was ascertained

Nature

London vol 141 June 4 1938

Sir Frederick Gowland Hopkins —H Wieland
The Florisbad Skull —A Keith
Photochemical Interaction between Ketones and Secondary Alcohol —Ch Weizmann Y Hirshberg and E Bergmann
Overtrophic and Folliculoplasic Hormone —J Freud
Hormone and Action of Thyroid Gland —F Ellinger
Development of Giant Salivary Gland Nuclei of *Drosophila* —S L Frolova

New England Journal of Medicine

Boston vol 218 June 2 1938

Passing of Surgical Yeomen —A G Rice
Relation of Newer Drugs to Public Health —G P Grabfield
Medico-legal Examination of Hairs —B M Vance
*Progress in Diabetes Mellitus —H F Root and A Marble

Progress in Diabetes Mellitus —This is a summary of the literature which has appeared during the past year It contains an account of the uses of the newer insulins, such as protamine zinc insulin and calcium insulin A full list of references is appended

Nordisk Medicinsk Tidskrift

Stockholm vol 15 June 4 1938

Electro encephalography —G Ehrenward and T S Frey
*New Viewpoints in estimating Value of Treatment of Schizophrenia with Insulin Comparative Study of 200 Cases given Ordinary Clinical Treatment —G Langfeldt
Treatment of Varicose Veins with Injections of Varicocid (Sodium Morrhuate) —A Tallroth
Arteries in Myo-endometrial Zone of Human Uterus —H Okkels

Prognosis of Schizophrenia —Follow up study showed that when schizophrenia was well defined a permanent cure could be claimed in only 3 per cent whereas among the ill defined uncertain cases the complete recovery rate was 32 per cent and the partial recovery rate 35 per cent Hence the importance of distinguishing between well defined and ill defined schizophrenia from the outset before attempting a prognosis or forming an opinion of the therapeutic value of insulin shock

Policlinico

Rome vol 45 May 30 1938 (Sez Prat)

*Oxalic Acid Metabolism in Gout —I Di Marco
Ten Years Practice in Pneumothorax —E Mondolfo and R Molari
First Cases of Intestinal Schistosomiasis from *Schistosoma mansoni* in Libya —E Cicchitto
Early Getting Up and Early Alimentation after Operations —V Pettinari

Gout —Of forty-four cases of typical gout Di Marco noted an increased oxaluria in 88 per cent usually combined with an increase in the urinary oxalates He suggests that the oxalic acid is here largely derived from excess of uric acid hepatic metabolization of this being defective and leading to the appearance in increased amounts of the intermediate product

Presse Medicale

Paris vol 46 June 1 1938

*Instability of Vago sympathetic System and Operations on Sympathetic in Course of Pulmonary Tuberculosis —L Michon J Chaze and R Mollard
*Aerophagy —G Leven
Reflexotherapy of Neurotonic Reactions —L Alquier

Vago-sympathetic Instability in Phthisis —The authors as the result of five years research have come to the conclusion that vago sympathetic instability accounts for many of the subsidiary factors in pulmonary tuberculosis such as vaso motor, inflammatory and other perifocal phenomena the importance of which in prognosis is being increasingly realized They also point out that laboratory experiments have shown that the toxin of tuberculosis is a definite vago sympathetic poison Hence their object has been to endeavour to stabilize the sympathetic system or at least to render it less unstable For this purpose they use the method of injecting a weak solution of novocain into the stellate and/or the second third fourth and fifth thoracic ganglia They describe their technique and give examples of cases so treated

Aerophagy —The author is disturbed by recent publications in France and other countries tending to deny the existence or significance of aerophagy He gives examples drawn from the realms of surgery obstetrics, medicine and

radiology to prove the importance of this symptom and discusses its aetiology and treatment

Paris vol 45 June 4 1938

Place of Systematic X Ray Examinations in Early Detection of Pulmonary Tuberculosis in Communities—L Jullien
Some Numerical Data on Lumbar Sympathetic Chain (Ganglia)—V Desmaisons and R Porcher

Systematic X Ray Examinations—Jullien says the result of eleven years systematic x ray examinations in the French Army puts forward a plea for the adoption of the same methods in school children and young people The examination should be first by screening and then by films where necessary The author gives his reasons for preferring this to all other methods for the early detection of tuberculosis He describes an ingenious portable x ray apparatus

Schweizerische Medizinische Wochenschrift

Basle vol 68 June 4 1938

Meningitis of Unusual Causation (Pasteurella Meningitis)—W Hadorn
New Case of Cerebrospinal Meningitis from *B bipolaris septicus*—R Regamey
Chemotherapy of Acute Anterior Poliomyelitis—C Contat
Bengal pink and Other Tests of Hepatic Function—M Navill

Pasteurella Meningitis—In this and the succeeding paper the clinical features and bacteriological findings are described of a case of meningitis due to an organism of the Pasteurella group (*B bipolaris septicus*) The bacteriological relationships are discussed The illness followed some months after a fracture of the frontal bone and in spite of a frankly purulent cerebrospinal fluid took a benign course

Chemotherapy of Poliomyelitis—Contat had no mortality as well as a favourable course and satisfactory end results *qua* paresis in fifty four cases during the recent Swiss epidemic He used potassium chlorate both orally in doses larger than are customary and in nasal instillations The prophylactic and therapeutic properties as well as the toxicology and dosage of the drug are discussed fully

South African Medical Journal

Capetown vol 12 May 28 1938

Intravenous Treatment of Varicose Veins—R Simons
Endemic Focus of Plague—L Feurie
Case of Cerebral Tumour—I Sacks
Three Interesting Cases of Bilharzial Infection in a Family—P Klenerman

Ugeskrift for Laeger

Copenhagen vol 100 June 1938

Sanatory in Treatment of Diseases of Joints with Special Reference to Compensation of Treatment—K Secher
Polyarthritis Urethritica Simplex in Four Patients—S Clemmesen and K Kabbak
Osteoarthritis treated with Immetal Injection—H Jacobsen

Immetal—In 1932 W Konig published in the *Zentralblatt fur Chirurgie* a communication on the subject of a substance immetal he had produced which resembled in consistency the fluid normally found in a joint and which could remain in that fluid for a long time without doing any harm Jacobsen gives an account of twelve of his own cases treated with injections of this substance In all but one case the immediate or ultimate results were good

Wiener Klinische Wochenschrift

Vienna vol 51 June 5 1938

Effect of Structure of Bile Ducts on Gall bladder—K Budinger
Treatment of Migraine—R Ustvedt
Treatment of Lambliosis—P Gruneis
Forensic Medicine in Relation to Schizophrenia—J Berze
Fischer Bowman Pregnancy Test—B v Bedő
Cancer Mortality and Social Status—G Wolff
Clinical Significance of Examination of Morphology and Number of Blood Platelets—L Bacher
Results in Differentiation of Brucella Types according to Izar and Famulari—K Kollár
Treatment of Angina Pectoris and Cardiac Asthma—H Siedek
Therapeutic Importance of Vitamins in Obstetrics and Gynaecology—J Gigon

Treatment of Lambliosis—Gruneis reports on three cases of lambliosis successfully treated with three tablets daily of atebrin for five days At the end of treatment the faeces and duodenal secretion were free from parasites Treatment is simple without danger and can be repeated if necessary

Wiener Medizinische Wochenschrift

Vienna vol 88 June 4 1938

Elimination of Phrenic Nerve in Collapse Therapy of Pulmonary Tuberculosis—A Sattler
Therapy of Diseases caused by Worms—O Charousek
Importance of Blood Circulation in Abdominal Surgery and its Consequences—R Friedrich
Practical Therapy of Leucorrhoea—W Hacker

SPECIAL JOURNALS

American Journal of Diseases of Children

Chicago vol 55 May 1938

Rheumatic Erythema Nodosum—A Walgren
Metabolism and Mode of Action of Vitamin D Importance of Liver for its Antirachitic Efficacy—W Heymann
Results of Collapse Therapy in Children with Pulmonary Tuberculosis—M Siegel and B Sniffer
Pathogenesis and Treatment of Myotonia Congenita Further Observations—H G Poncher and H W Wade
Insensible Loss of Weight in Infancy Findings for Forty six Infants under Basal Condition—J L Law and W G Frederick
Diagnosis of Syphilis in Newborn Infants Use of Quantitative Wassermann Tests—A L Christie
Mentality of Infants Relieved of Hydrocephalus by Coagulation of Choroid Plexuses—T J Putnam
Pathology of Chronic Arthritis of Children (Still's Disease)—R B Portis

Rheumatic Erythema Nodosum—A case of this condition is described in detail and proves the correctness of the view that acute rheumatic fever may give rise to erythema nodosum On the other hand the rarity of such cases disproves the view that erythema nodosum is often rheumatic

Collapse Therapy—An account of the pneumothorax treatment of pulmonary tuberculosis in children is given and the results are analysed Many children improved and life was prolonged The best results were obtained among the children with unilateral tuberculosis in whom a marked degree of collapse could be obtained

American Journal of Psychiatry

San Francisco vol 94 March 1938

Habeas Corpus Releases of Feeble-minded Persons and their Consequences—Leo Kanner
Experimental Neurosis and Problem of Mental Disorder—H S Liddell
Intro-extraversion The Concepts and their Clinical Use—R M Collier and Minna Emch
Appraisal of Intellectual and Physical Factors after Cerebral Damage in Children—Bronson Crothers and Elizabeth Lord
Other Side of Hallucinations—Jonathan Lane
Review of Results from Employment of Malaria Therapy in Treatment of Neurosyphilis in Florida State Hospital—Mark F Boyd W K Stratman-Thomas S F Kitchen and W H Kupper
Hereditary Form of Primary Parenchymatous Atrophy of Cerebellar Cortex Associated with Mental Deterioration—Andrew J Akelaitis
Constructive Criticism of Certain Hospital Procedures—Karl M Bowman
Statistical Contribution from Mental Hygiene Study of Eastern Health District of Baltimore.—B M Cohen and R E Fairbank
Diagnostic Validity of Rorschach Test—J D Benjamin and F G Brough
Some Clinical and Physiological Aspects of Brain Potentials—J Hughes E A Strecker and K E Appel
Post-operative Psychoses—Milton M Abeles

*Results of Fifteen Years Experience with Ketogenic Diet in Treatment of Epilepsy in Children—H I Helmholz and M Goldstein
Some Data of Psychic Morbidity of Jews and Arabs in Palestine—I Halpern
Psychiatric History and Development in California—M H Smyth

Intro-extraversion—The authors record a careful study conducted upon 250 psychologists and psychiatrists in order to find out the consensus of professional opinion regarding the traits of introversion and extraversion As they state very mildly The lack of clear-cut associations with either introversion or extraversion was evident and they back up their conclusions with overwhelming statistical evidence

Mental Hygiene Study—The authors give a general account of a most valuable statistical inquiry into the mental health of a selected district of Baltimore

Ketogenic Diet in Epilepsy—The authors report favourably upon the value of the ketogenic diet in the treatment of idiopathic epilepsy and found that only 5 to 10 per cent of those who became free from attacks following its use had any recurrence of seizures in a period of seven years They believe that after such an interval the chances of recurrence are slight

American Journal of Syphilis, Gonorrhœa, and Venereal Diseases

St Louis vol 22 May 1938

Qualifications of a Venereal Disease Control Officer—T B Turner
Thermal Death Time of Gonococcus at Fever Temperatures—C M Carpenter R A Bonk and S L Warren
Bismuth Studies VI Bismuth Absorption from Site of Injection in Dogs—T Sollmann and K Henderson
Morphological Variations of Syphilitic Germ—A Bessemans
Functional Variations of *Treponema pallidum*—A Bessemans
*Complement fixation Test for Gonorrhœa with Increased Antibody Content—E Weiss and Lloyd Arnold
Case of Congenital Neurosyphilis aged 60 with Multiple Osteo-arthropathies—W C Menninger and C C Carlson
Tryparsamide Dermatitis—Francis A Ellis
Detection of Syphilis in a Urological Clinic—L Friedman and M L Mazer
Fever due to Iodides—Lawrence Katzenstein
*Sulphanilamide may Revolutionize Laboratory Identification of Gonococci—W R Jones
Mapharsen in Wassermann fast Syphilis—L Chargin and W Leifer
Is Mercury a Specific for Syphilis?—D M Sidlick and A Strauss
*Accidental Intra-arterial Injection of Bismuth in Oil with Demonstration of Bismuth by X Ray in Arterioles of Penis—L W Kimberly
Effects of Placental Extract on Course of Experimental Rabbit Syphilis—J E Kemp Clarence Shaw and E M Fitzgerald
Depigmentation of Iris in Experimental Rabbit Syphilis—W E Coutts and J M Herrera

Complement Fixation—Weiss and Arnold have developed a new technique for the complement-fixation test for gonorrhœa basing their argument on the fact that since serum from gonorrhœal patients contains relatively small amounts of antibody it is necessary to use large amounts of serum The antigen consisted of a simple suspension of many strains of gonococci For the test proper they use 2 c.cm of the serum to be tested, 0·15 c.cm of undiluted complement and the amount of antigen determined by previous titration with saline to make up to 2·35 c.cm After incubation for one hour at 37° C five units of amboceptor in 0·1 c.cm saline and 0·05 c.cm of a 50 per cent suspension of sheep's cells are added The authors claim that the only non-specific results occur with sera from cases of epidemic meningitis

Sulphanilamide and Laboratory Diagnosis—W Ray Jones states that sulphanilamide may revolutionize the laboratory identification of gonococci Films taken from patients treated with sulphanilamide show that pus and epithelial cells are more degenerate and more extraneous organisms are present, while the gonococcus shows changed physical and staining characteristics and a varied relationship to the cells The drug may also mask the presence of the disease since it may reduce symptoms without killing off all the gonococci Great care therefore should be exercised in examining films from sulphanilamide treated cases Drug-counter prescribing of the drug produces carriers and may not cure and in Washington it has not reduced the incidence of gonorrhœa

Intra-arterial Bismuth—Kimberly points out that the intra-arterial injection of bismuth is a rare but serious accident He describes a case of embolism due to bismuth being injected into an artery A male aged 31 suffering from syphilis was given his seventeenth intramuscular injection of a 10 per cent suspension of bismuth subsalicylate in oil He experienced a sharp pain in the buttock radiating down the thigh and leg Radiographs showed bismuth in the arterioles of the penis and part of the glans and scrotum sloughed Five weeks later there was still evidence of injury to the sciatic nerve toe and ankle drop absent Achilles reflex flabbiness of the left calf and hypo-æsthesia on the outer aspect of the leg and foot After an interval of eight weeks the neurological condition though still present was improved

Annales de Medecine

Paris vol 43 May 1938

Benign Icterus
Introduction—N Fiessinger
Common Jaundice and its Infectious Nature—J Fromer
Intolerance and Catarrhal Jaundice—J Caroli
Acute Benign Hepatonephritis—J Vague
Sodium Metabolism in Common Jaundice—M Brule R Sasier and J Cottet
*Treatment of Benign Icterus by Duodenal Drainage—P Harvier
Treatment of Catarrhal Icterus by Cholagogues—E Chabrol
Recurrence of Afebrile Icterus and its Gravity Hepatic Cataphylaxis—N Fiessinger
Origin and Equilibrium of Two Forms of Bilirubin—N Fiessinger

Duodenal Drainage in Benign Icterus—This treatment is only of use in cases where the lesions are localized at the end of the common bile duct Diffuse lesions and prolonged illness require treatment by cholecystotomy and surgical drainage The need for surgical intervention is indicated when the icterus becomes worse when the patient is losing weight and when there are any signs of insufficiency of the liver

Archiv fur Klinische Chirurgie

Berlin vol 191 April 8 1938

Treatment of Vertebral Fractures—G Magnus
Pseudarthroses in Region of Ankle—P Rostock
Efforts to obtain a Reliable Skin Suture—W Haase and W Hellpap
Secretion and Absorption of Cerebrospinal Fluid in Cerebral Ventricles—G Jorns
Massage Treatment of Chronic Prostatitis—K Boshamer
Thoracic Injuries due to Pointed Instrument with Cardiac Pulsation conducted to Foreign Body—E Wetzel
Surgery of Perforated Gastro-duodenal Ulcer—L Nicolas
Result of Surgical Treatment of Non-excisable Gastric and Oesophageal Cancer—E Harms
Arteriovenous Anastomosis of Mesenteric Circulation—K Katz and W v Strenge
Review of Patients with Stones in Bladder in Jena Surgical Clinic during Last Ten Years—H A Dege
Significance of Atypical Radiographs in Diagnosis—B Simon
Disturbances in Ossification in Skeleton of Foot—F Niedner
Congenital Fissures in Articular Processes of Lumbar Portion of Spine—F Nöller
Collateral Inflammatory Reactions in Limbs (so-called Acute Bone Atrophy)—P Sudeck
Basedow's Disease Thyrotoxicoses—B Breitner
Significance of Thymus Gland in Basedow's Disease II Thymus Gland and so-called Anti-thyroidal Protective Substance—L Rathcke
Microscopical Findings in Coccyx—H Angerer

Archives des Maladies de l'Appareil Digestif et des Maladies de la Nutrition

Paris vol 28 May 1938

*Volvulus of Stomach—P Chêne and M Raimbaut
Studies of Diastatic Action of Pancreatic Juice in Some Fevers—M Garofeanu
Vitamin B_1 in Food and Question of Bread—M H Mueller
Three Cases of Chronic Pancreatitis with Atypical Courses—J Lorié

Volvulus of Stomach—The condition is a torsion of part of the stomach in either the longitudinal or the transverse direction thus one part of the anterior stomach wall is made to face part of its posterior wall In acute cases x-ray investigation is useless and surgical intervention is indicated, in spite

of treatment 50 per cent of the patients die In the chronic cases or with the intermittent occurrence of volvulus medical treatment is justifiable The freely movable volvulus is caused by intestinal pneumatosis cases of fixed volvulus by adhesions and perigastritis

Archives d'Ophtalmologie

Paris vol 2 May 1938

Intracranial Study of Lymphs and Centres of Conjugate Movement—E Jayle
Case of Intracranial Compression of Optic Nerve—P Desvignes
Haemorrhagic Familial Angiomatosis and its Ocular Complications—J Francois

Familial Haemorrhagic Angiomatosis—First described by Rendu in 1896 and more definitely by Osler in 1901 this condition has three outstanding features telangiectasis haemorrhage and familial cataract Telangiectases appearing at 20 to 40 years of age are found on the skin or the mucous membranes the former more frequently on the face the latter in the nose haemorrhages occurring spontaneously or after some trifling accident may be copious the cataract is a constant feature Examination of the blood shows nothing unusual Death from anaemia may follow frequent haemorrhages The vessels of the telangiectasis have an irregular lumen with a simple endothelial lining and a deficiency or absence of elastic tissue Venous ectasias and varicosities in the retina observed in the reported case may have no connexion with the condition There is no specific treatment and local diathermy with the formation of a sufficient scar is followed by the appearance of a further telangiectasis at the same spot in a few days

Archives of Pediatrics

New York vol 55 June 1938

Haemorrhage of Brain and Retina in Scurvy—E Shapiro and S Hurwitz
Place of Ultra violet Radiation in Paediatrics—F van der Bogert
Physiological Scoliosis—J G Kuhns
Immunological Characteristics of Different Types of Tuberculin Reactions—M Paretzky
Prevention of Common Contagious Diseases—A S Sarder
Vaccines A Brief Outline—H Goodman
The Fat Youngster—I Bram

Ultra violet Therapy—A large group of conditions in infancy and childhood can be benefited by this treatment provided it is given with proper skill The effect is a general one except in some superficial skin lesions An adequate supply of calcium and vitamin D is essential to get the best results The indiscriminate and inexact dosage of ultra violet rays is condemned a trained operator is essential

Beitrage zur Pathologischen Anatomie und zur Allgemeinen Pathologie

Jena vol 100 March 30 1938

Pathogenesis of Experimental Rheumatic Atherosclerosis Contribution to Experiment on Schmitt's Work—H Therasch
Thyroid Gland of Cretin at Birth—J Lussier
Significance of Bilateral Atrophy of Suprarenals in Production of Suprarenal Secretion—W Mahnert
Bronchiectasis and Focal Infection—A v Albertini and C Verdan
Glandular Hermaphroditism—G Pich
Fatal Diffuse Glomerulonephritis—R Huckel
Resorption and Storage in Foetal Organism Investigations by Vital Stains—E. Benecke
Pars Intermedia of Human Hypophysis—G Habermann
Primary Malignant Tumour of Parotid Portion of Temporal Bone of Type of Mixed Tumours of Salivary Gland—F Roesing
Chromatosis Cases—R Gonnermann

British Journal of Ophthalmology

London vol 22 May 1938

Smooth Muscle of the Periorbita and the Mechanism of Exophthalmos—C E Bruton
A Corneo-scleral Suture in Cataract Extraction Its Technique and Advantages—H B Stallard
Intracapsular Expression of Cataract—C V Krishnaswami
Transplantatio Conchae Auriculae New Method of Correcting Senile Entropion of Upper Lid following Total Tarsectomy—N I Shimkin
Anteposition Conjunctivae Fornicis Operation in Severe Cases of Senile Catarrh—N I Shimkin
Case of Aniridia Reunae—I Fer
Microstructure of Epithelial Cells and its Importance for Aetiology of Trachoma—W Gruter

Corneo scleral Suture—This suture prevents post operative hyphaemia and prolapse of the iris It is of great value when prolapse of the vitreous is to be expected There are no after effects from the suture The needle speculum and technique are fully described The procedure may be used in both intra- and extracapsular extraction

Intracapsular Expression of Cataract—This is a modification of Smith's method A small iridectomy is made after the section and the behaviour of the cornea and the irido lenticular diaphragm observed Where the cornea collapses or the irido lenticular diaphragm remains in its normal position easy delivery of the lens may be expected This operation reduces intra ocular instrumentation to a minimum and no second operation is required

London vol 22 June 1938

Vital Cell of the Pharynx (Ornithorhynchus)—K O Day
Osmotic Pressure of Aqueous Humour in Eye—D Lyle Glaucoma—E O G Kirwan and S N Mukerjee
Studies of Pathology of Trachoma—L A Julianelle
Melanosomes-dispersin Substance in Blood and Urine of Patients with Retinitis Pigmentosa (Preliminary Communication)—E Curran Harrison Duke
Case of Primary Bilateral Aniridia Clinical and Histological Report—E. Recordon and G M Griffiths
Modified Briggs's Retractor for Dacryocystorhinotomy—H B Stallard

Epidemic Dropsy Glaucoma—Epidemic dropsy being the only general disease at present known of which glaucoma is a feature it provides valuable material for research into the causation of glaucoma The anterior chamber being deep the vitreous does not swell in these cases Changes occur in the aqueous the albuminous content being raised Investigation of the osmotic pressure of the aqueous in epidemic dropsy shows that the change in the permeability of the capillaries does not affect the usual process of dialysation of aqueous from the blood but only alters the state of equilibrium setting it at a different level

Retinitis Pigmentosa—Many workers believe that retinitis pigmentosa has an endocrine origin Freshly passed urine of eight adult mentally defective patients with this disease was made just alkaline to litmus with N/10 sodium hydroxide placed in a boiling water bath for half an hour and allowed to cool in the dark When 0·3 to 1 c.cm. of this urine was injected into the dorsal lymph sac of frogs an increase of pigmentation was brought about varying from one frog to another Protein freed blood produced similar results but injections of cerebrospinal fluid had no effect A more constant result was obtained by immersing fresh frog skin in the urine Only certain cases of pregnancy and perhaps cases of abnormal skin pigmentation hyperthyroidism and pituitary disease give similar results Three of the eight patients had signs of pituitary dysfunction

British Journal of Urology

London vol 10 June 1938

Tuberculous Epididymitis—C A Weir
Tests of Renal Function—C P Stewart
Deposition of Uric Acid Crystals in Perirenal Capsule and Kidney Tissues—G de Ilsye
Gonococcal Infection of Upper Urinary Tract—W S M Kerr and C B Buchanan
Large Pedunculated Fibroma of Kidney—T B Mouat
Case of Heminephrectomy for Hematuria—H Meade
Necrosis of Anterior Wall of Urinary Bladder—an Unusual Complication after Resection of Bladder Neck Treatment and Prevention—M Graf

Tuberculous Epididymitis—Evidence is given in favour of the pathway of tuberculous infection within the genito urinary tract being from blood stream to kidney thence to the bladder by the urinary stream and from the posterior urethra to the epididymis by the lumen of the vas The higher incidence in recent statistics of renal lesions associated with genital lesions is believed to be due to improved facilities

for investigation and to better follow up methods In the author's series of cases there were associated renal and genital lesions in at least thirty proved cases out of fifty-five The cases of epididymitis without demonstrable renal lesions are explained by the presumption that the renal lesion has healed of which possibility provided that the lesion is merely microscopic there is recent evidence Clinically demonstrable lesions never heal and call for nephrectomy On this theory it became necessary in every case of tuberculous epididymitis to suspect the presence of a renal lesion and therefore repeatedly to examine the urine to carry out guinea-pig inoculation tests and to investigate fully the upper urinary tract It is suggested that prophylactic vasotomy on the healthy side should be performed (*a*) in old age (*b*) when one testicle has been completely lost or needlessly sacrificed, and (*c*) in the presence of frank prostatitis and vesiculitis

Tests of Renal Function—The following tests are considered the rate of secretion and concentration of urine the water excretion test the urea concentration test the urea range test the urea clearance test and tests based on the excretion of foreign substances As a test of total renal efficiency the urea clearance test is recommended while the single test giving the maximum amount of information is probably the phenolsulphonephthalein test

Current Literature in Anæsthesia and Analgesia

Elm Park Gardens vol 17 May June 1938

Influence upon Spinal Anæsthesia of Certain Characteristics of Spinal Fluid—K M Heard
Effects of Ethyl Ether and Vinesthene on Oxygen Consumption of Rats—S A Peoples
*A Reflex complication during Abdominal Surgery—C L Burstein and E V Rastine
First Surgical Sections in Man of Lesions Interrupting Pain—Temperature Path at Brain Stem for Treatment of Diffused Rebellious Pain—A M Doglietti
Present Scientific Status of Spinal Anæsthesia—Co Tui
Scope and Utility of Differential Pressure in Thoracic Surgery—H Killian
Clinical and Laboratory Observations on Intravenous Anæsthesia—G J Thomas
Investigation in Relation of Heat Regulations to Ether Convulsions and Syndromes—F W G Smith
*Further Experiences with Vinesthene Anæsthesia—I S Raydin E L Elkason G M Coates T B Halloway K L Ferguson A B Gill and T J Cook

Spinal Anaesthesia—Spinal anaesthesia is the method of choice for all operations below the diaphragm and should be more widely used Pantocaine and percaine give prolonged analgesia and are the best agents the former for low and the latter in 1 1 500 strength (Howard Jones) for high analgesia A test is described for estimating the behaviour and effectiveness of the drug the latter depending on the alkalinity of the cerebrospinal fluid A few drops of the solution to be used are added to a little cerebrospinal fluid in a test tube The formation of a precipitate indicates an alkaline fluid, in which the drug will be effective, the behaviour of the precipitate—floating, sinking or diffusing—enables the distribution of the injection to be predicted If N/10 sodium hydroxide must be added before precipitation occurs the action of the drug will be weak or delayed

Abdominal Surgery—Reflex disturbances of the sympathetic nervous system occurring during surgical manipulations in the neighbourhood of the coeliac plexus are discussed and have been studied experimentally As occurring during upper abdominal surgery these result in abdominal rigidity and a severe fall in pulse pressure Physostigmine is suggested for pre anæsthetic administration also for treatment of the condition during operation

Vinesthene—Divinyl ether (vinesthene) continues to be used to an increasing extent for short anaesthesias in all branches of surgery with very satisfactory results It has completely replaced nitrous oxide-oxygen for the short operations of the surgical out patient clinic

Deutsche Zeitschrift fur Chirurgie

Berlin vol 250 April 12 1938

Electrocoagulation of Bones and Joints—H Zschau
Replacement of Prolonged Extension Treatment by Forcible Extension Plaster Bandage in Bone Fractures—H Killian
Rare Forms of Abdominal Influenza—H Uebermuth
Vegetative Innervation of Synovial Membrane of Human Knee-joint—P Sundt Pluzmann and K Draubenspeck
Thyroid Gland and Vitamin B_1—I Schneider
Suppurating Sacral Dermoid Aetiological Diagnosis of Sacro-coccygeal Abscesses and Fistulas in Practice—I Becker
Experience with Application of Paraffin Plug in Pulmonary Tuberculosis—E Heller and V S Haeder
Diagnostic Significance of Displacement of Pineal Body with Changes in Intracranial Pressure—M Frank
Chronic Mastitis from Latest Point of View—R Wanke

Endocrinology

Wisconsin vol 22 June 1938

Rate of Ova accelerated in their Rate of Passage through the Fallopian Tubes of Mice by Massive Injections of Progynon B—H O Burdick and I Whitney
Acceleration of Rate of Passage of Fertilized Ova through Fallopian Tubes of Rabbits by Massive Injection of Progynon B—R Whitney and H O Burdick
Clinical Indication for Anterior pituitary like Sex Hormone—R L Shaffer F A Sharp and J V Tammy
Ovarian Secret Male Hormone IV Effect on Ovarian Androgens on Accessory Sex Size in Mouse—R T Hill and L M T Strong
Effect of Coitus on Gonadotropic Content of Pituitary Glands of Pseudopregnant Rabbits—A W Makepeace G L Weinstein and M H Friedman
Antihormone Studies in Boys treated with Anterior pituitary like Hormone for Genital Under-development—G B Dorff
Cytological Evidence of Gonadotropic Activity of Rabbit's Anterior Hypophysis—H B Friedgood and V B Dawson
Insulin Shock in Relation to Components of Adrenals and Hypophysis—H G Swann and J W Fitzgerald
Resorptive Effects of Anterior Lobe Extracts—C Wechsler Freed and B P Wiesner
Pituitary Extract in Simmonds's Disease—G F Dick and V C Dix
Pituitary Dwarfism Treatment with Growth Hormone—N M Taylor

Fukuoka Acta Medica †

Fukuoka vol 31 May 1938

*Role of Histamine in Formation of Toxins in Burns (Ger)—H Kuma
*Changes in Adrenal Glands in Burns and Histamine Poisoning (Ger)—H Kusima
Studies of Biochemical Properties of Mucins (Ger)—H Sakamoto
Some Physico-chemical Properties of Mucins (Eng)—N Yosikawa
Histopathological Sections in Planes of Cartilage Epiphyseal Line and Metaphysis in Long Bones of Normal Rabbits and those with Experimental Rickets (Fr)—S Nakahara
Epidemic Encephalitis and Tuberculous Meningitis (Ger)—K Kotorai
Studies on Pancreatic Lipase (Eng)—I Nakamura
Experimental Examination of Local Disorders in Lung Circulation (Ger)—T Ikeda

Histamine and Burn Toxins—An increase of histamine is found in the organs of dogs after experimental burns have been inflicted This is highest (seven to ten times the normal figure) in the spleen the kidney, and the pancreas, and is noticeable in the blood from six to twelve hours after the infliction of the burn increasing up to the second or third day and then gradually decreasing If the damaged skin is cut out immediately after the burn is inflicted no increase in the histamine occurs and no signs of a toxic effect were noticed This seems to show that histamine is formed locally and distributed by the circulation The same observation was made in four clinical cases

Changes in Adrenals—There is a decrease in the chromaffin and in the amount of adrenaline in the adrenal medulla in both burns and histamine poisoning The clinical signs and histological changes are similar in both conditions Histamine is probably an important factor in the toxin production in burns and alterations in the adrenal glands are the probable cause of death in the fatal cases

† "Eng" means that the article referred to is printed in English, "Fr" in French, and "Ger" in German

Journal of Laryngology and Otology

London vol 53 June 1938

Some Clinical Aspect of Vocal Cord Inactivation.—H. Tilley
Administration of a Hearing Aid Clinic.—P. J. Kerrigan
Tetanoid Tremor of Nasopharynx.—W. H. Frith

Local Cord Paralysis.—The author describes a group of cases of left vocal cord paralysis in many of which a spontaneous recovery took place contrary to orthodox medical teaching. The left recurrent nerve is said to be more vulnerable than the right on account of its longer anatomical course peripheral neuritis will therefore be more common on the left side than on the right

Journal of Nervous and Mental Disease

New York vol 87 May 1938

Is there a Relative Increase in Mental Disease?—Benjamin Malzberg
Blood Pressure and Pulse Rate in Primary Psychoses.—Rudolph Schwartz
Irrigation in Treatment of Acute Mania.—L. C. Grosh
Effect of Induced Metrazol Convulsions on Schizophrenic Patient.—Hans H. Reese, A. H. VanderVeer and A. H. Weed
Psychosexual Effect of Benzedrine Sulphate.—Paul Schilder
Concentrations of Athletes, Catatonia and Hypochondriacal Schizophrenia.—Kalman Cyarfas
Electroencephalography in Dementia Praecox and Localization of Intracranial Conditions.—Theodore J. Case

Relative Increase in Mental Disease.—As the result of an examination of the available statistics in the State of New York the author concludes that there is a relative increase in mental disease but that this increase is on the whole moderate and must be viewed as part of a general trend extending over many generations. It is not such as to give rise to considerable eugenic concern.

Insulin Treatment.—The author gives a brief review of the controversial question of glucose tolerance tests in the manic depressive psychoses. He records good effects following treatment with insulin in two cases of acute elation which showed unusual reactions to glucose tolerance tests and suggests that similar treatment might be advised in other acute elations showing a similar abnormality of glucose tolerance.

Induced Metrazol Convulsions.—The authors report the results obtained in twenty patients treated with metrazol (cardiazol) and express the opinion that catatonic schizophrenics in the early negativistic stuporous phases seem to be the most suitable subjects for this form of treatment.

Journal of Nutrition

Philadelphia vol 15 May 10 1938

Effect of Varied Vitamin B Ingestion upon Appetite of Children.—F. W. Schlutz, E. M. Krotkov *et al*
Studies on Vitamin B_1 Requirements of Growing Rat.—A. Arnold and C. A. Elvehjem
Relation of Grass Juice Factor to Guinea Pig Nutrition.—G. O. Kohler, C. A. Elvehjem and E. B. Hart
Technique of Measuring Radiation and Convection.—J. D. Hardy, E. F. Du Bois *et al*
Basal Metabolism, Radiation, Convection and Vaporization at Temperatures of 22 to 38° C.—J. D. Hardy, E. F. Du Bois *et al*
Effect of Urea on Human Respiratory Exchange and Alveolar Carbon Dioxide.—T. M. Carpenter
Basal Metabolism in Pregnancy.—J. A. Johnston, H. A. Hunscher, F. C. Hummel, M. F. Bates, P. Bonner and I. G. Macy

Vitamin B and Appetite.—The factors affecting appetite and food consumption especially the effect of vitamin B intake were studied in fifty four children aged 4 to 11 years. When the daily vitamin B intake was increased by about 50 per cent by a daily supplement of approximately 150 units there were increases of 17 to 25 per cent in the daily food consumption with correlated slight increases in the gain in weight of the children. Since the higher vitamin B intakes produced no ill effects and did stabilize appetite they might be regarded as optimum.

Urea and Alveolar Carbon Dioxide.—In a human subject ingestion of 30 to 40 grammes of urea caused a marked rise in the alveolar carbon dioxide for two to two and a half hours and a significant rise in the respiratory quotient in the period from one to three hours after ingestion both changes being related to the alkalosis caused by the ingestion of urea. There was no effect on the total metabolism. Water produced a slight fall in the alveolar carbon dioxide but no change in the respiratory quotient.

Journal of Pharmacology and Experimental Therapeutics

Baltimore vol 63 May 1938

Respiratory Parasympathetic Action of Some Shorter Chain Basic Aliphatic Amine Derivatives.—C. L. Burstein, E. A. Rovenstine
Growth Life Span and Food Intake of White Fed Diet Theoretically Adequate throughout Life.—M. L. Tainter
Clinical Examination of Toxicity.—A. H. Hamilton and A. F. Burton
Comparative Study of Effect of Various Anesthetic Agents on Emptying Time of Stomach.—C. K. Sleeth and E. J. Van Liere
Influence of Autonomic Denervation Estimation.—S. Lewin
Use of Dorsal Sacral Nerve Root in Dilatation.—R. A. McGuigan and H. A. McGuigan
Duration of Anaesthesia produced in Dogs by Repeated Administration of Dial and Nembutal.—G. H. Ettinger
Effect of Drinking Solutions of Sodium Chloride on Some Vital Changes in Growing White Rats.—A. J. Lehman and W. Deck
Use of Oestrogenic Hormone in Experimental Peripheral Gangrene.—L. Leone and S. E. Lenke

Journal of Physiology

London vol 93 June 15 1938

Role of Leucocytes in Fat Absorption.—E. H. Leach
Mechanism of Production and Physiological Significance of Agneusis.—G. Stella
Thermal Decomposition of Vital Purple.—R. J. Lythgoe and U. S. von Euler
Influence of Anterior Pituitary Extract injected either with or without Insulin on Glycogen contained in Liver of Fasting Young Rabbits.—H. P. Marks and F. G. Young

Journal de Radiologie

Paris vol 22 June 1938

Ultra-deep X Ray Therapy in United States.—J. Belot and R. Collez
Pseudo-cavernular Images through Folding of Gall-bladder (Gall-bladder unmounted by a Phrygian Bonnet).—R. Ledoux-Lebard and A. Dujan
Some of First Metatarsal.—A. Mouchet
Comparative Radiological and Anatomo-pathological Aspect of Lungs after Experimental Inhalation of Dust Particles.—N. A. Podkaminsky
Annual International Neurological Meeting of 1937.—Pain.—L. Delherm and P. Mathieu

Ultra deep X Ray Therapy.—This is a description of the different types of high tension generators and tubes for 500 000 to 1 200 000 volts. The static high tension generators of Van de Graaf and of the Massachusetts Institute of Technology are described and illustrated. A brief description is also given of Sloan's high frequency high tension generator of Lauritzen's continually evacuated 1 100 000 volt tube of Coolidge's sealed 600 000 volt tube and of Lawrence's cyclotron. The effects of ultra-deep x rays and neutrons are briefly described.

Klinische Monatsblatter für Augenheilkunde

Stuttgart vol 100 May 1938

Mode of Spread of Tuberculosis.—Lommel
Tay Sachs's Disease.—T. Wernicke
Ectogenous Tuberculosis of Conjunctiva illustrated by a Case.—M. Schmerer
Colour of the Eye.—H. Stockmann
Rosacea Iritis.—E. Olah
Operation of Iodoiodalysis.—I. Czukrasz
Sarcoma of Lacrimal Fossa.—I. Czukrasz
Radiology of Region of Lacrimal Sac with Observations on Technique of Endonasal Sac Operation.—H. Brunner
Glaucoma Arteriale of Cornea.—G. Favaloro

Tay Sachs's Disease.—This is a review of the pathological findings reported in the literature on Tay Sachs's disease. The histological findings in four additional cases showing typical appearances are described.

Rosacea Iritis.—Attention is drawn to the fact that iritis may occur in acne rosacea without corneal involvement. An endogenous route is assumed.

Glaucoma Anteritis of Continuo—This condition is described as a form of glaucoma which typically is subacute and stimulates haemorrhagic glaucoma. It is generally unilateral and always ends in blindness. The characteristic features are new vessel formations on the iris of arterial or venous origin, a marked tendency to bleeding at operations, and a deepening of the anterior chamber. Pathologically it is probably a lesion of the vessels in the anterior segment of the eye.

Monatsschrift fur Geburtshulfe und Gynakologie

Leipzig vol 108 May 1938

Connexion between Abortion and Injury—P Hussy
Extended Head—Fressel
Intra partum Metastatic Peritonitis—K Podleschka
Significance of Blood Picture in Gynecology—K Hollosi and S Mitzy

Le Nourisson

Paris vol 26 May 1938

Clinical and Aetiological Study of Mongolism and its Treatment—P Lereboullet
Anaemia Gravis with Enlargement of Spleen—M J Cathala and P Morel
*Sudden Death in an Infant with Eczema—M R A Marquezy and Mlle Ladet

Sudden Death—Necropsy on this case revealed much hyperaemia of the viscera with marked hypertrophy of the lymphoid tissue of the abdomen. The central nervous system showed diffuse vasodilatation and oedema in the region of the third ventricle. The authors consider that these changes are explained by damage to the autonomic nervous system and that injury to the temperature regulating centre in the neighbourhood of the third ventricle explains the vascular changes and oedema of the viscera. The sudden death seemed to be due to secondary changes, such as hyperpyrexia and vascular collapse.

Quarterly Journal of Experimental Physiology

London vol 28 June 1938

Effect of Asphyxia on Adenosine Triphosphate Content of Rabbit's Heart—I Chang
Relation between Villikinine and Absorption of Glucose from Intestine—E v Kokas and G v Ludany
Effect of Alarm Reaction on Water Excretion—St Karady J S L Browne and H Selye
Action of Prostigmin and Acetylcholine on Respiration—A Schweitzer and S Wright
Role of Gonadotropic Hormone in Maintenance of Luteal Function—J M Robson
Experimental Modification of Accessory Sexual Apparatus in Hen—A W Greenwood and J S S Blyth
Antagonism of Vaginal Action of Triphenyl Ethylene by Progesterone and Testosterone—J M Robson
Kinetics of Cholinesterase—A J Clark J Raventos E Stedman and Ellen Stedman
Histamine as Normal Stimulant of Gastric Secretion—I C Macintosh

Revue Française de Gynecologie et d'Obstetrique

Paris vol 33 May 1938

Treatment of Gonorrhoea in Women—M Fabre F A Pippilon and A Pecker
Treatment of Pregnant Woman with Gonorrhoea—A Morisson Lacombe
Treatment of Gonococcal Vulvo vaginitis in Young Girls—J E Marcel

Schmerz Narkose-Anaesthesie

Leipzig vol 2 June 1938

Experiences with Vinesthene in 1 000 Short Anaesthesias—E Dorffel
Short Evipan Anaesthesia for Delivery in Normal Parturition—H Roemer
*Investigations into Mode of Action of Short acting Narcotics I Comparison by Animal Experiment of Effectiveness of Evipan and Eunarcon H Localization of Lesions responsible for Side effects—Violet Heinz Werner

Short acting Narcotics—In a series of animal experiments the author has compared the actions of evipan and eunarcon, and of the original barbiturates from which these anaesthetics were developed. The average fatal dose for mice of evipan is higher than that of eunarcon while the rate of elimination of the former in rabbits is also considerably greater. The increased effectiveness of eunarcon is probably due to its halogen substitution. During the prolonged administrations of these experiments side effects, such as spasms tremors increased reflexes etc appeared. Histological examination of the brain in such animals showed damage to ganglion cells. Similar cell damage has been reported in the human brain.

Transactions of the Royal Society of Tropical Medicine and Hygiene

London vol 32 June 25 1938

*Placenta in Malaria with Special Reference to Reticulo-endothelial Immunity—P C C Garnham
*Spectrographic Analysis of Pigments in Serum and Urine of Blackwater Fever—H Loy and A Kondi
Early Discoveries regarding Parasite of Oriental Sore—C A Hoare
*Immunization of Monkeys and Humans with Formolized Tissue Cultures of Typhus Rickettsia—I J Kligler and Sonia Levine
Epidemiology of Enteric Fever in Hong Kong—K H Uttley
Quarantine and the Mecca Pilgrimage Growth of an Idea—G J Watson
Relative Attractiveness to *Aedes aegypti* of Certain Coloured Cloths—G A Brett
Chylous Filarial Lymphatic Varix Clinical and Pathological Report—F W O'Connor and J Knott

Placenta in Malaria—The characteristic placental response to malaria was only seen with *P falciparum* infections. It did not occur immediately at the beginning of a new attack but immediately at the beginning of a relapse. Schizonts and reticulo endothelial phagocytosis were not seen before the fourth month of pregnancy. All stages between large lymphocytes and mature reticulo endothelial cells were seen in the intervillous spaces. Relapses following parturition are probably due to expulsion with the placenta of a highly active reticulo endothelial system of defence. No evidence of congenital malaria was discovered.

Pigments in Blackwater Fever—Pseudo methaemoglobin with an absorption band between those of sulph and met haemoglobin has been confirmed as the new pigment in the serum of cases of blackwater fever in Greece, methaemoglobin was not found in the serum. The magnitude and suddenness of the haemolysis is not the only factor determining the concentration of pseudo methaemoglobin, nor does it directly determine the degree of anuria. Methaemoglobin occurs in the urine at a *pH* of from 5 to 9 is formed before the urine reaches the bladder, and is not directly related to the pseudo methaemoglobin in the blood. urines not containing methaemoglobin do not develop it at laboratory temperature.

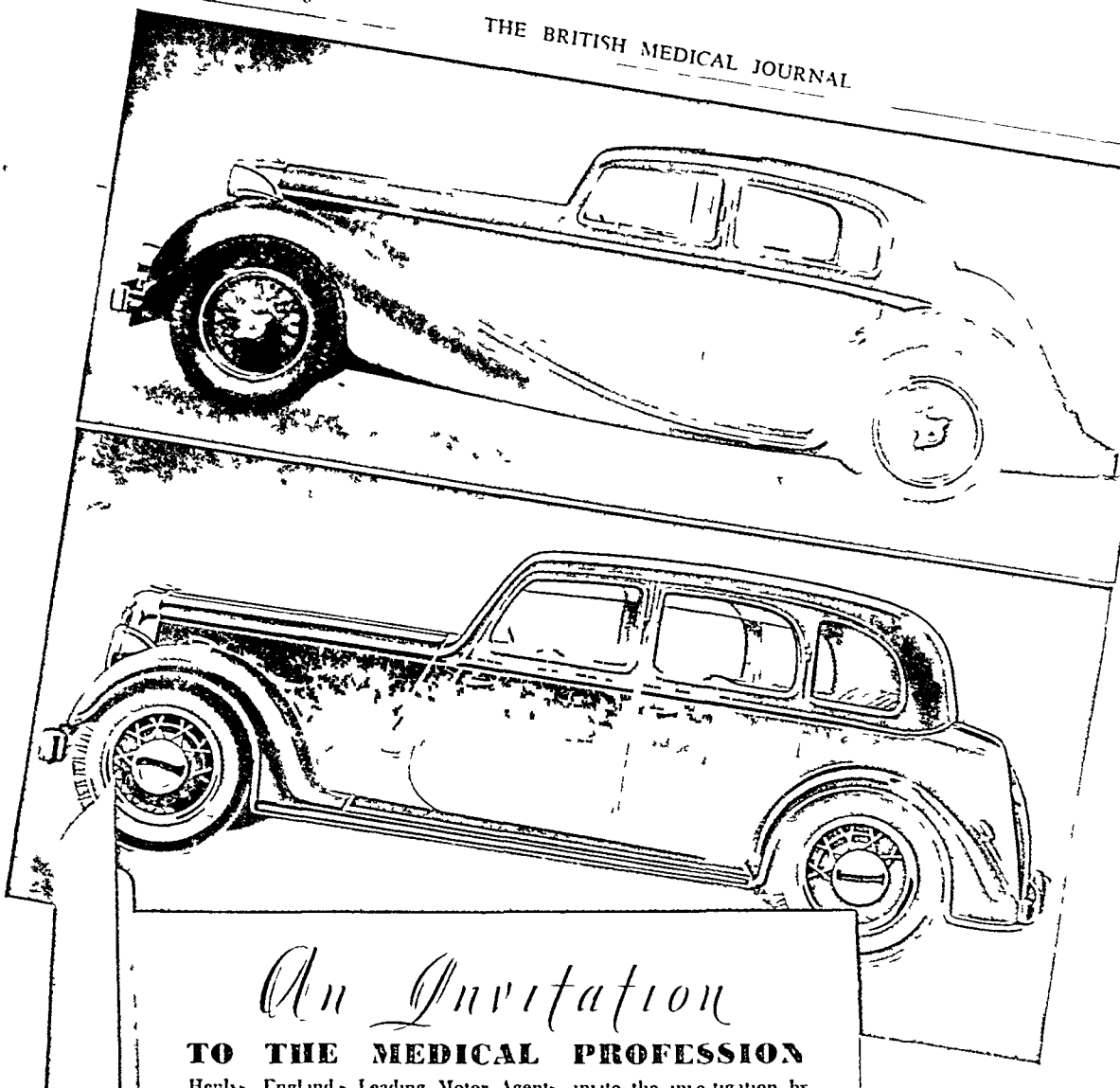
Typhus Immunization—Monkeys and humans treated with formolized tissue cultures of typhus rickettsia develop a positive Weil-Felix reaction. Monkeys given 2 c.cm. of the vaccine in three increasing injections at three day intervals were immune to a large infective dose of virus two weeks later.

Zeitschrift fur Orthopadie und ihre Grenzgebiete

Stuttgart vol 68 June 1938 Heft 1

Biological Peculiarity of Locomotor Apparatus—E Heidsieck
Humerus Varus with Special Reference to Shoulder Contracture—E Fröhlich
Genuine or Teratological Congenital Dislocation of Hip—H Korein
*New Investigations regarding Pathology of Acetabular Fossa—H Gickler and S Teufel
A Present day Foot Artist—W Thomsen

Acetabulum—Investigations were undertaken to determine the influence of the position of the acetabular fossa on its configuration. These investigations were carried out on plaster cast models of the hip allowing the femoral head to exert pressure in different directions. The authors have also evolved a new technique of taking x ray films of the acetabular fossa and have investigated cases of separated epiphysis of the femur and also cases of congenital dislocation of the hip. They reach the conclusion that in separation of the femoral epiphysis the chief aetiological factor is to be found in a more anteriorly placed acetabular fossa. In congenital dislocation of the hip the acetabular fossa remains in its foetal position.



An Invitation

TO THE MEDICAL PROFESSION

Henlys England's Leading Motor Agents invite the investigation by medical men of the many outstanding advantages to be gained by going to Henlys for new or used cars

If you prefer a new car Henlys are distributors for SS Jaguar Rover Alvis Austin and Studebaker and agents for other outstanding productions, including Morris Riley Daimler Humber Hillman Armstrong etc

If your choice is a used car Henlys offer you the largest selection in the country—7 days free trial and a guarantee with every example £100 and over

20 EQUAL MONTHLY PAYMENTS BUY ANY NEW CAR

To the medical profession Henlys offer special car purchase terms Any make of new car can be bought from Henlys and paid for by 20 equal monthly payments—the most favourable rate obtainable anywhere

Any car will be taken in part exchange Write phone or call now for further particulars

THE LARGEST & FINEST SELECTION OF NEW & USED CARS IN ENGLAND

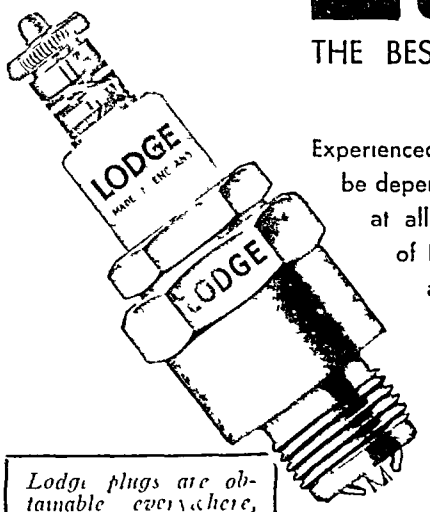
HENLYS

HENLYS HOUSE, 385 EUSTON ROAD N.W.1 'PHONE EUSTON 4444
DEVON HIRE 101 E. PICCADILLY W.1 AND AT MANCHESTER, BRISTOL AND BOURNEMOUTH

You can depend upon it

LODGE

THE BEST PLUG IN THE WORLD



Experienced motorists know that Lodge plugs can be depended upon for maximum performance at all times Give your car a new set of Lodge plugs, for easy starting, better acceleration, and maximum power

WORLD'S LAND SPEED RECORD.

Capt Eyston used Lodge plugs in the Rolls Royce engines of 'Thunderbolt

Lodge plugs are obtainable everywhere, from 5/- each

Made completely in England by Lodge Plugs Ltd Rugby

FINANCE

for the acquisition by

PAYMENTS OUT-OF-INCOME

of

Surgery and Other Furniture
Surgical Instruments
Medical Text Books
X-Ray Apparatus
Laboratory Equipment

The above list is illustrative only Under its Equipment Purchase Plan the Company is prepared to assist doctors to acquire ANY article and spread the cost over a period

BRITISH MEDICAL FINANCE LTD.

Tavistock House South,
Tavistock Square,
London, W C 1

BMF



A new Diagnostic Set

The GLYNDE

A unique Diagnostic Set containing the latest Friston Auriscope with three black bakelite specula and a May Ophthalmoscope with an illuminated dial showing magnified numbers The set also contains a large Battery Handle a Duplay Nasal Speculum Bent Arm Throat Lamp Tongue Depressor one each Laryngeal and Post Nasal Mirrors and a spare Lamp All bright parts are chromium plated

Catalogue No 3013

Gowlland

electric diagnostic instruments

OBTAINABLE FROM ALL SURGICAL SUPPLY HOUSES

HEALTH BREAD
ROLLS
CRACKNELS
HYGIENIC PACKING

PROTEIN 42 00% CARBOHYDRATES 49 10%

POLLEY AND COMPANY LIMITED

EDGO

REGD TRADE MARK

WIDELY USED IN DIETS FOR DIABETES, GASTRIC ULCER, INDIGESTION & OBESITY

Sample Diet Plans & Analysis Free on request

(Dept B), PLYMOUTH RD, LONDON, E 16

A GENTLEMAN ALWAYS LOOKS WELL DRESSED IN SAVILE ROW CLOTHES



NEW LIGHT OVERCOATS LOUNGE DRESS SPORTS SUITS etc by all eminent tailors viz Scholte Lesley & Roberts Kilgour etc OUR PRICES 3 to 8 Gns

Alterations on Premises

REGENT DRESS CO

2nd Floor Piccadilly Mansions 17 Shaftesbury Av Piccadilly Circus W 1 (Next Cafe Monico) GER 7150 LADIES DEPT on 1st FLOOR

BROCHURE SKETCHES & ESTIMATES FREE
CANonbury 3077

NAMEPLATES

BRONZE · STAINLESS STEEL · BRASS

COOKE'S (FINSBURY) LTD
FINSBURY PAVEMENT HOUSE
MOORGATE LONDON E C 2
Est 1877

NAME PLATES

IN BRONZE ENAMEL OR BRASS

Free Sketch and Booklet will be sent on receipt of details

Phone Clerkenwell 2441

S J & A Herd 30 Clerkenwell Rd EC1

The demand for CAPSTAN increases daily

W D & H O Wills

PLAIN OR CORK TIPPED

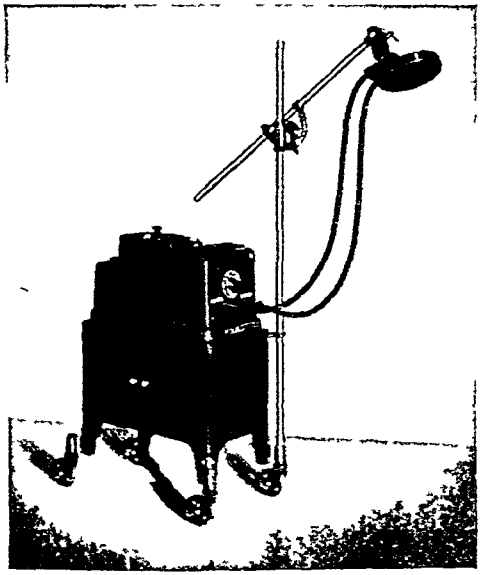
10 FOR 6°
20 FOR 11·2°



MORE AND MORE PEOPLE ARE SMOKING
CAPSTAN CIGARETTES

W D & H O Wills Branch of The Imperial Tobacco Co (of Great Britain and Ireland) Ltd

Easy, Economical, Effective Short-wave Diathermy with INDUCTOTHERMY



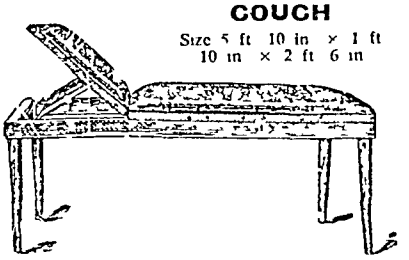
For the treatment of arthritis, neuritis, pelvic inflammations, sprains or any of the many chronic disorders in which HEAT is indicated, it will pay you to investigate Inductothermy For here is a method that develops more heat at greater depth than older agents and is, moreover, free from intricacy of control or application

Patients like the Inductotherm for its quietness, for the absence of complicated preparation, for the soothing warmth that is induced without the discomfort of other methods Users like it for its effectiveness, because Inductothermy selectively generates MORE heat in LESS time, WHERE IT IS MOST USEFUL—in the vascular tissues

Why consider ordinary short-wave equipment when the Inductotherm costs so little? Full particulars of and references validating every claim for Inductothermy are given in a series of interesting booklets Your request for free publication group AV1, will not obligate you in any way

VICTOR X-RAY CORPORATION, Ltd
15 19 CAVENDISH PLACE LONDON W 1
BELFAST BIRMINGHAM BRISTOL CARDIFF DUBLIN EDINBURGH
GLASGOW LEEDS LIVERPOOL MANCHESTER NEWCASTLE OPPOSITE

EXAMINATION OR CONSULTING ROOM COUCH

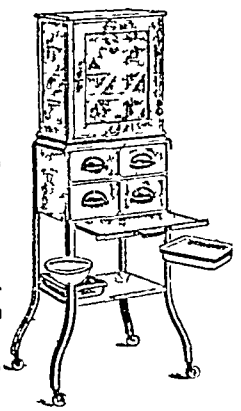


Size 5 ft 10 in × 1 ft 10 in × 2 ft 6 in

Made of SOLID OAK well seasoned Upholstered good quality brown rexine Adjustable head rest detachable legs OUR PRICE

Carriage forward **£3 7 6**

ASEPTIC INSTRUMENT AND DRESSINGS CABINET ON STAND



Enamelled white or aluminium bronze

£10.10.0

Carriage extra

Current List of Secondhand Instruments and Equipment forwarded on application

A. FLEMING & CO. *(Succrs)*

51 Mortimer St London, W 1 *Tel Mus 629-*

FURNITURE OF QUALITY AND DISTINCTION

The contents of Famous Mansions the elegant appointments of numerous Town Flats etc removed for convenience of Sale by Private Treaty now being dispersed at enormous sacrifice On Sale Daily 9 till 7 Stored and delivered free

The entire contents of 500 Bedrooms comprising suites of super quality in Walnut Mahogany Oak Lacquer Satinwood etc including **An Exceptionally Fine Full Figured Walnut Suite of Exquisite Design and of Finest make, comprising Fully Fitted Wardrobe with Bow Centre large Pedestal Dressing Table with Shaped Triple Mirrors Fully Fitted Gents Wardrobe Double Bedstead The complete set 45 gns** (less than ½ cost 15 months ago) Enormous selection of fine old Wardrobes from £8/10/ Bow and Square Chests Dressing Tables in Walnut and Mahogany Tallboys Toilet Mirrors at 25/ Double and Single Bedsteads in Walnut Mahogany and Oak at 27/6

The Dining Rooms Libraries and Halls comprise suites and pieces of every period Tudor Queen Anne Georgian and modern styles including some exceptionally fine sets in Figured Oak comprising **Old Dresser Refectory Table and set of 6 Old Rush Seat Ladder Back Chairs** at 28 gns Rare old Serpentine Mahogany Sideboards 10 gns *Old Georgian Dining Tables £8/15/ together* with 150 sets of fine Chair of all periods **including a rare set of 4 small and 2 Arm Wheelbacks in Elm on Cabriole Legs at 15 gns Fine Selection Supe Sprung Luxuriously Upholstered Settees and Club Chairs** in Jaspe Hide and Silk Damasks including **Elegant Knowle Suite in Beige Damask as new at 42 gns** Super Sets in Brown Hide at 15 gns also a **Magnificent Spoon Back Suite in Red Morocco of Rare Quality 50 Super Easy Chairs at 27 6 Settees to match at £3/15/** Fully Guaranteed **Super Library Furnishings** Bookcases Pedestal Desk Bureaux together with the complete household effects Pictures China Clock Cut Cry al etc etc

Carpets of Every Description including Plain Wilton in all Colours made up and laid Free **Phone CAN 2141 Buses 4 19 30 143 pass door**

THE FURNITURE & FINE ART DEPOSITORIES

Islington Park St Upper St, Islington N 1.

Smedley's

Great Britain's Greatest Hydro

Matlock

Full range of Hydrotherapeutic Treatments in Luxurious suites of Baths Turkish and Russian Baths Aix and Vichy Douches Massage Electrical Treatments Ozone Chair Electric Installation for Baths and other Medical Uses Dowsing Radiant Heat Infra-red Light Artificial Sunlight Douches and High Frequency Bath ray Nauheim Bath Scaples Foam Bath etc Certified milk from own farm Large Waste Carbon Oxygen Special provision for Invalids Nurse Attendance Over 60 trained Male and Female Nurses Masseurs Attendants etc

Terms 13/ to 18/6 per day inclusive board

Illustrated Brochure M.J on request.

Resident Physicians

C C R HARBINSON MB BCh BAO (R U I) R MacLELLAND MD CM

Phone No 17 Grams Smedleys Matlock

Addmeter Money **ADDING MACHINES 77/6 &c**

TAYLOR'S TYPEWRITERS

SELL HIRE HIRE PURCHASE EXCHANGE BUY and REPAIR ALL MAKES of Typewriters Duplicators and Calculating Machines.

Desks Tables and Chairs

Est 1884



Write for Bargain List 32 or Phone—Holborn 3793

BUY A BIJOU FOR 15/ a Month

74 CHANCERY LANE

THE QUIET BIJOU

The best portable Writer Complete in Travelling Case **£14 14s**

(Holborn End) W C 2

NAME PLATES Brass Bronze Stainless Steel

REDUCED PRICES

Send for List 18 to the Actual Maker

F OSBORNE & Co, Ltd Tel Euston 4824

117 Gower Street, London W C 1

NAME PLATES – in Bronze and Enamel

Stainless Steel Brass or Chromium

Actual Makers Quick Delivery Low Price

The WHITE BRONZE Co 196 London Rd CROYDON

BARNWOOD HOUSE, GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS Within two miles of the G W Railway and L M & S Railway Stations at Gloucester the Hospital is easily accessible by rail from London and all parts of the United Kingdom It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres Voluntary Patients of both sexes are also received for treatment Special accommodation for Lady Voluntary Patients is also provided at the MANOR HOUSE which has its own private grounds and is entirely separate from the Main Hospital For particulars as to terms etc apply to G W T H FLEMING M R C S L R C P D P M Medical Supt

Telephone No 6207 Barnwood

THE

HOTEL GREAT CENTRAL

Marylebone Road, N W 1

The Hotel Great Central is within a few minutes walk of the London Clinic and Harley Street

Special terms for friends visiting Nursing Homes in vicinity

Apply Manager Telephone Padd 1220

SPRINGFIELD HOUSE

Near BEDFORD ('Phone 3417)

For Mental Disorders with or without Certificates

Resident Physician CEDRIC W BOWER

Ordinary Terms Five Guineas per week (Including Separate Bedrooms where suitable)

Interviews in London by Appointment

THE GROVE HOUSE

CHURCH STRETTON SHROPSHIRE

A private Home for the care of and treatment of a limited number of Ladies mentally afflicted

Voluntary and Temporary Patients received under the new Mental Treatment Act 1930

Medical Superintendent Dr McCLINTOCK

CITY OF LONDON MENTAL HOSPITAL

DARTFORD KENT

Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upwards

NORMANSFIELD

For Mental Defectives of either sex

Under private management

Apply to Dr Langdon Down,

Normanfield Teddington

WYE HOUSE, BUXTON, AND CLINIC,

for the PREVENTION and TREATMENT of NERVOUS and MENTAL DISORDERS in both sexes Large country house beautifully situated in its own grounds Croquet lawns hard tennis court billiards wireless installation throughout Every facility for specialised modern treatment including psychotherapy occupational therapy ultra violet light diathermy Private rooms with special nurses if required Voluntary Temporary and Certified patients received—For terms apply to the Medical Superintendent HELEN S E MURRAY M D

Nat Tel 1 0

HOME FOR EPILEPTICS

MAGHULL (near LIVERPOOL)

FARMING and OPEN AIR OCCUPATION for PATIENTS

A few vacancies in 1st and 2nd Class House FEES 1st Class (men only) from £3 p w to wards 2nd Class (men and women) 3 / p w

For further particulars apply

C EDGAR GRISEWOOD, A C A.,

Secretary 20 Exchange Street East Liverpool 2

HALLIFORD HOUSE, UPPER HALLIFORD, SHEPPERTON *Established in 1841*

This handsome secluded residence standing in a park of 36 acres situated 16 miles from London is licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections

Voluntary or certified cases received Terms moderate Patients are under the constant personal care of the Resident Medical Superintendent Dr R A Stewart from whom full particulars can be obtained Tel Sunbury-on Thames 70

"ECCLESFIELD," Staplehurst, Kent

(Removed from Ashford Middlesex)

PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large mansion beautifully situated in 100 acres of parkland Extensive views Home farm R C Chapel Under the management of the Sisters of the Good Shepherd Apply Rev Mother Tel Staplehurst 61

Tel and Telegrams Haynes Brentwood 45

LITTLETON HALL, BRENTWOOD ESSEX

Large grounds 400 ft above sea HOME for ladies Mentally afflicted Voluntary Boarders received Stations Brentwood and Shenfield 1 mile Liverpool St 26 min Apply Dr Haynes.

BISHOPSTONE HOUSE BEDFORD

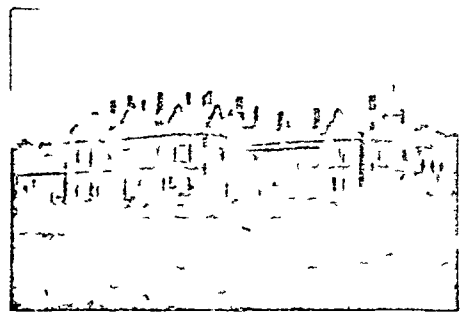
A select Private Mental Home for Ladies Certified and Voluntary with separate House and Grounds for Voluntary Boarders Under personal supervision of a Resident Mental Specialist and Psychiatrist—Medical Supt Dr J LANGHAM MACAULAY Tel Bedford 2708

THE RESIDENTIAL TREATMENT OF ALCOHOLIC & DRUG ADDICTION

RENDLESHAM HALL

(Postal Address) — **WOODBRIDGE, SUFFOLK**

Rendlesham Hall which is open to receive patients, is essentially a Sanatorium Its daily life and routine are that of an ordinary comfortable holiday or health resort or of a large country house Each patient has all the privileges of a guest consistent with the prescribed medical treatment



RENDLESHAM HALL—SOUTH VIE

Rendlesham Hall has 45 bedrooms and about 450 acres of gardens and park It has also a private nine-hole golf course, tennis and croquet lawns and bowling green

Illustrated booklet giving particulars as to terms etc can be had on application to the

RESIDENT MEDICAL SUPERINTENDENT

Telegrams and Telephone WICKHAM MARKET 216 (Toll Call from London)

Proprietors The Norwood Sanatorium Limited.

RUTHIN CASTLE, NORTH WALES

A Private Hospital or Clinic for the diagnosis and treatment of Internal Diseases (except Mental or Infectious Diseases) The Clinic is provided with a full staff of doctors bacteriologists chemists radiologists dietists nurses masseurs and masseuses

The surroundings are beautiful The climate is mild There is central heating throughout The annual rainfall is 30·5 inches that is less than the average for England

The inclusive weekly fees are from 15 guineas a week according to the room occupied rooms with bathroom are from 21 guineas The charges include all chemical bacteriological X-ray or other examination advised by the doctors and all the usual forms of treatment in addition to board and lodging There are no extra charges except for alcohol (when ordered) and laundry An examination and consultation fee of 15 guineas is charged on the first visit

Address THE SECRETARY Ruthin Castle North Wales *Telegrams* Castle Ruthin *Telephone* Ruthin 66

THE MAUDSLEY HOSPITAL.

DENMARK HILL S.E.5

Telephone RODney 3841

A CLINIC Instituted by the London County Council for treatment of Nervous and Curable Mental Disorder Voluntary patients only received

New Out-patients—MEN Mondays and Thursdays 2 p.m. WOMEN Tuesdays and Fridays 2 p.m. CHILDREN Mondays and Fridays 10 a.m. In-patients (a) 25 beds (both sexes) in wards or separate rooms including 15 beds in a ward of King's College Hospital which is in use as a temporary annexe of the Maudsley Hospital (b) a special ward (including some private rooms) for those patients of each sex who are paying the full cost and are otherwise suitable. TERMS £5 a week but in case of patients with a legal settlement in the County of London a less sum may be charged according to means

Terms include (with rare exceptions) all forms of treatment, for which there are exceptional facilities as there is a staff of Consultant Specialists, and the Central Laboratory of London County Mental Hospitals is attached to the hospital Inquiries of EDWARD MAPOTHER, M.D., F.R.C.P. F.R.C.S. Medical Superintendent.

CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy Cases of alcoholism and drug addiction are admitted The Physiotherapy Department has separate suites fully equipped for X-ray work heliotherapy short-wave therapy electro-therapy and hydrotherapy (swimming bath prolonged baths Scotch and Vichy douches Plombieres treatment electric and Turkish bath cabinets etc.) There is a fully equipped gymnasium under qualified instructors. Facilities are provided under special recreational therapist for all indoor and outdoor games including golf cricket football and hockey grounds lawn tennis and squash courts croquet and bowling greens

The Hospital has its own Cinema Library and Hairdressing Saloon. Terms include regular meals and lodging

Private rooms, suites or villas are available and special nurses can be provided.

The Hospital grounds extending to nearly 1,000 acres are laid out in delightful scenery and include an extensive farm (T.T. herd) gardens and orchards

As the Hospital is well endowed terms are exceptionally moderate e.g. First Department 3 to 10 guineas per week Second Department 2 guineas per week Voluntary and certified patients are received Medical Certificates given anywhere in the British Isles are valid for admission of patients For prospectus necessary forms and further information apply to

Physician Superintendent P. K. McCOWAN J.P. M.D. F.R.C.P. D.P.M. Barrister-at-Law

July 1st Tel. Dumfries 1119

ST. ANDREW'S HOSPITAL

FOR MENTAL DISORDERS

NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

President THE MOST HON THE MARQUESS OF EXETER C M G A D C

Medical Superintendent THOMAS TENNENT M D M R C P D P H D I M

This Registered Hospital is situated in 120 acres of park and pleasure grounds Voluntary patients who are suffering from incipient mental disorders or wish to prevent recurrent attacks of mental trouble temporary patients and certified patients of both sexes are received for treatment Careful clinical biochemical bacteriological and pathological examinations Private rooms with special nurses male or female in the Hospital or in one of the numerous villas in the grounds of the various branches can be provided

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders It contains special departments for hydrotherapy by various methods including Turkish and Russian baths the prolonged immersion bath Vichy Douche Scotch Douche Electrical bath Plombieres treatment etc There is an Operating Theatre a Dental Surgery an X ray room an Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment It also contains Laboratories for biochemical bacteriological and pathological research

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres Milk meat fruit and vegetables are supplied to the Hospital from the farm gardens and orchards of Moulton Park Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves in farming gardening and fruit growing

BRYN-Y-NEUADD HALL

The seaside house of St Andrew's Hospital is beautifully situated in a park of 330 acres Llanfairfechan amidst the finest scenery in North Wales On the North West side of the Estate a mile of sea coast forms the boundary Patients may visit this Branch for a short seaside change or for longer periods The Hospital has its own private bathing house on the seashore There is trout fishing in the park

At all the branches of the Hospital there are cricket grounds football and hockey grounds lawn tennis courts (grass and hard courts) croquet grounds golf courses and bowling greens Ladies and gentlemen have their own gardens and facilities are provided for handicrafts such as carpentry etc

For terms and further particulars apply to the Medical Superintendent (Telephone No 2356 and 2357 Northampton) who can be seen in London by appointment

THE COPPICE, NOTTINGHAM

HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted Occupational Therapy Voluntary and Temporary Patients received

Tel 64117 *For terms etc apply to the Medical Superintendent*

HAYDOCK LODGE

NEWTON-LE-WILLOWS, LANCASHIRE

Telegraphic Address Street Ashton in Makerfield *Telephone* Ashton in Makerfield 7311

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntary temporarily or under Certificate Patients are classified in separate buildings according to their mental condition

Situated in park and grounds of 400 acres Self supported by its own farm and gardens in which patients are encouraged to occupy themselves Every facility for indoor and outdoor recreation For terms prospectus etc apply MEDICAL SUPERINTENDENT

NORTHUMBERLAND HOUSE,

GREEN LANES, FINSBURY PARK, N 4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses Conveniently situated and easy of access from all parts Six acres of ground highly situated facing Finsbury Park Voluntary and Temporary Patients received without certification Occupational Therapy Psychotherapy and other modern forms of treatment

Telephone STAMFORD HILL 2688 Telegrams SUBSIDIARY LONDON

Convalescent Home KEARSNEY COURT DOVER For further particulars apply to the Medical Sup

COURT HALL, KENTON, near EXETER,

for the treatment of eight Ladies, voluntary, temporary, or certified patients Large gardens and own dairy

CLIFFDEN TEIGNMOUTH for early and convalescent cases A well appointed house with spacious balconies and extensive views of the South Devon coast Sub tropical gardens own dairy in 25 acres Private road to beach

Telephones

Resident Physicians BERTHA M MULES M D B S Starcross 59
ANNE S MULES M R C S L R C P Teignmouth 289

FENSTANTON,

CHRISTCHURCH ROAD,

Streatham Hill, S W 2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders Certified Voluntary and Temporary Patients received Large Mansion with 12 acres of grounds (*See Medical Directory* p 2312) Apply Resident Physician *Telephone* Tulse Hill 7161

BAILBROOK HOUSE, BATH

For sufferers from Nervous and Mental Disorders with or without certificates

The house is gloriously situated in wooded grounds of 20 acres with magnificent views of the City and the Avon Valley (See *Medical Directory* page 2322)

For terms apply A GUIRDHAM M A D M B Ch D P M Resident Physician

Telephone Batheaston 8189

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded grounds For Ladies and Gentlemen suffering from Nervous or Mental Illness Voluntary Patients Temporary Patients and Patients under Certificate are admitted for treatment Fees from 4 guineas a week upward according to requirements A few vacancies exist for Ladies and Gentlemen at reduced fees on the recommendation of the Patient's own Physician Apply to Dr J A SMALL Telephone 80 Norwich

Telegrams Small 80 Norwich

TYKEFORD ABBEY,

NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest standing in 15 acres of garden and ground and is situated 14 miles from Northampton and 12 miles from Bedford on the main London to Northampton Road *fifty miles* from London Both sexes are accommodated Psycho-therapeutic *Treatment* is used extensively in suitable cases Radiant Heat X ray and Ultra Violet Light Diathermy and Foam Baths Billiards Tennis etc

Apply Dr D E M DOUGLAS MORRIS

Telephone Newport Pagnell 171

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS

(20 mile from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on modern lines is Voluntary Temporary or Certified Private Patients at the Hill End Hospital Convalescent or mild cases can be treated in a delightful country mansion with extensive grounds known as

HIGHFIELD HALL,

situate about a mile away from the Hospital FEES TWO TO THREE GUINEAS PER WEEK

For further particulars apply to the Medical Supt W J T KIMBER L R C P D P M

ST ALBANS, HERTS

CHISWICK HOUSE, PINNER, MIDDLESEX

Telephone PINNER 251

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes

A modern country house, 12 miles from Marble Arch in beautiful secluded grounds

Fees from 10 guineas per week, inclusive Cases under Certificate Voluntary and Temporary patients received for treatment

Douglas Macaulay M D D P M

STRETTON HOUSE,

Church Stretton Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provisions of the Mental Treatment Act 1930 Bracing hill country See *Medical Directory* p 2328—Apply to the Medical Superintendent Phone 10 P O Church Stretton

CALDECOTE HALL

NUNEATON
WARWICKSHIRE
(Phone Nuneaton 41)

Residential treatment of
FUNCTIONAL NERVOUS DISORDERS
Including Alcoholism and other Addictions
(Certifiable Cases are not received)

This beautiful mansion situated in the heart of the country (less than two hours from London) and surrounded by harmonious pleasure grounds with hard tennis courts and outdoor occupational therapy are available is devoted to the treatment of Functional Nervous Disorders by psychotherapeutic and environmental methods.

Illustrated brochure and particulars obtainable from A. E. CHILVER, M.D., D.P.M., Resident Medical Superintendent

CAMBERWELL HOUSE, 33, Peckham Road, London, S.E.5

Telegrams PSYCHOSIS, LONDON — FOR THE TREATMENT OF MENTAL DISORDERS — *Telephone* RODNEY 2600 (6 lines)

Also completely detached villas for mild cases with private suites if desired. Voluntary patients received. Twenty acres of grounds. Hard and Grass Tennis Courts, Putting Greens, Bowls, Croquet, Squash Rackets, Recreation Hall with Badminton Court and all indoor amusements including Wireless and other Concerts. Occupational Therapy, Callisthenics and Dancing Classes. X-ray and Actino-therapy. Prolonged Immersion Baths. Operating Theatre, Pathological Laboratory, Dental Surgery and Ophthalmic Dept. Chapel. Senior Physician: Dr. HUBERT JAMES NORMAN, assisted by three Medical Officers, also resident and visiting Consultants.
An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary.

The Convalescent Branch is HOVE VILLA, BRIGHTON, and is 200 feet above sea level.

PECKHAM HOUSE, 112, Peckham Road, London, S.E.15

Telegrams: "Alleviated, London" — **Telephone: Rodney 2641, 2642.**

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders. Certified, voluntary and temporary patients are received. Separate houses for treatment and accommodation of special cases adjoin the Institution. Occupational therapy, physical drill and other forms of modern treatment. There is a seaside branch, Kearsney Court, near Dover, to which patients may be sent for treatment or on holiday. Motor drives are arranged when required. Tennis courts. Entertainments, dances and indoor amusements held throughout the year. Terms from £3 3s. per week.
Illustrated prospectus and further particulars can be obtained from the Medical Superintendent.

LAVERSTOCK HOUSE

SALISBURY — WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date. Lovely house and grounds (18 acres). Certified and uncertified cases taken. Facilities for going to the seaside.

ESTABLISHED OVER 200 YEARS

Apply to Med. Supt. for illustrated brochure — Tel. SALISBURY 2612

CHEADLE ROYAL HOSPITAL

CHEADLE, CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay, N. Wales, is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES.
The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary.
In addition to the Main Building there are separate villas. Extensive grounds. Hard and grass tennis courts, cricket and croquet grounds and a court for badminton. There are also wireless installations. Golf may be had within easy distance. Occupational therapy.
VOLUNTARY, TEMPORARY AND CERTIFIED PATIENTS received.
The Hospital is nine miles from Manchester, 40 minutes by rail from Liverpool and 3½ hours from London.
For terms and further particulars apply to the Medical Superintendent, who may be seen in MANCHESTER by APPOINTMENT.
Telephone GATLEY 1231 (3 lines)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds — Detached Villas — Chapel — Garden and dairy produce from own farm — Terms very moderate

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds with tennis courts, etc., which Voluntary, Temporary or Certified Patients may visit by arrangement, for long or short periods.

Illustrated Brochure on application to the Medical Superintendent, The Old Manor, Salisbury. 'Phone Salisbury 2251

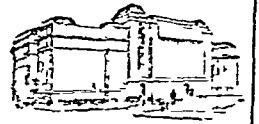
THE CLINIC

20 Devonshire Place London, W.1

Tel. Welbeck 4444 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns. to 18 gns. per week (Average—4 gns.)
8 Operating Theatres
150 State Registered Nurses
2 Resident Medical Officers (for emergencies)
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary



RUSSELLS

HEMEL HEMPSTEAD RD., WATFORD
Tel. phone WATFORD 5917

A convalescent home for the care and treatment of mild and recoverable nervous conditions in both sexes. The house is situated high up in 40 acres of grounds 17 miles from London at the termination of the Watford by-pass. One Medical Officer is in residence and two others are in daily attendance. Fees from ten guineas a week inclusive.

Apply RESIDENT MEDICAL OFFICER

ASHWOOD HOUSE,

KINGSWINFORD, STAFFORDSHIRE

An old-established PRIVATE HOME for the care and treatment of Ladies and Gentlemen mentally affected. Probationary cases and non-certified patients are received as well as those regularly certified.
The Home is beautifully situated in its own grounds of 40 acres.
Full particulars as to reception, terms, etc., may be obtained from the Resident Medical Officer.

THE GRANGE,

near **ROTHERHAM**

A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental Disorders. Both certified and voluntary patients received. Approved for temporary Patients. This is a Large country house with beautiful grounds and park, five miles from Sheffield. Tel. No. 4000 Ecclesfield. Res. Phys. GILBERT E. MOULD, L.R.C.P., M.R.C.S., *Station* Grange Lane, L. & N.E. Rly.

The MUNDESLEY SANATORIUM

The central building makes the Mundesley Sanatorium the best equipped building in England for the cure of Tuberculosis All the bedrooms have hot and cold running water electric light and wireless headphones The public rooms are spacious and comfortable

Resident Physicians
S VERE PEARSON
M D (Cantab) M R C P (Lond)
E C WYNNE EDWARDS
M B (Cantab) F R C S (Edin)
GEORGE H DAY
M D (Cantab)

For all information apply
The Secretary
THE SANATORIUM MUNDESLEY, NORFOLK
Telephone *Mundesley 94 and 95* (2 lines)

The buildings face S S W and are sheltered from the sea by a pine clad ridge The sunshine record and dry air complete a perfect site The medical equipment is of the latest kind and there is a day and night nursing staff

TERMS FROM 7½ GUINEAS WEEKLY

HOLLOWAY SANATORIUM VIRGINIA WATER

A Registered Hospital for the Treatment of MENTAL DISORDERS of the EDUCATED CLASSES Founded by THOMAS HOLLOWAY in 1885

This Institution is situated in a beautiful and healthy locality within easy reach of London It is fitted with every comfort Patients can have Private Bedrooms and Special Nurses as well as the use of General Sitting Rooms at moderate rates of payment Voluntary Patients can be admitted

There is a Branch Establishment at CANFORD CLIFFS BOURNEMOUTH where Patients can be sent for a change and be provided with all the comforts of a well appointed home

For Terms apply to

The Resident Medical Superintendent, St Ann's Heath, Virginia Water, Surrey

THE CORNISH RIVIERA SANATORIUM

ROSEHILL, PENZANCE

For the treatment of patients suffering from tuberculosis

The Sanatorium stands in its own grounds of 13 acres of garden lawn and woodland and is well sheltered from cold winds The climate is mild in winter cool in summer Artificial pneumothorax and other modern forms of treatment are available Day and night nursing staff Electric light Wireless in all rooms

Medical Supt **Francis Chown**, M B Lond D P H Consulting Physician (late Med Supt) Cornwall County Sanatorium

Terms 5 to 7 guineas weekly **'Phone Penzance 598**

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S S W sheltered from North and East elevation 800 feet Pure bracing air **Special Treatment by Artificial Pneumothorax** (X-ray controlled) **Tuberculins and Ultra-violet Rays** are available when necessary without extra charge **X-ray plant** Fully equipped Dental Department Electric light Radiators hot and cold basins and Wireless in all rooms Up to date main drainage

Full day and night Nursing Staff Terms 3 gns to 5 gns a week inclusive

Med Supt GEOFFREY A HOFFMAN B A M B T C Dub *Asst Phys* MARGARET A HARRISON M B B S Lond *Pathologist* EDGAR N DAVEY M B B Ch *Consult Laryngologist* CASSIDY DE W GIBB F R C S Edin *Consulting Dental Surg* GEORGE V SAUNDERS L D S R C S Lond Apply Secretary The Cotswold Sanatorium Cranham Gloucester *Tel* 81 and 82 WITCOMBE *Grams* HOFFMAN BRISTOL

HARROGATE FOR HEALTH

Harrogate specialises in the Treatment of — Disorders of the Liver — congestion, cirrhosis jaundice cholecystitis cholelithiasis and tropical liver Also in Diseases of the Skin—eczema psoriasis the coccal infections of the skin etc The Chronic Rheumatic Diseases—Arthritis Fibrositis, Neuritis Gout Hyperpiesis Mucous Colitis Functional Disorders of the Heart Pelvic Disorders of Women Convalescence from acute illness A wide range of Sulphur and Iron waters is available for dealing with the large group of disorders amenable to Spa treatment Prescribed diets for Spa patients can be obtained at hotels and boarding houses without extra charge **Complimentary and reduced price facilities for the Cure, Accommodation and Amusements are available for Members of the Medical Profession**

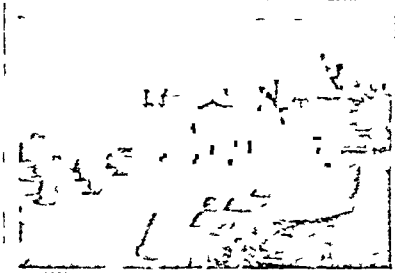
Full details of Harrogate for Cure and Holiday will be sent free on application to Spa Manager Information Bureau Harrogate 1 (state if a medical enquiry)

"IT'S QUICKER BY RAIL"
Cheap monthly return tickets to Harrogate from all stations Any train any day

HARROGATE
THE MODERN SPA

THE CHOICE OF a suitable resort for convalescence and recuperation will be made easier by frequent reference to this section of the Journal

Please mention the BMJ when writing to advertisers



Rheuma Spa of Wales

KINMEL HALL ABERGELE

SITUATED between the lovely Welsh foothills and the sea Kinmel Hall commands a thousand acres of its own parkland and golf course.

Exquisitely furnished and equipped with every aid to comfort it is an ideal residence for those needing rest recreation or modern Spa treatment, including the Continental Pistany Mud and Scotch Douche.

All Spa treatments for Rheumatic and similar disabilities are given in a separate wing of the building under the supervision of a fully qualified Resident Physician

The cuisine is first-class and careful attention given to special diets

• *Recreation facilities include own golf course tennis squash badminton riding fishing open air swimming pool Country Club adjoining (licensed)*

DOCTORS OWN SPA for RHEUMATISM

Sunny Pistany

Mud from Pistany in packs ready for home use Simplest safest and most economical treatment may be entrusted to any patient. Cost 7/6 to 10/- per treatment. Literature on request.

Pistany is from

VOLCANIC-SULPHURIC MUD SPRINGS in delightful surroundings

21 DAYS INCLUSIVE CURE

Special facilities for doctors and their wives

Second Class Fare with Sleeper £12 18 0 return.

PISTANY AGENCY LTD 310 Regent Street London W1 Tel LANgham 4214 or PISTANY SPA BUREAU 25 Cockspur Street S W 1 Tel WHitehall 2394

ST MARY'S HOSPITAL MEDICAL SCHOOL, W 2

(UNIVERSITY OF LONDON)

THE WINTER SESSION WILL BEGIN ON OCTOBER 1st 1938

The Medical School provides Courses in Preliminary Intermediate and Final Subjects and Students can join at one of three dates after Matriculation

SITUATION —Between a large population providing Clinical material and one of the best residential districts thus enabling Students to live in close proximity to their work

NEW BUILDINGS—The new buildings which cost £2 0,000 are now in use

CLINICAL UNITS IN MEDICINE AND SURGERY —Certain members of the Medical and Surgical Staff devote their whole time to teaching and research

NEARLY 1 000 BEDS available for teaching—additional Clinical material being provided by affiliation with Infirmary and other Institutions

ENTRANCE AND RESEARCH SCHOLARSHIPS to the value of £1 00 are awarded annually

APPOINTMENTS varying in value up to £ 0 per annum open to Students after qualification

For further particulars and illustrated prospectus apply to the School Secretary

C M WILSON (M C) M D F R S P Dean

MONTANA HALL, Montana, Switzerland

OPEN ALL THE YEAR

THE ONLY SANATORIUM IN SWITZERLAND UNDER BRITISH OWNERSHIP AND CONTROL AND WITH A DAY AND NIGHT STAFF OF BRITISH TRAINED NURSING SISTERS

INCLUSIVE TERMS—from 7 guineas (sterling) per week

Med Supt HILARY ROCHE, M D (M Ib) M R C P (Lond) Tuberculous Dis Dip (Wales)

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)

CITY ROAD E C 1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Gynæcological Clinics and to make MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Residential) Nearly 2 000 patients annually

RALPH B CANNINGS Secretary

QUEEN CHARLOTTE'S MATERNITY HOSPITAL

MARYLEBONE ROAD N W 1

Medical Students and Qualified Practitioners admitted to the Practice of this Hospital Unusual opportunities are afforded of acquiring Obstetrical Competence and Operative Midwifery (about one-half of the total admissions being premature cases) Over 4,700 patients are admitted to the Wards annually and in the Antenatal department there are over 20 000 attendances per annum Clinical demonstrations are given by the Staff daily

For rules fees etc apply H B STOKES Secretary Superintendent

F R C S (Edin)

EDINBURGH POSTAL COURSES

Full details on application to Dr J C C Orr H C Orr F R C S Surgeons Hall Edinburgh

MIDDLESEX HOSPITAL

LONDON, W 1

FERENS INSTITUTE OF OTO-LARYNGOLOGY

Applications are invited for the **BERNHARD BARON RESEARCH STUDENTSHIP** vacant on October 1st 1938, and tenable at the Ferens Institute

The appointment is for one year in the first instance, but a suitable candidate will be eligible for re-election for at least a year beginning on October 1st 1939

The honorarium is at the rate of £300 per annum with holiday leave amounting to one month in each twelve

Candidates must be males of pure British descent and citizens of Great Britain or Northern Ireland and must hold a registrable qualification The selected candidate will be expected to devote his whole time to research in connection with Anatomy Physiology or Pathology of the Nose, Throat or Ear under the general direction of the two Senior Surgeons to the Department Full opportunities are offered for Clinical and Operative work No strict limits are placed upon the nature of the research undertaken and in it the selected candidate may expect to avail himself to the full of the resources of the Department both clinical and pathological These include a large and fully equipped laboratory, providing special facilities for and with a staff familiar with the technique of temporal bone preparation

Applications should reach the School Secretary Middlesex Hospital W1 not later than September 3rd, 1938

POST-GRADUATE COURSE

Open only to members
Annual Subscription £1 1 0

F R C S Primary PHYSIOLOGY (August 15th to November 4th Mondays Wednesdays Fridays 5 30 p m) M R C P CLINICAL AND PATHOLOGICAL (National Temperance Hospital Tuesdays and Thursdays 8 0 p m September 6th to 22nd M R C P CHEST AND HEART (Royal Chest Hospital Mondays Wednesdays Fridays 8 0 p m September 12th to 30th) M R C P NEUROLOGY (West End Nerve Hospital, afternoons September 19th to October 1st) RHEUMATISM week end (Royal Bath Hospital Harrogate all day, September 16th, 17th 18th)

Apply FELLOWSHIP OF MEDICINE, 1, Wimpole Street, London, W 1 (Langham 4266)

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17 RED LION SQ LONDON, W C 1

FOUNDED IN 1882

by E S WEYMOUTH M A (Lond)

POSTAL OR ORAL PREPARATION FOR ALL MEDICAL EXAMINATIONS

SOME SUCCESSES

M D (Lond)	1901 37 (11 Gold Medallists during 1913 37)	413
M S (Lond)	1901 37 (including 4 Gold Medallists)	24
M B B S (Lond)	*Final* 1918 37 (Completed Exam)	255
F R C S (Eng) 1919 37	*Primary*	199
	Final	192
M R C P (Lond)	1919 37	286
D P H	(Various) 1906 37 (Completed Exam)	348
F R C S (Edin)	1918 37	65
M R C S L R C P	*Final* 1919 37 (Completed Exam)	606
M D	Various By Thesis	Many successes

Preparation for the above qualifications also for Medical Preliminary and all examinations leading up to M R C S L R C P or M B of various Universities also for M R C P (Edin) D P M D O M S D T M H D L O D C H D A D M R E M M S A L M S S A D C O G and some exams of Dominions Universities

ORAL CLASSES

M R C P M D Primary and Final F R C S F R C S (Edin) also Final M B B S and M R C S L R C P Museum and Microscope Work Also Private Tuition

MEDICAL PROSPECTUS (47 pp) CONTENTS The method and the cost of entering the Medical Profession *Particulars of all Medical Examinations* Postal Courses and Oral Classes Suggestions for the Higher Medical Examinations Suggestions for the Higher Surgical Examinations Suggestions for the Special Diploma Examinations Refresher Courses Open appointments for Women Hints for writing theses

Medical Prospectus gratis and post free Lists of Successes on application to the Principal 17 Red Lion Sq London W C 1 (Telephone Holborn 6313)

POST GRADUATE STUDY

The Medical Correspondence College provides ample facilities under highly qualified tutors, for oral practical, and clinical instruction in preparation for the various higher qualifications and for Post Graduate Study irrespective of any examination

Diploma in Anæsthetics
Diploma in Psychological Medicine
Diploma in Ophthalmology
Diploma in Radiology
Diploma in Laryngology Otology, and Rhinology
Diploma in Child Health
Diploma in Tropical Medicine
F R C S Eng, and all higher Surgical Examinations
M R C P Lond, and all higher Medical Examinations
M D Thesis of all Universities

You can qualify for any of the above by our Courses of Combined Postal and practical Courses

Write at once stating your requirements to the Secretary, **MEDICAL CORRESPONDENCE COLLEGE, 19, Welbeck Street, W 1**

WE SPECIALISE IN POST-GRADUATE COACHING FOR ALL EXAMINATIONS

DIPLOMA IN PSYCHOLOGICAL MEDICINE

Short Intensive Oral and Postal Revision Courses in preparation for the D P M Conjoint London University etc

Apply SECRETARY Medical Correspondence College 19 Welbeck Street London W 1 Free Booklet How to Pass the D P M on application

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE

INCORPORATING THE RUSS INSTITUTE

POSTS OVERSEAS FOR MEDICAL MEN

A register is kept in the School of medical men who are prepared to be considered for posts overseas and the School is frequently asked to advise plantation and mining companies when such posts fall vacant

The salaries offered are attractive conditions of service are governed by standardised forms of contract and many of the posts offer to medical men a most interesting field in which to practise their profession

It is desirable that candidates for posts overseas should hold a diploma in tropical medicine and hygiene The course provided by the London School for the Conjoint Board's Diploma lasts six months and the tuition fee is £40 The course may be taken from October to March or from January to June There are generally more vacancies in the course commencing in January

The Director of the Ross Institute is always glad to interview medical men who would like information regarding the possibilities of a career overseas if they will be good enough to make an appointment to call on him Enquiries may be addressed to

The Director
Ross Institute of Tropical Hygiene
London School of Hygiene & Tropical Medicine
KEPPEL STREET GOWER STREET W C 1

DIPLOMA IN PUBLIC HEALTH

The Royal Institute of Public Health and Hygiene

The Course of Instruction can be commenced at any time Special provision is made for students who can give only part time to the work

A prospectus and further particulars can be obtained from the Secretary

Telephone Langham 2731 2
28 Portland Place London W 1

LONDON HOSPITAL MEDICAL COLLEGE & DENTAL SCHOOL

THE WINTER SESSION will Open on Monday October 3rd

The LONDON HOSPITAL serves the East End of London and with eight hundred and ninety beds is the largest voluntary Hospital in England. The Out-patient Department which deals with about three hundred new patients per week is extensively used for teaching.

The Medical School has a large number of resident medical officers. Every year twenty resident house physicians and house surgeons and eighty students' dressers and clinical assistants are appointed from the recently qualified students. The opportunities which these appointments offer for obtaining clinical experience in hospital practice are unrivalled.

The MEDICAL COLLEGE is attached to the Hospital and includes Departments of Anatomy, Physiology, Bacteriology, Chemical Pathology, Applied Anatomy and Medicine of the University of London.

SPECIAL COURSES in Anatomy and Physiology for the Primary F.R.C.S. and Advanced Courses in Surgery for the Final F.R.C.S. Examination and in Medicine for the M.D. and M.R.C.P. Examinations are held twice a year.

ENTRANCE SCHOLARSHIPS AND PRIZES of the total value of £1,000 are awarded annually. Research Funds to the value of £13,000 permit of a number of research workers being engaged in medical research.

The MEDICAL COLLEGE contains a modern Museum of Pathology and a Library provided with all the current medical periodicals in charge of a full-time Librarian. There is an Athletic Club and Dining Hall, a Cricket and two Squash Courts in the Students' Hostel. The Athletic Ground of 18 acres at Hale End is within easy reach of the Hospital.

The HOSPITAL is only 20 minutes from Charing Cross and Baker Street Stations. Rooms for those who wish to be in residence in proximity to the Hospital can be obtained in the Students' Hostel.

Further details may be obtained from the Dean, Dr. A. E. Clark-Kennedy, M.D., F.R.C.P., Physician to the Hospital and Fellow of Corpus Christi College, Cambridge, who will always be pleased to meet students wishing to see the Hospital and College and to whom applications for rooms should be made, Turner Street, London, E.1.

THE CLINICAL RESEARCH ASSOCIATION, LTD.

WATERGATE HOUSE, ADELPHI, W.C.2 (Close to Charing Cross Station)

A COMPLETE LABORATORY SERVICE.

The Consulting Rooms and Laboratories of this Association (established in 1920) are available for all Medical Practitioners desiring Laboratory assistance in the investigation and diagnosis of cases under their care. All necessary apparatus and full instructions for collecting pathogenic material or for the personal attendance of Laboratory Workers at the Consulting Rooms of the Association will be forwarded immediately on application.

CARDIOGRAPHIC AND X-RAY EXAMINATIONS. ALSO NURSING HOME ACCOMMODATION ARRANGED.

Telephone: TEMPLE BAR 8593 (4 lines). M. CANDLER, Secretary. Telegrams: TUBERCLE, RAND, LONDON.

Chartered Society of Massage and Medical Gymnastics

CHARTERED MASSEUSES and MASSEURS receive Hospital Training. They are qualified to administer MASSAGE, REMEDIAL EXERCISES, ELECTRICAL and LIGHT TREATMENTS.

The Society was granted a Royal Charter in 1920 in recognition of the high standard of work maintained. C.S.M.M.G. Members do not advertise individually and pledge themselves to treat patients only under medical direction. All members of the Society are eligible for enrolment on the National Register of Medical Auxiliary Services.

Name and address of members practising in any district in the Country or Colonial address can be obtained from

THE SECRETARY, C.S.M.M.G., TAVISTOCK HOUSE (NORTH), TAVISTOCK SQUARE, LONDON, W.C.1.

Phone: Euston 1076-7-8

LONDON HOSPITAL MEDICAL COLLEGE

PRIMARY FELLOWSHIP EXAMINATION

A SPECIAL COURSE OF INSTRUCTION for the above Examination will begin on Monday September 19th.

The fee for the Course is 15 guineas.

Further particulars may be obtained from — DR. A. E. CLARK-KENNEDY, M.D., F.R.C.P., Dean, Turner Street, London, E.1.

LONDON HOSPITAL MEDICAL COLLEGE

F.R.C.S.

A Course of Instruction for the FINAL FELLOWSHIP EXAMINATION will begin on Thursday, September 1st, 1938. Fees (exclusive of Operative Surgery) 25 guineas. Operative Surgery 10 guineas.

Further particulars may be obtained from — DR. A. E. CLARK-KENNEDY, M.D., F.R.C.P., Dean, London Hospital Medical College, Turner Street, London, E.1.

THE MILROY LECTURES ON STATE MEDICINE AND PUBLIC HEALTH

The Council of the Royal College of Physicians are prepared to receive applications for the office of MILROY LECTURER for 1940.

Applications should be addressed to the Registrar, Royal College of Physicians, Pall Mall East, on or before September 17th, 1938, and should contain a statement of the division of the subject selected by the candidate.

The course consists of two lectures.

The Lectures are to be given on a Tuesday and Thursday in February or March, 1940.

A copy of Dr. Milroy's Suggestions on the subject of his bequest and information as to the emolument may be obtained from the Registrar.

AUGUST, 1938.

University College Hospital Medical School,

University Street, W.C.1

WINTER SESSION commences Tuesday, October 4th, 1938.

Scholarships and Prizes exceeding £1,000 awarded annually, and numerous vacancies for House Appointments also Senior Posts for Registrars, etc.

Dental School Department

National Dental Hospital, Great Portland Street, W.1.

Recently reorganized and equipped on the highest standard of modern requirements.

Full particulars can be obtained on application to the Dean.

THE ROYAL CANCER HOSPITAL (FREE)

(Incorporated under Royal Charter)

FULHAM ROAD, LONDON, S.W.3

The Course of Study in **PHYSICS and MEDICAL RADIOLOGY** qualifying for the Diploma in Radiology of the University of London and the Royal Colleges of Physicians and Surgeons will be held as usual at the above Hospital and will commence on Monday, October 3rd, 1938.

Applications should be made as soon as possible to the Secretary at the Hospital from whom all particulars can be obtained.

CLEMENT COBBOLD, Secretary.

STAMMERING SPEECH DEFECTS

BEHNKE METHOD. Established 1890. Can be seen resident treated at 39, Earl's Court Sq., S.W.5, and interviewed in the Summer at Bognor daily by Mrs. BEHNKE. Consultations in the Chiltern Hills. "Preeminent success in education and treatment of stammering and other speech defects." — Times. "The rational physiological principles." — Lancet. "The method is scientifically correct and perfect in effect." — Gt. Hospital Gazette."

Stammering, Cleft Palate Speech, Lisping. 3/9 p.m. MISS BEHNKE, 9, Earl's Court Sq., S.W.5.

Preliminary Examinations

The COLLEGE OF PRECEPTORS holds Preliminary Examinations for Medical and Dental Students in London and at Provincial Centres in March, June, September and December. For Regulations apply to the Secretary, College of Preceptors, Bloomsbury Square, London, W.C.1.

COACHING

By M.D., M.R.C.P., F.R.C.S., in Surgery and Pathology for Conjoint, M.B., Fellowship, Class also individually. Address No. 7918, B.M.A. House, Tavistock Square, W.C.1. Phone (mornings) KEN. 0

JOHN DUNVILLE RESEARCH FELLOWSHIP IN EXPERIMENTAL PATHOLOGY

Applications are invited for the JOHN DUNVILLE RESEARCH FELLOWSHIP IN EXPERIMENTAL PATHOLOGY at a salary of £400 per annum. The Fellowship is tenable in Queen's University, Belfast, for a period of three years or for such further period as the Board of Electors may determine.

The successful candidate will be expected to take up duty on October 1st, 1938, or such other date as may be determined.

Applications must be in the hands of the Secretary of the University not later than Saturday, September 3rd, 1938. Further particulars may be obtained from the undersigned.

Queen's University, Belfast. RICHARD H. HUNTER, Secretary.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH

Applications are invited for the post of CONSERVATOR of the MUSEUM and DIRECTOR of POSTGRADUATE STUDIES (tenable for five years with eligibility for reappointment) at an initial salary of £1,000 per annum.

Applications, along with the names of two persons to whom reference may be made, must be indorsed not later than October 1st, 1938. Particulars of the duties of the post may be obtained from the Secretary, Royal College of Surgeons, 18 Nicolson Street, Edinburgh, 8, to whom applications should be addressed.

COUNTY COUNCIL OF MIDDLESEX

HAREFIELD AND CLARE HALL SANATORIA

OCCUPATIONAL THERAPY

Applications are invited for the appointment of Occupational Therapy Instructors (Men) at the above sanatoria

A knowledge of the teaching of all or any of the undermentioned subjects is desirable

Printing
Cobbling
Light Woodwork
Leatherwork
Basketwork
Decorative Work

Salary in accordance with the Burnham Scale for the London area applicable to an appointment of this nature Superannuation deducted under the Teachers Superannuation Act

Applications stating age qualifications and experience together with copies of not more than three recent testimonials must be received by the undermentioned not later than August 20th 1938 Relationship to any member or officer of the Council must be disclosed in the application

Successful candidates will be required to pass a medical examination

Application forms are not provided Envelopes must be endorsed Occupational Therapy Instructors Canvassing directly or indirectly will be a disqualification

C W RADCLIFFE 7
Clerk of the Middlesex County Council
Guildhall Westminster S W 1
July 27th 1938

GOVERNMENT OF INDIA

Applications are invited from women candidates for the appointment of PROFESSOR OF MATERNITY AND CHILD WELFARE at the ALL INDIA INSTITUTE OF HYGIENE AND PUBLIC HEALTH CALCUTTA

Candidates must possess a registrable medical qualification and must have experience of the executive and administrative aspects of Maternity and Child Welfare Preference will be given to candidates possessing also experience in directing or conducting research and in lecturing to students

Agreement for five years in the first instance Pay scale Rs 1 050 rising by biennial increments of Rs 50 to Rs 1 350 a calendar month plus Overseas Pay of Rs 150 (Rupee = 1s 6d approximately) Provident fund First class passage to India and return passage on satisfactory termination of service (Overseas Pay and return passage admissible only to appointee of non-Asiatic domicile)

Applications will be accepted from members of the Women's Medical Service (India) who possess the requisite qualifications In respect of such candidates different terms and conditions will apply details of which will be furnished on request

Further particulars and forms of application may be obtained on application by postcard from the HIGH COMMISSIONER FOR INDIA General Department India House Aldwych London W C 2 Last date for receipt of completed applications September 10th 1938

KENT EDUCATION COMMITTEE

SCHOOL MEDICAL SERVICE

APPOINTMENT OF WHOLE TIME ASSISTANT SCHOOL MEDICAL OFFICER (Ophthalmic)

The Committee invite applications for the post of Assistant School Medical Officer (Ophthalmic) Diploma in Ophthalmology will be considered an advantage

Salary £700 per annum plus travelling expenses

The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1937 and is terminable by three months' notice on either side The successful candidate will be required to pass a medical examination as to physical fitness

Application stating age full qualifications and experience accompanied by copies of three testimonials should be forwarded to the undersigned by September 2nd 1938

No official form of application will be issued and canvassing will disqualify

CONSTANT PONDER M D
School Medical Officer
Sessions House Maidstone
August 2nd 1938

APPLICATIONS ARE INVITED IN WRITING in the first instance for the EUNICE OAKES RESEARCH FELLOWSHIP at the HOSPITAL FOR SICK CHILDREN Great Ormond Street London W C 1 tenable from January 1st 1939 Candidates must be medically qualified and fully equipped technically and by experience to conduct research work upon the prevention and cure of Children's Diseases They must be under 35 years of age and the salary is to be not less than £ [illegible]

Applications which must give full particulars of the proposed line of research and be accompanied by testimonials and copies of papers if any should be addressed to the undersigned

H E PUTHLI FORD Secretary
July 1938

THE KING EDWARD VII WELSH NATIONAL MEMORIAL ASSOCIATION

Applications are invited from duly registered medical practitioners for the post of HALF TIME ASSISTANT TUBERCULOSIS OFFICERS (three in number) to be attached to the Cardiff Newport and Pontypridd areas respectively and commencing duty on October 1st next The appointments are limited to one year at a remuneration for the year of £250 During their tenure successful candidates will be expected to take during the other half of their time the Course for the Diploma in Tuberculosis Diseases (Wales) at the Tuberculosis Department Welsh National School of Medicine and afterwards sit the examination Particulars as to fees for this course can be obtained from the Secretary Welsh National School of Medicine Cardiff

Applicants must have held a house appointment in medicine or surgery at a general hospital for at least six months and must also have held either a post as resident for a period of twelve months in an institution for the treatment of tuberculosis (medical or surgical) or a period of whole time work accepted by the Senate as equivalent thereto

Applications stating age qualifications experience etc together with copies of three recent testimonials should reach the undersigned not later than Wednesday August 24th 1938

D A POWELL
Principal Medical Officer
Memorial Offices
Westgate Street Cardiff
August 1st 1938

MONMOUTHSHIRE COUNTY COUNCIL

ASSISTANT MEDICAL OFFICER

The Council invite applications from duly qualified and registered Medical Practitioners male or female not exceeding 5 years of age holding a *Diploma in Public Health and State Medicine* for the appointment of Assistant Medical Officer to undertake mainly the Medical Inspection and Treatment of School Children and Maternity and Child Welfare work

The salary will be £500 per annum rising by annual increments of £25 to £7 0 with third class rail fares and subsistence allowance according to the Council's scale

The successful candidate will be required to act under the direction and supervision of the County Medical Officer to devote whole time to the service of the County Council and to reside in such place as the Council may determine

The post will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922

A schedule of the duties to be performed together with conditions of appointment and a form of application can be obtained from the undersigned to whom applications accompanied by copies of not more than three recent testimonials are to be sent by September 1st 1938

The County Hall D ROCYN JONES
Newport Mon County Medical Officer
August 5th 1938

THE WARWICKSHIRE AND COVENTRY JOINT COMMITTEE FOR TUBERCULOSIS

KING EDWARD VII MEMORIAL SANATORIUM
Hertford Hill near Warwick

Applications are invited for the post of JUNIOR ASSISTANT MEDICAL OFFICER (man or woman) at the Memorial Sanatorium near Warwick of 225 beds

The salary will be at the rate of £250 per annum with board lodging and laundry in addition and the successful candidate will be appointed for six months

There are three other Medical Officers at the Sanatorium

Applications with copies of testimonials should be forwarded direct to the Medical Superintendent at the Sanatorium to reach him by not later than Thursday August 18th 1938

Shire Hall L EDGAR STEPHENS
Warwick Clerk of the Joint Committee
July 29th 1938

COUNTY BOROUGH OF PRESTON

SHAROE GREEN HOSPITAL
(250 Beds)

ASSISTANT RESIDENT MEDICAL OFFICER (Female)

Applications are invited from fully qualified and registered practitioners for the above appointment Salary at the rate of £300 per annum with full board and residence The appointment is a temporary one and will be for a period of six months

Previous experience in midwifery is essential the duties consisting mainly of obstetrical work (35 maternity beds are provided) with the addition of the clinical pathological work of the Hospital

Applications stating age qualifications and experience together with copies of three recent testimonials should reach the Medical Superintendent not later than first post on Saturday August 20th 1938

UNIVERSITY OF LONDON

The Senate again invite applications for the UNIVERSITY CHAIR OF RADIOLOGY tenable at the Royal Cancer Hospital The holder of the Chair will be Head of the Department of Radiology at the Hospital Salary £2 000 a year

Applications (twelve copies) must be received not later than first post on September 20th 1938 by the Academic Registrar University of London Senate House London W C 1 from whom amended particulars should be obtained

BUCKINGHAMSHIRE COUNTY COUNCIL

(1) DEPUTY COUNTY MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER
(2) ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners not over 40 years of age holding a registrable qualification in Public Health Sanitary Science or State Medicine for the following appointments

(1) Deputy County Medical Officer of Health and School Medical Officer for the Administrative County of Buckingham at a commencing salary of £725 per annum rising subject to satisfactory service by annual increments of £25 to £800 per annum

(2) Assistant County Medical Officer of Health and Assistant School Medical Officer at a commencing salary of £500 per annum rising subject to satisfactory service by annual increments of £25 to a maximum of £700 per annum The duties will pertain mainly to School Medical Inspection and Maternity and Child Welfare work but there will be opportunities for the investigation of sanitary conditions generally

The successful applicants will be required to pay contributions under the Local Government and Other Officers Superannuation Act 1937 and to pass a medical examination as to physical fitness

Particulars and condition of the appointments are set out on the form of application which can be obtained from the undersigned

Application on the prescribed form accompanied by copies of not more than three recent testimonials which will not be returned should be addressed to the Clerk of the Bucks County Council and delivered at the County Hall Aylesbury not later than 11 a m on Saturday September 3rd 1938 marked Deputy County Medical Officer or Assistant Medical Officer

County Hall GUY R CROUCH
Aylesbury Clerk of the Bucks County Council
August 1938

COUNTY BOROUGH OF SUNDERLAND

CHERRY KNOWLE
(Sunderland County Borough Mental Hospital)
Ryhope near Sunderland

APPOINTMENT OF DEPUTY MEDICAL SUPERINTENDENT

Applications are invited for the post of Deputy Medical Superintendent of Cherry Knowle

Applicants must have held House appointments in a General Hospital The salary will be £550 per annum advancing subject to satisfactory service by annual increments of £25 to £600 per annum plus emoluments valued for purposes of superannuation at £150 per annum If in possession of a diploma in psychological medicine the person appointed will receive an additional sum of £50 per annum

The appointment will be subject to the provisions of the Asylum Officers Superannuation Act 1909

Form of application may be obtained from me and applications addressed to me and endorsed on cover Deputy Medical Superintendent Cherry Knowle together with copies of three recent testimonials must be delivered at my office Town Hall Sunderland not later than Tuesday August 23rd next Canvassing either directly or indirectly until after the first selection of candidates by the Committee will be a disqualification

Town Hall G S McINTIRE
Sunderland Town Clerk and Clerk to the Visiting Committee
July 30th 1938

COUNTY COUNCIL OF ROSS AND CROMARTY

Applications are invited for the appointment of RESIDENT MEDICAL OFFICER (male) for Lewis Sanatorium and Infectious Diseases Hospital for a period of six months with option of extension Salary at the rate of £450 per annum with board lodging and laundry Duties Resident Medical Officer at the Sanatorium Infectious Diseases Hospital and other Public Health duties as required by Medical Officer of Health or his resident Assistant

Applications giving particulars of qualifications and previous experience and stating when can take up duty accompanied by six copies of testimonials to be lodged with the undersigned on or before August 20th current

County Clerk's Office T S H BURNS
Dingwall County Clerk
July 27th 1938

Appointments for Medical Officers in the ROYAL AIR FORCE

Medical men are invited to apply for Short Service Commissions in the Royal Air Force Candidates must be registered under the Medical Acts and be not more than 31 years of age on entry

The period of service is 3 years—extendible to 5 years A gratuity of £400 or £1 000 is payable at the termination of 3 or 5 years respectively Permanent commissions are awarded in a number of cases These offer a pensionable career with the opportunity of extra leave on full pay for specialised study Applicants who hold—or are likely to hold—post graduate appointments in civil hospitals may on joining the Royal Air Force be seconded until the termination of their appointments (for a period not exceeding one year) An interval of commission up to twelve months is allowed for appointments held at approved hospitals

Fuller information can be obtained from The Director of Medical Services, Air Ministry, Kingsway, London

ROYAL NAVAL MEDICAL SERVICE.

Vacancies exist for Medical Officers in the Royal Navy, and applications are invited for entry in September, 1938

Candidates below the age of 28 years are preferred, and they must be registered under the Medical Acts No examination in professional subjects will be held, but candidates will be required to attend for interview by a Selection Board

Selected candidates will be entered for Service for a period of three years, which if desired is usually extended to five years at the discretion of the Admiralty

At the end of three years' service, officers may retire with a gratuity of £400, but those who serve for five years will receive £1,000

At the end of five years' Short Service, permanent commissions will be given to selected officers who wish to make the Naval Medical Service their permanent career Officers transferred to the permanent list will receive a gratuity of £1,000 (less Income Tax)

Full opportunities exist for transfer to the permanent list, and periods of unemployed or half pay are very rare The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Opportunities are available for officers on the permanent list for post-graduate study, to specialise to take higher examinations and to obtain further qualifications

Naval Medical Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers

Copies of the regulations for entry and conditions of service, including rates of pay, allowances and retired pay may be obtained from the Medical Director General of the Navy, Admiralty, S W 1, and from the Deans of all Medical Schools

Applications for entry from intending candidates must be received not later than 31st August, 1938

CITY OF BIRMINGHAM

MENTAL HOSPITALS DEPARTMENT

RUBERY HILL AND HOLLYMOOR DIVISION

The Committee of Visitors invite applications from duly qualified medical men for the position of JUNIOR MALE ASSISTANT MEDICAL OFFICER The successful candidate will be required to reside in the Hospital

The commencing salary will be £350 per annum *plus the usual residential emoluments* of board lodging laundry and attendance An increase of £50 will be granted on completion of twelve months satisfactory service and thereafter in increases of £25 per annum up to a maximum salary of £450 per annum An additional £50 per annum will be paid to a holder of the D P M qualification or to a person obtaining the D P M after appointment All fees received in connexion with panel work will be required to be paid into the Borough Funds but for making insurance reports reports on compensation cases and Coroner's inquests the fees can be retained

A person who has held for at least six months a medical or surgical residential post in a general hospital will be regarded as having an additional qualification Previous mental hospital experience is not essential but experience in the administration of anæsthetics is desired

The candidate appointed will be required to pass a medical examination and will be placed on the permanent staff after one year's satisfactory service when he will be required to contribute under the Asylums Officers Superannuation Act 1909 He will be required to serve in such institution belonging to the Mental Hospitals Committee as they may from time to time direct The appointment is subject to one month's notice on either side

Applications stating full particulars of qualifications experience and appointments held accompanied by copies of three recent testimonials must be addressed to the undersigned so as to be received not later than September 1st 1938

Town Clerk's Office *Council House* Birmingham 1 — F H C WILTSHIRE Clerk to the Committee of Visitors

CITY OF BIRMINGHAM

SELLY OAK HOSPITAL (520 Beds)

JUNIOR MEDICAL OFFICERS (MALE)

Applications are invited from fully equipped Medical Practitioners for the whole time appointment of Junior Medical Officer (male) at the Selly Oak Hospital *Birmingham* The appointment will be for a period of six months in the first instance but may be extended at the end of that time for a further period of not exceeding six months

Salary at the rate of £200 per annum and full residential emoluments

Further particulars may be obtained from the Medical Superintendent at Selly Oak Hospital to whom applications stating age experience and qualifications with copies of recent testimonials should be forwarded not later than Saturday August 20th 1938

F H C WILTSHIRE *Town Clerk*

The Council House Birmingham July 1938

SURREY COUNTY COUNCIL

PUBLIC HEALTH DEPARTMENT

SURREY COUNTY SANATORIUM
Milford (300 Beds)

JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER

Applications are invited from registered Medical Practitioners (either sex) for the appointment of Junior Assistant Medical Officer at County Sanatorium Milford near Godalming Resident experience in general hospital essential Appointment is for six months renewable for further period of six months

Salary £250 per annum together with full residential emolument Appointment is subject to the Staffing Regulations of the County Council

Applications stating age qualifications and *experience and enclosing copies of not more than* three recent testimonials should be sent to the Medical Superintendent Surrey County Sanatorium Milford Surrey to reach him not later than Saturday August 20th 1938

County Hall Kingston upon Thames — DUDLEY AUKLAND Clerk of the Council

August 2nd 1938

LONDON COUNTY COUNCIL

Medical Practitioner required with appropriate qualification for appointment as ASSISTANT PATHOLOGIST at Central Histological Laboratory Archway Hospital Archway Road N 19 Salary £450 by £25 to £500 Experience in morbid histology and post mortem work essential

Form of application and further particulars (stamped addressed foolscap envelope necessary) from Medical Officer of Health (Staff Division 2a) County Hall Westminster Bridge S E 1 returnable by August 31

Canvassing disqualifies

RADNORSHIRE COUNTY COUNCIL

APPOINTMENT OF COUNTY MEDICAL OFFICER OF HEALTH

Applications are invited for the above appointment from medical men of not more than fifty years of age who are duly qualified for the appointment pursuant to the statutory provisions contained in the Local Government Act 1933 and the Regulations made by the Minister of Health thereunder and by virtue of the Public Health Act 1936

The duties will include all statutory duties as County Medical Officer and School Medical Officer work required under the Mental Deficiency and Maternity and Child Welfare and Midwives Acts together with duties in connexion with the supervision of the work of the County School Dentists and Health Visitors general supervision and control of the Maternity and Child Welfare Centres and various Clinics and such other duties as may be prescribed

Salary £600 per annum increasing after two years service by four annual increments of £25 to £900

The appointment will be subject to the approval of the Government Departments concerned to the provisions of the Local Government and Other Officers Superannuation Act 1922 and to a satisfactory medical examination and will be terminable by three months notice on either side

A form of application may be obtained from the undersigned by whom applications must be received not later than August 19th 1938

Canvassing directly or indirectly will be con

G W MOSELEY
Clerk of the Council

COUNTY BOROUGH OF DARLINGTON

ASSISTANT MEDICAL OFFICER OF HEALTH

Applications from qualified Medical Practitioners are invited for the combined appointment of Assistant Medical Officer of Health for Tuberculosis Public Assistance under the terms of the *Public Assistance Order 1930 and other Public* Health duties (not including domiciliary visiting for the Public Assistance Committee)

Applicants must not exceed *40 years of age* and should have had at least three years post graduate experience in general medicine and surgery and in Public Health work The person appointed will be required to give full time service under the Authority to act generally under the direction of the Medical Officer of Health to pass a medical examination to contribute to the Superannuation Fund and to reside in a house provided by the Authority for which a rental of £40 per annum exclusive of rates will be charged

The total salary is £550 per annum rising to £700 per annum by annual increments of £25 plus a car allowance of £30 *per annum* and all fees or emoluments received must be paid over to the Local Authority The appointment will be terminable on three months notice

Application forms may be obtained from the Medical Officer of Health Health Centre Greenbank *Darlington* and duly completed and endorsed Assistant Medical Officer of Health they should be sent to him together with copies of three recent testimonials not later than August 31st 1938

H HOPKINS
Town Clerk

August 3rd 1938

CITY OF BRADFORD

ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited for the post of *Assistant School Medical Officer* at a salary of £750 per annum rising to £937 10s by biennial increments of £50 the first increment to take effect on *April 1st 1941*

The salary is subject to a *deduction* of 5 per cent per annum under the terms of the Local Government and *Other Officers Superannuation* Act 1922 and the successful candidate will be required to pass a medical examination

Application forms may be obtained from the Medical Officer of Health Town Hall Bradford and should be returned to the undersigned not later than August 27th 1938 Envelopes should bear the words Assistant School Medical Officer in the top left hand corner

N L FLEMING Town Clerk

Town Hall Bradford

CITY OF BRADFORD

MUNICIPAL GENERAL HOSPITAL
St Luke's

HOUSE PHYSICIANS and HOUSE SURGEONS required Salary in each case £150 per annum plus board and lodging These appointments are for six months renewable for a further period of six months

Application forms may be obtained from the Medical Officer of Health Town Hall Bradford and should be returned to the undersigned not later than August 27th 1938

N L FLEMING Town Clerk

Town Hall Bradford

LANCASHIRE COUNTY COUNCIL

WHISTON COUNTY HOSPITAL
Near Prescot

APPOINTMENT OF RESIDENT SURGICAL OFFICER

Applications are invited for the appointment of Resident Surgical Officer (unmarried) at the Whiston County Hospital near Prescot (500 beds)

Applicants must be Fellows of the Royal College of Surgeons or hold *Degrees or Diplomas* of similar standing and must be capable of dealing with surgical emergencies

The salary is at the rate of £400 per annum together with the usual residential emoluments The appointment is for a period of *one year* in the first instance but may be renewed for a further year only

Forms of application may be obtained from the County Medical Officer of Health Hospital and Medical Department County Offices Preston to whom applications must be returned not later than August 31st 1938

County Offices Preston — GEORGE ETHERTON Clerk of the County Council

July 26th 1938

LANCASHIRE COUNTY COUNCIL

WHISTON COUNTY HOSPITAL
Near Prescot

APPOINTMENT OF RESIDENT MEDICAL OFFICER

Applications are invited for the appointment of Resident Medical Officer (unmarried) at the Whiston County Hospital near Prescot (500 beds)

Applicants must have held previous hospital appointments in which they have gained experience in clinical medicine and pathology and they *should* hold one of the higher medical qualifications

The salary is at the rate of £400 per annum together with the usual residential emoluments The appointment is for a period of one year in the first instance but may be renewed for a further year only

Forms of application may be obtained from the County Medical Officer of Health Hospital and Medical Department County Offices Preston to whom all applications must be *returned not* later than August 31st 1938

County Offices Preston — GEORGE ETHERTON Clerk of the County Council

July 26th 1938

LANCASHIRE COUNTY COUNCIL

WHISTON COUNTY HOSPITAL
Near Prescot

VISITING RADIOLOGIST

Applications are invited for the appointment of a Visiting Radiologist (Part time) at the Whiston County Hospital near Prescot Remuneration at the rate of 3 guineas per session

Application forms and terms of appointment may be obtained from the County Medical *Officer* Hospital and Medical Department County Offices Preston to whom all applications must be for warded not later than August 31st 1938

County Offices Preston — GEORGE ETHERTON Clerk of the County Council

July 26th 1938

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

SCALEBOR PARK MENTAL HOSPITAL

The Visiting Committee of the Scalebor Park Mental Hospital invite applications for the appointment of JUNIOR ASSISTANT MEDICAL OFFICER at the Scalebor Park Mental Hospital for private patients at a salary of £350 per annum rising by annual increments of £25 to £450 per annum with board and residence at the Hospital with an additional £50 for the D P M or M D in Psychological Medicine General hospital experience will be an additional qualification

Further particulars and form of application may be had from the undersigned by whom all applications together with copies of *not more than* three recent testimonials must be received not later than August 29th 1938

J CHARLES McGRATH
Clerk to the Visiting Committee

County Hall Wakefield
August 1938

METROPOLITAN BOROUGH OF DEPTFORD

Applications are invited for the appointment of a DENTAL SURGEON who will be engaged on a sessional basis at the Central Child Welfare Clinic and Tuberculosis Dispensary Remuneration at the rate of £60 per annum in respect of each regular weekly session held (at present three a week)

Application forms giving full particulars of appointment obtainable from the *undersigned* must be returned not later than first post on Thursday September 1st 1938

HAROLD G REED
Town Clerk

Deptford Town Hall New Cross S E 14

July 25th 1938

BOROUGH OF EDMONTON

APPOINTMENT OF ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from duly qualified Medical Practitioners for the combined appointment of Assistant Medical Officer of Health and Assistant School Medical Officer.

Candidates must be registered medical practitioners and the person appointed will be required to qualify for Medical Inspection of School Children, Routine Medical Work and Consultative Duties. He may be called upon to perform such other duties as may be allotted to him by the Medical Officer of Health and School Medical Officer.

The person appointed will be required to devote the whole of his time to the duties and will not be allowed to engage in private practice and will be required to reside within the Borough or within one mile of the Borough.

The salary will be at the rate of £600 per annum, rising by £50 per annum by annual increments to £750 per annum.

It is proposed that the post shall be a designated post under the Local Government and Other Officers Superannuation Act, 1937, and the person appointed will be required to contribute to the Superannuation Fund and to pass the Council's medical examination.

Forms of application and conditions of appointment can be obtained from the Medical Officer of Health, Public Health Department, Silver Street, Edmonton.

Completed applications, together with copies of not more than three recent testimonials endorsed "Junior Resident Medical Officer," must be forwarded so as to be received by the undersigned not later than Monday, August 29th, 1938.

Canvassing, either directly or indirectly, will be a disqualification.

By Order,
FREDK. W. CLANTON,
Town Clerk.

Town Hall, Edmonton,
August 4th, 1938.

COUNTY BOROUGH OF DEWSBURY

ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from qualified and registered medical practitioners (men or women) for the post of Assistant Medical Officer of Health and Assistant School Medical Officer.

Applicants should have had at least three years' experience since qualification and possess the D.P.H. Experience in child welfare and tuberculosis desirable. The duties are in connection with School Medical work, Child Welfare and Tuberculosis and there are also opportunities for experience in general Public Health work.

The salary is £600 per annum, rising by annual increments of £25 to £700 per annum. The appointment will be subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Particulars of the duties and terms and conditions of the appointment, together with application form, may be obtained from Dr. J. F. Galloway, Medical Officer of Health, Municipal Buildings, Halifax Road, Dewsbury, to whom applications accompanied by copies of not more than three recent testimonials should be delivered not later than Monday, August 22nd.

Canvassing in any form will be a disqualification.

Town Hall, HOLLAND BOOTH,
Dewsbury. Town Clerk.
July 26th, 1938.

COUNTY BOROUGH OF BARNSLEY

ASSISTANT MEDICAL OFFICER OF HEALTH (Clinical Duties)

Applications are invited from fully qualified registered medical practitioners for the above post which will be vacant from October 1st, 1938, at a salary of £600 per annum, rising by annual increments of £25 to £700 per annum.

The duties of the post will consist mainly of those as Resident Medical Officer for the Isolation Hospital of 110 beds and as Assistant in the Venereal Diseases Clinic. Additionally the successful candidate may be called upon to perform other duties in the Public Health and School Medical Services as may be determined by the Medical Officer of Health. The officer appointed will devote whole-time duties to the post and will not be allowed to undertake any private practice.

The possession of a Degree or Diploma in Public Health will be an essential qualification.

The appointment will be to a designated post under the Local Government and Other Officers Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment will be determinable by three months' notice on either side.

Application forms can be obtained from the undersigned, and should be returned, accompanied by copies of not more than two recent testimonials endorsed "Assistant Medical Officer of Health," not later than August 27th, 1938.

Town Hall, A. ERIC GILFILLAN,
Barnsley. Town Clerk.
August 3rd, 1938.

CITY OF LIVERPOOL

RESIDENT ASSISTANT MEDICAL OFFICER

FAZAKERLEY SANATORIUM (100 Beds)

Male and Female Tuberculous and Surgical Tuberculous.

Applications are invited for the above appointment for a period of one year at a salary of £150 per annum, together with the usual residential allowance.

Candidates must possess a recognised medical and tuberculosis qualification and previous experience will be given preference.

The post is suitable for a candidate working for the M.D.

The Sanatorium is within easy reach of the Liverpool University and Royal General Hospital.

Canvassing will be deemed a disqualification.

Applications must be made on forms obtainable from the Medical Officer of Health, Home Office, Municipal Annexe, Dale Street, Liverpool, to be received not later than Wednesday, August 24th.

Municipal Buildings, W. H. BAINES,
Dale Street, Liverpool. Town Clerk.
August 3rd, 1938.

COUNTY BOROUGH OF HALIFAX

THE HALIFAX GENERAL HOSPITAL (205 Beds)

JUNIOR RESIDENT MEDICAL OFFICER (Male)

Applications are invited from duly qualified registered Medical Practitioners for the above appointment.

Salary £150 per annum, together with board, residence and laundry. The appointment is for a term not exceeding one year and is not renewable.

Forms of application and conditions of appointment can be obtained from the Medical Officer of Health, Public Health Office, Harrison Street, Halifax.

Completed applications, together with copies of not more than three recent testimonials endorsed "Junior Resident Medical Officer," must be forwarded so as to be received by the undersigned not later than Monday, August 29th, 1938.

Canvassing, either directly or indirectly, will be a disqualification.

The Council has not adopted a superannuation scheme.

The Town Hall, PERCY SAUNDERS,
Halifax. Town Clerk.
August 6th, 1938.

COUNTY BOROUGH OF WEST HARTLEPOOL

PUBLIC ASSISTANCE COMMITTEE

ASSISTANT (RESIDENT) MEDICAL OFFICER

Applications are invited from fully qualified ladies under 45 years of age for the appointment of Assistant Medical Officer at HOWBECK INFIRMARY, West Hartlepool, containing 256 beds. Salary £350 per annum, rising by annual increments of £25 to £450 per annum, together with furnished rooms, washing, and rations valued at £100 per annum for superannuation purposes.

The lady appointed will be required to devote her whole time to the service of the Corporation, undertake to give lectures in Surgical and Medical Nursing to Probationer Nurses, and carry out the instructions of the Superintendent Medical Officer.

Applications stating qualifications, age and previous experience, should be accompanied by copies of three recent testimonials, and delivered to the undersigned on or before Saturday, August 13th, 1938.

W. E. TUNNELL,
Public Assistance Officer.

Public Assistance Offices,
Hart Road, West Hartlepool.

COUNTY BOROUGH OF DERBY

DERBY CITY HOSPITAL

ASSISTANT RESIDENT MEDICAL OFFICERS

Applications are invited for the posts of Assistant Resident Medical Officers (male) at the above Hospital of 400 beds. The Hospital provides treatment for acute medical and surgical cases, obstetrics and children's diseases, etc.

Candidates must be registered in medicine and surgery. The appointments are for period of six months, two months' notice of termination of duties may be given on either side. One successful applicant will be required to commence duties on or about September 5th, and the other to commence during October.

Salary at the rate of £200 per annum, with board and residence.

Applications, stating age, experience, and accompanied by three recent testimonials, should be sent to the undersigned as soon as possible.

Public Health Department, GORDON LILICO,
1 Derwent Street, Medical Officer of Health,
Derby.

UNION OF SOUTH AFRICA

VACANCY FOR

(A) SENIOR PROFESSIONAL OFFICER (PHYSIOLOGY)—ONE POST (Salary Scale £600—£750).

(B) SENIOR PROFESSIONAL OFFICER (BIOCHEMISTRY)—ONE POST (Salary Scale £600—£750).

Applications are invited from suitable candidates for appointment to the above-mentioned posts in the Department of Agriculture and Forestry in the Union of South Africa.

The appointees will be selected on a basis of qualifications and experience.

SPECIAL QUALIFICATIONS.

For the Physiology Professional Officer (Physiology).

Applicants must be in possession of a doctor's degree with thorough training in physiology and must have given special attention to this branch in their advanced studies. Experience in biochemical research work, especially in the direction of fruit research, will be a recommendation, although such qualification will not necessarily be regarded as essential.

For the Biochemistry Professional Officer (Biochemistry).

Applicants must be in possession of a doctor's degree with thorough training in biochemistry and must have given special attention to this branch in their advanced studies. Experience in biochemical research work, especially in the direction of fruit research, will be a recommendation, although such qualification will not necessarily be regarded as essential.

Certificates and testimonials should not be submitted in the first instance.

Before appointment to the fixed establishment in a permanent capacity the successful candidates will be required to serve on probation for a period of not less than twelve months; they must be British subjects and have resided in the Union of South Africa or in the Mandated Territory of South West Africa for not less than three years, and they must furnish satisfactory certificates of birth and health. Successful candidates who do not satisfy the nationality and residential qualifications will be appointed on contract until their services are satisfactory, they acquire liberty for permanent appointment. Proficiency in one of the official languages—English and Afrikaans (or Nederlands)—is an essential requirement.

Copies of publications and scientific reports of which the applicant is the author must be attached to all applications where possible.

Any degrees obtained by candidates must be those of universities of recognised standing. Any qualifications additional or of a standard equal to those which are required will also be taken into account.

Application must be made on the prescribed form (Z.S.C.) which is obtainable from the Secretary, Office of the High Commissioner for the Union of South Africa, South Africa House, Trafalgar Square, London, to whom all completed forms must be addressed.

Applications must reach the High Commissioner's office not later than September 14th, 1938.

LIVERPOOL COUNTY BOROUGH

LOCAL EDUCATION AUTHORITY

ASSISTANT SCHOOL MEDICAL OFFICER (WOMAN)

Application are invited for an Assistant School Medical Officer (woman) in the Department of the Medical Officer to the Local Education Authority at a salary of £500 per annum, rising by annual increments of £25 to £700 per annum.

(Where the successful candidate holds a similar appointment under another Local Education Authority and receives a salary in excess of the advertised minimum, a commencing salary of not less than the salary which the candidate is receiving under her existing appointment (not exceeding the maximum under the Liverpool Scale) may be paid.)

Candidates must be registered medical practitioners and must have had at least three years' experience.

The Officer appointed will be required to reside within the City and devote whole-time service to the Local Education Authority under the direction of the Medical Officer to the Local Education Authority and will not be allowed to undertake any private practice.

The appointment will be subject to the Local Government and Other Officers' Superannuation Act, 1937, and the Standing Orders of the City Council.

Form of application which may be obtained by forwarding a stamped addressed foolscap envelope should be returned together with copies of three recent testimonials to the undersigned not later than September 3rd, 1938, and endorsed "Assistant School Medical Officer."

The canvassing of members of the Education Committee or the City Council is strictly prohibited and will be considered a disqualification.

Municipal Buildings, W. H. BAINES,
Liverpool, 2. Town Clerk and Clerk to
August 11th, 1938. the Local Education Authority.

SURREY COUNTY COUNCIL

PUBLIC HEALTH DEPARTMENT

EPSOM COUNTY HOSPITAL
(250 Acute Beds 126 Chronic Beds)

FIRST ASSISTANT MEDICAL OFFICER
(Acting Deputy Medical Superintendent)

Applications are invited from registered Medical Practitioners for the appointment of First Assistant Medical Officer at the Epsom County Hospital Dorking Road Epsom The Hospital with Ewell Park Annexe provides accommodation for 376 patients at present but a programme of extension and improvement is contemplated which will increase the accommodation to 500 beds

The Medical Officer appointed must have had considerable previous experience in surgical appointments and should preferably possess a Higher Surgical Qualification

The tenure of the appointment is limited to a period of five years but the appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 The cash salary is at the rate of £350 per annum rising by annual increments of £25 to a maximum of £450 per annum together with full residential emoluments valued at £125 per annum The First Assistant Medical Officer will receive an additional salary at the rate of £50 per annum while acting as Deputy Medical Superintendent

Applications stating age qualifications and experience and enclosing copies of not more than three recent testimonials should be addressed to the *County Medical Officer County Hall Kingston* on Thames so as to be received not later than August 29th 1938

DUDLEY AUKLAND
County Hall Clerk of the Council
Kingston upon Thames
August 9th 1938

SURREY COUNTY COUNCIL

MENTAL HOSPITALS COMMITTEE

APPOINTMENT OF JUNIOR ASSISTANT MEDICAL OFFICERS (Male)

Applications are invited for the appointment of two male Junior Assistant Medical Officers (unmarried) in the Surrey County Council Mental Hospitals service

Commencing salary which will be subject to statutory deductions under the provisions of the Asylums Officers Superannuation Act 1909 will be £350 rising by annual increments of £25 to a maximum of £450 per annum together with apartments board laundry and attendance valued for superannuation purposes at £150 per annum The persons appointed will also be paid in addition to their salaries the sum of £50 per annum if they hold the *Diploma in Psychological Medicine*

The appointments are subject to termination by one calendar months notice on either side and the persons appointed will be required to undergo a medical examination

Applications stating age accompanied by copies of three recent testimonials and enclosed in an envelope endorsed Mental Hospitals Junior Medical Officer must reach me not later than Wednesday August 24th 1938

DUDLEY AUKLAND
Clerk of the Council
Mental Hospitals Department
County Hall Kingston upon Thames
August 9th 1938

PETERBOROUGH AND DISTRICT MEMORIAL HOSPITAL
(154 Beds)

APPOINTMENT OF SENIOR RESIDENT HOUSE SURGEON
(Three Residents on Staff)

Applications are invited from fully qualified male practitioners for the above post which becomes vacant on September 1st next

Applicants must have held a Hospital appointment previously for at least six months and have had experience in Fracture work

Salary at the rate of £175 per annum for the first six months and £200 per annum afterwards

Application stating age qualifications and experience with copies of recent testimonials to be sent to the undersigned from whom further particulars may be obtained

FRANK A C TAYLOR
Secretary Superintendent

BOSTON GENERAL HOSPITAL
(70 Beds)

RESIDENT MEDICAL OFFICER required to commence duty as soon as possible Salary £150 per annum with board residence and laundry The appointment is for six months and is renewable

Applications stating age qualifications and experience together with copies of three recent testimonials should be addressed to the undersigned

GORDON FASIG Secretary

RHONDDA URBAN DISTRICT COUNCIL

ASSISTANT MEDICAL OFFICER

Applications are invited from male registered medical practitioners not exceeding 45 years of age for appointment as Assistant Medical Officer under the direction and supervision of the Council's Medical Officer of Health and School Medical Officer at a salary of £500 rising by annual increments of £25 to £700 a year the first annual increment being payable on April 1st following the completion of six calendar months service under the Council travelling expenses necessarily incurred in the performance of the duties will also be allowed Candidates must have had not less than three years professional experience subsequent to registration and must be experienced in the diseases of children the possession of a Diploma in Public Health is also considered desirable

The appointment which is designated under the Local Government and Other Officers Superannuation Act 1922 will be subject to the passing of a medical examination and will be terminable by two calendar months notice on either side The Officer appointed will be required to reside within the Rhondda Urban District and will not be allowed to engage in private practice

Applications are to be made on forms obtainable from the Medical Officer of Health Tydfil House Pentre Rhondda by whom they must be received endorsed Assistant Medical Officer and accompanied by copies of three recent testimonials not later than Monday August 29th 1938

The Council Offices D J JONES
Pentre Rhondda Clerk of the Council
August 8th 1938

WORCESTERSHIRE COUNTY COUNCIL

The Worcestershire County Council Air Raid Precautions Committee invite applications from suitable persons over 35 years of age for the posts of ASSISTANT AIR RAID PRECAUTIONS OFFICERS

The candidates appointed will be required to devote their whole time to the duties of the office and to work under the direction of the County Air Raid Precautions Officer

Medical Building or other technical qualifications and knowledge of Local Government will be an advantage and only those who have a thorough knowledge of the Air Raid Precautions Handbooks and Memorandum and of Air Raid Precautions work in general will be considered

The posts are temporary and the salary will be at the rate of £300 per annum Staff and offices are provided and travelling expenses in accordance with the County Scale will be allowed

Applications in candidates own handwriting on the prescribed form which will be forwarded upon request to the County Air Raid Precautions Officer Shirehall Worcester and supported by three recent testimonials and endorsed Assistant Air Raid Precautions Officer must be received by me not later than first post on Monday August 29th 1938

Canvassing either direct or indirect will be a disqualification

Selected candidates will be interviewed about *September 21st*

Shirehall C H BIRD
Worcester Clerk of the County Council
[L 211]

BRISTOL EYE HOSPITAL
(82 Beds) (12 Private Patients)
1937 1 017 In patients 17 794 Out patients

Applications are invited for the post of JUNIOR HOUSE SURGEON Salary £100 per annum *Senior post available after six months* Vacant October 1st 1938

Suitable experience for D O M S

Applications stating age and qualifications etc with three recent testimonials to reach the undersigned by August 27th next

D M BABER
Secretary and House Governor

ROYAL WEST SUSSEX HOSPITAL
Chichester

The Board of Management will shortly proceed to the appointment of an HONORARY ANAESTHETIST Candidates must be duly qualified medical practitioners

Applications together with three copies of testimonials showing evidence of special training and efficiency in the administration of anaesthetics should be sent on or before September 5th 1938 to the undersigned

J COXON INCE Secretary

BRISTOL ROYAL INFIRMARY

Application are invited for the post of HOUSE PHYSICIAN for the six months commencing September 1st 1938 Salary at the rate of £80 per annum Candidates who must be duly qualified to send in their application on forms to be obtained from the undersigned together with copies of not more than three testimonials

ELLIS C SMITH FCIS
Secretary and House Governor

SOUTHEND ON SEA GENERAL HOSPITAL

(235 Beds) Eight Residents
Hon. Specialist Staff of Twenty Members

Applications are invited for the posts of
(1) RESIDENT ANAESTHETIST (male) salary £125 p.a. with board residence and laundry
(2) HOUSE SURGEON (male) including work in the Ear Nose and Throat Department salary £100 p.a. with board etc

The Hospital is recognized by the Royal College of Surgeons in respect of this post

The appointments are for six months

Applications with copies of two recent testimonials should be sent to the undersigned immediately

P H CONSTABLE Secretary

MANCHESTER EAR HOSPITAL
Grosvenor Square All Saints

The Board invite applications for the following posts

RESIDENT HOUSE SURGEON Salary at the rate of £120 per annum

NON RESIDENT HOUSE SURGEON Salary at the rate of £150 per annum with partial board

Appointments six months 31 beds Candidates must be duly qualified and registered

Applications with copies of four recent testimonials to be forwarded to Mr REGINALD S MILFORD (Hon Secretary Manchester Ear Hospital) c/o Mr W J ELLAM 17 Brazennose Street Manchester 2

ROYAL SOUTH HANTS & SOUTHAMPTON HOSPITAL (296 Beds)

Applications are invited for the appointment of SENIOR HOUSE SURGEON for the period commencing September 17th and ending September 30th 1939 at a salary of £200 per annum with board residence and laundry Candidates must be male and unmarried and preference will be given to *those holding the F R C S diploma* This is the senior post of seven residents and previous experience as a House Surgeon is essential

Applications accompanied by not more than three testimonials should be sent to the undersigned not later than Thursday August 18th

S W BARNES
House Governor and Secretary

ROYAL SOUTH HANTS & SOUTHAMPTON HOSPITAL (296 Beds)

Applications are invited for the appointment of HOUSE SURGEON who will also have charge of the Ear Nose and Throat Department for the six months commencing October 1st 1938 at a salary of £150 per annum with board residence and laundry Candidates must be male and unmarried

Applications accompanied by not more than three testimonials should be sent to the undersigned not later than Thursday August 18th

S W BARNES
House Governor and Secretary

ROCHDALE INFIRMARY AND DISPENSARY
(110 Beds)

The Board of Management invite applications for the appointment of SENIOR HOUSE SURGEON The salary attached to the appointment is at the rate of £250 per annum including board residence and laundry

Applications stating age nationality etc together with copies of three recent testimonials to be sent to the Secretary endorsed House Surgeon Conditions of the appointment may be had on application to the Secretary

Infirmary Office W WYNNE Secretary
Rochdale Lanes

THE CHILDREN'S HOSPITAL SHEFFIELD
(157 Beds)

Applications are invited for the post of HOUSE PHYSICIAN vacant September 1st 1938

The appointment is for six months Salary £100 per annum with board residence and laundry Candidates (male and unmarried) who must possess registered qualifications should forward applications stating age nationality etc together with copies of three recent testimonials to the undersigned

T H G GARTLAND
Superintendent and Secretary

TAUNTON AND SOMERSET HOSPITAL
Taunton

Two HOUSE SURGEONS required September 23rd and 30th Six months appointments A House Physician also in residence Salaries at the rate of £125 p.a. with board residence and laundry and the retention of certain fees

Applications with copies of not more than three recent testimonial to F J J STACEY Secretary

ROYAL SALOP INFIRMARY SHREWSBURY
(185 Beds and Residents)

APPOINTMENT OF RESIDENT SURGICAL OFFICER

Applications are invited from fully registered medical practitioners for the appointment of Resident Surgical Officer as and from September 1st.

The appointment is for a period of three months at a salary of £150 per annum with board residence. The Resident Surgical Officer is Superintendent of the Hospital.

House Physician, House Physician and House Surgeon.

Applications, stating age, qualifications, experience and salary required, accompanied by copies of three recent testimonials, to be sent to the undersigned not later than August 15th.

Board Room, J. W. NOBLE
August 1938 Secretary's Department

ROYAL BERKSHIRE HOSPITAL
Reading (187 Beds)

ASSISTANT RADIOLOGIST required for full time duty. Salary £300 per annum. Applicants must be qualified Candidates must be fully registered Medical Practitioners and have had Hospital experience in Radiology and Deep Therapy and possess the D.M.R.E. qualification.

Applications together with names of three referees to be sent to the undersigned not later than August 15th, 1938.

H. E. RYAN
Secretary and House Governor.

HERTFORD COUNTY HOSPITAL
(189 Beds) Three Residents

Applications are invited for the post of HOUSE PHYSICIAN (male).

Salary £140 per annum with board residence and laundry. Duties to include Casualty and to commence September 10th. The appointment is for six months in the first instance.

Applications together with copies of three recent testimonials should be forwarded to the undersigned not later than August 15th.

PERCY C. BROOKS, Secretary.

JENNY LIND HOSPITAL FOR CHILDREN
Norwich

Applications are invited for the post of RESIDENT MEDICAL OFFICER. Salary £110 with board, residence and laundry. Candidates (male or female) who must possess or be expected qualify shortly, should forward applications, stating age, experience, etc., together with copies of three testimonials to the undersigned not later than the first post on Wednesday, August 10th, 1938.

FRANK INCH
August 1st, 1938. Secretary.

MANCHESTER NORTHERN HOSPITAL
(General Hospital 113 Beds)
Cheetham Hill Road, Manchester 8

Applications are invited for the post of RESIDENT SURGICAL OFFICER commencing salary £140 per annum with board and residence. The appointment is for twelve months from mid-August 1938.

Applications, stating age, qualifications and nationality, with copies of not less than three recent testimonials to be sent to the Secretary, Mr. JAMES C. DANIELS, 38, Barton Arcade, Manchester, as soon as possible.

WARNEFORD GENERAL HOSPITAL
Leamington Spa (164 Beds)

HOUSE PHYSICIAN required by September 30th. Six months' appointment. Salary £110 per annum with board and laundry.

Applications from qualified registered medical practitioners should be sent together with three recent testimonials to the undersigned by August 29th, 1938.

EDWARD L. WIPGYAN
House Governor and Secretary.
August 6th, 1938.

BRADFORD ROYAL INFIRMARY

POST OF HONORARY SURGEON

The Board of Management at the monthly meeting on Friday, September 2nd, will proceed to the election of an Honorary Surgeon in place of Mr. F. W. Goyder.

The Senior Honorary Assistant Surgeon is a candidate for the post.

HY. TRUSSON
August 16th, 1938. House Governor and Secretary.

ROYAL VICTORIA HOSPITAL, DOVER
(66 Beds. Two Residents)

Wanted for August 27th R.M.O. duly qualified and registered. Salary £140 per annum with board residence and laundry.

Application stating age with particulars of experience accompanied by copies of three recent testimonials should be sent to the Secretary as soon as possible.

THE RADCLIFFE INFIRMARY, OXFORD

Applications are invited for the following appointments at the Infirmary:

ONE RESIDENT SURGICAL OFFICER who will be required to assist the Senior Surgeon in the Surgical Out-patient Department and to undertake the duties of Casualty Officer. Salary £150 per annum, with board, residence, laundry, and attendance. Appointment for twelve months from October 1st, 1938.

THREE HOUSE PHYSICIANS.

ONE OBSTETRIC HOUSE PHYSICIAN.

ONE HOUSE SURGEON to the Nuffield Department of Clinical Medicine. Salary £125 per annum (D.L.O.).

THREE HOUSE SURGEONS.

All Resident Medical Officers will have certain administrative duties.

The Junior House Surgeon will be responsible for Casualty.

Applications for each of the above appointments (except that of Casualty Officer) to be sent in the first instance to the undersigned not later than August 15th, 1938.

A. C. E. SANCTUARY
Administrator.

THE RADCLIFFE INFIRMARY, OXFORD

Applications are invited for the following appointments on the Honorary Medical Staff:

HONORARY PHYSICIAN to the Department of Physical Medicine.

The successful candidate will have the right to carry on private practice in his department, which is to be selected by him between himself and the Committee of Management of the Infirmary. The successful candidate will be required to reside in Oxford.

Thirty copies of applications with testimonials, with the names of three referees, must be forwarded to the undersigned from whom further particulars can be obtained, not later than Friday, September 9th, 1938.

A. G. E. SANCTUARY, Administrator.

THE CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE
Withington, Manchester

Applications are invited for the post of RESIDENT MEDICAL OFFICER to the above Hospital and Institute for six months with the Radium Therapy Department to commence October 1st, 1938.

Appointment for a further six months in the first instance but not more than one year.

Salary at the rate of £150 per annum plus residence (private suite) and laundry.

The appointment offers an excellent opportunity of gaining experience in Radium and X-ray Therapy.

Candidates must have had previous Medical and Surgical experience.

Applications, stating age, qualifications and previous experience, to be received by the undersigned not later than September 9th.

PERCY N. GLASS
Superintendent.

THE PRINCE OF WALES'S HOSPITAL
Greenbank Road, Plymouth
(Formerly South Devon and East Cornwall Hospital) (164 Beds)

Applications are invited for the post of RESIDENT ANAESTHETIST and HOUSE SURGEON to the Special Department.

Salary £110 per annum with board, residence and laundry.

Appointment is tenable for six months and is subject to renewal. Duties to commence September 10th.

The Hospital is officially recognized for the clinical practice required before admission to the Final Fellowship Examination of the Royal College of Surgeons of England.

Applicants must be registered under the Medical Acts. Applications, stating age and qualifications, with copies of three recent testimonials to reach the undersigned not later than August 6th, 1938.

ARTHUR R. CASH
August 6th, 1938. Secretary.

THE PRINCE OF WALES'S HOSPITAL
Greenbank Road, Plymouth
(Formerly South Devon and East Cornwall Hospital) (164 Beds)

There are vacancies for two HOUSE SURGEONS at the above Hospital. Applications are invited for the same. Salary £110 per annum with board, residence and laundry.

Appointments are tenable for six months and are subject to renewal. Duties to commence September 6th and 16th.

The Hospital is officially recognized for the clinical practice required before admission to the Final Fellowship Examination of the Royal College of Surgeons of England.

Applicants must be registered under the Medical Act. Applications, stating age and qualifications, with copies of three recent testimonials to reach the undersigned by August 6th, 1938.

ARTHUR CASH
August 6th, 1938. Secretary.

MANCHESTER ROYAL INFIRMARY

MEDICAL CHIEF ASSISTANT
(Non-resident)

TWO VACANCIES

The Board of Management invite applications for the above appointment. Applicants must be registered medical practitioners, Higher qualifications.

The appointments are attached to the medical unit and will be required to attend on certain half-days per week. Each appointment will be for six months. Duties will commence with the Hospital year and Out-patient attendance and participation in teaching. The salary will be £150 per annum.

Salary £300 per annum. The appointment will be for one year in the first instance but may be renewed for a further period, not exceeding in all two years.

Candidates should forward fifteen copies of their applications, giving particulars of experience together with names of three referees to reach me later than 9 a.m. on Thursday, August 11th, 1938, the undersigned from whom further particulars may be had.

By Order,
F. J. CABLE
General Secretary and Secretary.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY

RESIDENT SURGICAL OFFICER

The Board of Management invite applications from unmarried gentlemen for the post of Resident Surgical Officer, the duties of which shall include the care of the Senior Surgeon's Beds.

Candidates should possess a Fellowship or Membership of the Royal Colleges of Surgeons or a post-graduate degree in Surgery.

The Infirmary and its two Homes of Recovery contain 410 beds. Total Resident Staff 8.

Salary at the rate of £200 per annum with board, residence and washing. One year's appointment.

Applications, stating age, qualifications and previous posts held, to be sent with copies of not more than two testimonials to be forwarded to the undersigned not later than the first post on Monday, August 15th.

JOHN GIBSON
Superintendent and Secretary.
August 1st, 1938.

NOBLE'S ISLE OF MAN HOSPITAL AND DISPENSARY
Douglas, Isle of Man (111 Beds)

The Committee of Management invite applications for the post of RESIDENT HOUSE SURGEON. Candidates must be duly qualified and registered under the Medical Acts. The duties will be chiefly in the Ward and Dispensary Work, commencing about October 1st.

Salary (with board and laundry in addition) £120 per annum, which is subject to increase by £10 per annum at the end of each year of satisfactory service.

Applications, stating age and experience, with copies of recent testimonials, must reach the undersigned before August 20th. The appointment will be held for twelve months and will be from October 1st.

Westmuir, Isle of Man Road, E. K. KELLY
Douglas, Isle of Man Hospital Secretary.
August 6th, 1938.

NORTH STAFFORDSHIRE ROYAL INFIRMARY, STOKE-ON-TRENT
A General Hospital of 290 Beds. Recognized for the DLO and FRCS Examinations.

HOUSE SURGEON FOR AURAL AND OPHTHALMIC DEPT.

The Committee invite applications for the above post.

Salary at the rate of £110 per annum with board, residence and laundry.

The appointment will be made for six months, renewable.

Applicants, stating age and experience, with copies of two recent testimonials, to be sent to the undersigned immediately.

By Order,
W. STEVENSON,
Secretary and House Governor.
August 8th, 1938.

NEW SUSSEX HOSPITAL FOR WOMEN AND CHILDREN
Brighton (Incorporated)

Applications are invited from suitably qualified Medical Women for the post of HONORARY OPHTHALMIC SURGEON. Duties to commence in September next.

Applications with copies of testimonials to be sent to the undersigned on or before August 15th.

Board Room, PERCY F. SPOONER
Windlesham Road, Secretary.
Brighton, August 5th, 1938.

LEICESTER ROYAL INFIRMARY
(500 Beds)

RESIDENT RADIOLOGIST

Applications are invited for the above position vacant early in September

The successful candidate will be expected to act as House Physician to the Radiologists and assist in the diagnostic and therapeutic sides of the X-ray Department

The appointment is for six months in the first instance and the salary is at the rate of £100 per annum together with board residence and laundry Candidate holding the Diploma of Radiology preferred but not essential

Applications giving full particulars as to age qualifications experience and accompanied by not more than three testimonials should be sent not later than August 15th to the House Governor and Secretary

July 9th 1938

HULL ROYAL INFIRMARY

Applications are invited from Registered Medical Practitioners for the post of HOUSE PHYSICIAN (male) to the Sutton Branch Hospital vacant September 2nd

Salary at the rate of £110 per annum plus residence board and laundry

The appointment will be for six months but will at any time be determinable by one month's notice on either side

The Branch Hospital is not a recovery annexe but a General Hospital of 100 beds forty five of which are reserved for medical cases The post now advertised is approved by the University of London for the M D Branch I Examination

Applications giving particulars of age experience and nationality together with copies of recent testimonials should be addressed to the undersigned

R J CARLESS
August 5th 1938 House Governor

JERSEY GENERAL HOSPITAL AND POOR LAW INFIRMARY

Applications are invited for the following posts (vacant October 1st 1938)

(*a*) HOUSE SURGEON (male)
(*b*) CASUALTY OFFICER and HOUSE PHYSICIAN (male)

The appointments are for six months subject to reappointment

Salaries £175 per annum

Board residence and laundry are provided

Applications stating age nationality and qualifications with recent testimonials to be addressed to the undersigned on or before Saturday September 3rd

General Hospital H I PLYMEN
Jersey C I Secretary Accountant

KING GEORGE'S SANATORIUM FOR SAILORS
Liphook Hants

(Seamen's Hospital Society) for the Treatment of Pulmonary and Non Pulmonary Tuberculosis

ASSISTANT MEDICAL OFFICER (single male or female) required as from September 1st for six months Salary at the rate of £100 per annum in the first instance Applications with copies of not less than three testimonials to be sent in immediately to the undersigned

F A LYON Secretary
Seamen's Hospital Society
Greenwich S E 10
Greenwich August 3rd 1938

HUDDERSFIELD ROYAL INFIRMARY
(321 Beds)

Applications are invited from gentlemen possessing the Fellowship of one of the Royal Colleges of Surgeons for the post of RESIDENT SURGICAL OFFICER to commence duty on September 1st 1938 The salary will be at the rate of £225 £250 per annum with board residence and laundry and the appointment will be for a period of twelve months in the first instance

Applications together with copies of three recent testimonials to be addressed to the undersigned immediately

H J JOHNSON
Gen Supt and Secretary

DUCHESS OF YORK HOSPITAL FOR BABIES MANCHESTER 19

Applications are invited for the post of AURAL REGISTRAR Details of the appointment can be obtained from the Secretary to whom applications together with testimonials should be sent by August 24th 1938 LOUISE BAILEY
Secretary

DUCHESS OF YORK HOSPITAL FOR BABIES MANCHESTER 19

Applications are invited for the post of CLINICAL ASSISTANT to work in the Out Patient Department Details of the appointment can be obtained from the Secretary to whom applications should be sent by August 24th 1938
LOUISE BAILEY
Secretary

ROYAL VICTORIA INFIRMARY
Newcastle upon Tyne (587 Beds)

Applications are invited for the post of SENIOR ACCIDENT ROOM HOUSE SURGEON who will also act as Deputy Resident Medical Officer Applicants must be fully registered in Medicine and in Surgery and have had six months' hospital experience

The appointment will be for one year from September 5th 1938 and is renewable for two further periods of one year The remuneration is at the rate of £150 per annum

Regulations governing the appointment may be obtained from the undersigned

Applications stating age experience and qualifications and accompanied by not more than three testimonials should be sent not later than August 20th 1938

S DUNSTAN
August 8th 1938 House Governor and Secretary

ROYAL VICTORIA INFIRMARY
Newcastle upon Tyne (587 Beds)

MEDICAL REGISTRARS (Open Appointment)

Applications are invited for the posts of MEDICAL REGISTRARS (two vacancies) one to take up duty on September 5th and the second to take up duty on November 14th 1938 Candidates must be registered in Medicine and in Surgery The salary is at the rate of £150 per annum (non resident)

Further particulars regarding duties times of attendance etc may be obtained from the House Governor and Secretary to whom applications with copies of not more than three testimonials should be sent not later than August 22nd 1938

S DUNSTAN
August 8th 1938 House Governor and Secretary

TYNEMOUTH VICTORIA JUBILEE INFIRMARY

HOUSE SURGEON (male) required September 1st 1938 Applicants must be duly qualified and registered Salary £150 per annum with board residence and laundry

Applications stating age and other essential particulars and accompanied by copies of recent testimonials and photograph to be addressed to the undersigned before August 15th 1938 from whom all particulars may be obtained

The Hospital has two resident House Surgeons and contains 80 beds and costs an X-ray Department and an Out patient Department where resident cases are received

1 Northumberland Place CHAS ROWELL
North Shields Secretary

SOUTHPORT GENERAL INFIRMARY
(150 Beds Three House Surgeons)

Special Departments for Eye Ear Nose and Throat X Rays Massage Skin Pathology etc

Wanted to take up duties on September 1st next a JUNIOR HOUSE SURGEON Salary £150 per annum with residence board and laundry Applicants to be fully qualified registered and unmarried

Applications stating age experience with copies of testimonials to be sent in by August 22nd 1938 to the Superintendent and Secretary Infirmary Office Pilkington Road Southport

STROUD GENERAL HOSPITAL
Stroud Glos

RESIDENT MEDICAL OFFICER required Candidates must be fully qualified and registered Six months appointment duties to commence as soon as possible Salary £200 per annum with board and laundry

Applications stating age nationality etc together with copies of three recent testimonials to be sent to the undersigned from whom further particulars may be obtained

C FORD SPENCER Secretary

THE JESSOP HOSPITAL FOR WOMEN
Sheffield (151 Beds)

The Board of Management invite applications for the post of RESIDENT ANAESTHETIST (female) for a period of six months commencing August 16th Salary £100 per annum together with board residence and laundry The candidate appointed will be expected to carry out other House Surgeon duties

Applications stating age together with copies of testimonials should be addressed to the undersigned immediately

DAVID OSWALD
Superintendent and Secretary

THE HARTLEPOOLS HOSPITAL
(95 Beds)

Applications are invited for the position of HOUSE SURGEON at a salary of £150 p a plus board residence and laundry

Appointment for six months subject to renewal and duties to commence immediately

Applications to be made to the undermentioned

NORMAN O DLANS
Secretary

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke on Trent (300 Beds)

HOUSE PHYSICIAN (SECOND)

The Committee invite applications for the post of House Physician (second) who will have charge of the Ted Allcroft Ward in the Infirmary and will attend them in the Out patient Department which is very extensive

Salary at the rate of £150 per annum with board residence and laundry

The appointment will be made for seven months renewable

Applications stating age and experience with copies of three testimonials to be sent to the undersigned immediately

By Order
W STEPHENSON
Secretary and House Governor
August 4th 1938

BIRMINGHAM AND MIDLAND EYE HOSPITAL (114 Beds)

Applications are invited from duly qualified Medical Practitioners for the post of RESIDENT SURGICAL OFFICER at the above Hospital Salary £100 per annum and £10 10s bonus at the end of the year

The Resident Staff consists of a Resident Surgical Officer and three House Surgeons and in the event of one of the latter being promoted to the position of Resident Surgical Officer applicants should state whether they will be willing to accept appointment as House Surgeon at a salary of £130 (rising at the end of six months' satisfactory service to £150) per annum

Applications with testimonials and evidence of registration must be received not later than Monday August 15th

Church Street J W PEARCE
Birmingham 3 House Governor

MANCHESTER ROYAL INFIRMARY

The Board of Management of the Manchester Royal Infirmary invite applications for the post of RESIDENT MEDICAL OFFICER of the Private Patients' Home of 100 beds

Applicants must be registered and hold a Medical and Surgical qualification and must have had previous resident experience in a general hospital The appointment is for twelve months renewable for a further period Salary £150 per annum with board residence and laundry allowance

Full information is obtainable from the undersigned to whom applicants must send twelve copies of their application and testimonials on or before 9 a m on Thursday August 18th 1938

By Order
I J CABLE
General Superintendent and Secretary

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(200 Surgical and Medical Beds)

HOUSE SURGEON to Ophthalmic and Ear Nose and Throat Departments

Applications are invited from fully qualified men for the above post The appointment is for six months Salary at the rate of £150 per annum

Applications stating age together with copies of three recent testimonials should be sent to the undersigned as soon as possible

M H BOONE
July 29th 1938 Superintendent and Secretary

CUMBERLAND INFIRMARY CARLISLE.
(202 Beds)

Applications are invited for the post of male RESIDENT SURGICAL OFFICER

Candidates must be unmarried and hold a higher qualification in surgery The appointment will be for a period of one year with possible extension Salary £150 per annum with board residence etc

Application forms and particulars of duties etc may be obtained from the undersigned and must be returned by first post on Friday August 19th 1938 J S RIPLEY
August 3rd 1938 Secretary-Superintendent

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL

Applications are invited from duly registered candidates (male and unmarried) for a HOUSE SURGEON Salary £150 per annum

The appointment is for six months and include apartments board and laundry The House Surgeon must be an experienced anaesthetist

All applications stating age etc with copies of testimonials to be sent to me at once

FRANK H TOONE
9 Leicester Road Secretary
Loughborough

ROYAL UNITED HOSPITAL BATH

HOUSE SURGEON required (General Surgery and Ear Nose and Throat)

Salary £150 per annum with board residence and laundry

Applications with copies of three testimonials to be addressed to the undersigned immediately

J LAWRENCE MEARS
July 8th 1938 Secretary Superintendent

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association B M A House, Tavistock Square W C 1 (in the case of Scottish appointments with the Scottish Secretary 7, Drumsheugh Gardens Edinburgh)

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—(*cont.*)	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY (*Medical Officer*)	MID RHONDDA MEDICAL AID SOCIETY (*Assistant Medical Officer*)	COUNTY OF ROXBURGH (*Assistant Medical Officer for Health*)
BLAENAVON MEDICAL SOCIETY (*Chief Medical Officer*)	NEATH AND DISTRICT (*Medical Referee*)	**DISPENSARY APPOINTMENTS**
GILFACH GOCH GLAMORGAN (*Workmen's Medical Scheme*)	OGMORE VALLEY GLAMORGAN (*Hospital Contributory Medical Aid Society*) (*Workmen's Medical Scheme*)	LIMERICK CITY (*Infectious Diseases Medical Officer*)
LLWYNYPIA CLYDACH VALE PENYGRAIG GLAMORGAN (*Workmen's Medical Scheme*)	OAKDALE MON (*Medical Officer of Medical Aid Association*)	

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association B M A House Tavistock Square W C 1

Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch
NEW SOUTH WALES (*All Friendly Societies Appointments*)	The Medical Secretary New South Wales Branch 135 Macquarie Street Sydney N S W	**VICTORIA** (*All Institute and Medical Dispensaries*)	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria	**WESTERN AUSTRALIA** (*Contract and Lodge Practices*)	The Hon Sec Western Australian Branch British Medical Association Shell House 05 St George's Terrace Perth Western Australia
QUEENSLAND (*Hospitals Ambulance Friendly Societies Institute*)	The Hon Sec Queensland Branch British Medical Association B M A House 2— Wickham Terrace Brisbane B 1—				

August 10, 1938 By Order of the Council G C ANDERSON *Secretary*

ROCHDALE INFIRMARY AND DISPENSARY
(110 Beds Three Residents)

The Board of Management invites applications for the appointment of HOUSE PHYSICIAN (male) The salary attached to the appointment is at the rate of £150 per annum with board residence laundry The duties include work in the Out Patient Aural Ophthalmic etc departments as well as in the wards The Hospital covers a large industrial area and affords excellent opportunity for experience

Applications stating age nationality etc with three recent testimonials to be sent to the Secretary Rochdale Infirmary

Infirmary Office W WYNNE
Rochdale Secretary

ROYAL LANCASTER INFIRMARY
Lancaster
(140 Beds) Four Residents

Applications are invited for the post of SENIOR HOUSE SURGEON Salary £200 per annum with board residence and laundry The appointment is for six months in the first place and may be renewed for a further six months

Applications stating age qualifications experience and nationality to ether with copies of three recent testimonials to be sent to the undersigned

FRANK A MILNES
Superintendent Secretary

ROYAL LANCASTER INFIRMARY
Lancaster
(150 Beds) Four Residents

Applications are invited for the post of SECOND HOUSE SURGEON Salary £175 per annum with board residence and laundry The appointment is for six months

Applications stating age qualifications experience and nationality together with copies of three recent testimonials to be sent to the undersigned

FRANK A MILNES
Superintendent Secretary

KELLING SANATORIUM HOLT NORFOLK

The Committee of Management of the Kelling Sanatorium (Tuberculosis) desire applications from Medical Practitioners with suitable qualifications for the post of MEDICAL SUPERINTENDENT at Kelling Sanatorium Holt Norfolk (169 beds men) Preference will be given to applicants between the ages of thirty-five and fifty who have administrative experience knowledge of modern method of Sanatorium treatment and X ray work The position is open as from October 1st 1938 salary £700 per annum with excellent house in Sanatorium grounds A Superannuation Scheme is in force

Applications, stating qualifications together with three recent testimonials should be sent to the Secretary Kelling Sanatorium Holt Norfolk by September 3rd 1938

ROTHERHAM HOSPITAL
(130 Beds)

CASUALTY HOUSE SURGEON

Applications are invited from qualified men for the post of Casualty House Surgeon Duties to commence as soon as possible will include work in the Ear Nose and Throat Department. Excellent experience to be gained in the treatment of fractures. Salary £150 per annum with full board residence and laundry

Applications with copies of recent testimonials should be sent to the Secretary G W ROBERTS 8 Moorgate Street Rotherham Yorks

---

MERTHYR GENERAL HOSPITAL
(118 Beds)

RESIDENT HOUSE SURGEON required for a period of six months

Salary at the rate of £150 per annum with board and laundry Applications stating age nationality qualifications and accompanied by three (copies only) recent testimonials should be addressed to the Secretary of the Merthyr General Hospital

---

HILL END HOSPITAL AND CLINIC
for the Prevention and Treatment of Mental and Nervous Disorders
St Albans Herts

HOUSE PHYSICIAN male or female required age under 30 years Appointment for six months at the rate of £165 p a with board and quarters renewable for a further six months at the rate of £140 p a

The Hospital has over 1 000 beds and is the County Mental Hospital for Hertfordshire Laboratory Psychological and Child Guidance Clinic Occupational Therapy etc

Application forms from the Medical Director to be returned with copies of recent testimonials Duties to commence in September 1938

ROYAL EYE HOSPITAL
Pevensey Road Eastbourne.

NON RESIDENT HOUSE SURGEON required to commence duty in August The appointment will be for six month in the first instance

Salary £100 per annum and allowance in lieu of board residence £1 per annum

Applications stating age qualifications and ophthalmic experience to ether with recent testimonials should reach the undersigned as soon as possible

Before engagement candidates have to be interviewed by the Hon Surgeon from whom further particulars could be obtained in person.

H BYGRAVE Hon Secretary

MANCHESTER ROYAL EYE HOSPITAL.

JUNIOR HOUSE SURGEON required Salary £120 per annum with residence board etc

Applications (with copies of testimonials) endorsed House Surgeon to be addressed to the undermentioned

H R NORTH
Gen Supt and Secretary

(*Appointments continued on p vii*)

CHARGES for ADVERTISEMENTS

CIRCULATION OF THIS ISSUE—41,000 COPIES

CLASSIFIED The *Minimum* charge is 9s, which covers up to 30 words Extra words are charged 1/6 for 5 or less.

Example 33 words would be charged as for 35 Name and address should be included when counting words for cost

If *Box Number* is used, it should be reckoned as 5 words in the total

Replies should be addressed separately to each Box No care of this office

Advertisements, accompanied by remittance, should reach this office not later than NOON—TUESDAY, TO ENSURE INSERTION IN CURRENT ISSUE Please write CLEARLY

DISPLAYED Whole page £24 and pro rata to one eighth page Special positions dates and rates on application

Every effort is made to ensure the accuracy of advertisements appearing in the Journal No recommendation is implied by acceptance and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement

ADVERTISEMENT MANAGER, BRITISH MEDICAL JOURNAL, B M A HOUSE, TAVISTOCK SQUARE, W C 1

EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA

TOBACCO GOOD SMOKES at a low price quality guaranteed Box of 50 for 2/5 post free—Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"BIZIM" CIGARETTES

THESE luxurious deliciously satisfying smokes 50's or 100's at 6/3 per 100 58/6 per 1 000 post free—Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"SOLACE CIRCLES" TOBACCO

THE finest combination ever discovered of Choice Natural Tobaccos Every pipeful an indescribable pleasure 12/6 per ½ lb tin post free—Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

NATIONAL ADOPTION SOCIETY 4 BAKER STREET W 1 Telephone Welbeck 7211 OFFERS ASSISTANCE in the legal adoption of illegitimate and orphan babies into suitable family life Chairman THE LADY GWENETH CAVENDISH

TYPEWRITING—SPECIALISTS IN TYPING Medical and scientific papers lectures theses and books Shorthand typists always available Proof reading indexing—MARGARET WATSON LTD 16 Palace Chambers Bridge Street S W 1 WHitehall 3838

TYPEWRITING DUPLICATING TRANSLATIONS—Experts in Medical work TESTIMONIALS THESES etc accurately copied in style that commands attention—WOBURN BUREAU Drayton House Gordon Street London W C 1 (close B M A House) EUSton 1775

WHEN YOU COME TO LONDON STAY AT THE HAMPDEN RESIDENTIAL CLUB FOR GENTLEMEN Hampden Street N W 1 Close Kings Cross and Euston 300 bedrooms 15/ to 22/6 p w includ baths attend and boot cleaning All meals à la carte in dining room Mod tariff Large club rms reading rm study for students Illus pros Sec EUSton 2244/5

ASSISTANCIES

WANTED IMMEDIATELY INDOOR AND Outdoor ASSISTANTS for Town and Country Practices with and without view to Partnership Good salaries offered State full particulars—BRITISH MEDICAL BUREAU 33 Cross Street Manchester 2

WANTED IMMEDIATELY MARRIED ASSISTANT British for South Wales colliery practice Salary £450 and £50 car allowance or car provided Free unfurnished house—Address No 8032 B M A House Tavistock Square W C 1

WANTED END OF AUGUST YOUNG male indoor ASSISTANT English or Scotch preferred for mixed practice in North London Time for reading Car provided Salary £300—Address No 7825 B M A House Tavistock Square W C 1

WANTED OCTOBER 1st MALE ASSISTANT Outdoor for large panel and private practice in Sheffield £300 p a plus board residence Allowance if own car—Address No 8040 B M A House Tavistock Square W C 1

WANTED ASSISTANT CAPABLE OF taking charge of easily worked Practice (especially if Principal decides to open Branch) Partnership with view offered later to suitable man Furnished flat board attendance Excellent prospects Scope Fullest essential particulars to—Address No 8037 B M A House Tavistock Square W C 1

WANTED MALE ASSISTANT BRITISH Isles for South Yorkshire town Indoor car dispenser hospital excellent experience Salary £300 £350 p a—Address No 7801 B M A House Tavistock Square W C 1

WANTED ASSISTANT OUTDOOR SINGLE for panel and private practice in country near Birmingham Dispenser kept Salary £450 p a If own car £50 extra allowance Usual bond—Address No 7914 B M A House Tavistock Square W C 1

WANTED OUTDOOR ASSISTANT IN good-class suburban practice (Manchester) Salary £400 p a Car allowance £50 State essential particulars Partnership prospects—Address No 7924 B M A House Tavistock Square W C 1

WANTED MALE OUTDOOR UNMARRIED ASSISTANT near Cardiff Salary according to experience minimum £350 with furnished house attendance and car provided Driving licence essential Young energetic principal Private practice mainly industrial and panel with consultations—Address No 7910 B M A House Tavistock Square W C 1

WANTED OUTDOOR ASSISTANT FOR mixed practice 15 miles west of Manchester Salary £450 with furnished house attendance £50 p a car allowance Start beginning of September—Address No 7916 B M A House Tavistock Square W C 1

WANTED OUTDOOR ASSISTANT MALE unmarried English or Scottish age not over 31 for panel and private practice Yorks £350 and all found with car allowance—Address No 7931 B M A House Tavistock Square W C 1

WANTED INDOOR ASSISTANT ENGLISH or Scottish and unmarried preferred for practice in mile from London with view to partnership if desired Salary £400 all found with £50 car allowance—Address No 7950 B M A House Tavistock Square W C 1

WANTED ASSISTANT (SINGLE MALE) for Cardiff Some experience preferred Outdoor Salary start £450 p a rising annually to £600 p a—Address No 7951 B M A House Tavistock Square W C 1

WANTED MALE ASSISTANT OUTDOOR for early October Mixed town practice Devon Salary £400 p a rising annually and £50 car allowance—Address No 7909 B M A House Tavistock Square W C 1

WANTED ASSISTANTSHIP OUTDOOR BY young doctor—qualified eighteen months Town practice Midlands Salary preferred but not essential Considerable experience of G P work Own car—Address No 7910 B M A House Tavistock Square W C 1

ASSISTANT REQUIRED FOR BRITISH Colony must be of German or Austrian nationality holding degree of medicine and British qualifications are not Salary £600 p a plus bonus passage paid for 3 years contract and view to partnership surgical experience essential Subject to Government permit—Write TRELEAVEN DUNNER LTD 25 Malden Lane Strand W C 2

ASSISTANT OUTDOOR WANTED IN industrial district Essex Married and experienced G P Young energetic Englishman or Scot required Salary £430 £50 car allowance free unfurnished house Early view if desired—Address No 7931 B M A House Tavistock Square W C 1

ASSISTANT REQUIRED MALE SCOTTISH or English unmarried young some experience general practice preferred Own rooms at branch Kent border £360 per annum all found £50 car allowance and garage—Address No 8036 B M A House Tavistock Square W C 1

ASSISTANT PARTNERSHIP FOLLOWING wanted Mixed practice West Middlesex English or Scot married Good prospect Salary £400 plus car allowance Send particulars and dated photo to—Address No 7908 B M A House Tavistock Square W C 1

ASSISTANT (WOMAN) WANTED AS SOON as possible by Woman Doctor Outskirts of London Furnished flat and service Car (or car allowance) provided Commencing salary £300—Address No 7915 B M A House Tavistock Square W C 1

M B (LOND) F R C S E REQUIRES ASSISTANTSHIP—one year or more—good mixed practice town or country £600 per year with unfurnished house at suitable rental—Address No 7900 B M A House Tavistock Square W C 1

M B, EXPERIENCED HOSPITAL AND general practice requires PART TIME WORK London or Leeds to fit in with D P H course commencing late September Evening surgeries week end duty—Address No 795 B M A House Tavistock Square W C 1

PART-TIME ASSISTANT WANTED NORTH London area Suit public health student—Address No 8038 B M A House Tavistock Square W C 1

PART TIME WORK WANTED IN LONDON by English postgraduate six years experience hospital and general practice including anæsthetics Long or short period Available for interview—Address No 7927 B M A House Tavistock Square W C 1

NORTH WALES.—WANTED ASSISTANT [illegible] Country town close to sea. Welsh speaking essential. Driving car.—Full particulars to Chemists, 49 Hamilton Street, Hoylake, Cheshire.

WOMAN DOCTOR REQUIRES ASSISTANTSHIP view to PARTNERSHIP or SUCCESSION. Very experienced, special medical and surgical, hospital, private.—Address No. 7906, B.M.A. House, Tavistock Square, W.C.1.

LOCUMS

WANTED LOCUM WITH EXPERIENCE for Eye, Ear and Throat Hospital, Londonderry, Northern Ireland. Mid August to 30th September. Honorarium £5 5s. 0d. per week and private practice by arrangement. Accommodation provided and a friend.—Reply to Secretary, Eye, Ear and Throat Hospital, Londonderry, Northern Ireland.

WANTED LOCUMS BY MEDICAL WOMAN from beginning of September. Much experience in private and panel practice. Own car.—Address No. 7931, B.M.A. House, Tavistock Square, W.C.1.

WANTED LOCUM ASSISTANTSHIP OR PART TIME WORK, experienced in private and panel. Free August 1939. Could go anywhere. Phone.—Address No. 8015, B.M.A. House, Tavistock Square, W.C.1.

WANTED YOUNG MALE LOCUM FOR Manchester industrial practice end of August or early September. Car essential.—Address No. 7923, B.M.A. House, Tavistock Square, W.C.1.

EXPERIENCED PRACTITIONER, THIRTY years, SEASIDE LOCUM last half September. Offers services, own car in return for five guineas per week, plus board, wife and baby. Other offers considered.—Address No. 7936, B.M.A. House, Tavistock Square, W.C.1.

EXPERIENCED OXFORD MAN (ENGLISH) unregistered now for LOCUM APPOINTMENTS.—Address No. 7937, B.M.A. House, Tavistock Square, W.C.1.

LADY DOCTOR REQUIRES LOCUM WORK from August 15th to September 5th. Experienced general practice and locum. Drives car. Eight guineas per week. Indoor.—Address No. 8010, B.M.A. House, Tavistock Square, W.C.1.

RETIRED GENERAL PRACTITIONER desires LIGHT LOCUM or ASSISTANCY WORK. Reasonable terms. High-class references and experience. After August 2nd.—Locum, 6 Waltham Road, Caterham.

YOUNG INDIAN DOCTOR, M.D., EXPERIenced panel practice ex H.M.S., wants LOCUM or ASSISTANTSHIP. Can drive, tee totaler.—Address No. 7954, B.M.A. House, Tavistock Square, W.C.1.

MEDICAL POSTS, DISPENSERS

WANTED MEDICAL OFFICER FULLY qualified for whaling venture sailing September-October.—Write No. 91, KEITH and Co., Advertising Agents, Edinburgh.

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request, qualified with practical experience in private practice and dispensary work, also trained in Bacteriological Laboratories, of the LONDON COLLEGE OF PHARMACY FOR WOMEN. Preparation for Examinations.—Write, wire or phone (Bayswater 0869), Secretary, 7 Westbourne Park Road, W.2.

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY, and Secretaries, Dispensers can be supplied to Doctors. Sessions January, April and September.—Apply, Principals, School of Pharmacy, Drayton House, Gordon Street, W.C.1. Phone, Euston 910.

DISPENSER WANTED FOR PRACTICE IN country town in West of England. Apply with photo.—Address No. 8000, B.M.A. House, Tavistock Square, W.C.1.

DISPENSING CAREER FOR YOUNG LADIES. FULL TRAINING for Apothecaries Hall Certificate. Enrolments every three months.—Apply, The Principal, Central School of Pharmacy, 28 Moreton Street, London, S.W.1. Telephone, Victoria 1641.

DOCTOR DESIRES PERMANENT POST. Medical Institution, married quarters. Ex House Surgeon, Casualty Officer, Assistant Superintendent, Four yrs. Tuberculosis experience, two years Radiology, Inhalations, Expert Anaesthetist.—Address No. 7916, B.M.A. House, Tavistock Square, W.C.1.

DOCTORS REQUIRING QUALIFIED Dispensers, Nurse Dispensers, Secretary Dispensers, Chauffeur Dispensers are invited to write, wire or phone Temple Bar 5858. The Dispensers Bureau, 7 Lincoln House, 171 Salisbury Avenue, London, W.C.

DOCTOR'S WIDOW (40) BOY (9) REQUIRES POSITION OF TRUST. Thoroughly competent to take post. Highly recommended. Excellent manager, housekeeper, needlewoman, bookkeeper, shorthand typist and book-keeping.—Address No. 7942, B.M.A. House, Tavistock Square, W.C.1.

EXPERIENCED LADY DISPENSER SECRETARY seeks post. Highly recommended. Knowledge of shorthand, typewriting and bookkeeping.—Address No. 7926, B.M.A. House, Tavistock Square, W.C.1.

LADY B.Sc. QUALIFIED AS BIO-CHEMIST (Cranwell certificate for Blood and Urea Analysis). Experienced, good references, interested in research, requires POST in hospital or practice with Pathologist.—Address No. 7883, B.M.A. House, Tavistock Square, W.C.1.

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION, 88 Eccleston Square, S.W.1 (Telephone, Victoria 2[illegible]) supplies qualified Dispensers, Bookkeepers, Laboratory Assistants, Sanitary Assistant, Male Nurses, Medical and Special Treatment Orderlies, Dental Clerk, Orderlies, Printer, Caretaker, etc., without charge to prospective employer.

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed

Applications should be separately enclosed and clearly addressed

Address No
B.M.A. House
Tavistock Square, W.C.1

All communications are forwarded to advertisers under plain cover

PARTNERSHIPS

WANTED AFTER PRELIMINARY ASSISTantship, PARTNERSHIP in country or country town near sea by M.B.(Aberd.), F.R.C.S. (Ed.), aged 25. Surgical bent.—Address No. 901, B.M.A. House, Tavistock Square, W.C.1.

WANTED—PARTNER TO REPLACE ONE returning Isle of Wight Two-fifths share commencing Age 0[illegible]5. Man keen on med[illegible] preferred.—Address No. 7911, B.M.A. House, Tavistock Square, W.C.1.

APPLICATIONS ARE INVITED FOR A PARTNER in very old-established suburban practice, male, not over 33, Protestant, short probationary assistantship valuable appointments held, unique security and prospects. Share worth £1—0 increase to £—500 to suit buyer, man two years purchase.—Address No. 7914, B.M.A. House, Tavistock Square, W.C.1.

DEVON CITY — PARTNER WANTED. About £1,500 at 2 years. Birth-place capital essential. Adequate reason for disposal. Physician-aged about 55 preferred. Panel about 1,500.—Address No. 8034, B.M.A. House, Tavistock Square, W.C.1.

DEVONSHIRE.—APPLICATIONS INVITED for a HALF SHARE in an increasing practice of £2,000 in a favourite residential seaside resort. Panel 400. Surgical experience an advantage. State full particulars.—Address No. 8033, B.M.A. House, Tavistock Square, W.C.1.

LANCS TOWN.—PARTNERSHIP YIELDING £1,000 gross. Middle and working-class. Panel 1,000. Private house with garage for sale. Premium £1,00 including drugs, book debts.—Address No. 7905, B.M.A. House, Tavistock Square, W.C.1.

M.D. OR M.R.C.P. WANTED TO JOIN three others in South Coast practice. SHARE equals one-seventh of about £7,800 rising to equality. Good house for purchase. Hospital facilities available.—Address No. 51, B.M.A. House, Tavistock Square, W.C.1.

PARTNERSHIP MIDLAND DISTRICT. SITE secured on rapidly developing estate from commencement. Old-established practice, £1,000 per annum. Medical service. One-third share, valued at £1,100 per year. Finance can be arranged. Young energetic Englishman preferred.—Address No. 7914, B.M.A. House, Tavistock Square, W.C.1.

URGENT.—ONE THIRD SHARE IN INDUSTrial practice near London. Two-thirds purchase. Last year's receipts over £5,100. Surgeon House to rent. Enthusiastic Scot preferred, not G.P. Acceptable reason disposal.—Address No. 8010, B.M.A. House, Tavistock Square, W.C.1.

PRACTICES

WANTED IMMEDIATELY UNOPPOSED country PRACTICE, from £1,000-£1,500 p.a., with Panel. Good garden and house essential.—Address No. 7850, B.M.A. House, Tavistock Square, W.C.1.

WANTED IMMEDIATELY PRACTICE IN London preferably in western half. Income about £—000 with a fairly large panel. Cash available.—Address No. 7931, B.M.A. House, Tavistock Square, W.C.1.

WANTED NOVEMBER OR DECEMBER small country PRACTICE in Dorset, Devon or Cornwall. £400 to £600. House to rent preferred.—Address No. 7913, B.M.A. House, Tavistock Square, W.C.1.

WANTED IN LONDON OR PROVINCES PRACTICES with incomes £500 to £—,000 p.a. Many purchasers waiting and quick transactions for immediate cash.—PEACOCK AND HADLEY, LTD., 67 68 Chandos Street, Strand, W.C.—.

A NUMBER OF SMALL PRACTICES AT LOW premiums. Excellent opportunities for practitioners wishing to get a practice with scope.—Apply PEACOCK AND HADLEY, LTD., 67 68 Chandos Street, Strand, W.C.—.

ESTABLISHED PRACTICE LONDON AREA (suburban). Receipts about £1,700 p.a. including appointments 1,350 panel and appointment 350. Receipts from private and panel however annual increase. Attractive house on main road with garage and large garden.—Address No. 7—, B.M.A. House, Tavistock Square, W.C.1.

FASHIONABLE SE. COAST RESORT. Present owner's hands 10 years. £600 p.a. net. 2 years purchase. Six bedrooms, house and garden. Freehold £—,000 must be bought.—Address No. 7960, B.M.A. House, Tavistock Square, W.C.1.

FOR SALE.—COUNTRY TOWN MIDLANDS PRACTICE. Gross income £—,000. Ideal for partnership. Panel almost 3,000. Modern house and garden with tennis court. Educational facilities unrivalled. Complete. Cottage hospital. Wide connection for surgery. Premium 2½ years purchase. House £2,500. Only applicant with some capital please.—Address No. 7929, B.M.A. House, Tavistock Square, W.C.1.

GLASGOW SOUTH SIDE.—PRACTICE private and panel for sale, average gross earnings approximately £1,000, good reasons for disposal, reasonable premium accepted, adequate introduction.—For further particulars apply CRAWFORD, HERRON AND CARRON, Solicitors, 25 West George Street, Glasgow, C—.

LARGE MIDLAND TOWN (SUBURB).—WELL established PRACTICE. Receipts average nearly £600 p.a., good panel. Attractive house on rental. Premium about £1,500.—PEACOCK AND HADLEY, LTD., 67 68 Chandos Street, Strand, W.C.2.

MEDICAL PRACTICE OF THE LATE DR. Charles Douglas, Ayr, is for sale. Particulars from and applications to J. T. DOUGLAS, Solicitor, 56 High Street, Perth.

MIDLAND SUBURB — SOUND PROgressive private and panel PRACTICE near pleasant countryside £1 000 per annum panel 1850 Detached corner house and branch surgery for sale Premium two years purchase —Address No 7915 B M A House Tavistock Square W C 1

NEAR HOLBORN W C — WELL ESTABlished PRACTICE Receipts average £1 000 p a panel 1 104 Splendid surgery accommodation only Long introduction Premium £2 000 — Apply PEACOCK AND HADLEY LTD 67/68 Chandos Street Strand W C 2

NEAR NEWCASTLE ON TYNE —OLD ESTABlished panel and club PRACTICE Cash receipts last year £ 00 increasing Attractive house large garden and garage £1 500 practice Premium 2 years purchase For disposal between January and April 1939 —Address No 7919 B M A House Tavistock Square W C 1

OPHTHALMIC IN IMPORTANT RESIDENtial and industrial city in South producing about £600 p a Considerable scope for expansion of PRACTICE Suit L R C S or D O M S Usual private consultation fees and appointments Premium £1 225 Address No 7919 B M A House Tavistock Square W C 1

PRACTICE (NORTH LONDON) ESTABLISHED over thirty years recently taken panel 800 Splendid scope for energetic able man Failing health Premium £600 or near —Address No 7612 B M A House Tavistock Square W C 1

YORKSHIRE OLD ESTABLISHED COUNTRY PRACTICE £1 030 per annum panel £350 Small appointments Distinct scope Excellent free hold house garden garage Educational facilities Practice and House £3 000 Address No 7914 B M A House Tavistock Square W C 1

12 MILES CHARING CROSS RAPIDLY increasing area Panel 1 350 Private £1 200 Dentist on premises House freehold to let or sell —Address No 7892 B M A House Tavistock Square W C 1

HOUSES, CONSULTING ROOMS

HARLEY STREET

Well appointed House, suitable for Medical Profession with 9 bedrooms 2 bathrooms 3 reception rooms and usual offices

TO BE LET ON LEASE

NO PREMIUM

Address No 7903, B M A House Tavistock Square W C 1

COUNTRY COTTAGE (6 ROOMS) FREE September Furnished necessities quiet rural surroundings bath telephone assured water lamps small garden garage London 50 miles Eastbourne 12 Monthly rent £6 for long let — MORTON Brooklands Horam E Sussex

DEVONSHIRE STREET TWO DOORS FROM Harley Street an excellent CONSULTING SUITE of three good rooms in one of the finest professional houses Rent only £250 p a or single rooms may be had at £100 p a with plate on the door and all services Vacant Sept 29th 1938 —Address No 7610 B M A House Tavistock Square W C 1

FOR DISPOSAL BY DOCTOR IN CENTRE of large and rapidly expanding South Coast resort attractive detached two floor RESIDENCE with garage House divided into modern style flatlets from which an income of £200 £250 per annum may be derived No catering or service undertaken Price for 14 years lease (landlord responsible for exterior repairs) goodwill and valuable contents £750 —Address No 7921 B M A House Tavistock Square W C 1

HARLEY STREET AND DISTRICT —A NUMber of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application —ELCOCK AND Co 10 Henrietta Place Cavendish Square W 1 Lang 2601

HARLEY STREET (FIVE MINUTES) —A bargain FIRST FLOOR FLAT rent reduced five years lease lift c h w part central lounge 20 by 14 parquet floor dining room 16 by 15 3 bedrooms kit bath —Before noon Paid 9660

For available

CONSULTING ROOMS

PROFESSIONAL HOUSES & FLATS

in Harley Street and the medical area generally including Mayfair

LEY CLARK & PARTNERS

AUCTIONEERS SURVEYORS & VALUERS

31 Wimpole Street Cavendish Square W 1

Telephone Langham 1035 6 7

Represented at Cannes Nice and Monte Carlo

HARLEY STREET AND MEDICAL DISTRICT

For all types of available accommodation

BERTRAM & CO., Surveyors and Estate Agents

59 Connaught Street W 2 Paddington 1032 3

PART TIME USE OF ROOM ON PREMISES of General Practitioner in London required by specialist Good rent offered Apply Box 50 HANNAFORD AND COOPERSON LTD 57 59 Cursitor Hill London E C 4

QUEEN ANNE STREET —ONLY £40 P A secures exceptionally fine CONSULTING ROOM for use when required with attendance and all services Residential accommodation available Address No 7355 B M A House Tavistock Square W C 1

SOUTHEAST —£80 FEE ANN IN RATES AND taxes SMALL HOUSE 2 rooms 2 bath (1st floor) Electricity gardens garages or 1 studio flat 15s per week 3 rooms bath (1st) —Address No 7913 B M A House Tavistock Square W C 1

1, BENTINCK STREET (CORNER WELBECK Street) —Finest New CONSULTING SUITES in Medical Area Each 2 rooms and lavatory Also 4 roomed FLATS Sole Agents ERNEST DURRANT AND Co 4 Duke Street W 1 Welbeck 8 95

NEAR MARBLE ARCH —WHOLE OR PART OF HOUSE to let Excellent situation — Agents ERNEST DURRANT AND Co 4 Duke Street W 1 Welbeck 8 95

MISCELLANEOUS SALES etc

IMPORTANT

to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE Specially Cut Fitted and Moulded to each individual figure made from Finest Quality Materials and in the Best Possible Style cost no more than mass production ready made clothes

The invaluable Practical Experience and Advice of our 14 Expert West End Cutters and Fitters is always at your disposal

ALL HALLZONE Productions are HAND FINISHED IN EVERY ESSENTIAL DETAIL

SPECIAL OFFER

JACKET & VEST (In black or grey)	£1 1
Lined best quality Art Satin Art Silk or Alpaca	
SOLID FANCY WORSTED TROUSERS	£1 2
The Ideal Suit for Professional or Business wear	
LOUNGE SUITS to measure from	£6 6
OVERCOATS	£7 7
DINNER SUITS	£8 8
DRESS SUITS from	£10 10s
PLUS FOUR SUITS from	£6 6

THE IDEAL Suit for Country and Sporting Wear

GOLD MEDAL RIDING BREECHES from	£1 1
RIDING HABITS	£8 8s
RIDING BOOTS	£3 3s
COSTUMES & LONG COATS	£6 6

UNSOLICITED APPRECIATION

I strongly advise all medical men who wish to have satisfaction to patronise Harry Hall Ltd as all the clothes I have had from them during 35 years have been perfect in Fit Cut and Finish

(Signed) S J A MA MB F R C P S

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self measurement Form or Pattern Garments

Visitors to London can order and fit same day Special Patterns would then be cut and Perfect Fitting Clothes supplied after without trying on

HARRY HALL, LTD.

Governing Director Harry Hall

THE Coat Breeches Habit and Costume Specialists

101 OXFORD ST W 1 119 CHEAPSIDE E C 2

Telephones

GERrard 4905 4906 and 4907 NATional 8696/7

Makers of Finest Quality Bespoke Civil Sporting and Hunting Clothes for Ladies and Gentlemen

Highest Award 12 Gold Medals

Est over 10 years

INCOME TAX

YOUR Burden OUR Income Tax Specialists to the Medical Profession

HARDY & HARDY

19 CHANCERY LANE LONDON W C 2

Telephone Holborn 6671

Write to-day for free copy of Advice on Income Tax

FOR SALE - COMPLETE THEATRE EQUIPMENT suitable for Cottage Hospital or Nursing Home —Address No 7917 B M A House Tavistock Square W C 1

PATHOLOGICAL APPARATUS FOR SALE second hand nearly complete outfit £6 Incubator centrifuge balance refrigerator — Address No 7911 B M A House Tavistock Square W C 1

RADIUM —50 MILLIGRAMME RADIUM ELEMENT in six glass tubes with certificates Physikalische Chemische Reichsanstalt Berlin for sale at very reasonable price —Address No 7907 B M A House Tavistock Square W C 1

COVERS FOR BINDING

VOLS I and II of the BRITISH MEDICAL JOURNAL for 1937 and previous years can be half bound by parcel post 2 10 each Orders with appropriate remittance should be addressed to—THE SECRETARY BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE LONDON W C 1

TENDER

COUNTY COUNCIL OF MIDDLESEX

PUBLIC ASSISTANCE DEPARTMENT

TENDERS FOR DRESSINGS SURGICAL APPLIANCES SURGICAL INSTRUMENTS ETC BASIC DRUGS B P OR B P C PREPARATIONS PROPRIETARY DRUGS SERA NITROUS OXIDE GAS OXYGEN ETC PATHOLOGICAL REQUISITES X RAY LIGHT AND RADIUM REQUISITES (SIX MONTHS)

The County Council of Middlesex invites tenders for the supply of the above goods or material for the period stated from October 1st 1938 to its several Hospitals Institutions Sanatoria Children's Homes Offices etc

Forms of tender (upon which only tenders will be considered) and conditions of contract may be obtained on application to the Director of Public Assistance Z 3 Central Buildings (fourth floor) Matthew Parker Street Westminster S W 1 accompanied by a stamped addressed foolscap envelope

Sealed tenders marked "Tender for ——" must be delivered at or before 11 a m on Thursday September 1st 193 addressed to The Clerk of the Middlesex County Council Guildhall Westminster S W 1

The Council does not bind itself to accept the lowest or any tender and reserves the right to accept any tender or part only

Estimated quantities required are stated in the form of tender and tenderer may tender to supply all or any one or more of the Establishments concerned

Guildhall Westminster August 1938

C W RADCLIFFE Clerk of the County Council

APPOINTMENTS —Contd

CARDIFF ROYAL INFIRMARY (Associated with the Welsh National School of Medicine)

Applications are invited for the post of RESIDENT MEDICAL OFFICER

Duties will include case record keeping and teaching and Medical work under the direction of the Honorary Staff

Candidates must be Doctors of Medicine of a University of the United Kingdom or Members of one of the Royal Colleges of Physicians in the United Kingdom and must have previously held a Resident Hospital post

The salary will be at the rate of £200 per annum with board residence and laundry The appointment is for one year and the holder will be eligible to apply for reappointment and may retain office for three consecutive years

Further particulars may be obtained from the Medical Superintendent to whom applications (endorsed R M O) with not more than three testimonials (copies) must be sent by noon on Wednesday August 31st 1938

By Order of the Council

R ARMSTRONG Medical-Superintendent

YORK DISPENSARY

Applications are invited for the post of RESIDENT MEDICAL OFFICER (term of commencement to be mutually agreed).

The appointment is subject to the Medical Acts.

Candidates must be registered medical practitioners, and must have had experience in midwifery.

Salary £200 per annum with board, lodging and washing, and all uniforms provided.

Applications with testimonials to be sent to

JOHN C PETERS
New Street York Secretary

THE GLASGOW EYE INFIRMARY

The Directors invite applications from registered Medical Practitioners for the post of RESIDENT HOUSE SURGEON. Salary £100 per annum with apartments, board, lodging and washing.

Applications with copies of testimonials, should be lodged with the undersigned by August 20th 1938.

T C CALDWELL
Infirmary, West George Street Secretary
Glasgow, C.2.
August 9th 1938.

WORTHING HOSPITAL

Applications are invited for the post of HOUSE PHYSICIAN to start on October 9th. The appointment is for six months. Salary at the rate of £130 per annum with board, lodging and laundry.

Candidates (male) should forward applications, stating age, nationality, qualifications and experience, accompanied by testimonials, to the undersigned.

A V OAKTON
August 11th 1938. Secretary Superintendent.

WORTHING HOSPITAL

Applications are invited for the post of HOUSE SURGEON, just now. The appointment is for six months. Salary at the rate of £130 per annum with board, lodging and laundry.

Candidates (male) should forward applications, stating age, nationality, qualifications and experience, accompanied by testimonials, to the undersigned.

A V OAKTON
August 11th 1938. Secretary Superintendent.

CENTRAL LONDON OPHTHALMIC HOSPITAL
Judd Street, St. Pancras, W.C.1

Applications are invited from registered medical practitioners for the posts of SENIOR and JUNIOR HOUSE SURGEON, vacant on September 19th. The Junior House Surgeon is a candidate for the Senior post. Salary £100 and £100 per annum respectively, with board and residence.

Applications with copies of three testimonials should reach the undersigned on or before August 1st.

GEORGE WATTS
Secretary.

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road, E.7. (104 Beds.)

Applications are invited for the post of HOUSE PHYSICIAN (male). The appointment is for six months, commencing September 1st.

Salary at the rate of £100 per annum, with board, residence and laundry.

Applications, stating age, nationality, experience and full particulars, together with copies of three testimonials, should reach the undersigned by August 15th.

REGINALD PERRY
Secretary.

ROYAL FREE HOSPITAL
Gray's Inn Road, London, W.C.1

Applications are invited from duly qualified and registered Medical Women for the following post:

RESIDENT CASUALTY OFFICER. Duties to commence October 1st, 1938, for six months. Salary £100 per annum.

Candidates must have held previous Resident hospital appointments.

Application forms may be had from the undersigned, and should be duly filled in and returned on or before August 31st.

RICHARD T BARTLEY
Secretary.

THE INFANTS HOSPITAL
Vincent Square, Westminster

Applications are invited for the post of HOUSE PHYSICIAN (either sex). Salary at the rate of £100 per annum, with board, residence and laundry.

The appointment is for six months from October 1st.

Applications with copies of testimonials to be forwarded to the undersigned not later than August 31st.

ALFRED J SMALL
Secretary.

QUEEN MARY'S HOSPITAL FOR THE EAST END
Stratford, London, E.15

RESIDENT MEDICAL OFFICER

Applications are invited from fully qualified and registered medical women (only) for the above post. The Hospital contains 219 beds, including 40 for Maternity patients.

The appointment will date from October 1st, 1938, and will be for three months as Junior at £110 per annum, and three months as Senior at £130 per annum; or six months in all, terminating on March 31st, 1939.

Candidates, who must be single and who should previously have held hospital appointments, should send applications, accompanied by testimonials, to the undersigned not later than Thursday, August 25th, 1938.

RAPHAEL JACKSON, Major
Secretary.

QUEEN MARY'S HOSPITAL FOR THE EAST END
Stratford, London, E.15

OBSTETRIC HOUSE SURGEON

Applications are invited from fully qualified and registered medical men (only) for the above post. The Hospital contains 219 beds, including 40 for Maternity patients.

The appointment will date from October 1st, 1938, and will be for three months as Junior at £110 per annum, and three months as Senior at £130 per annum; or six months in all, terminating on March 31st, 1939.

Candidates, who must be single and who should previously have held hospital appointments, should send applications, accompanied by testimonials, to the undersigned not later than Thursday, August 25th, 1938.

RAPHAEL JACKSON, Major
Secretary.

THE PRINCE OF WALES'S GENERAL HOSPITAL, London, N.15

The following Resident Posts will be vacant on September 15th next:

(a) One JUNIOR HOUSE PHYSICIAN.
(b) Two JUNIOR HOUSE SURGEONS.

Salary at the rate of £90 per annum, board, residence and laundry. Appointments held for six months, but holders are eligible for a further term as Senior.

Candidates (male and unmarried) must be fully qualified and registered, and applications (on the prescribed form), together with copies of three recent testimonials, should be sent to the undersigned on or before August 31st, 1938.

J C BURDETT
July 21st, 1938. Director and House Governor.

THE PRINCE OF WALES'S GENERAL HOSPITAL, LONDON, N.15

Applications are invited for the appointment of HONORARY CLINICAL ASSISTANT with special Psychiatric experience.

Applications should be sent to the undersigned on or before August 31st, 1938.

J C BURDETT
Director and House Governor.
July 30th, 1938.

DREADNOUGHT HOSPITAL
Greenwich, S.E.10
(Seamen's Hospital Society.)

Half-time Non-Resident Male RECEIVING ROOM OFFICER required from September 1st for six months. Morning or afternoon sessions with alternate Saturdays, 9 a.m. to 1 p.m. Previous experience in residential posts essential. The post is suitable for those studying for higher examinations. Salary at the rate of £150 per annum with meals.

Application stating age, nationality and experience accompanied by copies of testimonials to be sent at once to the undersigned.

F A LYON, Secretary.
July 30th, 1938.

MILLER GENERAL HOSPITAL
Greenwich Road, S.E.10

Applications are invited for the following posts:

HOUSE PHYSICIAN (male, unmarried). Salary £100 per annum.

HOUSE SURGEON (male, unmarried). Salary £100 per annum.

CASUALTY OFFICER (male), part time afternoon session. Salary £1 0 per annum, non-resident.

Full particulars on application.

The appointments are for six months from October 1st, 1938. There are six Resident Officers.

Application forms can be obtained from the Secretary, and must be returned not later than August 20th, 1938.

August 3rd, 1938.

WEST HAM HOSPITAL FOR NERVOUS AND MENTAL DISORDERS
Goodmayes, Ilford, Essex

Applications are invited for a male JUNIOR ASSISTANT MEDICAL OFFICER at the above Hospital. Candidates must be unmarried.

The commencing salary is at the rate of £350 per annum, rising by annual increments of £50 to a maximum of £400 per annum, together with emoluments in lieu of board, lodging and washing valued at £150 per annum. The person appointed will be paid in addition such salary, including £50 per annum on account of the Diploma of Psychological Medicine.

The appointment is subject to the provisions of the Asylum Officers' Superannuation Act, 1909. Class I. and to a satisfactory medical examination.

A knowledge of bacteriological work will be an advantage.

Applications, stating age and experience, accompanied by copies of three testimonials, must reach the Medical Superintendent not later than August 31st, 1938.

THE ROYAL EYE HOSPITAL
St. George's Circus, Southwark, S.E.1

SENIOR HOUSE SURGEON and TWO ASSISTANT HOUSE SURGEONS required at the above Hospital. The appointment is in the first instance for a period of six months, but board and residence as from October 1st.

Salaries: Senior House Surgeon, at the rate of £150 per annum. Assistant House Surgeons, £100 per annum. Candidates must be registered practitioners.

Applications, with copies of three recent testimonials, should be sent to the Secretary not later than Thursday, September 1st.

F E DALTON, Secretary.

THE SALVATION ARMY THE MOTHERS' HOSPITAL
Lower Clapton Road, Clapton, E.5

Applications are invited from Medical Women for the post of JUNIOR RESIDENT MEDICAL OFFICER, vacant October 1st, 1938. Salary £80 per annum, with board, residence and laundry. The appointment is for six months.

Applications with testimonials must be sent to the Secretary on or before Monday, August 29th, 1938.

FRED HAMMOND, Secretary.

THE CENTURY INSURANCE COMPANY LTD

7 LEADENHALL STREET
LONDON E.C. 3

18 CHARLOTTE SQUARE,
EDINBURGH

ASSISTS DOCTORS TO PURCHASE A PRACTICE OR PARTNERSHIP

NO GUARANTORS REQUIRED
REPAYMENTS ARRANGED BY EQUAL QUARTERLY INSTALMENTS WHICH DO NOT VARY WITH FLUCTUATIONS IN THE BANK RATE.

PLEASE WRITE FOR PARTICULARS, STATING AGE NEXT BIRTHDAY.

MENTION B.M.J.

THE MEDICAL AGENCY, Ltd.

DUDLEY HOUSE 36 38 SOUTHAMPTON ST STRAND W C 2

Telephones—Temple Bar 1034 1054 Established in 1901 by J A Fenstor

WEST COUNTRY —PARTNERSHIP Old established Town and Country Practice suit to competent surgeon One third share offered with view to half Receipts £4 000 Large panel Premium years purchase

DEVON —ASSISTANTSHIP with view to succession Unopposed Country Practice View partnership in SIX months Prefer married man Receipts £1 00 Further details on request

LONDON W —Mixed C I residential locality Double fronted house Large garden garage Receipts nearly £ 000 Panel 1 300 Premium for goodwill and house £4 500 or near offer

LONDON S E —Working class G I House to rent Receipts approx £2 00 Panel 3 00 in Fees 1 6 up 1 App Premium 3 years purchase or near offer

LONDON W —Easy distance West End Middle class C P House to rent on lease Receipts approx £2 400 Panel 1 500 Several app Fee 3/6 up Premium £4 000 or near offer

MANY OTHERS FOR SALE

N E COAST —Mixed G I Receipts approx £ 000 Panel nearly 2 00 Clubs nearly £500 1 App Premium £ 000 or near offer 1 in hide Book Debts Surgery Furniture Drug etc

YORKSHIRE —Mixed G I Residential locality near large town Medium sized house Large garden garage Receipts £1 800 Panel over 000 Fees 3 6 up Premium £ 500

LONDON W —PARTNERSHIP Suburban G P scope House to rent Receipts nearly £ 000 Panel approx 4 000 One fifth share 2 years purchase with view to one third share

MIDDLESEX (W) —G I growing residential locality Excellent house with large pleasant garden Receipts approx £1 500 Panel 1 700 Fees 3/6 up Prem years purchase Freehold house and furniture £3 000

LONDON N E —Middle-class G I Receipts approx £ 500 Panel 1 00 Premium 2 years purchase or near offer

DETAILS ON REQUEST

ESTABLISHED 1877

LEE & MARTIN, LTD.

The Birmingham Medical Agency,
71, TEMPLE ROW, BIRMINGHAM
Telegrams *Telephone*
Locum Birmingham 5963 Midland B'ham

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED

MAXIMUM FEE £50 if exclusively entrusted to us

ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORT NOTICE also ASSISTANTS

WANTED TO PURCHASE

1 BIRMINGHAM (or within 50 mile thereof)—Good Mixed PRACTICE with a Panel of 1 00 over and receipts of from £1 500 £3 000 URGENTLY REQUIRED CAPITAL WILL BE AVAILABLE
2 REQUIRED —Good English Scottish and Irish LOCUMS Immediate posts to offer Also ASSISTANTS good posts to offer with and without view to Partnership

FOR DISPOSAL

1 GLOUCESTERSHIRE — Well established middle and working class PRACTICE Receipts av £1 250 p a Panel 1 200 scope to increase and good house with all services
2 STAFFS —Rapidly increasing Mixed Private and Panel PRACTICE Receipts last year £1 050 and Panel 1 230 over Excellent House all services
3 MIDLANDS —Old established industrial and middle class PRACTICE Receipts average £1 068 p a Panel 962 scope to increase and good house
4 SOUTH WALES —Well established middle and working class PRACTICE Receipts last year £2 200 Panel 2 100 Good house
5 LONDON —Old established mixed Private and Panel PRACTICE Receipts av £1 750 p a Panel 966 Ample scope to increase and good house
6 WEST COUNTIES —Old established working class PRACTICE Receipts £1 750 Panel 2 526 Good detached corner house which may be rented

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partnerships on very reasonable terms Full particulars on application

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE

ESTABLISHED 1868

PEACOCK & HADLEY, Ltd,

MEDICAL TRANSFER AGENCY,
67-68, Chandos St Bedford St Strand, W C 2
Telegrams Herbarin Lesquare London
Telephone Temple Bar 5564

This old established Agency negotiates the Sale of PRACTICES and PARTNERSHIPS on reasonable terms which can be obtained on application LOCUM TENENS and ASSISTANTS supplied free of charge to principals

CAVENDISH NURSES

★ MALE AND FEMALE

Head Office
21 BEAUMONT STREET LONDON W 1
Branches MANCHESTER 176 *Oxford Road*
GLASGOW 28 *Windsor Terrace*
DUBLIN 23 *Upper Baggot St*
Telephones London 1277 Welbeck (2 lines)
Manchester 3152 Ardwick
Dublin 67006 Glas 477 Douglas
Telegrams Tactear London Surgical Glasgow
Tactear Manchester Tactear Dublin

THE WESTERN MEDICAL AGENCY

LONDON and BRISTOL

Dr K H BENNETT and Dr W J EVERSHED who give personal attention to every client

Financial Assistance for Purchasers and all Classes of Medical Insurance arranged

LOCUMS AND ASSISTANTS SUPPLIED WITHOUT CHARGE TO PRINCIPALS

For exclusive Agency maximum commission is £50 which includes everything sold except house property

1 MIDLAND CITY —Steadily increasing PRACTICE in favourite part Average £ 00 p a (receipts £ 725 last year) Panel 1 100 Well established Premium £5 30 House in excellent repair £ 000
2 MIDLAND CITY —Woman's PRACTICE The Practice has been worked entirely independently to the above but they can easily be amalgamated and worked as a Partnership if required Average £860 p a (receipts £1 053 last year) Panel 900 Old established Good scope Premium £1 800 House rent
3 DURHAM —PRACTICE doing about £ 000 p a Panel 2 135 Old established 2 years purchase or near offer to include drug furniture etc House £700
4 SOMERSET COAST — PARTNERSHIP In country town Man keen on medicine and accustomed to good class patients preferred Panel 1 400 Over £3 000 p a Third share at 2 years purchase House sale or rent
5 MIDLAND CITY —PARTNERSHIP in good part in rapidly increasing Practice Panel 1 500 £2 12 last year Half share at £3 000 or near offer Choice of house
6 LONDON W C —PRACTICE doing £1 000 p a Panel 1 104 Premium £ 000 Lock up surgeries to rent
7 BRISTOL —Woman's PRACTICE with exceptional scope Vendor wishes to retire and is constantly refusing work Has not encouraged panel Can be quickly increased Receipts over £ 00 p a Offers considered
8 S COAST — PRACTICE in popular town Panel 1 600 Average £2 550 p a 2 years purchase House rent
9 Genuine increasing PRACTICE ten miles south of London Premium £4 0 Low expenses

22, CLARE STREET, BRISTOL 1
Telegs Medgen Bristol *Tel* Bristol 22689
15, BEDFORD ST, STRAND, W C 2
Tel Temple Bar 2532

Telephone Welbeck 27 8
Telegrams ASSISTIAMO LONDON

NURSES

MALE OR FEMALE

TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES

Nurses reside on the premises and are available for urgent calls Day and Night

THE NURSES' ASSOCIATION
(In conjunction with the MALE NURSES ASSOCIATION)
29 York St, Baker St, London, W 1
Mrs MILLICENT HICKS *Supt*
W J HICKS *Secretary*

PERCIVAL TURNER LTD

MEDICAL AGENCY

ESTABLISHED 60 YEARS

25 MAIDEN LANE STRAND W C 2
(Corner of Bedford Street)
Telegrams Eyelimlin London
Phone Temple Bar 9011 (3 lines)
After office hours Watton on Thames 155
Assistants and Locums Found Without Fee to Principals Practices Investigated Book keeping Debt Collecting etc

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE EXCLUSIVE OF HOUSE PROPERTY £50 FULL TERMS ON REQUEST

FOR DISPOSAL

DEVON —UNOPPOSED ASSY WITH view to partnership and succession Half share of £1 00 Premium £1 000 Very nice house rent free during Asst —1

NUCLEUS SURREY SUBURB — About £400 p a with exceptional scope Premium £75 or offer Small house rent or sell —

FRENCH RIVIERA —OVER £1 000 p a Old established Fees 21 Good seen Premium £ 500 MD essential —3

DERBYSHIRE — COUNTRY PRACTICE about £770 p a good class select panel Increasing and scope choice of house Premium 3 years purchase —4

NORTHERN TOWN —ABOUT £1 000 p a Very old estd Panel Clubs and Appts £500 p a Visits 5/ to 6/ Prem £3 600 or 1 by 6 deferred House only £ 00 —5

KENT COAST — WOMAN'S PRACTICE Average £400 p a Panel over 00 Visiting fees 5 to 10/ Premium £750 House 4 bed etc Rent £55 p a —6

MIDDLESEX — HALF SHARE OF £1 000 p a with scope Panel 700 Appts over £100 p a Premium £800 Nice house to rent —

LONDON W 5 —ABOUT £900 P A Panel 560 Visits 3/6 to 5/ Premium 2 years purchase House 4 bed etc to rent —8

LONDON N W —ONE FIFTH SHARE of over £5 000 p a Panel 6 000 Appts over £160 Fees 2/6 to 10 6 Prem 2 years purch Small maisonette to let —9

SCOTLAND (N) —COUNTRY OVER £1 000 p a incl panel of £300 p a Visits 5/ to £5 5s Premium 1½ years purchase or offer Good house rent or all —10

MIDDLESEX —SUBURB £1 050 P A Panel 600 increasing FMS £100 Premium 2 years purch Comfy house (4 bed) sell or let —11

SURREY SUBURB —HALF SHARE of £3 000 p a Old-est increasing modern house garden and garage to let Premium £1 000 —1

HYDE PARK NEAR — PHYSICO THERAPY PRACTICE about £1 600 p a Well est good class Ample accommodation on rental Premium £1 500 —13

LANCSTOWN —OLDEST INCREASING £1 100 p a Select panel of 1 000 Nice house ample accommodation Premium £1 350 incl drugs and surgery furniture —14

KENT SUBURB —GOOD MIDDLE CLASS about £700 p a increasing select panel visits 7/6 up surgery 5/ Nice Tudor house for sale might let Premium 14 years purchase —15

SOUTH COAST —OLD EST, NEARLY £1 400 p a increasing Fair panel mixed middle and better class Detached house garden and garage for sale or might let Premium £ 500 —16

COUNTY TOWN WITHIN 100 MILES OF LONDON —PARTNERSHIP with early succession in ENT Practice about £1 350 p a and appointments £850 p a 2 years purchase Purchaser should have FRCS Choice of house —17

BIRMINGHAM NEAR — NEARLY £800 p a good scope panel nearly 800 developing area House garden garage for sale at £5 0 or let at 27s 6d p w Premium £1 500 —18

HANTS — OLD EST AVERAGE £1 000 p a Panel 1 000 Appts about £150 p a Good family house nice garden and garage Rent £10 Premium 11 years purchase —19

YORKSHIRE DALES —BEAUTIFUL country old estab £1 000 p a Large house and grounds rent only £60 p a Suit resident patients Smaller house available Panel worth £140 p a Premium £1 500 —20

NEAR VICTORIA S W 1 —LOCK UP, about £500 p a increasing panel 350 good scope Ample professional accommodation on rental at £6 p a Premium 11 years purchase —21

MIDLANDS —OLD EST NEAR IMPORTANT town scope Vendor retiring About £650 p a Panel 750 Prem 2 years purchase House 5 recep 6 bed good garden for sale or might let —

NO CHARGE TO PURCHASERS
FINANCIAL ASSISTANCE ARRANGED

ASSISTANTS — VACANCIES IN Town and Country Indoor and Outdoor List on application

BRITISH MEDICAL BUREAU

(The Scholastic, Clerical and Medical Association Ltd.)

(FOUNDED 1880)

NORTHERN BRANCH

33, CROSS ST., MANCHESTER, 2.

Telephones {Manchester - Blackfriars 3925 / Manchester - Rusholme 2549 (Night Calls)

Telegrams "Locum, Manchester"

Branch Offices at Leeds and Belfast

Recommended with every confidence to the profession by the BRITISH MEDICAL ASSOCIATION as a thoroughly trustworthy medium for the transaction of all Medical Agency business

TRANSFER OF PRACTICES AND PARTNERSHIPS INTRODUCTION OF RELIABLE ASSISTANTS AND LOCUM TENENS at Short Notice VALUATION and INVESTIGATION OF PRACTICES, Etc

FOR DISPOSAL

Full particulars free on request

Practices and Partnerships wanted Large list of bona fide purchasers with ample capital available Enquiries invited from prospective vendors All information treated in strict confidence

LANCASHIRE TOWN—Sound mixed Panel and Private PRACTICE close to country Improvement handed over years Cash receipts last year £1,450 Panel 1,400 Nice detached house 2 reception 5 bedrooms garage and large garden Premium—Practice—£1,000 No 1153

LINCOLNSHIRE—Very old-established PRACTICE in pleasant country town Cash receipts last year £2,471 Panel about 1,300 Cottage Hospital Good house 5 bedrooms small garden garage etc Premium—Practice—£1,150 for quick sale—No 1132

CHESHIRE—Old-established mixed Panel and Private PRACTICE in pleasant Country town Average cash receipts £2,[illegible] pa Panel 1,59[illegible] Attractive house 3 reception 5 bedrooms, garage and fine garden with tennis court Premium—1½ years purchase—No 1140

MANCHESTER—Old-established mixed Panel and Private PRACTICE in suburb Cash receipts last year £2,527 Panel 2,200 Good scope Good semi-detached house 2 reception 3 bedrooms garage and small garden Premium—1½ years purchase—No 1154

YORKSHIRE (W.R.)—Old-established mixed Panel and Private PRACTICE in better working-class and rural district Cash receipts last year £1,186 Panel 1,[illegible] Scope Good house 2 reception, 3 bedrooms, maid's room 3 Professional rooms (separate entrance) garden with tennis court Rent £45 p.a. Garage rented Premium—1½ years purchase—No 1122

MANCHESTER—Very old-established Panel and Private PRACTICE, offering a perfect great increase Cash receipts approximately £1,36[illegible] p.a. Panel 1,464 Good house 2 reception 6 bedrooms, 2 Professional rooms (separate entrance) garage and small garden Premium—Practice—£2,250 (to include book debts)—No 1155

MIDLANDS—Increasing middle and working class PRACTICE in large town. Cash receipts last year £1,050 Panel over 1,200 Scope Excellent modern house 2 reception 4 bedrooms garage and large garden For sale Freehold Premium—Practice—£2,000—No 1123

LANCS TOWN—Very old-established mixed Panel and Private PRACTICE Cash receipts last year £1,372 Panel 1,925 Scope Good house 2 reception, 4 bedrooms 3 Professional rooms (separate entrance) Premium—Practice—1½ years purchase—No 1131

MANCHESTER—Well-established mixed Panel and Private PRACTICE in pleasant suburban district adjacent to new Housing Estate Cash receipts approximately £1,100 Panel about 1,000 Excellent modern house 2 reception 4 bedrooms, garage and nice garden. For sale or may be rented Premium—1½ years purchase—No 1115

SHROPSHIRE—Old-established Unopposed Country PRACTICE. Cash receipts last year £688 Panel 450 Modern house 2 reception 5 bedrooms 3 Professional rooms, garage and large garden Electric light Rent £50 p.a. Premium—best offer—No 1096

NEAR MANCHESTER—Well-established middle and better working-class PRACTICE in pleasant suburban district in present hands 15 years. Average cash receipts over £3,000 p.a. Panel 1,833 Good scope Good corner house 2 reception, 4 bedrooms, 3 Professional rooms garage and garden also Branch Surgery premises. Both may be rented on lease Premium—1½ years purchase—No 1135

NEAR LEEDS—Old-established middle and working-class PRACTICE. Cash receipts average £1,200 p.a. Panel 900 Excellent detached house 2 reception, 4 bedrooms, Professional rooms (separate entrance) garage and garden Price £1,000 Mortgage can be arranged. Premium—Practice—1½ years purchase or partnership—No 1125

NEAR MANCHESTER—Very old-established middle and working-class PRACTICE in prosperous town Very suitable for two friends in partnership or may be run by one man and an Assistant Cash receipts last year £[illegible],300 Panel 3,000 Nice modern house 2 reception 4 bedrooms, separate Professional room, garage and large garden For sale at valuation Premium—by offer—No 11[illegible]

NORT[illegible] PER[illegible] [illegible]ed middle class PRACTICE [illegible]ls years Cash receipts o[illegible] [illegible]se reception 5 bedrooms Professional rooms, garage and nice garden Premium—1½ years purchase—No 1151

NORTH WALES COAST—Good-class PRACTICE in select residential resort Cash receipts last year £905 No Panel or appointments. Nice detached house with splendid accommodation garage and garden Premium—Practice—2 years purchase—No 1152

NORTH WEST LANCS—Old-established mixed Panel and Private PRACTICE in large town Cash receipts last year £1,102 Panel over 1,000 Good house pleasantly situated 2 reception 5 bedrooms, garage and small garden Premium—Practice—1½ years purchase—No 1105

NEAR MANCHESTER—PARTNERSHIP in old-established mixed Panel Practice owing to death of senior partner Average cash receipts £2,445 p.a. (increasing) Panel 2,[illegible] Scope for increase Good house to rent, 2 reception 4 bedrooms, 3 Professional rooms, garage and small garden Premium—one half share—1½ years purchase—No 1114

DERBYSHIRE—Old-established PRACTICE capable of great increase. Cash receipts last year £[illegible]50 (increasing) Panel 1,562. Excellent house 2 reception 4 bedrooms, 3 Professional rooms (separate entrance) garage and good garden Premium—Practice and house £1,600—No. 989

MIDLANDS—PARTNERSHIP in old-established Practice in large City Cash receipts last year £2,4[illegible] Panel 3,103 Scope Nice house 2 reception study kitchen hall 4 bedrooms, small garden and garage Price £1,300 of which substantial sum could remain on mortgage Premium—half share—£2,[illegible]40—No 1156

NEAR MANCHESTER—Very old-established middle and better working class PRACTICE. Cash receipts over £2,500 p.a. Panel 1,[illegible]50 Excellent detached house 2 reception 6 bedrooms, garage and garden with tennis court Price £1,000 Premium—1½ years purchase—No 1105

MIDLAN[illegible] pre liminary Prac tice Ca[illegible] anel 1,300 Incoming partner may choose own residence Possibility of Hospital appointments Premium—7 24th share—7 years purchase—Further share in three years—No 1069

NORTH EAST COAST—Old-established mixed Panel and Private PRACTICE. Cash receipts last year £2,160 Panel 2,220 Appointment (transferable) over £400 p.a. Good house 2 reception 3 bedrooms, 3 Professional rooms, garage and small garden Price £[illegible]00 Premium—1½ years purchase—No 1034

NORTH STAFFS—Very old-established [illegible]orking and middle class PRACTICE. Cash receipts last year £[illegible],431 Panel 1,225 Scope as district developing. Excellent house 2 reception 4 bedrooms, maid's room, separate surgery premises, garage and garden For sale Freehold Premium—Practice—1½ years purchase or near offer—No 1120

MANCHESTER—Sound old-established PRACTICE in industrial district Cash receipts last year £2,200 Panel 2,[illegible]30 Scope House 4 bedrooms, 2 Professional rooms. Rent £50 p.a. Premium—best offer—No 1034

NORTH MIDLANDS—Old-established mixed Panel and Private PRACTICE in Country district near large town Average cash receipts £1,0[illegible]7 p.a. Panel 9[illegible]0 and transferable appointments £200 p.a. Excellent detached house, 2 reception 6 bedrooms, Professional rooms, garage and large garden Price £1,250—Premium—1½ years purchase—No 1117

CHESHIRE TOWN near Manchester—DEATH VACANCY—Old-established mixed Panel and Private PRACTICE. Cash receipts last year £[illegible]6+6 Panel [illegible]58 Scope Excellent detached house (in own grounds) 2 reception rooms [illegible]ed 4 bedrooms [illegible] [illegible]nents quarters and garden For sale at valu[illegible] —No 1136

NORTH LANCS—YORK[illegible] [illegible]mmodated Country PRACTICE n pr[illegible] £1,0[illegible] p.a. Panel and appointments approximately £[illegible]0 p.a. Well-built house [illegible]n ample accommodation central heating, electric light garage and garden of 2 acres. Rent £75 p.a. Premium—£1,[illegible]00 Vendor remains—No 1119

MONMOUTHSHIRE—Old-established Contract PRACTICE. Cash receipts last year £2,114 of which over £2,000 from contract work. Excellent house containing 3 reception 4 bedrooms, 2 maid's rooms, garage for 2 cars, and garden Rent £[illegible]0 p.a. on long lease Good prospects of increase in income Premium—best offer—No 1144

YORKSHIRE (W.R.)—Old-established middle and better working class PRACTICE in large town Cash receipts last year £1,[illegible]0— Panel (not guaranteed) [illegible]50 Good house 2 reception 4 bedrooms, 2 Professional rooms, garage For sale or may be rented Premium—1½ years purchase—No 1141

NORTH WEST COAST—Medical Woman's PRACTICE of great scope Cash receipts £[illegible]6" Good house to rent at £45 p.a. Premium—best offer—No 1143

— WANTED —

ASSISTANTS and LOCUMS

For Immediate Engagements

Apply with full particulars to above address

All communications to be addressed to the Branch Manager BRITISH MEDICAL BUREAU 33 CROSS STREET MANCHESTER, 2.

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)

Tele Address Triform, Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE W C 1

Telephone Euston (1611 1612)

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical Scholastic and Accountancy business and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult The Manager in all transactions requiring the services of a Medical Agent

Members of the British Medical Association may take advantage of a reduced scale of charges applicable to them

REDUCTION IN FEES

In cases where the Bureau acts as Agent the commission in respect of any sale of goodwill book debts furniture drugs fittings and other effects (excluding sale of any freehold or leasehold property or of practices situate elsewhere than in Great Britain) is limited to a maximum fee of Fifty Pounds

FULL TERMS ON APPLICATION

Practices and Partnerships for Disposal

1 DEATH VACANCY—Residential town in Berkshire Cash receipts year ended December 31st 1937 £1 91 Panel returned £690 House (6 bedrooms) to rent

2 ESSEX—Old established PRACTICE about £3 000 p a in middle and working class district Panel 1 788 Double fronted house (3 bedrooms) to rent Premium £5 000

3 S MIDLANDS—Well established PRACTICE about £700 p a in good town Panel 788 Detached corner house with garage and garden to rent Premium £850

4 KENT—Medical Woman s PRACTICE of £600 p a in outlying suburb Panel 193 Detached house with garage and garden to rent Premium £800

5 S WALES—Old established PRACTICE over £800 p a in small town Panel 600 Detached house (4 bedrooms) for sale Premium 1½ years purchase

6 S OF ENGLAND—Easily worked PRACTICE about £1 000 p a in Cathedral city (clubs worth about £100 and panel 1 065) House (6 bed and dressing rooms) for sale or rent Premium one and a half years purchase

7 S E COAST—Easily worked middle class PRACTICE, averaging £650 p a in summer resort House (6 bedrooms etc) in best part with large garden and garage for sale Branch surgery rented at 10s weekly Panel 200 Scope Premium £1 200

8 HOME COUNTIES—Old established country PRACTICE of about £700 p a under 50 miles from London Panel 450 Good house in excellent position with garage and garden to rent Premium £800

9 LONDON, W 12—Old established PRACTICE about £800 p a in suburban district Panel 900 Good house (4 bedrooms etc) Freehold for sale Premium two years purchase

10 S E COAST—Medical Woman s PRACTICE of about £400 in a popular seaside resort Panel 208 House with garage for sale or to rent Premium £650

11 SURREY—PARTNERSHIP (after a preliminary Assistantship) in growing residential district about 10 miles from London Cash receipts average about £2 450 p a Panel 1 050 A three eighths share is for disposal at two years purchase

12 S E COAST—PARTNERSHIP (with succession) in non dispensing Practice about £2 000 p a Very small panel Attractive house for sale or rent Premium 7/10ths share two years purchase Hospital and possible vacancy for physician in two or three years

13 SURREY—PARTNERSHIP in Practice of about £3 000 p a in residential district Panel 630 Modern house (4 bedrooms), garage garden To rent Preference would be given to an F R C S One half share £3 000

14 E ANGLIA—Old established country PRACTICE of about £2 200 p a within easy distance of coast Panel 1 300 Well built house to rent Premium two years purchase

15 LONDON, E C—PARTNERSHIP (with good scope for private practice in a speciality) in Practice mostly derived from valuable appointments Share of £800 to £1 000 at first at two years purchase Partner must possess the M D or M R C P or F R C S and preferably have City connections

Full Particulars sent free

16 S WALES COUNTY TOWN—PARTNERSHIP in Practice £2 500 p a Panel over 1 600 Visits to £1 [illegible] share extra One half share on reasonable terms Partner must hold F R C S Hospital and consulting opportunities for surgical scope and appointment on Preliminary Assistantship

17 ESSEX (Borders of Epping Forest)—PARTNERSHIP in steadily increasing Practice over £ 600 p a growing residential district Panel 1 700 House of character One fourth share at two years purchase Good panel Scope for increasing fees

18 S E COAST—PARTNERSHIP in non dispensing Practice about £ 500 p a Panel 1 400 One fourth share at two years purchase Preliminary Assistantship Scotsman preferred

19 LONDON N 12—Middle class increasing PRACTICE in growing district Receipts present year £4 0 Panel Modern labour saving house for sale or rent Premium

20 S WALES—Contract and small private PRACTICE over £1 900 p a in industrial district Panel 2 101 House with surgery premises to rent Prospective appointment Premium £3 500

21 S COAST HEALTH RESORT—OPHTHALMIC PRACTICE Receipts 1938 £1 600 House to rent Limited scope Premium one years purchase

22 LONDON S W—ELECTRO THERAPEUTICAL PRACTICE Receipts 1937 £1 727 Large consulting room and treatment room to rent Premium £1 600 plus apparatus valued about £750

23 LONDON N—LOCK-UP PRACTICE £490 p a run by medical woman Panel 227 Rent at surgery 25/ weekly Good scope Premium 18 years purchase

24 DEATH VACANCY—ESSEX SUBURB—Receipts average £989 p a Panel 735 Well situated house for sale Scope

25 N WALES—Popular seaside resort Good-class chiefly non dispensing PRACTICE averaging £870 p a No panel Excellently situated detached residence for sale Good scope Premium two years purchase

26 LONDON E—Cash and panel PRACTICE averaging £2 800 p a Panel 4 300 House (5 bedrooms) Rent £156 p a Scope Premium two and a half years purchase to include drugs etc

27 W MIDLANDS—PARTNERSHIP in Practice averaging £6 000 p a in market town Panel 3 500 One sixth share at first at two years purchase Incoming partner should be aged 25/30 and able to do general surgery and minor E N and T work Hospital Preliminary Assistantship

28 N MIDLANDS—PRACTICE in residential district near progressive town Receipts, 1937 £710 Panel about 100 House for sale Good scope Premium £900

29 S OF ENGLAND—Well established SANATORIUM for the open air treatment Receipts at present at rate of about £3 000 p a Premium £1 000 to include furniture etc

30 LONDON, S E—PRACTICE averaging £800 p a in populous suburb Panel 800 Detached double fronted house Price of leasehold £1 250 Scope Premium £170

31 FRENCH RIVIERA—Old established PRACTICE M D essential Vendor at present in England

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)

Tele Address Triform Westcent—London

TAVISTOCK HOUSE SOUTH TAVISTOCK SQUARE W.C.1

Telephone Euston 1644 1645

Practices and Partnerships for Disposal (continued)

32 S.W. ENGLAND—Country PRACTICE over £1,500 in beautiful part. Panel about 1,100. Exceptionally nice modern house and region own grounds for sale. Hunting and shooting. Scope. Premium two years purchase.

33 S.E. COAST—PARTNERSHIP in Practice averaging £2,100 p.a. in growing resort. Panel 1,250. Good house (5 bedrooms) to rent. One-fifth share at first at two years purchase.

34 Consulting Ear, Nose and Throat PRACTICE in industrial city. Receipts over £1,250 p.a. (in addition appointments worth about £550 p.a.). Centrally situated house to rent. Purchaser should hold F.R.C.S. and have specialist experience. Premium two years purchase.

35 KENT—PRACTICE in developing district 14 miles from London. Receipts present year over £500. Panel about 465. House (6 bedrooms) to rent. Ample scope. Premium £750 to include drugs etc.

36 BIRMINGHAM—Medical Woman's PRACTICE averaging £1,269 p.a. Panel nearly 900. Good house with garage and garden. Price £500 leasehold. Scope. Premium one and three-quarter years purchase.

37 WEST END near Lord's Cricket Ground—PRACTICE averaging about £1,900 p.a. in ideal residential part. Panel about 1,300 with prospects of good increase. Well built detached double fronted house with garage and nicely sized garden. Good introduction. Premium £3,325.

38 MIDDLESEX—PARTNERSHIP in steadily increasing town. Practice about £2,000 p.a. Panel 1,800. House to rent. Premium one half share two years purchase. Applicant should be English or Scottish.

39 SURREY—Medical Woman's PRACTICE over £1,000 p.a. in outlying suburban district. Panel 130. House for sale or rent. Scope. Premium £1,000.

40 S. AFRICA—Medical Woman holding D.O.M.S. required in Ophthalmic Practice. Experienced in operative work and not over 50 preferred. SHARE about £1,000 offered after ASSISTANTSHIP.

41 S. COAST—PARTNERSHIP in Practice over £1,000 p.a. in seaside resort. Panel about 2,000. Semi-detached house (5 bedrooms) for sale or rent. Premium on half share £1,000. Excellent hospital and scope for surgery.

42 N.E. ENGLAND—PARTNERSHIP in non panel Practice doing about £6,000 in one of the chief towns. House available. One-sixth share at two years purchase. Partner should be surgically inclined.

43 S. COAST HEALTH RESORT—PARTNERSHIP in Practice about £1,500 p.a. Panel over 1,100. House to rent. Premium two-fifths share £1,250 to include drugs etc.

44 N. OF ENGLAND INLAND SPA—PARTNERSHIP in Practice about £1,900 p.a. Panel 1,200. Excellent house for sale. Premium one half share £1,800.

45 S. COAST—PARTNERSHIP in non dispensing Practice over £5,600 p.a. in health resort. Panel about 600. Share worth about £2,900 at two years purchase.

46 WEST END OF LONDON—Good class non dispensing PRACTICE about £1,150. No panel. Large house to rent. Premium lease and practice £1,000.

47 BUCKS—PRACTICE in growing town. Receipts last year £594. Panel about 790. House for sale. Well equipped hospital. Premium £1,500.

48 LONDON W.6—Non dispensing PRACTICE £1,000 p.a. Pleasant suburb. No panel. House (8 bedrooms) garage and garden. *Premium house and practice £2,500.*

49 LONDON S.W.—Medical Woman's PRACTICE about £960 p.a. in outlying suburb. No panel. Suitable accommodation available. Premium £950.

50 PARTNERSHIP in increasing Ear, Nose and Throat Practice in provincial town. Partner must hold F.R.C.S.

51 MIDDLESEX—FOURTH PARTNER required in Practice over £7,600 p.a. in residential district on the Thames. Panel 1,600. House (5 bedroom) to rent. Scope. Premium 6/8ths share £1,100.

52 LONDON N.W.—PARTNERSHIP in Practice averaging about £5,200 p.a. Panel about 6,000. Maisonette (2 bedrooms etc.) to rent. One-fifth share at first at two years purchase.

53 N.E. COAST—Middle and better working class PRACTICE over £1,150 p.a. in seaport town. No panel. Private residence for sale. Premium £750 to include furnishings etc. of consulting rooms or near offer.

54 LONDON W.9—PRACTICE doing between £900-£950 p.a. in residential district. Panel about 60, but plenty of scope. Rent of maisonette (4 bedrooms) £200 p.a. Premium £1,000 or offer.

55 LONDON N.W.4—Middle class PRACTICE about £900 p.a. in developing part. Panel 700. House (3 bedrooms) for sale or rent. Scope. Premium £1,250.

56 HOME COUNTY—FOURTH PARTNER required in Practice in growing town. Panel 1,000. Incoming partner must be energetic aged about 30 (married preferred) with a leaning towards medicine. Initial share about £1,250 p.a. Premium £1,000. Preliminary Assistantship.

57 CORNISH COAST—PARTNERSHIP in non dispensing Practice nearly £3,000 in favourite resort. Panel 1,200. House obtainable. One-third share at two years purchase. Good anaesthetist required. Short Assistantship.

58 S.W. OF ENGLAND—Non dispensing PRACTICE averaging £1,166 p.a. in favourite watering place. Small panel. Semi-detached house for sale or rent. Good hospital. *Premium £2,500.*

COLONIES—Number of Colonial PRACTICES. Incomes range from about £700 p.a. upwards.

Purchasers can raise additional capital for the purchase of approved practices or shares. Particulars will be forwarded on application.

All communications to be addressed to The Manager

Manager W. M. SCOBIE. **SCOTTISH BRANCH 21, Alva Street, Edinburgh, 2** Telephone Edinburgh 23969

FOR DISPOSAL.

A. S. OF SCOTLAND—Country PRACTICE in lovely district. Receipts approximately £1,000. Panel 760. Exceptionally convenient house. Price £2,000. Premium for practice one and a half years purchase.

B. SCOTLAND—Old-established City PRACTICE. Receipts approximately £2,500. Panel 2,500. House price £900. Premium two years purchase or near offer.

C. YORKSHIRE—Country PRACTICE. Receipts £1,200. Panel 500. Excellent house with garage. Price £1,200 freehold. Premium one and three quarter years purchase.

D. E. OF SCOTLAND—Country town. Receipts last year £685 (appointments £112, panel £573). Excellent house with garage and garden. Price £1,450. Premium £1,000.

E. N. OF SCOTLAND—Country PRACTICE. Long established. Receipts approximately £1,000. Panel 275.

F. WALES—PARTNERSHIP in country town. Receipts £1,200. Panel over 1,000. Suitable house. Price £800. One half share at one year's purchase.

G. EDINBURGH—PRACTICE doing £450. House must be bought. Premium practice and house £1,650.

For further details apply The Manager 21 Alva Street Edinburgh.

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager to whom all communications should be addressed.

RELIABLE LOCUMS and ASSISTANTS are URGENTLY REQUIRED by ALL OFFICES of the BUREAU.

INDEX TO ADVERTISEMENTS

PUBLISHERS
British Medical Association 4
Churchill J & A Ltd 2
Lewis H K & Co Ltd 2
Livingstone E & S 2
Nelson Hassing Supp i
Saunders W B Co Ltd 3

ASSURANCE & INSURANCE
Century Insurance Co 43
Medical Defence Union Ltd Supp i

BANKS & FINANCE
British Medical Finance Ltd 22
Century Insurance Co 43

CHEMISTS
Benger's Food Ltd 14
Boots Pure Drug Co Ltd 9
Burroughs Wellcome & Co 19
Christy Thos & Co Ltd Supp ii
Coates & Cooper Ltd 10
Denver Chemical Co 18
Dinneford & Co Ltd 14
Eli Lilly & Co Ltd 17
Genatosan Ltd 15
Glaxo Laboratories Ltd 20
Hewlett C J & Son Ltd 11
Iron Jelloid Co Ltd 48
Kaylene Ltd 16
Martindale W 12
Oppenheimer Son & Co Ltd 16
Parke Davis & Co 20
Peat Products Ltd 10
Phil Sano Ltd 4
Prentif Ltd 8

FOODS, BEVERAGES
Allen & Hanburys Ltd Cover iv
Crookes Laboratories Ltd Supp iv
Hovis Ltd 11
Husband J K & Co Ltd 1
Ingram & Royle Ltd 13
Lactagol Ltd 11
Libby McNeill & Libby Ltd 1
Lolley & Co Ltd 22
Sumner's Typhoo Tea Ltd Supp ii
Valentine's Meat Juice Co Cover ii
Wander A Ltd 12

MOTORS & ACCESSORIES
Henlys 21
Lodge Plugs Ltd 22

NAME PLATES etc
Crooke's Ltd 22
Hill J B & Co 2
Herd S J & A 22
Osborne E & Co Ltd 24
White Brown Co 24

PRINTING, TYPEWRITERS, etc
Taylor's Typewriters 24

SURGICAL APPARATUS
Curtis H L & Son Ltd 8
Everett S & R J & Co Ltd 4
Fleming A & Co 24
Hilliard 2
Salt & Son Ltd Supp iii
Spencer Corsets Ltd 7

TAILORING & CLOTHING, etc
Regent Dress Co 22

TOBACCO & CIGARETTES
Player's No 3 5
Wills's Capstan 23

VACCINES, SERA etc
British Drug Houses Ltd 13
Evans Sons Lescher & Webb Ltd 10

X RAYS & ELECTRO MEDICAL
Gowlands Ltd 22
Portable X Rays Ltd 2
Watson X Ray Corporation Ltd 23

HOMES & INSTITUTIONS
Pages 24 25 26 27

HOUSE AGENTS
Page 42

HOSPITALS & CLINICS
London Clinic 27
Ruthin Castle 25

SANATORIA
Cornish Riviera Sanatorium 28
Cotswold Sanatorium 28
Holloway Sanatorium 28
Montana Hall 29
Mundesley Sanatorium 28

SPAS, HEALTH RESORTS, & HYDROS
Harrogate 3
Ilkley Wells 31
Llandrindod Spa 3
Smedley's Hydro 4

MEDICAL SCHOOLS TUTORS, & LECTURERS
Pages 29 30 31

NURSING, etc
Page 4

TRANSFER AGENTS
Bland Medical Agency Ltd 45
British Medical Bureau 45 & 47
Lee & Martin Ltd 44
Medical Agency Ltd 44
Pollock & Hadley Ltd 44
Turner Percival Ltd 44
Western Medical Agency 44

CONTRACT PRACTICE
Page 33

HOSPITAL VACANCIES etc
Pages 31 32 33 34 35 36 37 38 39 40 41

CLASSIFIED ADVERTISEMENTS—(Wanted and Vacant)
Pages 40 41

GENERAL
British Oxygen Co Ltd 6
Chartered Society of Massage 31
Furniture & Fine Art Depos 34

Modern Iron Therapy

Iron Jelloids are an elegant and reliable means of administering the protocarbonate of iron. The preparation has none of the disadvantages of Pil Blaud. The iron content remains fresh and unoxidized indefinitely and injury to teeth is avoided.

The Jelloids are highly effective in the treatment of achlorhydric anæmia and indeed in all the simple anæmias in which massive iron therapy is indicated.

Iron Jelloids

You are cordially invited to apply for samples for clinical test

The Iron Jelloid Company Ltd. King George's Avenue Watford Herts

by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Eyre and Spottiswoode East Harding St Fleet St London E C 4 Printed in Great Britain Entered as Second Class at New York U S A Post Office

BOVRIL MEDICAL AGENCY, LTD.

ALDINE HOUSE

10-13 BEDFORD STREET, STRAND LONDON W.C.2

Telegrams BOVMEDICAL, ESQUARE, LONDON Telephone TEMPLE BAR 1616 (3 Lines)

Chairman and Managing Director Dr J. CLIFFORD HALL

The maximum commission payable on the sale of any Practice or Partnership in Great Britain placed exclusively in the hands of this Agency is £50 (fifty pounds) which sum covers goodwill drugs surgery fittings fixtures and furniture instruments and book debts but not house property. Schedule of Terms will be forwarded on application

Accountancy and legal services furnished by the Agency where desired at moderate inclusive charges. No charge is made to Principals for the introduction of Locum Tenens or Assistants

1 SUSSEX.—PARTNERSHIP.—A half share in old-established good-class Practice producing over £3,000 p.a. Panel of about 1,500 and variety of appointments producing about £600 p.a. Good house with ample accommodation. Large garden. Freehold for sale. Good class and social following. Premium 2 years purchase. Incoming partner should be experienced and have knowledge of anaesthetics.

2 HANTS.—FAVOURITE TOWN.—Well-established PRACTICE producing between £900 and £1,000 p.a. including panel of over 1,000. Excellent freehold house with 5 to 6 bedrooms, etc., easily worked. On rental or can be bought. Premium 1 years purchase or near offer.

ESSEX COAST.—PARTNERSHIP.—A third partner is required in old-established Practice producing over £4,000 p.a. Suitable house with 3 reception and 4 bedrooms, etc., on rental. Premium 2 years purchase. Incoming partner should be well qualified experienced between 30 and 40 and preferably married.

3 NORTH WEST LONDON.—PARTNERSHIP.—One-fifth share (with increase later) in well-established Practice producing about £5,200 p.a. including panel of about 1,600. Suitable maisonette with 2 reception and 3 bedrooms, etc. Inclusive rental £90 p.a. Premium 2 years purchase.

4 DURHAM COUNTY.—Old-established industrial PRACTICE present income £2,000 p.a., of which only about £450 is earned from private work. Panel of over 2,100 units. Practice has been held by the present owner for about 20 years. Premium £4,000 to include book debts, drugs, surgery furniture, etc. (part by arrangement) or £3,600 cash down.

5 COAST TOWN WITHIN 80 MILES OF LONDON.—Well-established PRACTICE producing about £1,600 p.a., of which about £1,100 p.a. is derived from panel of approximately 1,100 patients. PMS, etc. Good freehold house available. Thoroughly modernized and redecorated central heating. Ample accommodation garden garage. Rent £150. Premium 2 years purchase. Suit pair of assistants who can do surgery.

6 CITY LOCK UP.—Old-established PRACTICE producing about £1,400 p.a. gross or approximately £700 p.a. net. Fees 10/6 and 21/-. Good deal of electro-therapeutic work. Premium £1,400 with furniture and equipment or at valuation. Hours: Monday to Friday 9 to 10, 10 to 5.

7 WEST END.—Opportunity for physician desirous of entering West End PRACTICE. MODERN premises and decorations essential. Full details on personal application.

8 EAST LONDON.—Well-established PRACTICE producing about £1,550 p.a. (with about £750 p.a. derived from panel of about 1,300 patients P.M.S. and Public Assistance work). Large proportion of cash. Premium 2 years purchase.

9 SOUTH DEVON.—PARTNERSHIP.—A third partner (after preliminary assistantship) is required in old-established mixed-class Practice. Share to produce £800 p.a. Suitable house available with ample accommodation. Rent £90 p.a. Premium 2 years purchase. Salary during preliminary assistantship at rate of £600 p.a.

10 COUNTY TOWN WITHIN 120 MILES WEST OF LONDON.—PARTNERSHIP.—A HALF SHARE in old-established good mixed-class Practice producing approximately £2,500 p.a., including large panel. Fees 2/6 to 15/-. Low expenses. Purchaser can choose his own house as Practice is two miles from central surgery. Premium 1½ years purchase. Incoming partner should be experienced and under 40.

11 SURREY.—WITHIN 15 MILES OF LONDON.—PARTNERSHIP.—ONE HALF SHARE in very good mixed-class Practice situated in growing residential district. Gross cash receipts approximately £3,000 p.a., with substantial panel. Very nice house with all modern conveniences and beautiful garden (2 reception, 4 bedrooms, etc.) Can be rented or purchased. Premium 2 years purchase. Ingoing partner must be experienced in surgery.

12 LONDON, S.W.—Old-established mixed-class PRACTICE producing for last 12 months £7,000 including panel of 1,450. Flat can be rented at £78 p.a. Premium £1,250.

13 LONDON, EAST.—Middle and working-class PRACTICE producing over £500 p.a. with good scope. Panel of about 750. Fees from 2/- Ten roomed corner house. Price for lease £550. Premium £800 to include drugs, surgery fittings, etc., and some furniture.

14 DEVON COAST.—POPULAR HOLIDAY RESORT.—Old-established non-dispensing PRACTICE averaging for past 3 years £1,640 p.a., including panel of 1,400. Suitable house with ample accommodation. Freehold £1,700 or would rent. Premium £1,800.

15 NORTH WELSH COAST.—Good middle-class non-panel PRACTICE average about £900 p.a. with good scope. Detached house overlooking beautiful bay with ample accommodation. Sport of all kinds. Good schools. Premium 2 years purchase. Ill-health reason for sale.

16 WEST MIDLANDS.—PARTNERSHIP with succession in 2 or 3 years. Mixed-class Practice in attractive county town in prosperous surrounding. Average receipts for last 3 years £1,850 p.a. Panel of about 850. On succession ideal house available 3 reception, large lounge hall, billiard room, 5 bedrooms, etc., excellent Practice accommodation and garden, etc. Premium for half share £1,650.

17 BEDS.—PARTNERSHIP.—ONE THIRD SHARE in well-established mixed-class Practice producing £1,675 p.a. Panel of 760. Suitable house easily obtainable. Premium £1,000. Definite scope.

18 WELSH COAST.—Well-established good mixed PRACTICE producing over £2,000 p.a. including panel of 1,450. Suitable house with ample accommodation, good garden and garage. Rent £70 p.a. Premium £3,000 for quick sale.

19 SURREY.—RAPIDLY EXPANDING DISTRICT.—PRACTICE at present produces about £700 p.a. but could be much increased. Panel of 350 (discouraged). No midwifery. Excellent house with all modern conveniences. Premium for Practice and house £3,000.

20 MIDLANDS.—GOOD RESIDENTIAL COUNTRY DISTRICT.—Compact PRACTICE producing £770 p.a., with good prospects. Choice of 2 houses. Moderate premium. Ill-health reason for sale.

21 S.W. ENGLAND.—FAVOURITE COAST TOWN.—HALF SHARE after preliminary assistantship in chiefly better-class Practice producing nearly £2,000 p.a. Small panel. Choice of residence. Must be experienced and of unexceptionable knowledge of L.N.T. Premium 2 years purchase, part by arrangement.

22 LONDON, S.E.—Well-established PRACTICE, chiefly cash. Receipts average about £1,030 p.a. with panel and club producing over £400 p.a. Can be run as a locum. Suitable premises available. Premium 2 years purchase.

23 LONDON, S.W.—RESIDENTIAL DISTRICT.—Good middle-class PRACTICE producing about £1,400 p.a. including panel of 500 patients and appointment worth about £200. House on rental. Good scope for energetic worker. Premium 2 years purchase or near offer.

24 SURREY.—Well-established increasing PRACTICE situated in developing residential district. Gross cash receipts for last 12 months about £900 including panel of about 500. Small compact freehold house. Price £800 part on mortgage or would rent at £45 p.a. Premium £1,200. Ample scope for energetic worker.

25 GROWING RESIDENTIAL DISTRICT WITHIN 10 MILES OF LONDON.—Recently established upper and middle-class PRACTICE producing about £700 p.a. with definite scope for increase. Selected panel of 72. Fees 5/- upwards. Prominent corner house with 2 reception, 5 bedrooms. Separate entrance to Professional rooms. Well-laid-out garden. House on rental. Premium £1 years purchase.

27 LONDON, S.W.—WITHIN EASY REACH OF CITY AND WEST END.—Well-established chiefly middle and better-class PRACTICE with substantial scope producing about £1,400 p.a. Selected panel of 450. Fees 5/- and 7/6. Good-sized first floor flat with all conveniences. Purchaser should be able to assist surgery and F.R.C.S. would be advantageous.

28 LONDON, W.C.—Well-established PRACTICE producing nearly £1,000 p.a. Average £1,460. Panel over 1,660. Suitable accommodation available and surgery premises used as locum on rental. Premium 2 years purchase.

29 LONDON.—WESTERN DISTRICT.—Old-established profitable panel PRACTICE producing about £800 p.a. Considerable opportunity for expansion, especially if panel work and midwifery undertaken. Well situated corner house on main road. [illegible] suitable for a doctor and wife as [illegible]

30 [illegible] established PRACTICE producing last year over £1,400 p.a., including about £400 from panel. Fees 5/- upwards. Midwifery usually 5 guineas, about 12 cases per annum. Suitable house available. Premium 1 years purchase or would take £200 cash for quick sale.

31 [illegible] established PRACTICE producing last year over £1,400 p.a., including about £400 from panel. Fees 5/- upwards. Midwifery usually 5 guineas, about 12 cases per annum. Suitable house available. Premium 1 years purchase or would take £200 cash for quick sale.

32 KENT COAST.—FAVOURITE SEASIDE RESORT.—Old-established middle-class PRACTICE producing about £670 p.a. Small panel of 203 patients. Very good house in best end of the town with ample accommodation. Freehold available. Premium £1,200. Eminently suitable for retired army officer wishing to augment pension or there is scope for young man.

33 SUSSEX.—FAVOURITE COAST TOWN.—Old-established PRACTICE producing about £700 p.a., including panel. Cash brings in about £100 p.a. Good house on two floors, 2 reception, 4 bedrooms etc. Freehold to sell. Premium 2 years purchase.

34 SOUTH COAST SEAPORT.—PARTNERSHIP.—ONE THIRD SHARE available in old-established and rapidly increasing Practice, which last year produced approximately £3,350 including a panel of over 1,600 patients. Purchaser can choose his own residence. Practice is conducted from central surgery and the expenses are not high.

35 LADY DOCTORS PRACTICES.—Several available. Full details on application.

36 NORTHANTS.—ASSISTANTSHIP with view to Partnership in an old-established country Practice with good future prospects. Initial salary £500 p.a. including car allowance. The assistant to live out. Full details on application.

37 MIDLANDS.—FAVOURITE COUNTY TOWN.—SURGICAL OPENING.—A QUARTER SHARE (after preliminary assistantship of 3 months) is offered in old-established increasing Practice producing approximately £3,900 p.a. Panel of about 2,900. One appointment worth about £125 p.a. Fees 5/- to 30/-. No dispensing. Suitable house with garden and garage. Rent £65 p.a. Premium 2 years purchase part by arrangement. Incoming partner should be under 35, experienced, and able to do some surgery.

38 SOUTH OF ENGLAND.—COAST TOWN.—PARTNERSHIP.—A HALF SHARE in good mixed-class Practice established over 100 years, averaging approximately £3,000 p.a., with substantial panel. Appointments worth about £300 p.a. Suitable house on rental at £100 p.a. Premium 2 years purchase.

39 MIDDLESEX.—PARTNERSHIP.—ONE HALF SHARE in increasing Practice producing approximately £2,000 p.a. Panel of 600 and increasing. House with 2 reception, 3 bedrooms, etc. Rent £100 p.a. Premium 2 years purchase.

40 LONDON, S.E.—Old-established chiefly middle-class PRACTICE producing for last 12 months £1,250 p.a. Panel of 650. Suitable house on rental. Premium 2 years purchase or near offer.

41 SOUTH AFRICA.—PARTNERSHIP.—Good surgical opening. Present receipts about £2,000 p.a., with ample scope for extension with a good suitable partner. Full details on application.

42 SOUTH WELSH COAST.—PARTNERSHIP.—ONE HALF SHARE in old-established middle and working-class Practice producing over £1,000 p.a. Panel of 2,500. Good house with ample accommodation. Large garden. Freehold for sale. Premium £3,500 part by arrangement.

43 ESSEX.—ATTRACTIVE COUNTRY DISTRICT.—PARTNERSHIP.—ONE HALF SHARE of old-established mixed-class Practice producing approximately £1,200 p.a., with good scope. Panel brings in about £700 p.a. Good house with 3 bedrooms, etc. Rent £40 p.a. Very reasonable premium for quick sale.

The Agency has made arrangements for special facilities, on very favourable terms, to be afforded to approved purchasers for the advance of part of the premium for any suitable practice or partnership. Full details on application.



Simplify the Technique of Infant Feeding by using

Allenburys Progressive System

ALLENBURYS SYSTEM EMBODIES THE FOLLOWING ADVANCES IN THE SCIENCE OF INFANT FEEDING

(1) **Humanised Casein lactalbumen ratio**
(2) **Intimate incorporation of Dextrin-Maltose**, the benign starch-free mixture of non fermenting carbohydrates
(3) **Homogenised Cream** in reconstituted Milk Foods
(4) **Prophylaxis of Scurvy** Every tin of Allenburys Foods bears and has borne in the past explicit instructions for daily administration of vitamin C
(5) **Prophylaxis of Rickets** Calcium Phosphorus ratio adjusted 560 units of vitamin D per quart reconstituted **Independent biological assay of antirachitic potency**
(6) **Prophylaxis of Anæmia** The reconstituted foods contain 4 parts per million of available iron

Allenburys System provides every known Nutritional Requirement of the Infant
It enables the physician to replace unreliable home-made milk mixtures with readily prepared infant foods which eliminate the risk of enteral infection and provide easily digested scientifically balanced meals for babies at every stage in their development

ALLENBURYS Humanised MILK FOOD No. 1 (Entirely Free from Starch)

The best first artificial food because it resembles breast milk closely in composition and in the ease with which it is digested

Composition when reconstituted by dilution (1 6) with water as instructed on tins

Fat	Casein	Lactalbumen	Lactose	Dextrin Maltose	Ca as CaO	P as P O	Fe parts per million	Vitamin D per fl oz not less than 14 units
3 1%	1%	0 7%	7 3%	3 3	0 09%	0 16	4	

This food is intended for use from birth to 3 months, or for longer periods in dyspeptic infants, who tolerate it readily

ALLENBURYS Humanised MILK FOOD No. 2 (Entirely Free from Starch)

Milk Food No 2 is prepared in exactly the same way as No 1 and retains its general features It is intended for use during the second trimester when digestion is established and it **contains a higher proportion of milk protein and correspondingly less carbohydrate** The mineral content is adequate in respect of calcium, phosphorus and iron and each fluid ounce of reconstituted food contains not less than 14 international units of vitamin D

ALLENBURYS MALTED FOOD No. 3 (The First Step to Weaning)

This food introduces partially converted starch at the seventh month It has a mineral and vitamin content equal to No 1 and No 2 and it is intended for use in conjunction with the broader dietary now recommended for the second six months of infancy

Malted Food No 3 prepared for use with cows milk and water has this composition

Protein	Fat	Carbohydrate	Ca as CaO	P as P O	Fe parts per million	Vitamin D per fl oz not less than 14 units
2 8%	2 2%	9 7%	0 14%	0 13%	4	

ALLEN & HANBURYS LTD LONDON E 2

BRITISH MEDICAL JOURNAL

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION

SATURDAY AUGUST 20 1938

PRINCIPAL CONTENTS

Rheumatoid Arthritis	p 387	Leading Articles	p 409
Orthopaedics in Rheumatoid Arthritis	391	Correspondence	422
Effect of Jaundice on Rheumatoid Arthritis	394	Surgery in General Practice Tenosynovitis and Ganglion	415
Sulphanilamide in Erysipelas	399	Reviews	405
Perforated Peptic Ulcer Late Results of Operation	403	Epidemiology Section	434
		International Health	418
		A Strict Vegetarian Diet	417

WITH SUPPLEMENT AND EPITOME

LONDON

BRITISH MEDICAL ASSOCIATION

TAVISTOCK SQUARE

No 4050, WEEKLY PRICE 1/3

Copyright

REGISTERED AS A NEWSPAPER

SALTAIR SURGICAL SERVICE

Guarantee

"We guarantee to alter exchange or accept the return of any appliance without cost and not by the Medical Profession if not found Suitable within fourteen days from date of supply"

Salt and Son Ltd

Saltair
ELASTIC PLASTER BANDAGES

for chronic ulceration of the leg, and other conditions

Chronic ulceration of the leg can be most successfully treated with SALTAIR ELASTIC PLASTER BANDAGES Made from a specially woven selvedge material, uniformly impregnated with an antiseptic zinc oxide paste The bandages are self-adhesive and highly elastic, so that they provide an even surface dressing that will not crease or slip An attractive characteristic of this ambulatory treatment is that it allows of full activity of the limbs SALTAIR ELASTIC PLASTER BANDAGES can also be used for abdominal support after operation, as a strapping for breast in mastitis, or as a dressing for minor injuries, boils, etc

SAMPLE 3 in BANDAGE SENT POST FREE FOR 2'- ON REQUEST

SURGICAL SERVICE SALTAIR

SALT & SON LTD BIRMINGHAM 2

BRITISH MEDICAL JOURNAL

AUGUST 20 1938

TABLE OF CONTENTS

ADDRESSES AND PAPERS

Rheumatoid Arthritis WILFRID EDGECOMBE M.D. F.R.C.P. 387

Orthopaedics in Rheumatoid Arthritis NORMAN CAPENER F.R.C.S. 391

Effect of Spontaneous Jaundice on Rheumatoid (Atrophic) Arthritis PHILIP S. HENCH M.D. 94

Sulphamido-chrysoidine Sulphanilamide and Benzylsulphanilamide in Erysipelas W. R. SNODGRASS M.D., T. ANDERSON M.B., and J. L. RENNIE M.B. 399

Late Results of Surgical Treatment in Perforated Peptic Ulcer J. VERNEY CABLE M.D., M.R.C.P. 403

A Strict Vegetarian Diet Sir LEONARD HILL, M.B., F.R.S. 417

SURGICAL SERIES

Tenosynovitis and Ganglion E. PEARCE GOULD F.R.C.S. 415

CLINICAL MEMORANDA

Recovery from Haemolytic Streptococcal Septicaemia in Patient with Diabetes J. H. DEREK MILLAR M.B., Ch.B. 404

REVIEWS

Encyclopaedia of Medical Practice 405
Responsibility under Supervision 406
Urological Practice 406
Veterinary Parasitology 407
Anaglyphs for Squinters 407
Analysis of Dreams 407
Notes on Books 407

GENERAL ARTICLES AND NEWS

International Health Measures Permanent Committee's Survey 418

Jubilee of International Congress of Physiologists 419

Nova et Vetera
The 1613 Printing of Johannes Rümelin's Catoptron 423

ROCKEFELLER TRAVELLING FELLOWSHIPS 419

PREPARATIONS AND APPLIANCES 408

UNIVERSITIES AND COLLEGES 428

MEDICAL NEWS 433

LEADING ARTICLES

Health Insurance in Australia 409

Greater Vision 410

ANNOTATIONS

Jaundice and Arthritis 411
Silicosis and Pulmonary Carcinoma 411
Adrenaline in Angina Pectoris 412
Demonstration of Tubercle Bacilli in the Sputum 413
The Teaching of Medicine 413
Limitation of Opium Production 414
Medical Postgraduate Study 414

SUPPLEMENT

Report of Insurance Acts Committee

Future of the Hospital System By R. H. P. ORDE B.A.

NATIONAL HEALTH INSURANCE IN WALES
REGISTRATION OF FOREIGN MEDICAL GRADUATES IN NEW SOUTH WALES
PUBLIC HEALTH NOTES
INSURANCE MEDICAL SERVICE
COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO
CORRESPONDENCE
POSTGRADUATE NEWS
NAVAL, MILITARY AND AIR FORCE APPOINTMENTS
Association Notices Vacancies and Appointments Diary

LOCAL NEWS

SCOTLAND—
Health of Edinburgh 420
Montessori Congress 420
Edinburgh Foot Clinic 420

ENGLAND AND WALES—
Welsh Board of Health's Report 420
Bristol Health Services 421

THE SERVICES

Honorary Physician to the King 428
Award of Military Cross 428
Prophylactic Anti-tetanic Inoculation 428
Deaths in the Services 428

EPIDEMIOLOGY SECTION

EPIDEMIOLOGICAL NOTES 434
TABLE OF INFECTIOUS DISEASES AND VITAL STATISTICS 435

CORRESPONDENCE

Pelvic Measurements J. M. MUNRO KERR M.D. 422
Trial Labour: The Plastic Head NORMAN REECE F.R.C.S. 422
Quinsy and its Treatment W. KENT HUGHES F.R.C.S. 423
Steinach II Operation for Prostatic Enlargement KENNETH WALKER F.R.C.S. 423
Subvesical Diathermy Prostatectomy R. OGIER WARD F.R.C.S. 423
Undescended Testicle R. C. BROCK F.R.C.S. 423
Sulphonamide in Gonorrhoea G. L. M. MCELLIGOTT M.R.C.S. and A. J. COKKINIS F.R.C.S. 424
Lavage for Gonorrhoea ALISTAIR FRENCH M.R.C.S. 424
Mental Factors in Medicine F. DILLON M.D. 424
Maternal Mortality and Medical Education Sir E. GRAHAM-LITTLE M.D., M.P. 425
Abdominal Pregnancy E. W. HAYWARD F.R.C.S.Ed. 426
Small-pox and Vaccination FRED H. JUDD M.B. 426
Purpura from Sedormid H. IVOR BALFOUR M.B. 426
Abortion and the Law ALLAN H. BRIGGS M.B. 427
Hygiene of Sea Bathing K. R. COLLIS HALLOWES M.B. 427
London Emergency Bed Service P. G. S. KENNEDY M.B. 428

MEDICO-LEGAL

A Nurse is a Workman 429

OBITUARY

Sir Colin Mackenzie, F.R.C.S.Ed. (With Portrait) 429
C. A. H. Gee M.B. 431
G. N. Alexis L.R.C.P.Ed. 431
L. W. La Chard L.M.S.S.A. 431
A. Gelsthorpe Osborn M.B. 431
Alexander Shearer M.B. 431
Arthur S. Barling M.R.C.S. 432
Ethel Rosaline Griffiths M.B. 432
E. J. Maxwell M.B. 432

LETTERS AND ANSWERS

Hypertrichosis 436
Typhoid Mary 436
Income Tax 436
Thomas Annandale 436
Sensitiveness to Bee Stings and Ant Bites 436
Fountain Pen Found 436

A KEY TO CURRENT MEDICAL LITERATURE will be found at the end of the JOURNAL

H. K. LEWIS & Co. Ltd., Publishers and Booksellers



BOOKSELLING DEPARTMENT } TEXTBOOKS and Works in Medical, Surgical and General Science **FOREIGN BOOKS**

BOOKS Advertised or Reviewed in this Journal supplied promptly from stock or to order

STATIONERY DEPARTMENT Special Stock of Medical Stationery Card Index Systems Filing Cabinets Name Plates etc Hand-painted Shields of the Arms of Universities Hospitals and Colleges All Students Requisites

MODELS DEPARTMENTS Anatomical Models Charts Osteology etc

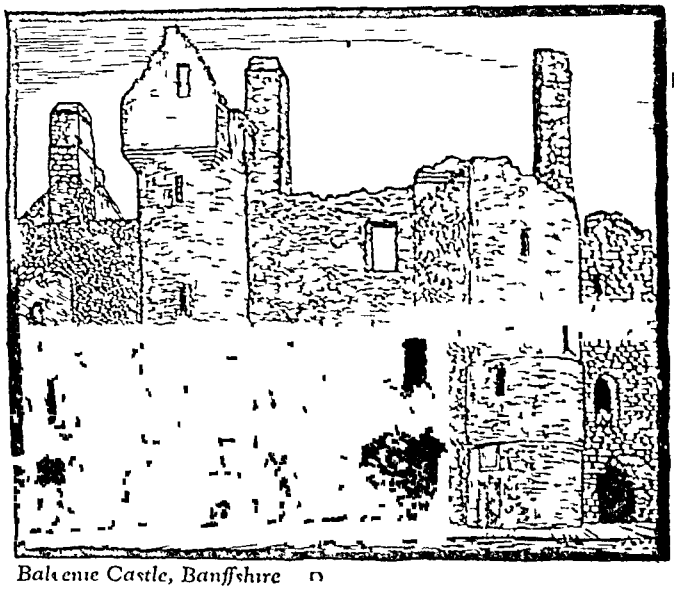
MEDICAL AND SCIENTIFIC LENDING LIBRARY.

Annual Subscription from One Guinea Prospectus on application

SECOND-HAND BOOKS DEPARTMENT, 140, GOWER ST, W.C.1

London H. K. LEWIS & Co. Ltd., 136, Gower Street, W.C.1

Telegrams PUBLICAVIT WESTCENT LONDON Telephone EUSton 4282 (5 lines)



Balcarres Castle, Banffshire

"There's no sweeter Tobacco comes from Virginia and no better brand than the 'Three Castles.'"
W. M. Thackeray— THE VIRGINIANS

10 FOR 8D
20 FOR 1/4
30 FOR 2/-
50 FOR 3/3
Handmade
20 FOR 1/6
Also obtainable in other packings

WILLS'S
THREE CASTLES
CIGARETTES

One expects to pay a little more for a cigarette of such excellent Quality

WRIGHT'S PUBLICATIONS

EMERGENCY SURGERY

By Hamilton Bailey F.R.C.S. (Eng.) Third Edition Fully Revised Large 8vo 852 pp With 816 Illustrations a large number of which are in colour 50s. net postage 8d.

Forms a reliable guide and the author merits praise for the high standard which is consistently maintained —Lancet

DEMONSTRATIONS OF PHYSICAL SIGNS IN CLINICAL SURGERY.

By Hamilton Bailey F.R.C.S. (Eng.) Sixth Edition Fully Revised 296 pp With 358 Illustrations some of which are in colour 21s. net postage 6d.

It fully maintains the very high standard of its predecessors —British Journal of Surgery

ANÆSTHESIA AND ANALGESIA FOR NURSES AND MIDWIVES

By J. K. Watson M.D. (Ed.) Recently Published Crown 8vo 135 pp 19 Illustrations 3/6d. net, postage 3d.

We consider that medical practitioners and dental surgeons will welcome it —Medical World

SYNOPSIS OF PHYSIOLOGY.

By A. Kendit Short M.D., B.Sc. and C. J. G. Pratt M.Sc., M.D. Third Edition Fully Revised 325 pp Illustrated 10s. 6d. net postage 9d. Interleaved for Notes 17/6d. net postage 6d.

There could be no better form of revision than reading through this book —Lancet

Bristol JOHN WRIGHT & SONS LTD London SIMPKIN MARSHALL LTD

SAUNDERS' BOOKS

ALL NEW and of REAL HELP in PRACTICE

PRACTICE OF UROLOGY

By LLOYD HERMAN PS MD Professor of Urology University of Pennsylvania Graduate School of Medicine Octavo of 925 pages with 756 Illustrations on 504 Figures Cloth **45s** net

In Dr Herman's book we can apply as few text books do most those facts about urinary affections which the medical adviser of a patient should be possessed The subject matter is skilfully arranged and the text is well illustrated
—THE LANCET

SURGICAL DISEASES OF MOUTH AND JAWS

By EMIL CALVIN PADGETT PS MD FACS Associate Professor of Clinical Surgery University of Kansas Octavo of 807 pages 354 Illustrations Cloth **45s** net

We have nothing but praise for this work as a whole It is easily read the type being clear and the text divided into well indicated sections but hundreds and photographs amply illustrate it This is a valuable work
—BRITISH MEDICAL JOURNAL

TEXTBOOK OF OPHTHALMOLOGY

By SANFORD R GIFFORD MA MD FACS Professor of Ophthalmology Northwestern University Medical School 492 pages 249 Illustrations 11 in Colours Cloth **18s** net

This textbook gives an admirable survey of the essentials of ophthalmology for the student and practitioner Its descriptive matter is concise and easy to read —THE LANCET

THE CEREBROSPINAL FLUID

By H HOUSTON MERRITT MD and FRANK FREMONT SMITH MD of Harvard With Foreword by JAMES B AYER MD Octavo 353 pages Illustrated Cloth **22s 6d** net

The book has practical value as a clear statement of the changes in the fluid which may be expected in every form of disease in which it is affected —THE LANCET

THE BUSINESS SIDE OF MEDICAL PRACTICE

By THEODORE WIPRUD Executive Secretary of the Medical Society of Milwaukee County Lecturer in Medical Economics at Marquette University 177 pages Cloth **12s** net

We have rarely read a book that is so compact a volume such a compendium of valuable information What is more - know of no other book written in English that even approaches Mr Wiprud's book in usefulness
—SOUTH AFRICAN MEDICAL JOURNAL

TEXTBOOK OF MEDICINE

Edited by RUSSELL L CECIL MD Professor of Clinical Medicine Cornell University Octavo 1614 pages Illustrated New (4th) Edition Cloth, **40s** net

This book should make a strong appeal not only to the practitioner who wants a reference volume to cover the whole realm of medicine but also to the student who will find in it all that he requires for his pass examinations and also for higher degrees —MEDICAL PRESS AND CIRCULAR

THE LARYNX AND ITS DISEASES

By CHEVALIER JACKSON MD ScD LLD FACS and CHEVALIER L JACKSON AB MD, MSc (Med) FACS 555 pages 221 Illustrations 11 Plates in Colour Cloth **35s** net

From the accepted masters of bronchoscopy and oesophagoscopy one expects a really interesting book on the larynx nor are we disappointed The book is in every sense complete it deals with everyday laryngeal troubles and at great length with all the rarer conditions —IRISH JOURNAL OF MEDICAL SCIENCE

W B SAUNDERS COMPANY, Ltd, 7, Grape Street, London, W.C 2

THROMBIN-COAGULANT-MAW DRESSINGS HAVE PROVED THEIR EFFICIENCY!

In the short time they have been on the market Maw's T C M Dressings have achieved remarkable success Members of the profession who have used them have been impressed by the rapidity with which coagulation is achieved and numerous instances are recorded of severe haemorrhage being checked almost instantly T C M Dressings are treated with Thrombin-Coagulant-Maw, a preparation of natural Thrombin which accelerates blood coagulation and causes clotting within 5-15 seconds They are supplied sterile in sealed drums ready for immediate use and the series consists of Gauze Lint Squares suitable for most purposes Special T C M Dressings can be supplied when required



They cost only a trifle more than ordinary Dressings and are well worth the extra charge We ask you to give them a fair trial, for we are confident that you will be satisfied with the results

A Product of the Maw Laboratories

Full details and technical information on request

S MAW, SON & SONS, LTD, 7/12, ALDERSGATE ST, LONDON, EC1

£2,733 for £191

The above is one of many examples of the supreme value of

PERMANENT SICKNESS INSURANCE

The member paid £191 in premiums and drew £2,733 in benefit over a period of 32 years

HAVE YOU A POLICY?

If not, write for booklet "B 30" to the Manager and Secretary,

THE MEDICAL SICKNESS, ANNUITY & LIFE ASSURANCE SOCIETY, LTD.

300, HIGH HOLBORN, LONDON, W.C 1

TELEPHONE HOLBORN 5722

The Hearing Aid Par Excellence

BŌNOCHORD

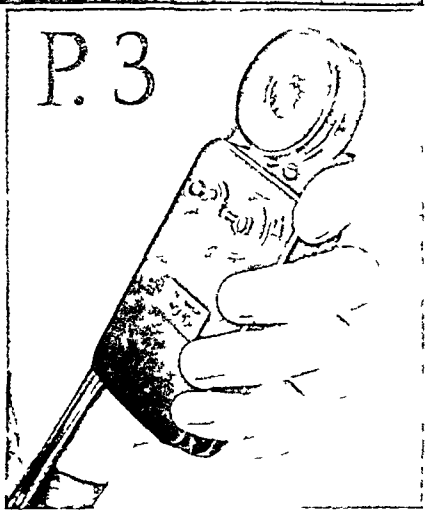
Vest Pocket Valve Amplifier

SMALL AS A MICROTELEPHONE YET WITH THE HIGHEST OUTPUT EVER OBTAINED FROM A POCKET VALVE DEAF AID

Since their introduction the main obstacle to the general use of valve amplified deaf aids has been their bulk and weight. Attempts have been made to produce them in a form suitable for wear on the person without inconvenience but in every case performance has been sacrificed to size, or the instrument has been unsightly for pocket use.

The BONOCHORD P3 is a 3 valve amplifier with *piezo* electric microphone which will fit *easily* into a waistcoat pocket with separate batteries. Special valves designed for us have made this possible together with the use of small components developed by our Research Department. In spite of its small size the aid has the amazingly high maximum output of 60 decibels. Let us send you full details of this new instrument which we believe will do much to establish the general use of valve aids.

P. 3



ALLEN & HANBURYS LTD, Acoustic Department **48 Wigmore Street, LONDON, W 1**

and at

LIVERPOOL
ALEXANDER & FOWLER
[illegible]

MANCHESTER
J. A. TILSLEY
[illegible]

BIRMINGHAM
L. CANNON
[illegible]

SHEFFIELD
[illegible]

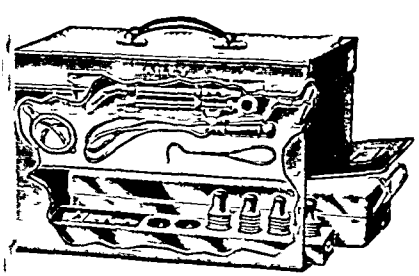
NEWCASTLE ON TYNE
BRADY & MARTIN LTD
[illegible]

EXETER
[illegible]

EDINBURGH
[illegible]

ABERDEEN
[illegible]

W. H. BAILEY & SON, LTD.



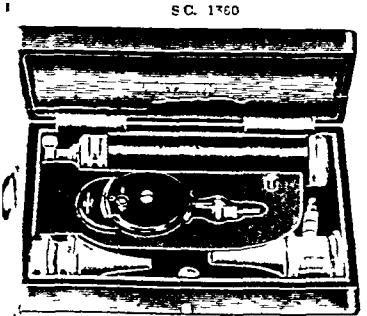
SG. 1360

SG 1360—Bailey's large size Surgeon's Midwifery Case made in best Cowhide fitted with Slide Tray to take six 1 oz bottles in metal cases and Chloroform Drop Bottle in separate compartment at side of Sterilizer. Size 17 × 10 × 7 £3 15 0

Ditto fitted with best nickel plated stamped out seamless 16 in Steriliser (with lamp and tray) £5 15 0

Cases fitted complete—Prices on application

MERCURIAL SPHYGMOMANOMETER



D 1067

BAILEY'S DIAGNOSTIC SETS

D 1067 MAYS OPHTHALMOSCOPE AND AURISCOPE, with 3 specula battery handle spare lamp in case £3 18 6

Spare Batteries D 1064 each 6d Spare Lamps each 4s

Post free United Kingdom India and Colonies 2/6 extra

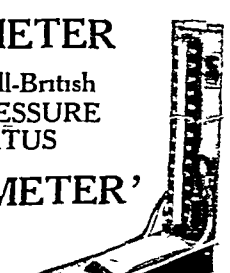
The latest All-British BLOOD PRESSURE APPARATUS

THE 'FRANCOMETER'

A Standard Instrument of high quality finish giving accurate readings

Light Cast Metal Case

Highly Recommended



PRICE £3 . 5 . 0

Surgical Instruments and Appliances
Hospital and Invalid Furniture

45, OXFORD STREET
2, RATHBONE PLACE
LONDON, W.1

Specially designed for use in the treatment of **Pneumonia, Bronchitis, Pleurisy** *and similar affections of the Chest and Lungs*

"Gamgee Tissue"

Made from the superfine grade of Gamgee" tissue, made exclusively by Robinsons of Chesterfield and reputed as the finest dressing for use in Thermal treatment Invented by and prepared exactly according to the direction of the late Sampson Gamgee FRSE, Consulting Surgeon to the Queen's Hospital, Birmingham Made in six sizes 9½d to 3/ Obtainable from all Chemists

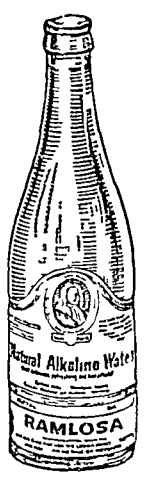
PNEUMONIA JACKET

SOLE PROPRIETORS & MANUFACTURERS ROBINSON & SONS LTD OF CHESTERFIELD & 168 OLD ST LONDON EC1

THE SWEDISH ALKALINE TABLE WATER

—a natural water of tonic properties, used extensively by athletes and invalids in Sweden

Supplied by Special Warrant to H.M. the King and H.R.H. the Crown Prince of Sweden and also to H.M. the King of Denmark



RAMLÖSA

50 YEARS' REPUTATION FOR MEDICINAL AND TABLE USE

This famous natural mineral water is bottled at the source and slightly aerated with pure Carbonic Acid The characteristics of "Ramlosa" are a relatively high Sodium Carbonate content in combination with an uncommonly low content of Calcium and Magnesium Salts (practically no lime) and a virtually complete absence of iron "Ramlosa," in consequence, avoids the fault of certain natural mineral waters which upset the digestion by partially neutralising the hydrochloric acid in the gastric juice "Ramlosa" considerably increases the amount of urine and is therefore indicated in the treatment of diabetes, gout, kidney troubles and other metabolic disorders, as well as in rheumatism and in conditions where a large supply of fluid is of importance as a mild form of initial physical therapy

ANALYSIS (per litre)

Sod Bicarb	53 gm	Pot Bicarb	0003 gm
Sod Chlor	041 gm	Potass Sulph	0003 gm
Mag Carb	0016 gm	Silicon Ox	006 gm
Protoxide of Iron	00001s gm		

SAMPLE BOTTLE FREE ON REQUEST

Supplied by the Army & Navy Stores Harrod Selfridges Harkers and the Trade generally

Retail prices (per dozen bottles)
Large 13/- Small 9/- Splits 7/-

Sole Wholesale Distributors
INGRAM & ROYLE LTD, 45, BELVEDERE ROAD, S E 1

Sole Agent in Gt Britain
COL. DRAGE, CRICCIETH

QUEEN *non-irritant* Toilet Preparations specially for prescription in Allergic cases

A COMPLETE range of toilet preparations entirely free from Orris in any of its forms or other irritants (B M J Medical World etc) A safe alternative to suspected cosmetics Through any Chemist or direct from —

BOUTALLS LTD., 150, Southampton Row London W C 1

ALUZYME

NON-AUTOLYSED YEAST

Professional samples descriptive matter and prices on request

ALUZYME PRODUCTS,
PARK ROYAL ROAD LONDON N W 10

TOTAL VITAMIN B ACTION

Aluzyme supplies *all* the members of the Vitamin B Complex in a fully active state The B Vitamins form a synergy, the separate factors of which accentuate or facilitate the action of the others (*Med Research Council's Special Report* 167) In all B deficiency conditions the best results may be anticipated from administration of the entire Complex which Aluzyme provides B_1 potency 1140 International Units per ounce Nuclein 0·4% Active response to tests for nicotinic acid flavin and glutathione Other indications anæmias, furunculosis many nervous and skin affections

THE ABSOLUTE COMFORT and security which the Deimel Underwear affords in the most trying climate is remarked upon by all its wearers Those whose powers of resistance have been weakened by wearing unsuitable underwear derive new strength from Deimel Mesh Garments which absorb and eliminate perspiration quickly and provide a dry climate about the body which enables the wearer to undergo extremes of heat and cold with comfort

Dr Deimel
"DEIMELIN"
Underwear
BRITISH MADE

DEIMEL FABRIC COMPANY, 99, NEW BOND ST, LONDON, W 1

BISMULAIT
(DUNCAN)

A uniform and palatable preparation of Bismuth, containing 5 grains of freshly precipitated Oxycarbonate of Bismuth in each fluid drachm It is readily diffusible and the Bismuth is presented in the minutest hydroamorphous condition Bismulait is of the utmost value as a sedative or antacid in gastro intestinal troubles

Also the following Combinations

BISMULAIT c PEPSIN

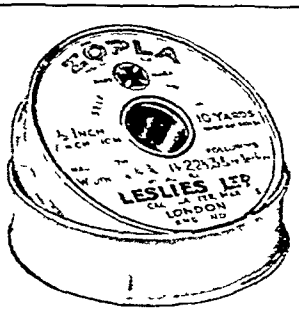
Contains 2 grains of Pepsin in each fluid drachm An ideal preparation for the treatment of Dyspepsia

BISMULAIT c SALOL

Contains 5 grains of Salol in each fluid drachm For the treatment of Dyspepsia associated with fermentation

Packed in 4 oz, 8 oz and 16 oz bottles
Sample on application

DUNCAN, FLOCKHART & CO.
EDINBURGH and LONDON
104, Holyrood Road, 8 155, Farringdon Road, E C 1



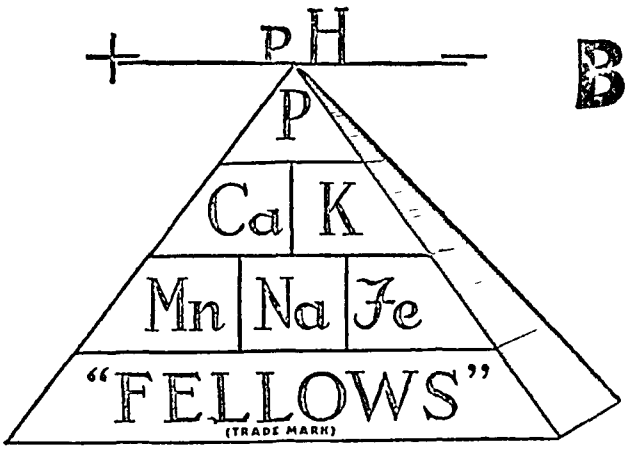
LESLIES ZŌPLA STRAPPING
CLOTHS—ORDINARY AND ELASTIC
WHITE OR FLESH
A SURGEON'S PLASTER—ALWAYS GOOD

ZŌPLA-BAND (Elastic Plaster Bandage)
Ideal for varicose ulcers etc

ZŌPLA ON WHITE FELT
Becoming very popular among surgeons for padding and protection Makes long-lasting pads

SAMPLES ON REQUEST

Manufactured by
LESLIES, LTD, Higham Hill Road, Walthamstow, London, E 17



BALANCE THE pH

and tone up the entire system with

COMPOUND SYRUP OF HYPOPHOSPHITES "FELLOWS"

Scientifically compounded to correct mineral deficiency; and as an unequalled tonic.

Samples on request

FELLOWS MEDICAL MANUFACTURING CO., Ltd.
286 ST. PAUL STREET WEST MONTREAL, CANADA

WHY WAIT FOR INTRAVENOUS SOLUTIONS?



Baxter's Intravenous Solutions of Dextrose Saline and Acacia are ready for use in the "Vacoliter" container in less than three minutes from stockroom to patient In "Vacoliters" Baxter's Solutions are always ready when you are ready to use them

Baxter's Intravenous Solutions in "Vaco liters" make it possible for you to have Intravenous Solutions ready in any quantity and to keep them at the highest degree of purity, stability, sterility and of a constant pH value They cannot become contaminated because they are packed in a high vacuum and tightly sealed with a metal closure

Baxter's service of Intravenous Solutions in "Vacoliters" is unmatched, and is not more costly than your own product

JOHN BELL & CROYDEN
Wigmore Street, London, W 1
DAY AND NIGHT SERVICE.

Sole Distributors in Great Britain for Baxter Laboratories Ltd 24, Conway Road, N 15

NOVASORB

(Magnesium trisilicate Evans)

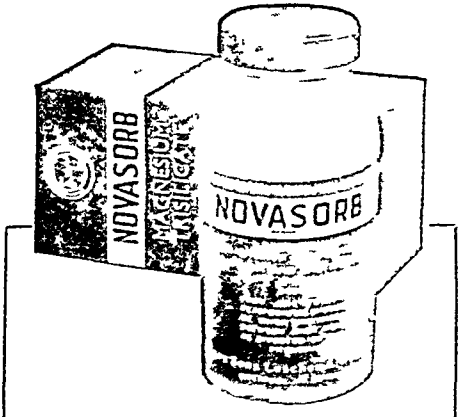
A SAFE ANTACID & ADSORBENT

For the treatment of hyperacid gastritis acid fermentation and gastric ulcer

Novasorb is produced by methods which ensure an optimum clinical value with freedom from any unfavourable secondary effect Even when given in quantity sufficient to neutralise free hydrochloric acid entirely it cannot cause alkalosis

Dosage *Approximately one teaspoonful in the day or as to the amount of calcium in the diet is not harmful*

Evans Sons Lescher & Webb Ltd
Liverpool and London



NOVASORB is issued in bottles 4 oz 2/6 8 oz 4/9 16 oz 9/-, 5 lbs (Hospital size) 40/- and in tablets tins of 48 2/3

MARMITE

YEAST EXTRACT

for

VITAMIN B COMPLEX

"Vitamin B may be given as Marmite"

(British Medical Journal May 21st 1938 p 1085)

Members of the medical profession are prescribing Marmite extensively for its high content of all the known vitamin B factors and for its anti anaemic properties

Experience gained over many years has proved the value of the systematic administration of Marmite in preventive and curative medicine

A patient suffering from a vitamin B_1 deficiency *'was advised to take Marmite 2 drachms daily made a gradual improvement and returned to work still takes Marmite 8 oz per week'*

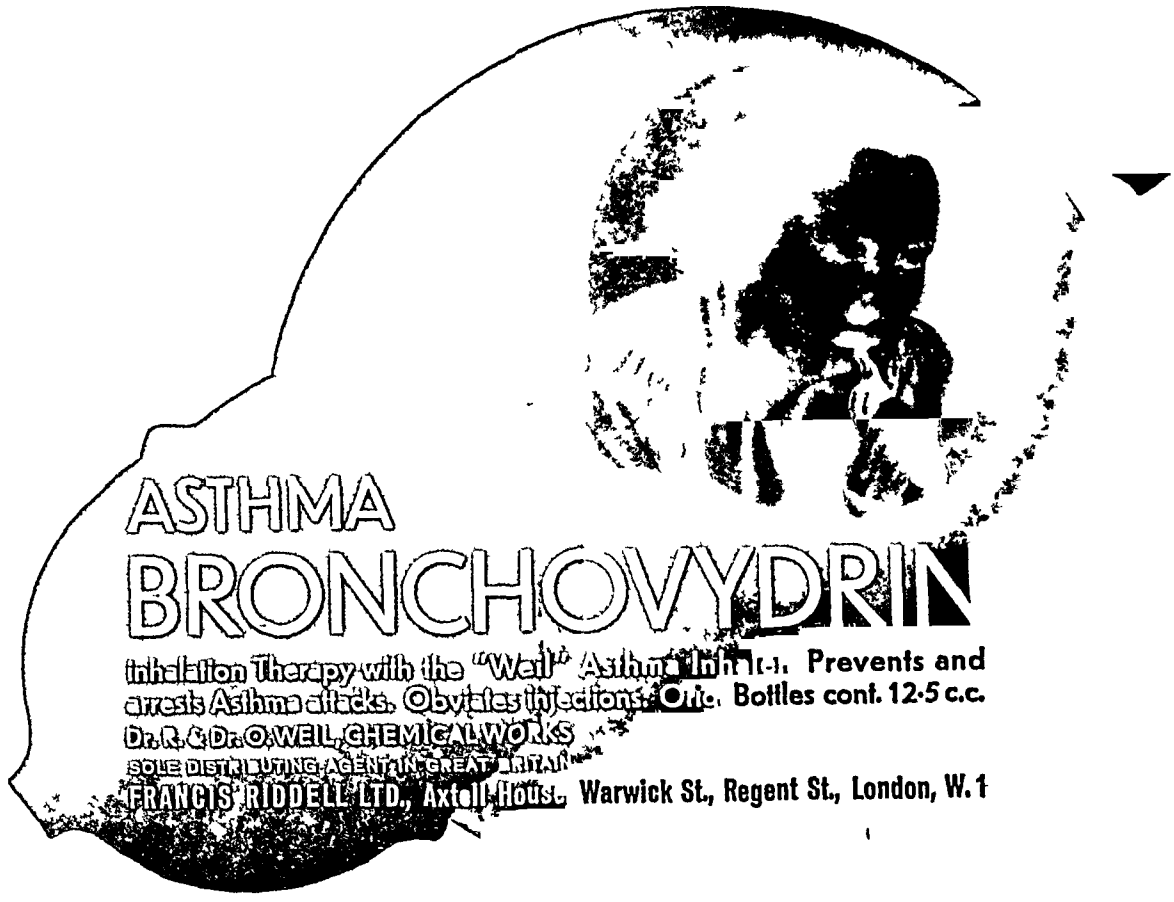
(Lancet May 7th 1938 p 1045)

THE MARMITE FOOD EXTRACT CO LTD
Walsingham House - Seething Lane - London EC3

In jars 1-oz. 6d 2-oz 10d 4-oz. 1s. 6d 8-oz. 2s 6d 16-oz. 4s 6d
Special quotations for Marmite packed for use in hospitals and welfare centres

Samples and literature on request

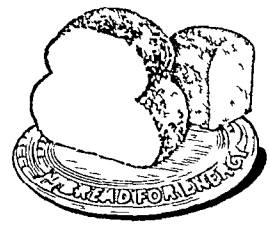
385/1/H



It is significant that the British Medical Association, in the new edition of "The Doctor's Cookery Book", continues to recommend Bread and Flour as by far the largest item in the family food budget.

"*If*", says the foreword to this valuable publication, "*the family purchases are made as suggested*", the housewife "*will be feeding her family well and spending her money to the best advantage*".

BREAD
FOR ENERGY

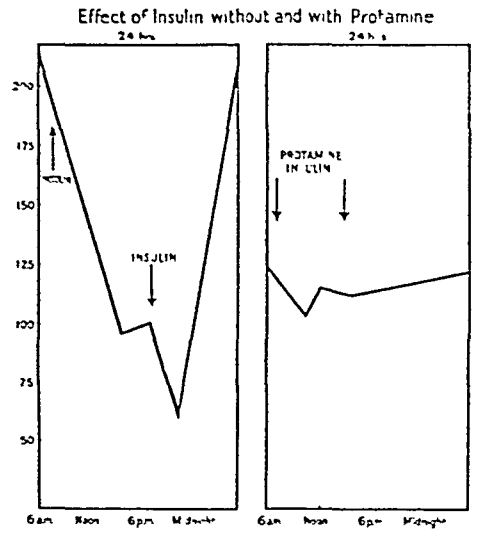


C.F.H. 470

'A.B.' PROTAMINE INSULIN

BRAND

(with zinc) SUSPENSION



The absorption of insulin injected in the form of A B Brand Protamine Insulin (with Zinc) Suspension is much prolonged and closely resembles the natural secretion of the pancreatic islets This insulin has a steady action and exerts a better control than that of ordinary insulin over the carbohydrate metabolism The number of injections can be reduced a lower total dosage is usually necessary and the subjective symptoms of diabetes markedly improve.

40 units per c cm
5 c cm (200 units) 2/4
10 c cm (400 units) 4 6

80 units per c cm
5 c cm (400 units) 4 6

INSULIN 'A B was the first British insulin offered commercially to the medical profession and has a world wide reputation for its strictly safeguarded sterility its carefully standardised strength its freedom from toxic reactions and its stability in hot climates

Full particulars will be sent free to members of the Medical Profession

Joint Licensees and Manufacturers

THE BRITISH DRUG HOUSES LTD
ALLEN & HANBURYS LTD

ANNOUNCEMENT

PICKETT-THOMSON RESEARCH LABORATORY

Genatosan Limited wish to inform members of the Medical Profession that they will cease to distribute the Vaccine Products, prepared in the Pickett-Thomson Research Laboratory, after August 31st, 1938

These products will, in future, be marketed by RESEARCH PRODUCTS, LTD , NAN CLARKS LANE, LONDON, N W 7, together with other preparations manufactured in the Pickett-Thomson Research Laboratory

GENATOSAN LIMITED

Manufacturing Chemists • LOUGHBOROUGH LEICESTERSHIRE

TRADE MARK

'AMYTAL'

BRAND

Iso-amyl Ethyl Barbituric Acid

FOR SEDATION AND HYPNOSIS

The tranquil sleep of children is always the envy of less fortunate adults to whom at times this boon is denied because of sickness or other conditions which upset the psychic or emotional equilibrium

'Amytal' supplies the relaxation and sleep which are essential to recuperation of vital forces It may be prescribed wherever there is need to combat insomnia, restlessness, or apprehension A noteworthy margin of safety is characteristic of 'Amytal' and since destruction of the hypnotic within the body appears to be accomplished rapidly there is little tendency to unwelcome side-reactions or after depression

'Amytal' is supplied in ½-gram, ¼-gram, and 1½ gr in tablets in bottles of 40 and 500

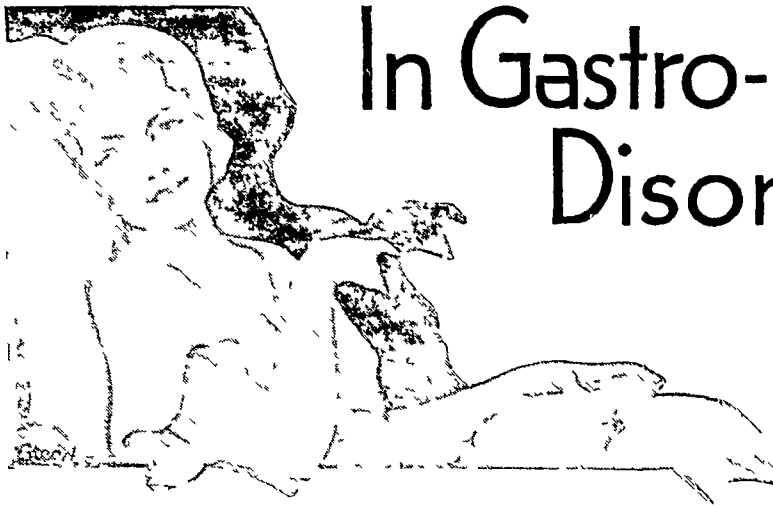
Lilly

TRADE MARK

ELI LILLY AND COMPANY LIMITED

2, 3 & 4, Dean Street, London, W 1

Distributing Agent in Britain for ELI LILLY AND COMPANY, INDIANAPOLIS, U S A



In Gastro-Intestinal Disorders

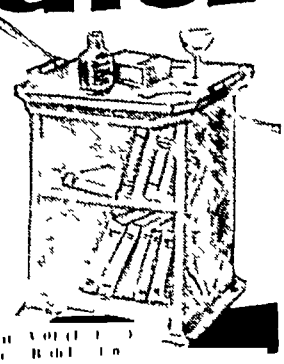
Allenburys

BEEF JUICE

In such conditions it is a primary consideration that the food should be light and unirritating In gastric and duodenal ulceration and in the dyspepsias Allenburys Beef Juice may safely and advantageously be given where beef tea would often increase the pain and have a harmful effect Because of its high protein and vitamin content it provides a valuable means of keeping up a patient s strength

In bottles at 1/9 and 3/- each

Descriptive literature and clinical trial sample will be sent on application



ALLEN & HANBURYS LTD., London, E. 2 Telephone ... Telegrams ...



MANDECAL

(Compound Calcium Mandelate B D H)

In B Coli Infections

'I used one bottle of Mandecal in a case of B Coli infection no relapse occurred Before the Mandecal was administered the urine was examined bacteriologically and a heavy growth was reported of B Coli After the bottle was finished the urine was again examined and reported sterile I shall use it for all future cases of B Coli infections' — — — LRCS, LRCP

Sample and literature on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

Med'S 11

ALASIL

Better Salicylate Therapy

WHATEVER be the season of the year there is a wide sphere of utility for Alasil the improved form of salicylate medication

Alasil is a very definite advance on ordinary compounds of salicylic or acetyl salicylic acid both in therapeutic efficiency and in freedom from the risk of unpleasant gastro intestinal sequelae This high tolerability is due to the fact that Alasil is composed of calcium cetyl salicylate—the least irritating of the salicylate compounds—and Alocol (Colloidal Hydroxide of Aluminium) a powerful gastric sedative and antacid

A careful series of experimental tests has shown that Alasil is more completely absorbed than ordinary salicylate compounds and that it is practically free from the risk of liberating free salicylic acid in the stomach

Wide clinical experience anticipated these findings by demonstrating that Alasil can be pushed or prolonged to a much greater extent than ordinary salicylate compounds and that it can be given with safety to children adults the aged and patients with finely balanced digestive capacities An analgesic antipyretic and sedative of established value

A supply for clinical trial with full descriptive literature sent free on request

A WANDER Ltd., Manufacturing Chemists
184 Queen's Gate London S W 7

Laboratories and Works KING'S LANGLEY HERTS

M269

Specially recommended for Nursing Homes and Institutions

Borwick's Cold Water Lemon Barley is made in a few seconds needs no boiling nor the addition of anything except cold water Refreshing invigorating and is guaranteed absolutely pure

IT IS MADE FROM PURE NATURAL BARLEY AND LEMONS AND CONTAINS NO ARTIFICIAL ESSENCE WHATSOEVER (*Public Analyst's Report*)

BORWICK'S COLD WATER LEMON BARLEY POWDER

In 7½d 10½d 1/3 and 2/3 tins Larger sizes for Institutions Obtainable from leading Chemists and Stores

Sample will be gladly sent on application to

GEORGE BORWICK & SONS LTD 1 Bunhill Row London E C 1 (Established nearly a Century)

NOVOCAIN

Brand Ethocain

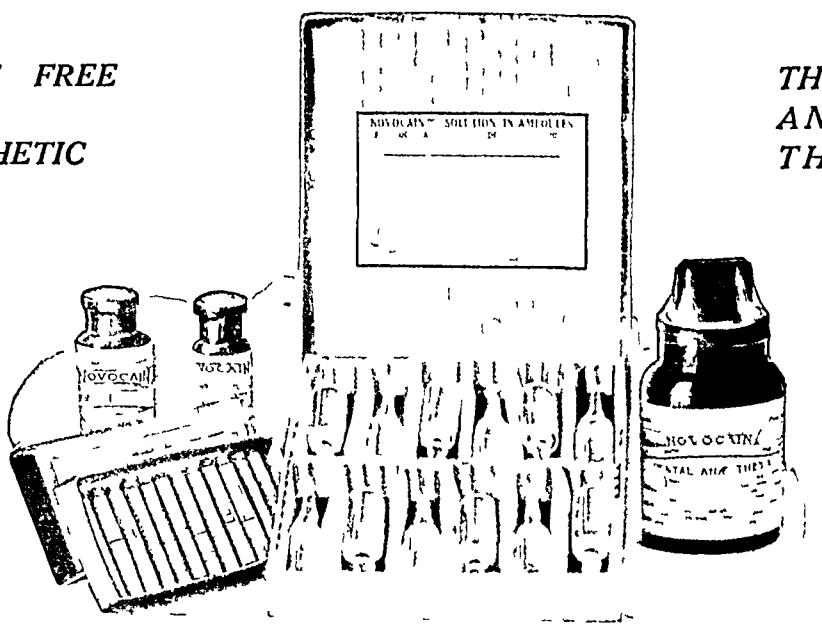
The Original Preparation

English Trade Mark No 276477 (1905)

The Safest and most Reliable Local Anaesthetic for all Surgical Cases.

COCAINE FREE LOCAL ANAESTHETIC

THE OLDEST AND STILL THE BEST



For use in all cases of Local and Spinal Anaesthesia.

Supplied in

Powder
Tablets of various Sizes
Ampoules of Solution
Ampoules of Sterilized Powder

Does not come under the Restrictions of the Dangerous Drugs Act

WRITE FOR LITERATURE

Sold under agreement

THE SACCHARIN CORPORATION LTD, 72, Oxford Street, London, W 1

Telegrams SACARINO RATH LONDON Telephone MUSEUM 8096

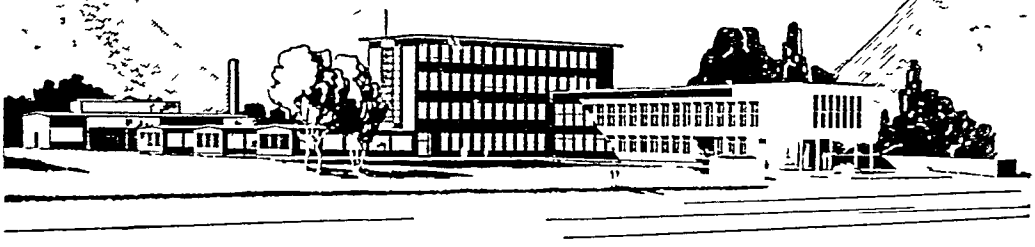
Australian Agents J L BROWN & CO 271 Moreland Road Moreland N 13 Melbourne

New Zealand Agents THE DENTAL & MEDICAL SUPPLY CO LTD 128 Wakefield Street Wellington

ROCHE
MOVE TO WELWYN

The new offices, factory and research laboratories of Roche Products Limited are housed in buildings which are not only unique in structure and design but perfect in their modern equipment

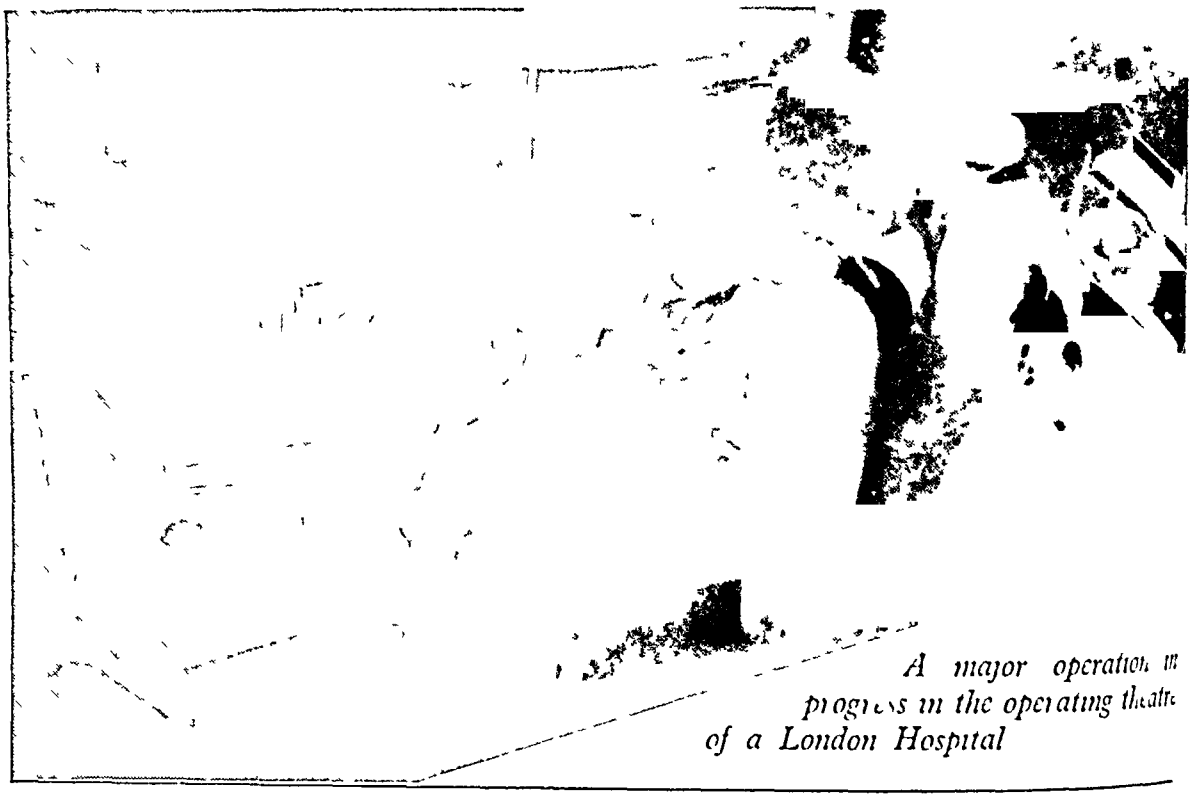
'Roche' preparations are made under ideal conditions The new factory includes the first large plant in the British Empire for the production of vitamins B_1 and C ('Benerva' and 'Redoxon')



Roche preparations introduced in the course of this year include the following Nestrovite vitamin concentrate presenting in a palatable and stable form vitamins A B_1 C and D Heparin Roche a solution of chemically pure heparin—the physiological anticoagulant and Cycliton Analeptic a new respiratory and circulatory stimulant

ROCHE PRODUCTS LIMITED WELWYN GARDEN CITY HERTS ENGLAND

Telephone Welwyn Garden 3232 (3 lines) Telegrams HOFROCHE Welwyn Garden City England



A major operation in progress in the operating theatre of a London Hospital

DEGREES OF PROTECTION....

THE most elaborate precautions against every possible chance of germ infection are of course essential in the operating theatre It would be ridiculous, however, to expect anything approaching this meticulous attention to antiseptic cleanliness in everyday hygiene and in the home treatment of superficial wounds

The general public is nevertheless beginning to realise the importance of germ-free cleanliness Hygienic standards to-day are higher than they have ever been It is generally agreed by medical men that although regular use of antiseptics is not desirable or really necessary for ordinary toilet purposes, the use of a reliable antiseptic soap can play a very valuable part in the prevention of infectious disease Face and hands are continually exposed to infectious germs, and require washing with Wright's Coal Tar Soap

Wright's has substantial antiseptic and antipruritic qualities For over 70 years it has enjoyed the confidence of the medical profession, and to-day more doctors use Wright's than any other brand of toilet soap Wright's Coal Tar Soap is prepared from materials selected after stringent tests It is the only soap in the world to contain 'liquor carbonis detergens' (Wright's), the valuable dermatological therapeutic recommended by skin specialists the world over In surgeries, hospitals, nursing homes and private households Wright's meets all the requirements of modern everyday hygiene You can use it and recommend it to your patients with complete confidence

WRIGHT'S COAL TAR SOAP

The Safe Soap

Wright, Layman & Umney Ltd, 44 50 Southwark Street, S.E.1

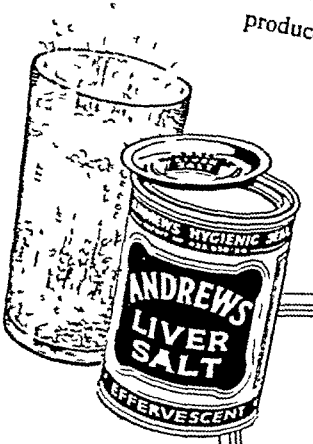
Fatigue and debility

ANDREWS LIVER SALT is the APERIENT OF CHOICE in all cases of FATIGUE AND DEBILITY whether due to ILLNESS, OVER-WORK or WORRY, or consequent upon excess of any kind

Fatigue is encouraged by constipation, and constipation by fatigue Severe purges increase fatigue ANDREWS LIVER SALT is immediately stimulating and refreshing, and, later, produces a feeling of well-being when the system is cleared of poisonous products

ANDREWS IS A SPECIALLY PREPARED EFFERVESCING SALINE, OF PURIFIED AND TESTED INGREDIENTS

Its action is CHOLAGOGUE and APERIENT, increasing the flow of bile, and inducing gentle peristalsis in the upper and lower bowel, owing to the retention of the fluid content by OSMOSIS



ANDREWS
LIVER SALT

SCOTT & TURNER LTD ANDREWS HOUSE, NEWCASTLE-on TYNE 2

★ An 8 oz Tin will be sent free, on request to any member of the Medical Profession

INDICATIONS FOR 'SANATOGEN' No 9

ENERGY

"Monotony more exhausting than hard work."

That only 30 men in every hundred like their work was quoted recently by the "Daily Express" as the findings of a questionnaire addressed to 500 University graduates Hence monotony, with the tiredness and nerve exhaustion that monotony induces Conversely, a distinguished physiologist reminds us that "those who find real pleasure in their work are able to work extremely hard at it without any harm accruing' Unfortunately not many of us can choose our occupations, and even fewer can change them when they no longer interest us We get caught in a vicious circle, the nervous exhaustion interfering with digestion, absorption and nutrition generally The malnutrition in turn exacerbates the nervous disturbance

In such circumstances 'SANATOGEN' has been found of great value It is a carbohydrate-free mixture of 95 per cent pure milk casein with 5 per cent sodium glycerophosphate 'SANATOGEN' is readily digested and absorbed, leaving no appreciable residue It supplies in concentrated form two of the essential materials needed for the repair of tissues and for the nourishment of nerve cells In addition to being readily assimilable, it stimulates appetite and promotes the digestion and utilisation of other foods taken with or after it

I am a firm believer in the efficacy of 'Sanatogen for the relief of nervous exhaustion and debility The types of cases in which I use it are overwork especially mental work, fatigue insomnia, and loss of appetite, weight and general tone I find that combined with an ordinary tonic a large teaspoonful in hot milk at bedtime is most beneficial I have noticed that the addition of 'Sanatogen to the daily menu means that the patient gets more good out of his food I put it down to increased efficiency of the visceral nervous system It is now almost 25 years in my H S days since I saw marked improvement from the use of 'Sanatogen —M B , B Ch

'I had been feeling very tired, owing to overwork in a busy general practice and I can definitely say that while taking 'Sanatogen I felt more energetic and experienced a euphoria which had hitherto been missing —M B , B Ch

'SANATOGEN'

(Trade Mark)

A brand of Casein and Sodium Glycerophosphate

Sold by all chemists price 2/6 to 19/9

DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants ½ teaspoonful added to each bottle feed

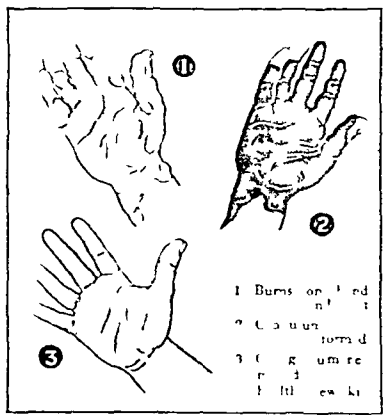
The word SANATOGEN is the Trade Mark of Genatosan Ltd and denotes the famous brand of Glycerophosphate manufactured by GENATOSAN Ltd Loughborough Leicestershire

Clinical samples and literature available on request to

GENATOSAN LTD., LOUGHBOROUGH, LEICESTERSHIRE

Tannic Acid

a recognised treatment for burns, scalds and abrasions



TRADE MARK 'TANNAFAX' BRAND

TANNIC ACID JELLY

(Tannic Acid with 0·5 per cent Phenol in a water soluble base)

Always ready for immediate application to the affected surface, 'TANNAFAX' eliminates the hazard of delay in treatment. Unscrew the cap from the tube and 'TANNAFAX' is ready for use. Owing to its freedom from oil and grease 'TANNAFAX' is of particular value when repeated dressings are required. Its removal may be effected without giving rise to the pain associated with oily preparations.

Tube of 20 gm. (3·4 oz. approx.) 8d. each
Tube of 4 oz. (113 gm. approx.) 2/1 each

Lord Percy Webb & Partners

Literature, post free to Medical Men, on request

BURROUGHS WELLCOME & CO LONDON

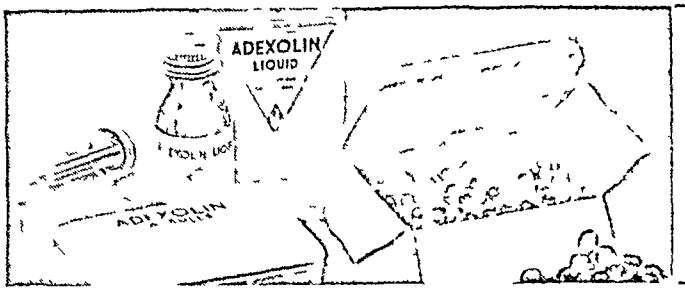
Address for correspondence: SNOW HILL BUILDINGS E.C.1

Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W.1

Associated Houses

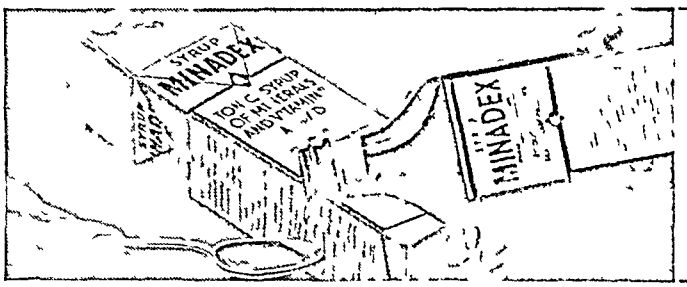
NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

H 3629 COPYRIGHT



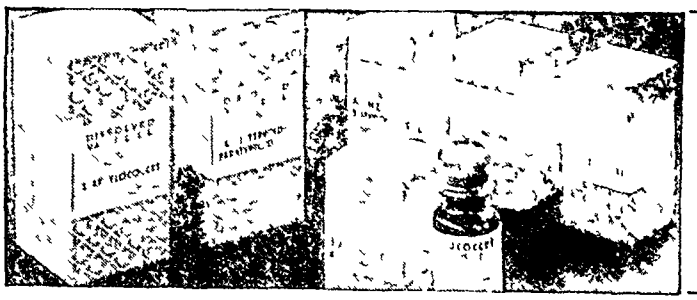
ADEXOLIN LIQUID AND CAPSULES

Standardized concentrates of vitamins A and D. One capsule recommended daily as a general protective tonic and nutritional barrier to casual infections. In pregnancy one daily for the last 100 days. For infants 2 drops in every bottle feed. Each 3m. capsule equivalent to 10 cc. and each cc. of liquid equivalent to 20 cc. of medicinal cod liver oil. *Capsules* Boxes of 25 2/6, 100 7/6, 300 20/6, 1000 56/. *Liquid* 3 oz. phials 2/6, 2 oz. bottles 7/6, 4 oz. 12/6, 8 oz. 22/6.



SYRUP MINADEX

The reconstructive tri-mineral tonic containing the active principles of Syr. Ferri Iodidi Co. and vitamins A and D incorporated as concentrates free from oil (18,000 and 3,000 international units per fl. oz. respectively). Restores appetite and tone to debilitated patient particularly those convalescent after acute illness. Combats anaemia, raises resistance to infection. Children thoroughly enjoy it for its appetising flavour. 4 oz. bottle 2/6, 12 oz. 4/6, 80 oz. winchesters 22/6.



DISSOLVED VACCINES G.L.

The high standard and rapidity of the effects produced by Dissolved Vaccines G.L. are due to two factors. *First* that the organisms being in solution can stimulate the antigenic response immediately upon injection. *Second* that being detoxicated the vaccines can be given in sufficient and substantial dosage without provoking undesirable reaction. In 5 cc. rubber-capped bottle 7/6, 10 cc. 10/9, 20 cc. 17/6. (Whooping Cough Dissolved Vaccine G.L., 5 cc. bottles 10/9, 10 cc. 18/6, 25 cc. 25/.)



FERSOLATE TABLETS

(FERROUS SULPHATE G.L.)

For all iron deficiency anaemias. Convenient highly effective inexpensive. Each 3 gr. tablet contains desiccated ferrous sulphate yielding exactly 1 gr. ferrous iron the most effective agent for treatment and is therapeutically equivalent to 15 grs. Blaud's Pill B.P. Dosage can therefore be achieved in minimum bulk. Bottles of 100 2/6, tins of 500, 7/6, 1000 12/6.

The above prices are subject to usual professional discount but do not apply in Eire.

THE SIGN OF A GL PRODUCT

GL Products for Everyday Practice

OTHER G.L. PRODUCTS OF SPECIAL INTEREST. Ostocalcium Tablets (calcium sodium lactate and calcium phosphate with vitamin D). Colloidal Calcium with Ostelin (the first preparation of vitamin D for parenteral use). Ostomalt (the four vitamin Malt Extract). Examen (Parenteral Liver Extract). Glucose D. Farex (Reinforced 3 Cereal Food).

GLAXO LABORATORIES LTD., GREENFORD, MIDDLESEX. TELEPHONE: BYRon 3434

affected joints And here I would stress the urgent necessity for the provision of institutional treatment for cases of rheumatoid arthritis on the same lines as is done for tuberculosis Were it a lethal disease this would have been done long ago, but since it is merely intensely disabling and crippling little has been done about it The prolonged treatment required, both general and local, can seldom be effected in a domiciliary way except for the very well-to-do For the poorer classes treatment is all too frequently spasmodic, disjointed, and unsustained, with the inevitable result of permanent disablement Rest, fresh air, warmth and sunlight, generous feeding, treatment to the joints by physical methods—dry or moist heat, massage passive movements, splinting when necessary diathermy x rays, orthopaedic measures—together with specific drug treatment, as by vaccine or by gold therapy where can all these be effectively combined other than in institutions well equipped and staffed for the purpose? Much of our disappointment in results is due to lack of facilities for concerted, concentrated, and continued treatment Professor Stanley Davidson at the Bath Conference on Rheumatic Diseases in April last forcibly stressed this aspect of the subject, maintaining that the voluntary hospitals under present conditions are quite inadequate to provide the necessary facilities for dealing with the large numbers of sufferers from the rheumatic diseases, and that municipal or State aid is required for the provision of centres for early investigation and prolonged treatment The creation of rheumatic centres in various parts of the country, though belated, is a beginning of what must ultimately develop on a greatly extended scale if the rheumatic scourge is to be effectively combated

VACCINES

The advocates of vaccine therapy in the treatment of rheumatoid arthritis, "primary" and "secondary," presumably accept unreservedly the infective theory of causation, otherwise the rationale of their treatment falls to the ground The uncertainty as to the specific organism involved—beyond the general incrimination of the streptococcal group—casts doubt on the specificity of vaccine treatment Multiple vaccines on the hit-or-miss principle are clearly unscientific, and any therapeutic benefit from them must result from general rather than specific stimulation of reaction against infection My criticism of the published results of vaccine treatment in rheumatoid arthritis is that they are not subject to adequate control—first in diagnosis, and, secondly, by comparison with parallel cases untreated by vaccines In secondary rheumatoid arthritis of proved infective origin, if the focus of infection has been removed, vaccines are usually unnecessary recovery will take place without their aid In primary rheumatoid arthritis where no infection is demonstrated vaccine treatment rests on no firm foundation, and is hypothetical in theory and disappointing in practice (Okell, 1937) I have seen too many cases of rheumatoid arthritis treated by prolonged vaccine therapy alone to the exclusion of other measures, gradually drift into a helpless and hopeless condition when other means might have been usefully employed, to leave me in any doubt

My considered opinion is that vaccine therapy has been frankly disappointing, and on inquiry from various workers in centres where adequate investigation and control of cases is undertaken, I find that vaccine therapy is being used less and less in some centres it has been given up entirely I suggest this as a fruitful topic for your discussion

PHYSICAL TREATMENT

Perhaps the greatest advance in the physical treatment of rheumatoid arthritis has been the recognition of the importance and value of rest to the affected joints This is obtained by temporary fixation in plaster, supplemented after a period of complete rest by daily passive movements of the joint through its normal range By this means rest is assured to the inflamed joint, contractures into faulty positions are prevented, and subsequent deformity or disability is avoided The more care taken in the early stages to prevent fixation in faulty positions, the less the need for drastic orthopaedic measures in the later stage Active collaboration between physician and orthopaedic surgeon should take place throughout prevention is better than cure (Kindersley *et al* 1936)

CHRYSOTHERAPY

Reference to chrysotherapy in the B M A report is limited to a single sentence "Gold preparations given by intramuscular injection have been used abroad for the treatment of arthritis, but beneficial results have not been confirmed" Since then much progress has been made In my experience gold therapy represents the greatest advance in the drug treatment of arthritis made during the last thirty years The almost dramatic results that are achieved in a relatively short space of time in selected cases are little short of marvellous From no other form of treatment in former years have I seen such gratifying improvement even in advanced and seemingly hopeless cases Careful choice of cases, however, should be made The tendency is to use gold indiscriminately in all rheumatic affections and thereby to bring discredit on the method Practically all observers are agreed that it is of no value in true osteo-arthritis and in non-articular rheumatic diseases its use should be limited to primary and secondary rheumatoid arthritis—in short, to the presumably infective forms The risks of untoward complications involved are not inconsiderable, but they are minimized by the use of a smaller dosage than was initially thought necessary, by careful test for idiosyncrasy to the drug and by a preliminary blood count and sedimentation rate before embarking on a course, and by the instant withdrawal on the first symptoms of intolerance The results achieved by gold therapy are well worth the risks that may be run Hartfall, Garland, and Goldie (1937) have done the most extensive work on gold treatment in this country They have published a review of 900 cases, giving the clinical analyses and results in 750 cases of rheumatoid arthritis and in 150 cases of other forms of arthritis, with the toxic reactions that occurred in the whole series Your collective experience of gold treatment would be instructive

SPA TREATMENT

In answer to the question, Is spa treatment helpful in the management of rheumatoid arthritis? the reply is undoubtedly, Yes It should be premised that there is nothing specific in the waters of the spas in this or any other country as a cure for rheumatoid arthritis The advantages of spa treatment are the removal from home surroundings to a new and healthy environment and the psychological element of hope, the availability at any well-equipped spa of a wide range of physical treatments, hydrological and balneological, access to medical advice from practitioners of special knowledge from long experience of the disease, facilities for thorough investigation, bacteriological and biochemical, necessary for diagnosis and control of treatment, and the use of natural mineral

waters for the correction of metabolic derangements and the improvement of general health so necessary a part of a concerted attack on the disease

The disadvantages are the expense entailed in a spa cure which must necessarily be prolonged if good results are to be achieved In so chronic a disease swift improvement cannot be effected in a short space of time Nevertheless even in a limited period a start may be made and a patient be put on the high road to recovery which may be followed up at home

REFERENCES

Allison N and Ghormley R K (1931) *Diagnosis in Joint Diseases* Oxford Medical Publications London

Cawadias A P (1934) *Acta Rheum* 6 26

Davidson L S P and Goldie W (1936) Reports of British Committee on Chronic Rheumatic Diseases, 2 1 London

Eagles G H Evans P R Fisher A. G T and Keith J D (1937) *Lancet* 2 821

Fisher A G Timbrell (1937) Ibid 1 1162

Gibson H J Hill L C and Collins D H (1938) *Proc roy Soc Med* 31 309

Goldie W and Griffiths G J (1936) *British Medical Journal* 2 755

Hartfall S J Garland H G and Goldie W (1937) *Lancet* 2 784 838

Hench P S (1936) Reports of British Committee on Chronic Rheumatic Diseases 2 83 London

—— (1938) *A Survey of Chronic Rheumatic Diseases* p 35 Oxford Medical Publications London

Kahlmeter G (1934) Conference Scientifique Internationale du Rhumatisme Chronique Progressif Generalise Aix les-Bains

Kindersley C E *et al* (1936) *Proc roy Soc Med* 29 237

Mark R (1923) *J Metabolic Res* 4 135

Okell C C (1937) Reports of British Committee on Chronic Rheumatic Diseases 3 4 London

Parker F and Keefer C S (1935) *Arch Path* 20 507

Pemberton R (1929) *Arthritis and Rheumatoid Conditions* Bailliere Tindall and Cox London

Poynton, F J and Schlesinger B (1937) *Recent Advances in the Study of Rheumatism* 2nd ed Churchill London

Race J F (1935) Reports of British Committee on Chronic Rheumatic Diseases 3, 4 London

Schlesinger B Signy A G and Amies C R (1935) *Lancet* 1, 1145

A Dubois (*These Paris* 1938 No 140) states that there are numerous cases on record indicating the possibility of tumours developing after trauma In the absence of any knowledge as to the mechanism of the formation of new growths it is impossible either to affirm or to deny the relation of cause and effect between the trauma and the tumour Experimental work does not yet appear to have provided sufficient data to prove or disprove this connexion Most discussion has taken place about the development of tumours after a single trauma whereas the possibility of the formation of new growths after repeated injuries is readily granted There are numerous cases on record of the occurrence of sarcoma after injury to bone or muscle and a large number of cases have been reported in which tumours of the lung stomach intestine or kidney have developed after a trauma and in which the most reliable methods of investigation—such as radiography or surgical operation—have shown the absence of any tumour before the trauma Tumours of the testis or brain are remarkably frequent after trauma Numerous cases are also on record in which aggravation of the tumour following trauma is shown by increase in its size and the formation of metastases accompanied by deterioration of the general condition In order to affirm that a tumour is of traumatic origin a number of conditions must be present—namely a latent period varying with the nature of the tumour identity of the site of the trauma and of the tumour absence of any tumour before the trauma and histological confirmation of the presence of the new growth

ORTHOPAEDICS IN RHEUMATOID ARTHRITIS*

BY

NORMAN CAPENER, F R C S

Orthopaedic Surgeon Princess Elizabeth Orthopaedic Hospital Exeter and Mount Gold Orthopaedic Hospital Plymouth Consultant Orthopaedic Surgeon Royal Devon and Exeter Hospital Exeter

As a simple orthopaedic surgeon I feel very diffident in contributing to the opening discussion on this subject which has such wide general medical aspects Dr Edgecombe however in his excellent exposition has prepared the ground very well for me He has drawn attention to the need for special centres for the treatment of this crippling disease It is not generally realized however that the orthopaedic hospitals of the country are being asked to do an increasing amount of work in this field This is for example true of the orthopaedic hospitals of Devon where it has been found that the facilities we have for the treatment of uberculosis of joints infantile paralysis and fractures are applicable to the prolonged general and local treatment that Dr Edgecombe has stressed

To take bone and joint tuberculosis as an example we have to deal with much else besides the purely orthopaedic problems of immobilization and surgery Opportunities are provided for the more important general treatment of the disease combined with facilities for physical treatment and with occupational and educational interests These facilities render an orthopaedic hospital almost an ideal centre for the treatment of rheumatoid arthritis

In orthopaedics our great concerns are to preserve as well as to restore function to prevent just as much as to correct deformity In rheumatoid arthritis as to a large extent in bone and joint tuberculosis we stress from the outset of the disease the importance of the natural recuperative powers of the body if placed under proper conditions—namely, the protection from painful stimuli the utilization of the beneficial effects of sunlight fresh air, warmth cleanliness discipline and what is well called physiological rest

Physiological Rest

This involves immobilization of an affected joint in the best physiological position for the relief of pain for the arrest of the inflammatory process for rest to overactive muscles and the retardation of muscle atrophy The position should be the best for function should ankylosis occur This immobilization is combined with periodic movement and with other measures to improve joint and muscle function of a type and quantity suitable for the particular state of the disease In the active stage the amount of the permitted movement and physical therapy may be *nil* and may remain so for two weeks or more After the acute stage has subsided function is graduated according to the progress of the individual joint While affected joints are being rested those unaffected are given greater opportunities and encouragement for movement

Having generalized in this manner I feel that I should proceed with a detailed statement of what are these optimum positions for physiological rest Before doing

* Read in opening a discussion at a joint meeting of the Sections of Orthopaedics and Fractures and Physical Medicine and Physical Education at the Annual Meeting of the British Medical Association Plymouth 1938

this there is, of course, no need for me to stress that a very careful physical examination of the whole locomotor system is necessary From all points of view it is of importance that a detailed report of this examination be made

Physical Examination

It is the practice of orthopaedic surgeons in dealing with anterior poliomyelitis to make a muscle chart before starting treatment In such a chart the more important muscles of the body are listed and graded in such a way that the records can be used for comparative purposes by independent examiners throughout the course of the case

In my view we should make a similar record in rheumatoid arthritis I append a suggested scheme (Chart 1) for recording activity of disease, joint positions, ranges of movement, and so forth for the lower extremity

CHART 1

RECORD CHART FOR AN ARTHRITIC CASE

Date of Examination — Right side in black, Left side in red

Joint	Pain and Swelling	Deformity*	Movement	Range of Passive Movement*	Range of Active Movement* Against Gravity	Range of Active Movement* Gravity Removed	Remarks (eg, activity muscle wasting etc)
Hip	*S 0*	*30*	Flexion	(90−30)=60	60°	90°	*Not active*
			Extension	0			
			Abduction	0			
	P 1	*20°*	Adduction	(30−20)=10	20°	10	
		10°	Int rotation	(30−10)=10°	0	10°	
			Ext rotation	0			
Knee	*S 2*	*45*	Flexion	60−10=20	10	10°	*Extremely painful*
	P 3		Extension	+	0	0	*Very active*
			Rotation				*Marked quadriceps wasting*
Ankle	*S 1*	—	Dorsi flexion	10	10	10°	*Very little change*
	P 0	—	Plantar flexion	20	20	20	
Subastrag & Midtars	*S 0*	—	Inversion	0	0	0	*Bony ankylosis*
	P 0	*Extreme*	Eversion	0	0	0	
Midtars & Tars Met	*S 0*	—	Adduction	<5°			*Fibrous ankylosis*
	P 1	*10*	Abduction	0			
		—	Dorsi flexion	<5°	—	—	
		—	Plantar flexion	0			
Metatarso Phalang First		—	Dorsi flexion	±20	20°	20°	*Hallux valgus*
	S 1	—	Plantar flexion	±10	0	0	*Active*
	P 2	—	Abduction	±10	0	0	
		45°	Adduction	0	0	0	
2	*S1 P0*	*30 extn*					*Old Kohler*
3	*S0 P0*	*20*					
4	*S0 P0*	*20°*					*No active disease*
5	*S0 P0*	*10°*					
Interphal Proximal 1	*S0 P1*	*Clawed*					*No active disease*
2	*S0 P0*						
3	*S0 P0*						
4	*S0 P0*						
5	*S0 P1*						
Distal 2	*S0 P0*						
3	*S0 P0*						
4	*S0 P0*						
5	*S0 P0*						

S Amount of Swelling *0*—Nil *1*—Appreciable *2*—Synovial thickening+ fluid —Hydrops

P—Amount of Pain *0*—Nil *1*—Only at extremes of movement —Through full range —Also present at rest

* Degrees of movement and of deformity are from the normal anatomical position.

A similar chart is used for the upper extremity

Optimum Physiological Positions for Rheumatoid Joints

No hard-and-fast rule can be laid down which is applicable to every case and joint, but certain positions may be given as a guide for the majority of cases (Charts 2 and 3) Generally speaking, these positions are equally suitable for the earlier treatment to preserve and to restore function as for the prevention of disabling deformity should ankylosis be inevitable

CHART 2

OPTIMUM PHYSIOLOGICAL POSITIONS (Upper Extremity)

Joint	Position	Remarks
Shoulder	Abduction 45 Flexion 30 External rotation 30° on left Nil on right	Minimizes possibility of adduction contracture Assists restoration of abduction Favours circulatory flow to whole upper extremity by removing dress across 1st rib Allows of abduction and adduction of the upper extremity through rotation of scapula if ankylosis occurs Permits hand to be used in front of mental plane left side to mouth for feeding right side at table for writing or bench work
Elbow	*Right* at about 80 (that is full extension less 80) *Left* at about 105° (that is full extension less 105°)	Positions to be varied according to patient's occupation The positions given permit right hand use for table knife and writing and left hand for table fork both in knitting and sewing
Radio ulnar	*Left* Mid position *Right* Slightly more pronation	The right forearm is more commonly used in pronation
Wrist	*Dorsiflexion* so that posterior metacarpal surface makes angle of 25° with line of centre of forearm	In this position the thumb metacarpal in its neutral position continues the line of the forearm
Fingers (including metacarpophalangeal joints) Thumb (including metacarpophalangeal joints)	Each joint slightly flexed Opposed and flexed sufficiently to enable its tip to touch tips of index and middle fingers	Position of semi grasp

The above positions are based upon the individual being a right handed person

CHART 3

OPTIMUM PHYSIOLOGICAL POSITIONS (Trunk and Lower Extremity)

Joint	Position	Remarks
Spine	Preservation of normal antero posterior curves	Avoid lumbar lordosis
Hip	*Single joint* 25 flexion Neutral abduction adduction No rotation *Both joints* Few degrees abduction otherwise the same as for single joint	When lumbar spine also involved and if ankylosis of both inevitable then possibility of more flexion of hips to permit greater ease of sitting to be decided with patient's wishes—walking of course more difficult
Knee	Flexion 15 to 25	Full extension to be avoided—through possibility of neuritis of sciatic nerve or its peroneal branch
Ankle	Plantar flexion 10	Permits use of heeled shoes
Tarsus	Slightly pronated	Avoid high arched varus position A relatively broad weight bearing surface prevents painful pressure points
Toes	Anatomical position	Avoid claw position

Retentive Apparatus

There is little disagreement that plaster of Paris forms the best type of splintage available because it can be made to fit a limb exactly and because it can be readily converted from a splint maintaining almost absolute immobility to one that when the indications permit, can be removed for physical therapy Personally I favour the use of well made hospital bandages as are available in orthopaedic hospitals where such material is produced on a large scale Where perfect bandages cannot be obtained there are good manufactured substitutes which are infinitely preferable to the bandages made by nurses unpractised in the art There appears to be a vogue extending from the field of fracture treatment to that for arthritis in which the unpadded plaster mould is used as a splint Possibly I am a reactionary but I think it is unnecessary it is disagreeable to the patient and to my mind is a confession of poor plaster technique I would make a plea for the greater comfort of the patient when held in a padded plaster, which, both in the treatment of fractures and of arthritis need not and should not contain an exuberance of padding Stockinet with a thin cellulose covering does not materially reduce efficiency and is warmer and less irritating to the patient's skin besides offering an opportunity for ventilation which is so desirable owing to the clamminess often encountered

There is one position in which I agree that the initial mould can best be of the unpadded type and that is for the wrist and hand where with small joints it certainly is difficult to obtain perfect approximation to limb surfaces

Space does not permit of detailed instructions for each joint The shoulder is not really suitable for plaster application for its use here involves extension on to the trunk a matter that should be avoided owing to possible interference with respiratory function I regard the full development of respiratory capacity as fundamental in the general treatment of the disease For the shoulder there are available adjustable abduction splints which are both light and efficient and which can be used in conjunction with plaster for the distal portions of the limb

Reconstructive Orthopaedics by Manipulative and Operative Surgery

Much of the work described under this heading should not be necessary if the methods of treatment already dealt with by Dr Edgecombe and myself have been adequately carried out Unfortunately facilities for this treatment are either not sufficiently available or are not sufficiently made use of Patients with appalling deformities and disabilities continue all too frequently to come for treatment Even for these pathetic cases there is no reason for the attitude of hopelessness with which they are so often regarded

Deformity of the knees is one of the most common and serious problems When these joints are severely flexed the patient is led to early confinement in bed or wheel chair and accordingly suffers from the unfavourable reaction that this exerts upon the general course of the disease Not only do deformities occur secondarily in the feet and hip but the general metabolic state is depressed and increasing generalized bone absorption from disuse occurs I venture to suggest that such mobilization of the calcium reserves may itself be an important factor in the stiffening process throughout the rest of the body

The correction of flexion deformity of the knees when ankylosis is not present can readily be carried out It is important however that during the process the joint be securely held at rest for by this means the correction can be made relatively painlessly The use of a double inclined plane splint with traction is not to be recommended as it does not satisfactorily maintain immobilization For the severer deformities amounting to 90 degrees or more the correction may be begun by manipulation under an anaesthetic This manipulation is not forced so is to cause extensive tearing of capsular tissues but is merely enough to stretch the contracted hamstring muscles to their limit In less severe cases manipulation under anaesthetic is not necessary In both types of case after suitable manual correction has been obtained a plaster cast is applied from the groin to the ankle which is well padded behind both these points and with an extra thick pad in front of the knee When dry a cut is made around the back and sides of the plaster transversely The plaster shell is thus almost divided into two but is left solid in front of the knee Into the gap thus made thin wooden blocks are inserted daily in order to wedge the two portions apart and thus straighten the knee the amount of correction obtained each day stopping just short of pain Pain in front of the patella always commands relaxation of correction During the process of correction the wooden blocks may be removed each day so that the joint may be exercised through the range of corrected movement

A very excellent modification of this method is provided by the use of a metal hinge piece of the Zimmer type joining the two halves of the plaster instead of the bridge of plaster in front of the knee The great advantage of this is that a greater range of controlled movement may be given each day and pressure upon the patella is avoided As soon as possible and usually long before full correction is obtained the patient should be encouraged to become ambulatory

In the correction of any deformity the principles of Hoffa should be borne in mind (1) mobilization and correction (2) retention (3) re education Therefore when the knee flexion is corrected bivalved plaster splints or light callipers should be used while re education of the quadriceps and the fullest development of active movement are achieved

Elsewhere in the body the same principles should be employed Where necessary manipulations under nitrous oxide or evipan are carried out retentive plaster moulds applied and hydrotherapy and other forms of physical therapy given with the education of muscular control and active movements Where possible interesting occupations must also be provided to encourage these movements and in the case of the hands the useful occupation of knitting is really valuable

Concerning manipulation a word of warning is necessary for I believe that one should as a rule be satisfied with small corrections at any one time If ligaments with osteoporotic surroundings are torn from their attachments, I believe fibrositic reactions may develop (akin to the fibrositis ossificans after fracture of the elbow) and the affected joint afterwards become stiffer rather than looser

Operations

Synovectomy is an operation having a limited scope In osteo arthritis particularly of the traumatic type it is of great value There are certain cases of rheumatoid arthritis however in which synovial effusion with pain is a marked feature and which do not respond well to more conservative measures, in weight bearing joints

particularly I have carried out the operation in a few of these rheumatoid joints, removing as much as possible of the synovial membrane, the results being surprisingly good The most remarkable feature is the development afterwards of a new synovial sac

Patellectomy —Brooke has shown how well patients can manage without a patella, and for those individuals with ankylosis of the patella to the femur I do not hesitate to remove it

Osteotomy particularly in ankylosis with deformity of the wrist-, hip-, knee-, and foot-joints, is a most valuable and simple procedure, the positions obtained being those already discussed In most cases the site of osteotomy is at the old joint line, but for hip deformities it is intertrochanteric If the ankylosis of the hip is fibrous then the bifurcation type of osteotomy is done, with displacement of the shaft beneath the acetabulum as devised by McMurray

Arthroplasty has its greatest sphere of usefulness in non-weight-bearing joints such as the temporo mandibular and elbow The best results are obtained in cases previously having bony ankylosis It is very important to remove an ample amount of intervening bone For the hip-joint, where it would often be desirable to obtain free movement, particularly in bilateral ankylosis, the successes are not very frequent For the distressing cases of spondylose rhizomelique, in which both hips and spine are ankylosed, it is worth making a good effort to obtain at least one movable hip The method recently described by Girdlestone of removing the entire head and neck of the femur offers great encouragement in this direction

Arthrodesis —In a disease that tends to produce ankylosis, arthrodesis is not commonly required In the wrist and foot, however, painful fibrous ankylosis with or without deformity, may have to be dealt with by this fixation operation Subastragaloid arthrodesis may enable a patient to walk who is otherwise crippled by pain, and for distressing multiple claw-toe deformities Lambrinudi's method of multiple interphalangeal arthrodesis gives most remarkable results, and to the patient pleasing relief

---

J Tourtı (*These Paris* 1938 No 121), who records six cases in patients aged from 22 to 63, illustrates the rarity of osteoperiostitis in the enteric fevers by drawing attention to the fact that only four cases were encountered in a series of 1,600 typhoid patients The condition is most frequent in young subjects, its incidence being highest under 25, and it is very rare above the age of 35, although it is occasionally found in elderly persons The complication is most commonly met with in atypical forms of the fever in individuals who have not acquired a high degree of immunity against the specific bacillus and are apt to show a low degree of agglutination It is due to persistence in the bone marrow of the bacillus, which gives rise to circumscribed lesions and behaves like a pyogenic organism The osteo periostitis may appear at an early or late stage of the fever, but in the great majority of cases it develops six to eight weeks after the onset, and sometimes not till several years later The commonest organism is *Bact typhosum* *Bact paratyphosum* B comes next and *Bact paratyphosum* A is hardly ever found In some cases the typhoid or paratyphoid organism may disappear and be replaced by secondary invaders, such as the streptococcus staphylococcus pneumococcus, or *B coli* in which case the prognosis is usually grave As a rule, however the outlook is favourable, and in spite of the slow course and frequency of relapse complete recovery takes place In non suppurative forms vaccine treatment alone is required In some acute suppurative forms operation may suffice but usually both vaccine and operation are employed

EFFECT OF SPONTANEOUS JAUNDICE ON RHEUMATOID (ATROPHIC) ARTHRITIS*

ATTEMPTS TO REPRODUCE THE PHENOMENON

BY

PHILIP S HENCH, M D.

Division of Medicine The Mayo Clinic Rochester, Minnesota

When patients with rheumatoid (atrophic, chronic infectious) arthritis or with primary fibrositis become definitely jaundiced a notable event usually occurs their rheumatic symptoms are rapidly, markedly, and generally completely alleviated for some weeks or months My first observations on this phenomenon were reported in 1933 and later (Hench, 1933a, 1933b, 1934, 1935) This phenomenon was unmentioned in the modern literature on rheumatic diseases, but was casually noted by Still in 1897, by Wishart in 1903, and in three recent discussions, not on arthritis but on cinchophen toxicity (Parsons and Harding, 1932a, 1932b, Grigg and Jacobsen, 1933) More recently further observations on the phenomenon were reported by Sidel and Abrams (1934), and by Borman (1936) Heretofore the possible significance of the phenomenon has not been fully appreciated

Recently I presented further observations (Hench, 1937, 1938a, 1938b) on two new groups of cases (1) studies on thirty-one additional rheumatic patients who experienced the phenomenon, and (2), of equal importance, studies on four patients with rheumatoid arthritis and on nine patients with other types of articular and neuritic complaints who were *not* relieved of symptoms coincident with jaundice These observations will be summarized briefly

Effect of Spontaneous Jaundice

Symptomatic remissions lasting from five to ninety two (average 19 5) weeks occurred in nineteen cases of rheumatoid arthritis (average 5 5 years' duration) in which intrahepatic or obstructive jaundice lasted an average of nine weeks Remissions continuing for four to 104 weeks occurred in nine cases of fibrositis in which the jaundice lasted an average of 5 6 weeks Two patients with lumbo-sacral and sciatic pain and one with secondary hypertrophic arthritis of the hips associated with "Otto pelvis" experienced jaundice and symptomatic remissions, both jaundice and remissions lasting an average of five weeks The degree of symptomatic relief was complete for 100 per cent of the fibrositic and for 63 per cent of the arthritic patients, 37 per cent of the arthritic patients had marked but incomplete relief "Relief" implies notable or complete amelioration of the symptoms of active disease Articular pain, active articular swelling, and muscular stiffness, soreness, and fatigue were considerably reduced or disappeared Residual articular thickening and stiffness from deformity were, of course, unaffected Nevertheless a moderately severe spontaneous jaundice was able to evoke a remission even in a case of long-standing very severe rheumatoid arthritis

Four patients experienced more than one attack of jaundice, attacks of mild jaundice did not produce remissions in rheumatic symptoms, but when the jaundice was more intense the phenomenon of relief was repeated

* Communicated to the International Conference on Rheumatic Diseases, Bath, 1938

with each attack of jaundice No cumulative effect was noted subsequent remissions not necessarily being longer than the first When the phenomenon is evoked the beneficial effects of jaundice generally make their appearance promptly with the onset of jaundice usually within the first two or three days of the onset of visible icterus The phenomenon was quite obvious to those affected and they usually volunteered certain characteristic and significant remarks to relatives and friends such as When the jaundice came in at the front door the rheumatism went out by the back door Spontaneous jaundice induced a remission not a cure Remissions lasted from three weeks to several months they averaged (roughly) from two to three times the average duration of the jaundice Subsequently rheumatic symptoms returned as before in 48 per cent of cases less intensely in 39 per cent In a few cases symptoms are still absent

The phenomenon is apparently dependent more on the quantity than on the type of the jaundice it accompanied catarrhal infectious or spontaneous (intrahepatic) jaundice cinchophen jaundice and also obstructive jaundice from stones or malignancy A mild jaundice is apparently ineffective the zone of therapeutic effectiveness seeming to begin at and to continue above a level of about 8 mg of bilirubin per 100 c cm of serum Four patients with mild jaundice (with a serum bilirubin below 4 or 5 mg per 100 c cm) noted no relief from their rheumatoid arthritis

Since intercurrent jaundice of several types and degrees of severity did not alleviate painful symptoms of a few patients with other conditions such as gouty arthritis toxic or infectious arthralgia, juxta articular malignancy ischaemic neuritis, post herpetic neuralgia (Hench 1937 1938a 1938b), the phenomenon appears (so far) to be relatively specific for rheumatoid arthritis and primary fibrositis Conclusions on the specificity of the phenomenon are not final it may be found that the phenomenon may have a wider field of exhibition (and utilization) than in these rheumatic diseases and some more basic immunological response may be involved

Therapeutic Implications

The therapeutic implications are obvious An intensive study of the phenomenon—Nature's trick way of stopping the disease rapidly even if temporarily—may give us a clue to the pathogenesis of the disease and a clearer understanding of the immunity mechanism involved Perhaps it may even lead to some superior method of treatment by which we can reproduce the phenomenon of remission at will Jaundice obviously provides not a cure but a temporary control at least of symptoms But is it not likely that the differences between a preliminary temporary remission and the final permanent remission which we call a cure are merely quantitative—differences of degree and of persistence? Recently new successes in the treatment of certain diseases have rewarded those willing to follow Nature's lead no matter how irrational that lead seemed instead of continuing methods that were rational but relatively unsuccessful There was no rationale for the use of malaria in neurosyphilis Originally, behind this venture was simply the unexplained fact that 'it worked So there is to date no particular rationale for the use of artificial jaundice in rheumatic diseases The history of the therapeutics of rheumatoid arthritis is filled with the ghosts of rational treatments which should have helped but didn't In this instance guided by the exposition of this phenomenon—one of Nature's revealing slips —a return to the empiric might be fruitful With this in mind we began a search for the agent responsible for the phenomenon and the mechanism whereby it is motivated

Speculations Concerning the Factor Responsible for the Phenomenon

The responsible factor may be a chemical agent This agent—substance X—may be a normal constituent of bile (bilirubin bile salts mucin or a lipoid) an abnormal hepatic substance such as a hepatic autolysate a product of hepatic damage or it may be an extrahepatic substance formed or activated elsewhere than in the liver as the indirect result of jaundice On the other hand it has been suggested that the responsible factor is not a chemical substance but some circumstance incident to jaundice simple sedation rest and reduction of trauma dietary restriction dehydration counter irritation

1 *Bilirubin*—The phenomenon occurs consistently in the presence of a fairly intense hyperbilirubinaemia but is generally absent when hyperbilirubinaemia is absent or slight Thus bilirubin might seem to some to be the most likely agent It has been suggested that perhaps the tissues of arthritic patients lack sufficient bilirubin and jaundice supplies the deficiency Recently Race (1937) noted that in patients with rheumatoid arthritis the icterus index and concentration of serum bilirubin were somewhat low The bilirubin deficiency however was small and was not the chief cause of the low icterus index For various reasons I believe that bilirubin may not be the responsible agent at least not the sole or ultimate agent though it may be an intermediary Bilirubin is generally regarded as a substance which physiologically is relatively inert Perhaps bilirubin plays no part in the phenomenon and is only an index of severity of the hepatic damage some by product of which is the factor responsible for the relief Rather complete remissions of symptoms of rheumatoid arthritis may be induced by states other than jaundice notably by pregnancy (Hench 1938c) in which hyperbilirubinaemia does not occur though tests of bilirubin excretion may show some retention (Soffer 1933) Nature probably does not cure arthritis even temporarily in two totally different ways Although the mechanism for developing the agent may be different is it not probable that in the last analysis the ameliorating agent is the same both in pregnancy and in jaundice? If this is true one must conclude either that bilirubin is not responsible at all or that an amount of bilirubin that will produce icterus is unnecessary for the phenomenon Perhaps in the presence of pregnancy or of jaundice a special potent form a derivative or compound of bilirubin and not ordinary bilirubin is the responsible agent and one effective even in amounts that do not cause pigmentation

Another reason for debating the possibility of bilirubin being the responsible factor is that in jaundiced arthritic patients the relation between the depth of jaundice and the phenomenon of symptomatic relief although close was not absolute Frequently analgesia lasted long after the bilirubin in the serum (and presumably in the tissues) had returned to normal Furthermore several patients apparently noted relief even before their jaundice was visible If that be true either no excess of bilirubin is necessary or only a slight excess is required to produce the phenomenon But since other observations on the ineffectiveness of slight even if definitely visible jaundice (4 to 6 mg. of serum bilirubin) have made the latter deduction at present untenable no final conclusion as to the role of bilirubin can now be made

2 *Bile Salts*—Bile salts are apparently increased in the blood in certain types of hepatic disease with jaundice decreased in others Bile salts in high concentration may retard the growth of certain bacteria Until accurate methods are available for determining their concentration in blood the role of bile salts in the phenomenon under discussion is speculative

3 *Hepatic Autolysate*—It would seem more likely that the responsible agent is a product which is normal not abnormal,

to tissues helped thereby Nevertheless, a product of hepatic injury may be the responsible agent The possible value of extracts of normal and abnormal livers is being investigated

4 *Special Diet*—In one of Pemberton's patients (Pemberton, 1920 Case 53) the joints entirely cleared up during acute catarrhal jaundice He ascribed the relief not to jaundice but to the incidental period of low feeding or even 'starvation' entailed (Pemberton 1920, 1935) In my cases, however, a diet low in calories or carbohydrates was not the responsible factor since to most of the patients a supportive diet for hepatic disease' (400 to 500 grammes of carbohydrates daily) was prescribed which they continued for from three to five weeks while in the hospital (generally with an additional 100 grammes of glucose intravenously daily) and for from three to six months thereafter Despite this the phenomenon was not interrupted

5 *Simple Sedation*—It has been suggested that in jaundice the sensorium is dulled by toxins producing a simple sedation or non specific reduction of pain perception This explanation is unsatisfactory It could hardly explain diminution of swelling and stiffness also Furthermore, most of the affected patients were quite alert mentally and physically despite their jaundice (as my photographs and motion pictures demonstrate) If jaundice provided simple sedation, should not the patients with gout, juxta-articular malignancy neuritis, or neuralgia have noted relief during jaundice?

6 *Counter irritation*—It has been suggested that jaundice provided counter-irritation that the patients were too sick from jaundice to notice their joints On the contrary they particularly noticed their joints because of the surprising relief obtained therein

7 *Rest and Reduction of Trauma*—These were not the responsible factors Most of the patients, freed from rheumatic pains during jaundice, were not less active but more active than for months or years, as their cited quotations indicate

8 *Dehydration*—This is said to relieve arthritic patients somewhat (Scull and Pemberton, 1935) In my cases dehydration was not noticeable Indeed, large amounts of fluid were generally given, not because of dehydration but to combat toxicity Despite the large intake of fluid, analgesia persisted

Speculations Concerning the Mechanism Whereby the Agent May Act

Assuming the responsible agent to be a chemical substance or compound, and not an incidental circumstance, the phenomenon may result from (1) the correction of some chemical deficiency, (2) the correction of some chemical over-sufficiency, or (3) an immunological process involving bacteriolysis, bacteriostasis, or detoxication

1 Though an attractive idea, it remains to be proved that jaundice provides to tissues involved in arthritis and fibrositis some chemical constituent adequate amounts of which the rheumatic patient did not previously possess

2 Presenting the opposite view, perhaps hepatitis and jaundice correct some hyperfunctioning and not a hypofunctioning state, the hepatic damage temporarily lowering the production of some substance of which rheumatic patients have an oversupply Were this so, severe hepatitis alone, without jaundice, might be expected to invoke the phenomenon, but it did not in one case (Hench, 1934, Case 17, first series)

3 Perhaps the agent, substance X, possesses the property of detoxication, bacteriolysis, or bacteriostasis in respect to the organisms responsible for chronic rheumatism Bile is bacteriolytic to pneumococci Our preliminary studies have failed to show any bacteriolytic or bacteriostatic effect on certain arthrotropic, neurotropic, or neuromyotropic streptococci *in vitro* using concentrations of bilirubin and bile salts (alone or together) equal to or greater than those of clinical (or experimental) jaundice Furthermore, arthrotropic streptococci could still be isolated from foci of patients enjoying the phenomenon

I have not discussed the effect of jaundice on the physical properties of blood—colloidal osmotic pressure, surface tension, viscosity, haemoglobin-oxygen stability, and so forth Further speculations on those phases of the problem are useless at present

Attempts to Reproduce the Phenomenon

It was decided to administer to rheumatic volunteers the different available constituents of bile, first alone and then in combination, and first by the simpler routes (oral, rectal) and later intravenously or otherwise Bilirubin was not used first because of reasons just noted, and because of its cost ($25 a gramme) and relative unavailability at the onset of this work

Bile Salts—Many preparations are available 'Glycotauro" (Hynson, Wescott and Dunning) was given orally in doses up to 15 grammes in fourteen days Ox gall was administered in doses up to 60 grammes in thirteen days These doses are equal to or above those usually prescribed The results were questionable

Synthetic Bile Salts—Sodium dehydrocholate ('decholin,' Riedel de Haen) was given intravenously, orally, and in combination Several patients received 2 grammes intravenously for from eight to twenty-one days, or the tablets (each 0·25 gramme) orally in doses up to a total of 44·5 grammes in twenty one days The results were questionable some patients felt somewhat relieved, but it was evident that ordinary doses of this and the previous preparations, given alone, would not precipitate the complete phenomenon Recently Sidel, Thompson, Rawls, and Margolis (in a discussion of my article) reached the same conclusion

Diluted Ox Bile—Sterile ox bile diluted in water and olive oil was given by proctoclysis, but proved irritating and was promptly evacuated

Human Bile—Amounts of human bile up to 2,600 c.cm on one day (7,650 c.cm in ten days) were given by stomach tube Anticipating that this bile probably would circulate only through the entero hepatic circulation and never reach the general or articular circulation, I was not surprised that the concentration of serum bilirubin was not increased and that no relief resulted Patients took the bile well, one took it with pleasure, saying it increased his appetite

Liver Extracts—Ordinary doses of commercial liver extract which I have occasionally used in treating arthritic patients with secondary or with coincident pernicious anaemia never appeared to affect articular symptoms This has also been the observation of Drs George Minot and William Murphy (personal communication) Hence this method of approach has not been extensively explored Reasoning that the effective agent might be a product of hepatic degeneration, Margolis (1937) gave McElroy's liver autolysate intravenously to two patients with rheumatoid arthritis Exacerbations of pain, stiffness, and soreness were obtained

Transfusions of Highly Jaundiced Blood—To my knowledge, jaundiced blood has not heretofore been deliberately used for transfusion Hoping that potent amounts of substance X might be present in portions of jaundiced blood available for transfusions, four arthritic patients received one to four such transfusions Round-robin transfusions' were arranged non arthritic jaundiced patients with various hepatic disorders donated amounts of (Wassermann negative, sterile) bad blood in return for twice as much good blood from healthy donors the jaundiced blood was injected into non jaundiced arthritic patients in the usual manner, with only a slight reaction or no more than from any transfusion One patient in her fourth transfusion received 800 c.cm of jaundiced blood containing 21 mg. of bilirubin per 100 c.cm (actually only 168 mg of bilirubin) The next day she insisted that she had less pain, if so, relief was transient, and the serum bilirubin was immaterially increased

Artificial Jaundice—Since these various methods used to reproduce the phenomenon were employed only on small numbers of patients they should not be hastily dismissed as useless But obviously the complete phenomenon provided by spontaneous jaundice was not being reproduced thereby Rather than persist in these methods it was decided to postpone further investigation along these lines and to attempt to obtain by some other method an effect comparable to the phenomenon described not the slow equivocal type of improvement which the current methods already provided It seemed necessary to effect a reproducible relatively harmless type of jaundice in order to study satisfactorily the physicochemical intricacies of the phenomenon

Toluylenediamine Jaundice—Certain studies (Wolff 1934 McGowan 1935 McGowan Bollman and Mann 1936) suggested that toluylenediamine might be a suitable substance to use in the first deliberate attempt to induce jaundice experimentally in man Toluylenediamine jaundice in animals was intense was rather controllable was intrahepatic in type and produced no significant detectable functional or pathologic residue In June 1936 an arthritic patient who was discouraged after thirteen years of suffering from a condition that had progressed in spite of all manner of therapy elected to take toluylenediamine orally Contrary to expectations the induced jaundice was wholly of the haemolytic type it was transient and rather mild the maximal concentration of bilirubin being only 6 3 mg. (direct reaction) not entering the zone of therapeutic effectiveness No relief of joint symptoms resulted The chemical produced considerable gastro intestinal irritation Further details will be reported elsewhere

Induced Hyperbilirubinaemia—More recently Thompson and Wyatt (1937 1938) noted that the intravenous administration of bile salts alone (decholin 2 grammes daily for nine to twelve days) was without beneficial effect in ten cases of rheumatoid arthritis as were injections of bilirubin alone (10 to 15 mg. per kilogramme daily for several days) in three cases They noted however that injections of bilirubin (10 mg per kilogramme) and decholin (40 mg per kilogramme) in combination produced an ameliorating effect which apparently duplicates the effects of clinical jaundice The bilirubin-decholin combination produced a slightly higher and more persistent hyperbilirubinaemia than injections of bilirubin alone Except for a few febrile reactions no evidences of toxicity were noted in the patients or animals that had been given the injections

At the last conference of the American Rheumatism Association (June 1937) Thompson presented the preliminary results of these experiments Injections of bilirubin and decholin were given to ten patients daily for from seven to eleven days Each day the injected bilirubin was rapidly but incompletely excreted so that with repeated doses the tissues retained enough to produce definite hyperbilirubinaemia and icterus Thompson and Wyatt reported that in these ten cases diminished swelling was noted after from one to nine injections Analgesia (at first partial) was observed after from one to seven injections and persisted for varying periods the shortest period being twelve days At the time of their report analgesia had been maintained in one case for five months in another for five and a half months in others for two months one month and one month respectively In November 1937 I visited Drs Thompson and Wyatt Their results at that time (which are here given with their permission) were as follows They had administered from six to twelve injections of bilirubin and decholin to a total of thirteen patients whose disease had lasted from three to eight years Of these thirteen cases long remissions (from two to eight months) had been precipitated in four cases short remissions (five to forty days) in six and no results had been obtained in three (Two other patients were under treatment) With regard to the three cases in which no results were obtained (1) one patient with muscular pains stopped treatment after six doses (2) a woman with severe rheumatoid arthritis was unrelieved after twelve doses and (3) a spondylitic patient noted slight analgesia after the second dose and considerable analgesia but no increased mobility after nine doses the analgesia persisted only ten days after which he had a severe exacerbation

Preliminary Results with Induced Hyperbilirubinaemia

A few weeks before presenting his preliminary results Dr Thompson kindly acquainted me with this work in order that I might attempt its confirmation The technique of preparation and administration is not as simple as it sounds It is not simply a question of dissolving bilirubin in any alkali adding bile salts and then injecting the mixture To date it appears that the solution must be made fresh daily (a matter of about two hours work) administered promptly and according to Thompson kept from sunlight constantly (possibly to prevent oxidation of bilirubin at least it tends to minimize reactions) It remains to be proved how necessary some of these procedures are Most commercial bilirubin is rather impure Although the samples of bilirubin we are both using are becoming purer they still contain impurities The strongly alkaline mixture continues to irritate the veins and causes frequent thromboses so that the matter of giving a number of consecutive daily injections often becomes a problem In an attempt to avoid thrombosis we buffered the solution to approximate neutrality just before the injection in two cases This markedly altered the results, no significant hyperbilirubinaemia and no symptomatic relief was obtained In spite of technical difficulties however we at the clinic have at least partially confirmed the work of Thompson and Wyatt By this procedure one can produce a definite apparently non toxic pigmenting hyperbilirubinaemia Using the larger dose of bilirubin (15 mg per kilogramme) more frequently than Thompson we have produced degrees of hyperbilirubinaemia in which the peak concentrations (just after the solution is injected) have reached 20 to 35 mg and the retention levels twenty four hours after injection (and just before another injection) rose to as high as 12 5 mg of bilirubin per 100 c cm of serum

To date my colleagues and I have treated twelve patients—eleven with rheumatoid arthritis and one with primary fibrositis Rarely obtaining any significant effect from six to twelve injections we have sometimes given twelve to twenty and in a few cases from twenty five to thirty consecutive daily injections Little or no benefit was obtained in five cases (including the two in which the solutions were buffered) One patient had a rather complete temporary remission in symptoms but only for about three weeks which is the longest and most definite effect obtained Short incomplete remissions apparently resulted in six cases for a few days only in three of these six cases the reduction in symptoms seemed slight but definite in the other three it was more definite but was still incomplete and very transient One of these six patients accepted two courses of injections the first course included seventeen doses the second twelve doses[1] He was markedly icteric but the effect was mild if there was any At the start attempting by correspondence to collaborate in the development of a new technique we made three slight changes in technique which we believed were insignificant[2] Correcting these differences however has not brought about a relief com-

[1] The first seventeen doses were prepared by our modification of Thompson's technique but the twelve doses of the second course were prepared exactly according to Thompson's technique

[2] In the method of Thompson and Wyatt bilirubin is dissolved in monohydrated sodium carbonate we used anhydrous sodium carbonate solutions in both cases being one tenth normal When the bilirubin was thoroughly dissolved Thompson filtered the solution through a Seitz filter To facilitate the Seitz filtration we first filtered the solution through a thin layer of infusorial earth. Decholin was added by Thompson after the Seitz filtration by us before the filtration These differences in technique seem immaterial

parable to that produced by spontaneous jaundice The failure to produce constantly any lasting relief by such injections has convinced me that it is necessary to study this problem from many other angles in order to establish the influence of the various factors involved

Preliminary Appraisal—It is too early to evaluate the procedure fully By it one can produce an apparently harmless artificial "jaundice' or hyperbilirubinaemia which may be utilized to advantage in the study of a number of physiological and clinical problems Only by some such method can we determine what part, if any, bilirubin plays in the phenomenon which spontaneous jaundice induces Regardless of the slight, and to my way of thinking unimportant, differences in technique, my results, and those of Thompson and Wyatt, speak for themselves A number of my patients have been made markedly icteric and had concentrations of serum bilirubin that should have been effective were bilirubin in just any form the potent factor, the results, however, have been equivocal or incomplete Obviously the method is not yet reproducing the full effect which spontaneous jaundice evokes But the fact that any effect, no matter how incomplete or transient, can be so induced, even inconstantly, seems significant So far, however, one must clearly differentiate the effects of spontaneous jaundice from those of induced hyperbilirubinaemia

Since the results were so often equivocal, the procedure of inducing hyperbilirubinaemia has been difficult to evaluate It seems to me best to regard it as a worthy preliminary venture which may provide a rather crude and inconsistent approximation of the more dramatic and complete effect of spontaneous jaundice Certainly in its present form it is by no means a "control of arthritis', nor is it yet a practical procedure, because it is expensive, time consuming, and (most important) inconstantly and incompletely effective Regarding it as promising research, I agree with Thompson that to exploit the use of bilirubin and bile salts for the treatment of arthritis at this time is unwarranted and most undesirable

Summary and Conclusions

Jaundice involves a physiological reaction which is antagonistic to the continuation of active symptoms of rheumatoid arthritis and primary fibrositis With the onset of any one of several types of jaundice, rather dramatic remissions in rheumatic symptoms, lasting from three to 104 weeks, occurred in nineteen cases of rheumatoid arthritis, in nine of primary intramuscular or periarticular fibrositis, in two of lumbo-sacral and sciatic pain, and in one of secondary hypertrophic arthritis of the hips Remissions averaged (roughly) from two to three times the average duration of the jaundice and affected symptoms of active disease, residual articular thickening and disability from deformity were unaffected

The phenomenon depends more on the quantity than on the quality (or type) of jaundice, a certain intensity of jaundice being required Since intercurrent jaundice of several types and various degrees of severity did not alleviate symptoms of certain other painful articular and neuritic diseases, the phenomenon may be relatively specific for rheumatoid arthritis and fibrositis This conclusion is tentative, perhaps the exhibition and application of the phenomenon may be possible in other conditions

The therapeutic implications are obvious a study of the phenomenon may enhance our knowledge of the pathogenesis of these diseases and may lead to some superior method of treatment The responsible agent and the mechanism whereby it operates have not been identified, certain hypotheses concerning them have been entertained Several methods involving the administration of various components of bile and the production of artificial jaundice and induced hyperbilirubinaemia are being used in an attempt to reproduce the phenomenon "Therapeutic jaundice" is an attractive term, but even if what it implies can be successfully accomplished, it should be regarded not as an end in itself but as a means to an end, a rather crude form of treatment which is just a step, but perhaps an important one, on the way to the refined therapy of the future

Regardless of what further investigations bring forth, four conclusions are made now

1 The condition of jaundice is not entirely malevolent, it may initiate a phenomenon distinctly, if temporarily, beneficial to patients with certain diseases, particularly rheumatoid arthritis and fibrositis

2 Rheumatoid arthritis and fibrositis can no longer be regarded as necessarily relentless uncontrollable diseases for which no really satisfactory rapid method of control should ever be expected Certain of their pathological changes may be permanent, but their pathological physiology is more rapidly reversible than previously supposed, indeed, it may be dramatically reversible

3 Regardless of the supposed validity of the infectious theory, obviously rheumatoid arthritis and fibrositis can be profoundly influenced by a phenomenon primarily chemical

4 Nature possesses a highly effective method of producing dramatic remissions involving a phenomenon which is precipitated more rapidly by jaundice than by any other physiological or therapeutic method The next step belongs to the future It is important for us to identify Nature's dramatic, if accidental, antidote

REFERENCES

Borman, M C (1936) *Wisconsin med J* **35**, 890
Grigg, W K, and Jacobsen, V C (1933) *Ann intern Med* **6**, 1280
Hench, P S (1933a) *Proc Mayo Clin* **8**, 430
—— (1933b) *J Amer med Ass* **101**, 1265
—— (1934) *Ann intern Med* **7**, 1278
—— (1935) *Med Clin N Amer* **19**, 573
—— (1937) *J Amer med Ass* **109**, 1481
—— (1938a) *Arch intern Med* **61**, 451
—— (1938b) *International Handbook on Rheumatic Diseases*
—— (1938c) *Proc Mayo Clin* **13**, 161
McGowan, J M (1935) *Proc Mayo Clin* **10** 565
——Bollman, J L, and Mann, F C (1936) *J Pharmacol*, **58** 305
Margolis, H M (1937) *Clinical Reviews of the Pittsburgh Diagnostic Clinic* p 256, Paul B Hoeber, New York
Minot, G, and Murphy, W Personal communication
Parsons, L and Harding W G, jun (1932a) *Ann intern Med* **6**, 514
—— —— (1932b) *Calif West Med* **37**, 30
Pemberton, Ralph (1920) *Arch intern Med* **25**, 351
—— (1935) *Arthritis and Rheumatoid Conditions Their Nature and Treatment* 2nd ed p 268 Lea and Febiger Philadelphia
Race Joseph (1937) *Reports on Chronic Rheumatic Diseases* No 3, p 30, The Macmillan Company, New York
Scull C W, and Pemberton, Ralph (1935) *Ann intern Med* **8**, 1247
Sidel N, and Abrams M I (1934) *New Engl J Med* **210**, 181
Soffer, L J (1933) *Johns Hopk Hosp Bull* **52**, 365
Still, G F (1897) *Trans roy med chir Soc* **80**, 47
Thompson, H E, and Wyatt, B L (1937) *J Amer med Ass* **109**, 1482
—— —— (1938) *Arch intern Med* **61**, 481
Wishart John (1903) *British Medical Journal*, **1**, 252
Wolff, H J (1934) *J Pharmacol* **50**, 407

SULPHAMIDO-CHRYSOIDINE SULPHANILAMIDE, AND BENZYLSULPHANILAMIDE IN THE TREATMENT OF ERYSIPELAS

A CONTROLLED SERIES OF 242 CASES

BY

W. R. SNODGRASS, M.A., B.Sc., M.D., F.R.F.P.S.G.

Assistant Physician Western Infirmary Glasgow

T. ANDERSON, M.B., Ch.B., M.R.C.P.Ed.

Deputy Superintendent Ruchill Hospital Glasgow

AND

J. L. RENNIE, M.B., Ch.B., D.P.H.

Assistant Medical Officer of Health Burgh of Ayr late Resident Assistant Physician Ruchill Hospital Glasgow

We have recently published two reports to the Therapeutic Trials Committee of the Medical Research Council on the treatment of erysipelas (Snodgrass and Anderson 1937a, 1937b). In our first report we showed in a controlled series of 312 cases that prontosil red (sulphamido-chrysoidine) was more effective than ultra violet light in that the cases which received sulphamido chrysoidine gave better results in respect of the curtailment of (1) the duration of the spread of the local lesion (2) the duration of primary pyrexia (3) the duration of toxaemia. The evidence supporting these statements was assessed statistically.

In our second report dealing with a controlled series of 270 cases of erysipelas we investigated the action of the derivative of sulphamido-chrysoidine termed *p* amino benzenesulphonamide and commonly called sulphanilamide. Ultra-violet light was again used as the method of treatment for the control series of cases. We once more came to the conclusion that the use of sulphanilamide was better than the use of ultra violet light in respect of the same criteria as in our first report. This evidence was also assessed statistically. The question of the optimum dosage was not determined but it was found that an effective method of treatment was to give 1 gramme of sulphanilamide by mouth at four hourly intervals until the cessation of primary pyrexia and thereafter 0.75 gramme by mouth thrice daily until final cure was determined.

Toxic symptoms in this second series in which large doses of sulphanilamide were used were common amounting to 35.5 per cent. in 270 cases. Cyanosis was the most frequent manifestation and occurred in 29.6 per cent. of cases. It was considered, therefore that further work was necessary in an attempt to settle a minimum adequate dosage for the incidence of cyanosis rapidly increased with an increase in dosage. In our first series employing sulphamido chrysoidine there were only two cases of cyanosis but the average case dosage was 5 grammes and the maximum case dosage 15 grammes. In the second series employing sulphanilamide the average case dosage was 41.6 grammes and in the first two days 14.64 grammes while cyanosis as already stated occurred in 29.6 per cent. of all cases. Thirty nine cases in our second series received more than 6 grammes of sulphanilamide a day during their initial stages of treatment and in this small group the incidence of cyanosis rose to 48.7 per cent. Sulphamido chrysoidine and sulphanilamide are not chemically equivalent drugs nor were they employed in equivalent dosage. It was therefore difficult to compare their therapeutic efficiency as exhibited in our two series of cases. It was thought desirable to undertake a third series of controlled cases with a view to determining this and further it was considered desirable to investigate the anti streptococcal activity in erysipelas of yet another derivative of this group of anti bacterial compounds and so *p* benzylamino benzenesulphonamide was employed. The objects of this third report are therefore (1) To investigate the comparative therapeutic activities of (*a*) sulphamido-chrysoidine (the preparation used was prontosil red Messrs. Bayer Ltd.) (*b*) *p* aminobenzenesulphonamide commonly termed sulphanilamide (the preparation used was streptocide Messrs. Evans Sons Lescher and Webb) (*c*) *p* benzylaminobenzenesulphonamide hereafter referred to as benzylsulphanilamide (the preparation used was prosepasine Messrs. May and Baker Ltd.) (2) To determine an optimum dosage taking into account the question of drug intolerance.

The material consists of all patients over 5 years of age whose case was diagnosed as erysipelas after admission to Ruchill Hospital Glasgow from November 1937 to March 1938. Again our material was thoroughly representative of the incidence of the disease in this district during the period under review. All patients were under the clinical control of T. A. and J. L. R.

Plan of Investigation and Details of Treatment

Part I. 122 Cases.—There were four treatment groups:

A. Benzylsulphanilamide 1 gramme four hourly.
B. Benzylsulphanilamide 2 grammes four hourly.
C. Sulphanilamide 1 gramme four hourly.
D. Sulphanilamide 2 grammes four hourly.

For each group fifteen male patients and fifteen female patients were gathered—the cases being allocated strictly in order of admission. (In each ward male and female one extra case was taken on at the end of the investigation and was retained in the series.)

These cases were admitted during the months of November and December 1937, and early in January 1938.

Part II. 120 Cases.—There were four treatment groups:

A. Sulphamido chrysoidine 1 gramme four hourly.
B. Sulphamido chrysoidine 2 grammes four hourly.
C. Sulphanilamide 0.5 gramme four hourly.
D. Sulphanilamide 0.75 gramme four hourly.

Again each group comprised fifteen male patients and fifteen female patients taken in rotation according to the order of admission. These cases were admitted during the months of January, February and March 1938.

The specific treatment noted above was continued until the temperature of the patient became normal. Thereafter all cases in groups A, B, C and D Part I and groups A and B, Part II received 1 gramme of the drug originally given thrice daily till dismissal from hospital. In respect of groups C and D Part II the original dosage of the drug chosen 0.5 gramme and 0.75 gramme was administered thrice daily.

No local treatment was given and all cases as before were treated under strictly comparable conditions. Full

details of diet and laxatives will be found in our second paper (Snodgrass and Anderson, 1937b), which also recorded the data used to obtain our records of results In a word, this series of cases, apart from specific treatment has been subjected to the same controls and to the same analyses as the preceding series

Assessment of Results

1 The distribution of the individual cases in the two treatment groups must be considered in respect of certain factors known to influence the course of the disease Those regarded as being of greatest importance are (*a*) the duration of the disease before admission to hospital, (*b*) the age of the patient, (c) the severity of the infection (*d*) associated diseases Tables constructed to show the relation of these factors to the types of treatment indicate an even distribution A statistician who has examined them is satisfied that there was no weighting of any one line of treatment by any of these factors

2 The question when "cure" is achieved has to be determined The fatality rate in erysipelas is so low that it cannot be used in a small series of cases to assess the value of a therapeutic measure There is no single clinical feature which can be regarded as a satisfactory criterion of recovery Cases are seen where the lesion continues to spread after the temperature has become normal, and, again, it is not uncommon for the local lesion to cease spreading while the temperature is still elevated and the patient continues in a toxic condition In order to arrive at a conclusion in this series of cases, attention was paid to the following points from the beginning of treatment (i) the duration in days of the spread of the local lesion, (ii) the duration in days of the primary pyrexia, (iii) the time in days which elapsed until the patient was free from toxic symptoms These are the criteria which were used in our previous reports

Results of Treatment

There were five deaths Four of these have been excluded from the following tables* All deaths will be dealt with later in this report The corrected and rearranged numbers for each subsection are therefore

Sulphamido chrysoidine	1 gramme four hourly		30 cases
" "	2 grammes " "		28 "
Sulphanilamide	0·5 gramme " "		30 "
"	0·75 " " "		30 "
"	1 " " "		31 "
"	2 grammes " "		31 "
Benzylsulphanilamide	1 gramme " "		29 "
"	2 grammes " "		29 "
		Total	238 cases

Table I shows that out of fifty-eight cases receiving sulphamido-chrysoidine 86·2 per cent had no further spread of lesion after twenty-four hours, out of 120 cases receiving sulphanilamide the equivalent percentage was 88·3 while out of fifty eight cases receiving benzylsulphanilamide the percentage was only 68·9 The difference between this last percentage and either of the others is more than twice the standard errors of the differences and is considered significant This reflects unfavourably on the effect of benzylsulphanilamide With regard to the various subgroups receiving sulphanilamide little can be said there is a slightly better outcome during the first day for those cases receiving the larger dosages, but the difference is small and cannot be deemed significant

TABLE I—*Spread of Lesion*

Method of Treatment		Duration in Days				Total Cases
		0	1	2	3	
Sulphamido-chrysoidine	1 gm	13 (43·3)	11 (36·7)	6 (20·0)	0	30
	2 gm	11 (39·3)	15 (53·6)	2 (7·1)	0	28
Sulphanilamide	0·5 gm	13 (43·3)	10 (33·3)	7 (23·3)	0	30
	0·75 gm	14 (46·7)	12 (40·0)	3 (10·0)	1 (3·3)	30
Sulphanilamide	1 gm	17 (54·8)	11 (35·5)	3 (9·7)	0	31
	2 gm	18 (58·1)	11 (35·5)	2 (6·5)	0	31
Benzylsulphanilamide	1 gm	16 (55·2)	4 (13·8)	7 (24·1)	2 (6·9)	29
	2 gm	16 (55·2)	4 (13·8)	8 (27·6)	1 (3·5)	29
Totals		118 (49·6)	78 (32·8)	38 (16·0)	4 (1·7)	238

Table II shows that there is no significant difference between the various results After forty eight hours, pyrexia had ceased in 77·6 per cent of the cases receiving sulphamido-chrysoidine, in 72·1 per cent of the cases receiving sulphanilamide, and in 74·1 per cent of the cases receiving benzylsulphanilamide

TABLE II—*Primary Pyrexia*

Method of Treatment		Duration in Days								Total Cases
		0	1	2	3	4	5	6	Over 6	
Sulphamido chrysoidine	1 gm	1 (3·3)	11 (36·7)	14 (46·7)	3 (10·0)	1 (3·3)	0	0	0	30
	2 gm	4 (14·3)	8 (28·6)	7 (25·0)	6 (21·4)	1 (3·6)	0	2 (7·1)	0	28
Sulphanilamide	0·5 gm	5 (16·7)	8 (26·7)	12 (40·0)	4 (13·3)	1 (3·3)	0	0	0	30
	0·75 gm	0	11 (36·7)	11 (36·7)	5 (16·7)	2 (6·7)	0	0	1* (3·3)	30
	1 gm	0	11 (35·5)	10 (32·3)	9 (29·0)	0	1 (3·2)	0	0	31
	2 gm	0	8 (25·8)	12 (38·7)	3 (9·7)	7 (22·6)	1 (3·2)	0	0	31
Benzylsulphanilamide	1 gm	1 (3·5)	9 (31·0)	12 (41·4)	5 (17·2)	0	2 (6·9)	0	0	29
	2 gm	0	9 (31·0)	12 (41·4)	7 (24·1)	0	0	1 (3·5)	0	29
Totals		11 (4·6)	75 (31·5)	90 (37·8)	42 (17·6)	12 (5·0)	4 (1·7)	3 (1·3)	1 (0·4)	238

* The delay here was due to drug fever

Table III shows that out of fifty eight cases receiving sulphamido chrysoidine the percentage having no toxaemia after the third day was 65·6 Out of 122 cases receiving sulphanilamide the equivalent percentage was 59·0 Out of fifty-eight cases receiving benzylsulphanilamide the percentage was 29·3 These percentages reflect unfavourably upon the action of benzylsulphanilamide

One patient died during convalescence and as the local lesion was at the time of death completely cured the case has been returned in the statistical tables

TABLE III—*Toxaemia*

Method of Treatment	Duration in Days								Total Cases
	0	1	2	3	4	5	6	Over 6	
Sulphamido-chrysoidine 1 gm.	0	0	7 (23·3)	13 (43·3)	9 (30·0)	0	1 (3·3)	0	30
Sulphamido-chrysoidine 2 gm.	1 (3·4)	2 (6·8)	3 (10·3)	12 (40·8)	9 (30·6)	0	1 (3·4)	0	28
Sulphanilamide 0·5 gm	0	4 (13·3)	4 (13·3)	11 (36·7)	8 (26·7)	2 (6·7)	1 (3·3)	0	30
Sulphanilamide 0·75 gm	1 (3·3)	0	7 (23·1)	12 (39·6)	8 (26·4)	1 (3·3)	1 (3·3)	0	30
Sulphanilamide 1 gm	0	0	3 (9·7)	15 (48·4)	10 (32·3)	2 (6·5)	1 (3·2)	0	31
Sulphanilamide 2 gm	0	0	3 (9·7)	12 (38·7)	12 (38·7)	2 (6·5)	2 (6·5)	0	31
Benzylsulphanilamide 1 gm.	0	0	2 (6·9)	7 (24·1)	11 (37·9)	6 (20·7)	2 (6·9)	1 (3·5)	29
Benzylsulphanilamide 2 gm	0	1 (3·5)	0	7 (24·1)	10 (34·5)	8 (27·6)	3 (10·4)	0	29
Totals	2 (0·8)	7 (2·9)	29 (12·2)	89 (37·4)	77 (32·3)	21 (8·8)	12 (5·0)	1 (0·4)	238

Very severe case with scalp abscess.

Recurrence

No recurrence took place in any case during the period of stay in hospital nor has any patient been readmitted with a recurrence one month after the closing of the records This is rather a remarkable result In our first series of 312 cases there were twenty seven cases of recurrence an incidence of 8 65 per cent In our second series of 270 cases the percentage incidence was 3 7 As half the cases in the two preceding series were not treated with any preparation of sulphanilamide and as all cases in this third series received some form of sulphanilamide the absence of recurrence may be adduced as a further strong argument in favour of treatment by some form of sulphanilamide

Complications

Here are included the septic complications directly attributable to infection with erysipelas Among such conditions are abscess formation septicaemia, thrombosis and nephritis

The percentage incidence was 13 8 in those cases receiving sulphamido-chrysoidine 6 6 in the cases receiving sulphanilamide and 13 8 in the cases treated with benzylsulphanilamide The number of complicated cases is so small that no significance is attached to the slight differences in the three percentages

Deaths

The number of deaths was five out of 242 a percentage of 2 06 This is low if compared with the annual fatality rate given for Ruchill Hospital in the medical officer of health's annual returns The percentages there for the past few years are 1935 7 5 1934 7 6 1933 9 3 1932 9 6 1931 7 7 Four of the patients who died have been excluded from Tables I II and III for obvious reasons but one is included because the erysipelas was completely cured and the patient a male aged 72 who suffered from chronic myocarditis collapsed and died on being allowed up on the ninth day after admission to hospital In this case the duration of spread of the lesion was two days of primary pyrexia three days and of toxaemia four days The data relevant to these fatal cases are given in Table IV

TABLE IV—*Details of Fatal Cases*

Case No	Method of Treatment	Sex and Age	Site	Days Ill before Admission	Dose of Drug in Grms.	Duration of Treatment in Days	Days in Hospital	Remarks
531	Sulphamido-chrysoidine	M 75	Facial	2	6	1	1	Large rodent ulcer of face Acute nephritis on admission Developed cavernous sinus thrombosis
1,114	Sulphamido-chrysoidine	F 43		2	24	2	2	Carbuncle of neck Diabetes mellitus Died in coma
*716	Sulphanilamide	M 72	"	1	11	3·5	9	Chronic myocarditis Allowed up on ninth day in hospital—collapsed and died
95	Benzylsulphanilamide	M 64		3	36	3	8	Lesion had subsided at death Chronic drinker of methylated spirit. ? due to cerebral atheroma Post mortem refused
6011	Benzylsulphanilamide	F 77	Leg	10	30	5	45	Developed subcutaneous abscesses of legs which would not heal. Senile hypostatic pneumonia terminal event

This patient was completely cured at time of death, and death had no relation to erysipelas

It is to be noted from Table IV that none of these deaths occurred in uncomplicated cases of erysipelas It is quite apparent that no definite conclusions can be drawn from fatality rates in this disease as to the relative merits of different types of treatment since there will always be a proportion of patients suffering from associated disease in whom erysipelas is merely one of the terminal events

Toxicity

Table V gives the total observed incidence of toxic manifestations

TABLE V—*Toxic Effects*

Type of Toxic Reaction	Sulphamido chrysoidine		Sulphanilamide				Benzylsulphanilamide	
	1 gm.	2 gm	0·5 gm	0·75 gm	1 gm.	2 gm	1 gm.	2 gm.
Moderate cyanosis	–	–	–	–	1	6	–	–
Slight cyanosis	7	2	14	12	13	13	2	3
Pyrexia	–	–	–	2	1	3	1	1
Rash	–	1	2	–	–	–	1	1
Vomiting or severe nausea	2	2	–	1	1	2	1	–
Delirium	1	1	–	1	–	–	–	–
Jaundice (?)	–	–	–	–	1	–	–	–
Complaint of severe drowsiness	–	–	–	1	–	1	–	–
Total cases showing toxic effects	10 (33·3)	6 (21·7)	16 (53·3)	17 (56·8)	17 (56·8)	25 (80·1)	5 (17·2)	5 (17·2)

* This case left hospital against advice on day jaundice was noted—twelfth day

The occurrence of some degree of cyanosis was the most commonly observed toxic effect Irrespective of drug or dosage, the total incidence was 30 7 per cent In no case could the appearance of cyanosis be considered dramatic, it was never of long duration and there was little constitutional disturbance No spectroscopic examinations were made, but none of the cases exhibited the severe degree of cyanosis that had been previously noted by us in patients with proved sulphaemoglobinaemia No patient received any form of sulphur while under treatment Twenty-nine per cent of the patients, however, gave a history of taking 'salts' before admission to hospital The routine which is adopted in the hospital when such a history is obtained is to administer a soap and-water enema on admission, repeat it in twelve hours, and delay treatment with the drugs until after the second enema Cyanosis developed in 32 8 per cent of those who gave a history of taking 'salts," while in those who had no such antecedent history the incidence of cyanosis was 29 per cent It has been suggested that there is a causal relation between premedication with saline purgatives containing sulphur and the occurrence of cyanosis (Paton and Eaton, 1937, Discombe, 1937) The close equivalence of the percentages in the two groups in this series and the absence of severe cyanosis rather suggests that the enemata may have some preventive action on the occurrence of cyanosis

At no time did cyanosis give cause for alarm, and while in some cases the drug was stopped on its appearance, in the majority the drug was continued with no apparent ill effect When comparison is made between the drugs used, it is found that the incidence of cyanosis was less in those cases which received sulphamido-chrysoidine or benzylsulphanilamide, and that, as we had previously suggested, cyanosis increased in incidence with the larger doses of sulphanilamide

Toxic effects other than cyanosis were noted in 11 8 per cent of the cases These (see Table V) were transient in nature, rapidly ceased after stoppage of the drug, and did not give rise to prolonged illness or unpleasant sequelae The occurrence of these secondary toxic effects cannot be correlated with any particular type of drug used, and whether they are an expression of idiosyncrasy or of some factor still undetected cannot yet be stated While routine blood examinations have not been carried out, no case has been observed in which there was any clinical suggestion of blood dyscrasia

One further observation should be made regarding toxic effects Reference to Table II shows that when 1 gramme of sulphanilamide was given four-hourly only 3 2 per cent of cases remained pyrexial after three days in hospital, while with a dosage of 2 grammes four-hourly the equivalent percentage was 25 8 When the other criteria of cure are examined in these two groups it is seen that if 2 grammes of sulphanilamide are given four-hourly the duration of the spread of the lesion and of toxaemia closely corresponds to the results obtained with 1 gramme of sulphanilamide given at four hourly intervals If this is taken in association with the later occurrence of drug fever as a toxic sign it would seem that larger doses of sulphanilamide may have a direct effect in the prolongation of fever

Discussion

Table VI summarizes the results obtained with the different drugs used in the combined series irrespective of dosage employed Percentages only are given

TABLE VI

Drug Employed	No Spread after 24 Hours in Hospital	No Pyrexia after 48 Hours in Hospital	No Toxaemia after 3 Days in Hospital	Toxic Effect of Drug	No of Cases
Sulphamido-chrysoidine	86 2	77 6	65 5	27 5	58
Sulphanilamide	68 3	72 1	59 0	61 4	122
Benzylsulphanilamide	68 9	74 1	29 3	17 2	58

It would appear that in respect of its effect on the duration of spread and toxaemia the action of benzyl sulphanilamide is slower than that of either of the other drugs The incidence of toxic effects from this drug is the lowest, but on the other hand, as has been stated earlier, the occurrence of these toxic phenomena seems to have no harmful sequelae, provided that the drugs are used in proper dosage and under careful clinical supervision On these grounds, therefore, and after careful study of Tables I, II, and III, we feel that benzyl sulphanilamide is not the drug of choice in the treatment of erysipelas

The figures in Table VI indicate that there is little to choose between sulphamido-chrysoidine and sulphanilamide I Table VI, however, the varied dosage of the two drugs employed is not taken into account One of the purposes of this paper is to attempt to ascertain a dosage which will have the optimal clinical effect After careful scrutiny of Tables I, II, and III it is thought that the best results have been obtained with the employment of sulphamido-chrysoidine in 1 and 2 gramme doses and sulphanilamide in 0 75 and 1 gramme doses The effects of these are summarized, therefore, in Table VII, using the same criteria for assessment and again expressing the results as percentages

TABLE VII

Drug and Dosage Employed	No Spread after 24 Hours Treatment	No Pyrexia after 48 Hours Treatment	No Toxaemia after 3 Days Treatment	Toxic Effects of Drug	No of Cases in Group
Sulphamido chrysoidine 1 gramme	80	86 7	66 7	33 3	30
2 grammes	92 9	67 9	66 7	21 7	28
Sulphanilamide 0 75 gramme	86 7	73 3	65 5	54 8	0
1 gramme	90 3	67 7	58 1	54 8	30

Analysis of Table VII suggests the following conclusions

(*a*) *Duration of Spread*—The percentage differences are small and not statistically significant The fact that with each drug better percentage results are obtained when the larger doses are employed is, however, suggestive of increased therapeutic effect

(*b*) *Duration of Primary Pyrexia*—We again note a slight lag in the fall of temperature when the larger doses are employed As already stated, we feel that the drugs may have a direct pyrexial effect in the larger quantities

(*c*) *Duration of Toxaemia*—No difference is observed between the two drugs or their varied dosage

(*d*) *Toxic Effects*—The occurrence of toxic effects is slightly less when sulphamido chrysoidine is used

(*e*) *Dosage*—The percentages indicate that the therapeutic results obtained with a dosage of 2 grammes of sulphamido-chrysoidine and 1 gramme of sulphanilamide

closely correspond In other words the sulphanilamide radical weight for weight is clinically more effective than the original sulphamido chrysoidine

We are however of the opinion from the above figures that the choice of drug to be employed can be left to individual preference The method of administration to an adult patient should be (i) Sulphamidochrysoidine 1 5 grammes every four hours—that is 9 grammes a day—until cure is established thereafter 1 gramme three times daily for a further period of fourteen days (ii) Sulphanilamide 1 gramme every four hours —that is 6 grammes a day—until cure is established thereafter 1 gramme three times daily for a further period of fourteen days

All other drugs must be avoided during the period of specific treatment a list of suitable purgatives should be given to the patient the use of enemata explained and explicit instructions given regarding diet along the lines laid down in our previous paper (Snodgrass and Anderson 1937b) Toxic effects should be reduced to a minimum if these suggestions are followed

We wish to thank Dr W M Elliott physician superintendent of Ruchill Fever Hospital for permission to conduct the investigation We would also record our thanks to Mr Victor Goode registrar for careful assistance in the collection of the figures

REFERENCES

Dimombe G (1937) *Lancet* 1 626
Paton J P J and Eaton J C (1937) Ibid 1 1159
Snodgrass W R and Anderson T (1937a) *British Medical Journal* 2 101
—— —— (1937b) Ibid 2 1156

LATE RESULTS OF SURGICAL TREATMENT IN PERFORATED PEPTIC ULCER

BY

J VERNEY CABLE, M D, M R C P
Formerly Resident Medical Officer to the Wellington Hospital New Zealand

Upon the late results of surgical treatment in cases of perforated peptic ulcer there appears to be a considerable diversity of opinion Thus Thompson Miles and Wilkie (1931) state that the successful closure of a perforation is in many cases followed by freedom from digestive trouble though they add that this is not so in a number of cases Sherren (1932) considers that if the ulcer which perforates is acute and situated on the anterior surface of the stomach no further symptoms will develop in most cases Walton (1934) commenting on the different views held says that a close follow up does not confirm the opinion that the majority of cases have no further symptoms after recovery from operation Romanis and Mitchiner (1937) consider that successful recovery from a perforation is nearly always followed by a period of relief from symptoms that may last from six to eighteen months before the recurrence which they seem to regard as a common event

The present investigation was carried out at the Wellington Hospital New Zealand with a view to ascertaining the late results of simple closure of a perforated peptic ulcer No attempt was made to divide the cases into groups in which the ulcer was thought to be acute or chronic The findings are compared with the results obtained from the treatment of a group of cases of unperforated peptic ulceration by medical methods

There were forty one cases of perforated peptic ulcer treated by simple closure this figure comprising fourteen cases of gastric ulcer twenty five cases of duodenal ulcer and one case each of jejunal and gastro jejunal ulceration The time elapsing between the occurrence of perforation and operation varied considerably being in some cases as short as one hour and in others as long as two days That the period was often longer than is usually the case in Great Britain is due in large measure to geographical considerations and lack of transport facilities and is reflected in the high mortality for of the forty one patients submitted to operation twelve died The site of the ulcer in the latter was duodenal in eight cases gastric in three and jejunal in one case

A careful follow up was made at a period after the operation varying from six months to three and a half years Of the twenty nine surviving patients five were not traced leaving twenty-four cases to be assessed The cases were divided into four groups according to their condition at this examination (1) Classed excellent the patient can eat anything without symptoms (2) Classed good the patient remains free from symptoms while keeping to some dietary restrictions (3) Classed fair symptoms troublesome even on dietary restrictions but have not obliged the patient to lie up or to stop work (4) Classed poor where the symptoms have required further treatment or have prevented the patient from working The results according to this classification are shown in Table I

TABLE I

	No of Cases	Percentage of Cases Treated
Excellent	2	8
Good	6	25
Fair	6	25
Poor	10	42

Of the ten cases classed as poor four have required surgical treatment from which two patients died while two others have since died from gross haemorrhage Two more have been readmitted to hospital one of these was found to have some pyloric stenosis and would have received surgical treatment had he not been considered too poor a risk on account of his age and general health Thus of the forty one patients admitted for treatment of a perforated ulcer sixteen (39 per cent) are known to have died as a direct result of the ulcer while six others (15 per cent) are in a state of chronic invalidism, and only eight cases (19 5 per cent) could be grouped together as good or excellent results

Comparison with Medical Treatment

These results may be compared with those obtained from treating a group of cases of peptic ulcer medically The diagnosis in this group was made clinically and was confirmed from radiographs a definite crater being the criterion

The mode of treatment was the usual dietary restriction and alkaline powders with rest in bed for a minimum of three weeks This treatment was carried out thoroughly for approximately three weeks in hospital, but at the end of that time in some cases the later treatment was not so strict as is now the rule It was considered that this lack of strictness was the principal reason for the somewhat unsatisfactory results of medical treatment, and consequently a prolonged and thorough regimen as advo-

cated by Hurst (1937) has since been more generally adopted

A group of eighty-one treated patients were traced and their condition assessed by the classification given above There were twenty-three cases of gastric ulcer and fifty eight of duodenal ulcer The results are set out in Table II

TABLE II—*Cases of Gastric and Duodenal Ulcer treated Medically*

	Gastric Ulcer		Duodenal Ulcer	
	No of Cases	Per cent	No of Cases	Per cent
Excellent	3	13	7	12
Good	7	30	24	41
Fair	4	17	12	21
Poor	9	39	15	26

Taking the gastric and duodenal cases together, the total number classed excellent is ten (12 per cent), while the number classed good is thirty-one (38 per cent), and if these cases are included in one group, "Excellent-Good," there are forty-one (50 per cent), a figure distinctly better than the comparable one in the perforated group Though the present series of cases is admittedly small, they were followed up carefully, and it is felt that the findings are of some value They lend no support to the view that cases of perforated peptic ulcer usually recover from their original disability after closure of the perforation

Summary

The late results of surgical treatment in a series of cases of perforated peptic ulcer are reviewed and compared with the late results of treatment in a group of cases of peptic ulceration treated by medical methods

It is shown that in the present series the results are opposed to the view that a considerable proportion of cases of perforated ulcer are free from ulcer symptoms after surgical closure

REFERENCES

Hurst A F (1937) Price's *Text Book of Medicine*, 5th ed, p 593, London
Roman C W H C and Mitchiner, P H (1937) *Surgery*, 6th ed, 2, 621 London
Sherren J (1932) C C Choyce's *System of Surgery* 3rd ed, 2, 2 London
Thompson Miles and Wilkie (1931) *Manual of Surgery* 8th ed, [illegible], 187, London
[illegible]n, J (1934) Grey Turner's *Modern Operative Surgery*, [illegible]d ed, p 592, London

A new periodical, the *Journal of Neurophysiology*, has been founded to provide a channel for the early publication of original work bearing on the functions of the nervous system It will not include articles on morphology or on neuropathology but only those clinical, psychological or zoological contributions which are regarded as being primarily experimental in character In a memorandum on the policy of the journal issued by the editors it is suggested that neurophysiology has now reached a stage at which it may well claim recognition independently of the parent science of physiology Although they state one may deplore the increasing subdivision of physiology this fragmentation is to a large extent inevitable The Editorial Board consists of Drs J G Dusser de Barenne J F Fulton and R W Gerard, who are supported by distinguished advisers in various parts of the world The *Journal of Neurophysiology* is to be issued every two months at a subscription rate of 6 50 dollars for countries outside the U S A Canada, and Latin America, and is published by Charles C Thomas, Springfield, Illinois

Clinical Memoranda

Recovery from Haemolytic Streptococcal Septicaemia in Patient with Diabetes

The following case of streptococcal septicaemia treated with prontosil seems interesting enough to be placed on record

CASE RECORD

A woman aged 29 had been treated for diabetes mellitus for several years She had been stabilized satisfactorily on a Lawrence diet, receiving 12 black and 8 low red lines She required insulin 25 units in the morning and 20 units in the afternoon

Until the onset of her illness she had been keeping perfectly well Her first symptoms were general weakness, aching in the limbs, dyspepsia, and pyrexia, being attributed to a mild attack of influenza At this stage she was admitted to the Royal Infirmary of Leicester The influenza pursued a normal course, although of a severe form, until five days after admission, when she complained of pain in the right side of the chest on deep inspiration On auscultation pleural friction rub was found Next day there was evidence of consolidation in the right upper and middle lobes Type II pneumococci were found in the sputum On the third day 25 c cm of Type II anti pneumococcal serum were given intravenously The pneumonia pursued a normal course until the fifth day, when an apparent crisis occurred However on the same evening the temperature rose again to 103° F Three days after the crisis an acute otitis media developed in the right ear, which rapidly settled after two days

Ever since the pseudo crisis the temperature had continued to fluctuate between 100° F and 103 F, never falling to normal pleural effusion was suspected On aspiration 4 ounces of clear fluid were obtained This was found to contain large quantities of haemolytic streptococci Blood examination showed 22,108 white cells per c mm, 88 per cent being polymorphs Six days after the pseudo crisis the spleen was first palpable, leading one to suspect blood stream infection, and about the same time the temperature began to rise in a manner suggestive of septicaemia On blood culture haemolytic streptococci were found in all the tubes after sixteen hours incubation

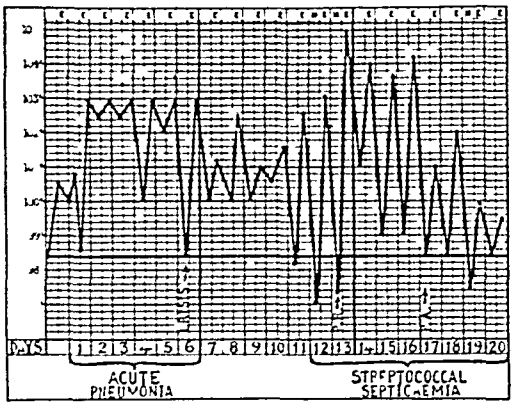
Up till this time the patient's general condition had been fairly satisfactory, although her diabetes was difficult to control but once the septicaemia developed the gravity of her illness became apparent She was exhausted, and dyspnoeic on the slightest movement, and the diabetes was uncontrollable even with very large quantities of insulin

Prontosil rubrum was now given intramuscularly, 10 c cm daily for four days This was followed by prontosil album (orally), 12 tablets daily Six days after the commencement of the septicaemia another blood culture was taken It was sterile after sixteen hours incubation Haemolytic streptococci were found in two tubes after three days Blood examination showed a fall in the white cells to 14,374 per c mm, of which 85 per cent were polymorphs The general condition of the patient also showed marked improvement, exhaustion being much less evident However, the temperature continued to fluctuate for a further three days although in a less alarming manner than previously

Ten days after the temperature had ceased to swing administration of the prontosil was stopped The temperature immediately began to show signs of a return to the septicaemic type, rising at nights to 102 F The administration of 6 grammes of prontosil daily was at once recommenced, and after three more days the temperature began to settle again This time

the prontosil was continued for a further two weeks gradually being reduced every three days thereafter

Since that date progress has been satisfactory except that the resolution of the consolidated lung has been slow Ultra therm treatment has been instituted resulting in hastening of the resolution A blood examination immediately after the



Daily Temperature Chart P R = Prontosil rubrum P A = Prontosil album

cessation of the prontosil showed white cells 10 100 per c mm red cells 4 650 000 per c mm haemoglobin 88 per cent these last two figures being higher than those taken a year previously while in good health The total dosage of prontosil rubrum was 40 c cm intramuscularly and that of prontosil album 136 tablets (orally)

SUMMARY

The above record describes the case of a patient suffering from diabetes mellitus who developed lobar pneumonia and otitis media followed by proved haemolytic streptococcal septicaemia Prontosil was given in large doses with recovery of the patient Chief points of interest are

Statistics state that the fatality percentage in streptococcal infections secondary to diabetes mellitus is 90 In such a case as described above the mortality rate would be still higher Considerable improvement, both clinical and bacteriological was noticed after administration of prontosil was begun with immediate relapse after its cessation this suggests that prontosil was responsible for keeping the septicaemia in abeyance, having not yet finally destroyed it

No ill effects were discovered after giving very large and intensive doses of prontosil There was no suggestion of agranulocytosis However there has been a tendency to persistence of slight ketosis which was not present before the illness This may be a symptom of the toxic action of prontosil

The evidence produced in this case still further corroborates previous opinion as to the specific action of prontosil upon haemolytic streptococci

I am much indebted to Dr R McD Cairns for permission to report on this case

J H DEREK MILLAR M B Ch B

Leicester Royal Infirmary

BIBLIOGRAPHY

Keefer C S Ingelfinger F J and Spink W W (1937) *Arch int Med* 60 1084

Reviews

ENCYCLOPAEDIA OF MEDICAL PRACTICE

The British Encyclopaedia of Medical Practice including Medicine Surgery Obstetrics Gynaecology and Other Special Subjects Volume VII Under the General Editorship of Sir Humphry Rolleston Bt G C V O K C B M D D C L LL D (Pp 718 16 plates including 1 coloured plate 171 figures London Butterworth and Company 1938

The issue of the successive volumes of the new encyclopaedia occurs with commendable regularity Volume VII covers the subjects hyperchlorhydria to leucorrhoea and of the seven hundred pages one quarter is devoted to the problems of labour The reader will find a full account of the mechanism and conduct of normal labour and the various causes of delay through ineffective uterine contractions malpositions disproportionate size of uterine contents or the bony pelvis clearly and succinctly described by experts in the subject Professor O Donel Browne deals with the operative and manipulative procedures which may be needed in complicated cases and there is a useful section on anaesthesia and analgesia in normal and difficult labour Radiology may be found an adjuvant to other methods of diagnosis and a statement of the principles involved concludes the group of articles Professor James Young who is responsible for the editorship of this section is to be congratulated on the successful choice of his contributors The whole forms a good description of modern obstetrical practice and like all the articles in the encyclopaedia is clearly headed so that ready reference may be made to the particular point required Professor Amy Fleming completes the gynaecological articles of this volume with a statement of the causes and treatment of non haemorrhagic vaginal discharges Proper differentiation must be made to ensure success in treatment

The principles of feeding normal infants by breast feeding wet nursing or by means of artificial foods and the dieting of children of older years are discussed by Dr Kenneth Tallerman Mr Lionel Colledge deals with the diseases of the larynx giving clinical pictures of the acute and chronic disorders met with their diagnosis and treatment He adds a lucid description of the operative procedures which may be used their indications and technique Mr A E Roche deals with the surgical diseases of the kidney while the important subject of acute and chronic intestinal obstruction is taken by Mr Nils L Eckhoff The symptoms arise apparently from chemical change in the stagnant intestinal contents behind the obstruction and perhaps even more from the changes in the blood supply of the bowel wall bringing about necrosis A state of collapse rapidly supervenes and even with modern surgical progress the mortality is great—in acute intestinal obstruction rarely below 30 per cent The formidable condition of post operative ileus may usually be prevented by pre operative preparation and careful operative technique Differentiation of ileus of sympathetic origin from that caused by obstruction may be made by giving spinal anaesthesia but this must be done when immediate operation is available to follow failure to relieve Diseases and disorders of joints and their development from injury are dealt with by Mr George Perkins and Professor G R Girdlestone Among the medical subjects the factors involved in jaundice are stated by Professor McNee from the modern aspect which he himself has done much to make clear The colour

giving rise to the symptoms is due to the formation of bilirubin largely outside the liver, jaundice then may be due to excessive production of bilirubin swamping the blood or to the obstruction in its excretion through the liver whether by blocking of the small or large bile ducts or by changes in the liver cells themselves The implications of the van den Bergh reactions are set out

Other syndromes in this volume are insomnia, by Dr J P Martin, and hyperchlorhydria, by Professor Henry Moore, while Dr Gladys Wauchope gives a satisfying description of the phenomena of hyperglycaemia and hyperinsulinism and their treatment Dr Douthwaite's article on influenza covers the vexed questions of the infecting agent (which is almost certainly a virus) and the secondary infecting bacteria which are responsible for so many of the complications, the diagnosis, and the treatment, for which there is no specific as yet Leishmaniasis and leprosy are important specialist subjects Of other special articles in this volume, Dr Strauss discusses hypnotism, Dr Okell immunity and immunization, and Dr J C Bridge lead poisoning Dr Otto May's comments on the points to be taken account of by examiners for life assurance will be useful to practitioners who undertake much of this work, and the interesting and important subject of industrial accidents is approached from the general and legal aspects by Dr D C Norris, who includes the factors of causation, so often in the worker himself, prevention, and estimation of compensation for disability sustained

RESPONSIBILITY UNDER SUPERVISION

Internships and Residencies in New York City 1934–1937 Their Place in Medical Education Report by the New York Committee on the Study of Hospital Internships and Residencies Jean Alonzo Curran, M D (Pp 492 tables 10s 6d net) New York The Commonwealth Fund, London Oxford University Press 1938

In our issue of March 19 last (p 628) we noticed a booklet on *Intern Education and Supervision* issued under the auspices of the Canadian Medical Association It was a succinct and valuable report on internship in relation both to medical education and to hospital administration and practice We now have a somewhat weighty volume entitled *Internships and Residencies in New York City, 1934–1937* It is thoroughly and characteristically American It has been compiled by a committee and subcommittees of no fewer than fifty-nine medical men with the help of several other persons, men and women, medical and lay, whose services are acknowledged in a preface It contains just under 500 pages, including nine appendices and nineteen statistical tables which may interest the curious and are more or less illuminating The information given and the opinions expressed are mainly the result of questionaries addressed to a large number of ex-interns and ex-residents and to the staffs of New York hospitals The general outcome of all this laborious, systematic, and careful activity does not seem to be more valuable than that embodied in the much more modest report published in Canada Indeed the conclusions arrived at, though confirming so far as they go those of that report, are less wide in character and less applicable to this country, but they are supported by much more detail

Some of these details seem to be of small importance, but others are in themselves interesting and significant For instance, while the trend from general to special practice in America is well marked, over half the specialists of each type have had a period of experience in general practice of an average duration of four or five years Only a little over half of all graduates practise obstetrics, either as specialists or with their other work, and the proportion seems to be becoming smaller It was found that 40 per cent of those in practice were doing major surgery, 58 per cent had made no attempt to enter this field, while only 2 per cent had done so temporarily before abandoning it If these facts can be taken as indicating the community need it would appear that not more than half the interns require "drill in major operation technique," and only a slightly larger proportion require drill in obstetric technique A good deal of intern education and experience is held to be misdirected It is regarded as axiomatic, however, that every student, after qualifying, should have at least one year, preferably two years, as an intern in one or more departments of the hospital, and that if a specialty is to be adopted two years' internship should be followed by "residency" of similar duration in the particular department required This being so it is essential that the undergraduate curriculum should be adapted to this programme, and that the period of internship should be so organized and conducted as to constitute a direct and effective preparation for practice In fact, in a large proportion of cases neither of these requirements is fulfilled The primary and essential function of resident posts in hospitals is educational "While they serve a useful purpose in the care of the sick in a modern highly organized hospital, it is only by this practical supervised experience that the student doctor can be qualified to assume independent responsibility for the care of patients"

That by some means, whether in hospital or otherwise, a reasonable period of actual responsibility under supervision must be a compulsory part of medical education is the conclusion arrived at by every inquiry into this subject, whether in America, in Canada, or in England

UROLOGICAL PRACTICE

The Practice of Urology By Leon Herman, B S, M D (Pp 923, 504 figures, 4 plates with 3 in colour 45s net) Philadelphia and London W B Saunders Company 1938

This admirable book well fulfils the author's ambition of writing a practical treatise on diseases of the urogenital system While intended particularly for the use of the general practitioner and surgeon, this volume will be of especial value to the urologist, written as it is from clinical experience and packed with valuable hints and "tips" The legends accompanying the numerous and excellently produced illustrations are a urological education in themselves Both author and publishers are to be congratulated on this fine production, which will surely take its place as a leading standard work on urology for many years to come The type is large and clear, but, as is often the case with similar works, the book is heavy to hold

The work is divided into various parts—on diagnosis (cystoscopy, urethroscopy, urography), instrumental therapeutics in urology (for example, operative cystoscopy), the kidney (with a chapter on renal physiology, tests of renal function, and renal sympathectomy), the ureter, the bladder (including its physiology and functional disorders), the urethra (with many chapters on gonorrhoea and its complications), the penis and scrotum, the testicle, spermatic cord, and seminal vesicle (including a chapter on functional disorders of the male sexual system), the prostate gland, urolithiasis, urogenital tuberculosis and actinomycosis, and urinary syphilis One may regret the use of the often encountered but etymologically unsatisfactory word "urinalysis" In contradistinction to the high proportion of cases of ureteric calculus operated upon

in some clinics conservative surgeons will agree with the author's estimate that operation is required in approximately 10 per cent of such cases In his opinion ureteric meatotomy should if possible be avoided because serious damage to the upper urinary tract in the form of permanent reflux may result A pyelogram of such a case is given showing uretero renal *dilatation* It would be interesting to know how often this occurs after properly performed meatotomy If not often as is probable such a possible complication should not prevent the use of a valuable therapeutic measure when truly indicated especially as open operation may be thus avoided The author's conclusion that tuberculin therapy though of value as an accessory measure in genital tuberculosis is useless and sometimes harmful in renal tuberculosis must like all his statements command respect and is probably correct

Altogether this is one of the best books on urology one could wish for The author has gone less to other books than to Nature for his knowledge with the result that his work is a mine of practical urological wisdom

VETERINARY PARASITOLOGY

A Guide to Veterinary Parasitology for Veterinary Students and Practitioners By T Southwell D Sc Ph D and A Kirshner M B Ch B D T M (Pp 143 88 illustrations 12 diagrams 7s 6d net) London H K Lewis and Co

For some twenty years Dr Southwell of the Liverpool School of Tropical Medicine has been teaching parasitology to the veterinary students of the University of Liverpool He and his assistant lecturer have produced their course of lectures in a condensed form as a book in which they have endeavoured to present veterinary parasitology in as simple elementary and practical a manner as possible Those who are familiar with Dr Southwell's power of simplifying the anatomy and differential diagnosis of parasites will need no assurance of the quality of this aspect of the work Illustrated by eighty-eight drawings and twelve diagrams it is an admirable students guide to the morphology of the more common protozoa, cestodes trematodes and nematodes of the horses cattle sheep pigs dogs cats and poultry farmed in Great Britain

In their preface the authors acknowledge that we have rather reluctantly included very brief accounts of the pathogenicity of some of the more important parasites The critic is disarmed by such charming confession of inexperience with the problem confronting the veterinary surgeon and he sympathizes with the authors in the loss of their former distinguished colleague Had the late Noel Pillers been spared to collaborate in this little book the authors intention of providing the practising veterinary surgeon with a useful guide might have been realized

ANAGLYPHS FOR SQUINTERS

Anaglyphs Their Use in Orthoptic Training By Margaret Dobson M D Lond (Pp 41 11 figures 11 photographic anaglyphs and 2 training anaglyphs 21s net) London C Tinsley and Co

We all learned something of the arrangement of the stereoscope during our First M B course in physics We remember that there were two pictures taken from slightly different angles, which when viewed through suitable prisms gave a wonderful sense of solidity to the picture The same effect can be obtained by printing two pictures of the same view in different colours—say red and blue—so that the two pictures do not accurately register upon each other The pictures when printed look like very bad two colour prints of some advertisement But when these prints are viewed through coloured glass or gelatin with red before one eye and blue before the other then there is gained by the visual centres of the observer as perfect an impression of solidity as the stereoscope can give This arrangement has been made use of by Dr Margaret Dobson for the production of a book of anaglyphs for use in the training of squinters A number of pictures and diagrams are provided with cardboard spectacles fitted with coloured gelatin for use in viewing the pictures The choice of pictures is good though for children we should have thought that a much simpler variety would have been more readily appreciated

The use of the anaglyphs is an alternative to that of the stereoscope and the adaptation of the stereoscope known as Worth's amblyoscope and other more complicated instruments There is room for a variety of apparatus

ANALYSIS OF DREAMS

Dream Analysis A Practical Handbook for Psycho Analysis By Ella Freeman Sharpe The International Psycho Analytical Library No 29 Edited by Ernest Jones (Pp 211 10s 6d net) London The Hogarth Press The Institute of Psychology 1937

This book is founded on lectures given in the training college for psycho analysis The method of production and mechanism of the dream is described in accordance with Freud's teaching and compared with certain recognized figures of speech in poetry Examples of dreams as they occur in psycho analytic practice are given and their significance and interpretation are discussed Others illustrative of differing types of dream are described showing to the author's satisfaction that however much they differ in accordance with the patient's type of personality they all refer to much the same themes in the depths of the unconscious—themes of infantile jealousies fears and hates due to sexual or excretory experiences or fantasies A single dream is analysed fairly fully as an example and certain problems in dream analysis are dealt with

The author shows how certain physical and psychical crises in life may determine dreams and how other dreams may show the stage of psychical readjustment reached in the course of analysis A few dreams from people who have finished their analysis are described and it is claimed that these do not markedly differ from those of the unanalysed but that the dreamer easily recognizes their meaning and does not suffer from any anxiety or painful feeling tone in relation to them Finally the last dream of a patient's life is narrated with a few moral reflections upon it

There is nothing strikingly original in this book and it is not likely to be of much interest except to those who are serious students of psycho analysis

Notes on Books

The eighteenth edition of *Dorland's Medical Dictionary* (W B Saunders Company 1938 30s plain 32s 6d with thumb index) has been brought up to date by thorough revision and the addition of more than 3 000 words This valuable work of reference now extends to over 1 600 pages and on almost every page new terms and improved definitions will be found For every term the pronunciation is given phonetically followed by the derivation and a concise definition The largest amount of new and revised definitions will be found in the fields of endocrinology immunology pathology medical

chemistry, clinical medicine, and dentistry In his preface Dr Newman Dorland acknowledges help from a host of friends of the Dictionary, with special mention of the editorial staff of the American Medical Association for their splendid co-operation From the same publishers comes the sixteenth edition of Dorland's *American Pocket Medical Dictionary* (price 8s 6d plain, 10s 6d with thumb index) For its size this is a remarkably comprehensive work, giving brief definitions of over 50,000 technical terms The whole material has once again been overhauled to keep pace with the advances in medicine and the allied sciences and the growth of their terminology The latest Pocket Dorland should prove even more useful than its predecessors

The Cockroach Its Life-History and How to Deal With It Pamphlet No 12 in the Economic Series, printed by the British Museum (Natural History) has now appeared in a third edition All who are plagued by these pests must feel grateful to Mr FREDERICK LAING for his practical booklet It may be obtained from the Natural History Museum, Cromwell Road, London, S W 7, at 6d (postage 1d)

L'Expertise en Stomatologie by M DECHAUME and L DEROBERT with a preface by Professor Balthazard, is published in Paris by Masson et Cie, 1937, at 30 fr Its title may be freely translated as "The Stomatologist and the Law' The authors have made a detailed study of the function of the stomatologist in criminal and civil cases Each year a list of experts is drawn up by the appropriate tribunal, and only a doctor of medicine can act in criminal cases Perhaps for this reason the elements of dental anatomy are included The book will be found extremely interesting by medico-legal experts, especially we note that the expert must approach his task free from bias, and that his evidence is given to the court for the guidance of the presiding judge

A handy *Dictionary of Scientific Terms* has been compiled by Surgeon Rear-Admiral C M BEADNELL (London, Watts and Co, 5s net, cheap edition, 1s net) It serves the purpose of a small reference book rather than a dictionary, and will be of interest to students and to those desirous of learning something about recent advances in scientific matters There are numerous cross references, synonyms, and antonyms, and a bibliography, for the further pursuit of the various subjects, is given at the end of the book

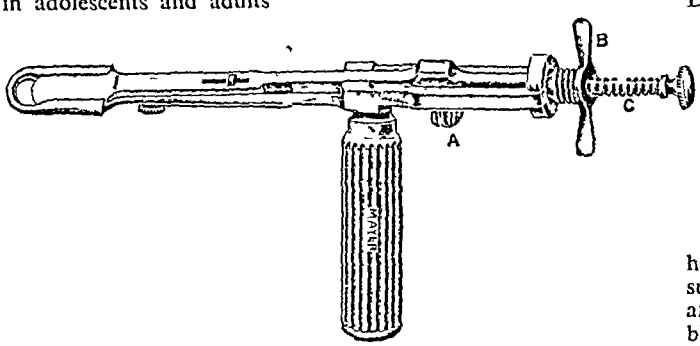
Another popular work from the pen of PAUL DE KRUIF entitled *The Fight for Life* (London Jonathan Cape, 12s 6d) concerns itself with the "war" against puerperal fever, tuberculosis, poliomyelitis, and syphilis, and its high lights are chemotherapy and electric fever The publisher's note credits the author with being able to "dramatize" such matters, and make them "not only comprehensible but vivid" Of this there is no doubt, but the process of dramatization has perhaps gone rather far for English taste There is a huge public for such works as this in America, where they like to know all about their diseases, and a flamboyant emotional style is more acceptable than some of us find it The first requisite in a book of this kind is scientific truthfulness, and this author's popular works are commendable from that point of view

Preparations and Appliances

A HAEMOSTATIC TONSIL GUILLOTINE

Mr E CRAIG DUNLOP F R C S Ed (Carlisle), writes

This instrument is intended for use in the enucleation of such septic tonsils as are suitable for the guillotine operation in adolescents and adults



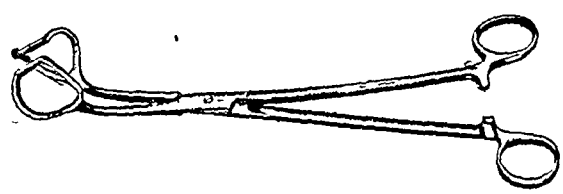
The method employed is that of Whillis and Pybus The edge of the blade is rounded on section, and when fully home meets a *flat* metal surface in the end of the guard ring The blade is closed over the tonsil by pressure on the thumb piece A in the usual way the peritonsillar tissues being grasped tightly enough to enable the tonsil to be dislocated Then, by turning the screw B the blade is gradually driven home, thus crushing the pedicle The spring C ensures that the thread of the screw is ready to engage immediately B is turned After leaving the instrument in position for five or six minutes severance of the tonsil is completed by screwing the rounded edge of the blade hard up against its flat opposing surface in the guard ring

The advantages claimed for this instrument are its simplicity and that it leaves a minimum of crushed tissue in the tonsil bed The guillotine has been made for me by Messrs Maxer and Phelps New Cavendish Street London, W 1 to whom I owe my thanks

GALL-BLADDER FORCEPS

Mr T B MOUAT F R C S, honorary surgeon to the Sheffield Royal Infirmary, writes

The special gall bladder forceps made for me by Messrs Down Bros, Ltd, and shown in the accompanying figure,



have proved useful There are at present no forceps quite suitable for pulling up the neck of the gall bladder Even after aspiration of the fluid contents of a distended gall bladder the inflamed and thickened wall may tear through if it is grasped by cholecystectomy or artery forceps, while tissue forceps or triangular forceps are apt to crush the contents or pull off

The blades of the special forceps are sufficiently bowed to leave room for the gall-bladder even when its neck contains stones, and their finely serrated half inch wide jaws give a firm grasp which enables the surgeon to pull up the neck of the gall bladder without danger of tearing the structures and give good exposure for the dissection of the cystic duct and artery before cholecystectomy

CALCYDIC TABLETS

Calcydic tablets (Allen & Hanburys Ltd) contain dicalcium phosphate and vitamin D made up with chocolate flavoured glucose They thus provide calcium and phosphate, together with vitamin D to promote the absorption of the minerals

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY AUGUST 20 1938

NATIONAL HEALTH INSURANCE IN AUSTRALIA

As was indicated in a leading article in the *Journal* of July 2 the National Health and Pensions Insurance Bill which had been introduced in the House of Representatives of the Commonwealth of Australia was assented to on July 5 last, and so became an Act In its passage through Parliament it was not subjected to any substantial alteration but it may be noted that sickness benefit will now be payable from the fifth day of incapacity In the same article it was stated that the Australian Government had undertaken to appoint a Royal Commission to consider mainly the terms and conditions of service of medical practitioners accepting service under the provisions of the Act The personnel of this Commission is as follows Chief Justice Dethridge (Chief Judge of the Commonwealth Arbitration Court) as chairman Sir George Mason Allan (President of the Institute of Chartered Accountants Sydney) Dr R D Mulvey of Bathurst N S W (President of the Western Medical Association a local association in New South Wales) The appointment of a medical man as one of the three Commissioners is unusual and noteworthy there may however be divided opinion as to its appropriateness or wisdom The terms of reference of the Commission are elaborated under eight headings but the matters on which it is to advise the Government may be briefly summarized as three (1) the amount of the capitation fee for insurance practitioners and of mileage grants and the method of distributing these having regard to emergency treatment and to temporary residence (2) the circumstances and conditions under which insurance practitioners may require payments from insured persons in respect of services rendered in pursuance of their contract or of services outside that contract (3) the amount of payments which may be made by organizations to practitioners under contract on a voluntary basis for attendance on the wives and children of insured persons and the conditions under which practitioners who enter into such contracts may require payment for services outside their terms The Commissioners in determining all these matters are to have regard to " the terms and conditions of existing contract practice in Australia " as well as to other relevant considerations In the absence of any further explanation it is difficult to see how any legal validity can be attached to the third section of the reference as outlined above or indeed why this should have been made the subject of reference at all In any case the Prime Minister of Australia has announced that any findings or recommendations of the Commissioners will not be binding upon either the Government or the medical profession

To meet the situation that has thus arisen the Federal Council of the British Medical Association in Australia has set up a special committee consisting of the members of that Council together with a general practitioner from each Branch and with some power of co option The Federal Council will take no action without first consulting this committee which has already held a number of meetings and passed several rather drastic resolutions One of these seems to question the constitutional legality of the Government having introduced any such legislation for establishing medical benefit at all and even suggests that it may be feasible to apply to the High Court for an injunction against the Government on this matter Another resolution asks the Government to extend the terms of reference of the Royal Commission so that it may consider a general medical service for the nation and a capitation fee which instead of being uniform should be proportionate to the income of the insured person From this distance both these resolutions seem to be of doubtful wisdom or advantage and to be unlikely of success Would it not be better and more effective instead of trying to create an altogether different situation, to accept that which has now arisen and concentrate on presenting what is undoubtedly a very powerful case to meet it on behalf of the profession, before the Commission? It is unlikely that the Commonwealth Government has acted without the highest legal advice It would appear desirable that the status of the profession and the main conditions of medical practice should be similar throughout Australia rather than wholly at the mercy of the several States in some of which these are the subject of unfavourable action already It is moreover always wise in appearing before an arbitration court to cultivate a friendly rather than an unfriendly atmosphere

The Federal Council is of course already busy preparing the case for the profession It has engaged solicitor and counsel to appear before the Commission on its behalf It is organizing opinion in each of the States of the Commonwealth It is establishing an Emergency Fund to be collected by the Branch Councils with the suggestion " that an

amount of ten guineas be asked of members of the Association as a first contribution," and it has already been announced that the Council of the Association at home is making a grant from central funds of £1,000 towards the cost of preparing and presenting the profession's case in Australia More than one questionary has been issued to members throughout Australia, and the results of these will be very carefully considered and formulated If they elicit unimpeachable facts these will be of value for the information and use of counsel, but for the purpose of forming or ascertaining opinion the method is very unreliable It is to be hoped that experience in this country, both as to the working and effects of similar legislation here and as to the methods of approaching and influencing Government Departments and tribunals, will be fully availed of and accepted as useful The Act has now been passed, the Government's intentions and determinations are known They are based upon the popular endorsement of electoral promises This being accepted, the whole British Medical Association will desire to help the Federal Council in its present important task and will wish it every success

GREATER VISION

In his presidential address before the British Association for the Advancement of Science at Cambridge this week Lord Rayleigh dwelt for the most part on the subject of "Vision in Nature and Vision Aided by Science" The unassisted eye, he said, has a field of view extending nearly over a hemisphere, it gives an indication very quickly and allows comparatively rapid changes to be followed It responds best to the wavelengths actually most abundant in daylight or moonlight This combination of qualities is ideal for what we believe to be Nature's primary purpose—that is, for finding subsistence and for fighting the battle of life against natural enemies But by sacrificing some of these qualities we can enhance others for purposes of research The use of lenses is one of the greatest scientific discoveries we do not know who made it A glass bulb filled with water may have been the first lens, and the magnification was ascribed to the nature of the water rather than to its shape We may compare the picture on the retina to a design in woolwork the details must conform to the mesh of the canvas, so with the retina But if the object to be seen is distant we want a lens of longer focus than the eye lens, so we neutralize this with a concave glass or eyepiece, then use a long-focus lens called the telescopic objective to make a larger picture on the retina Given perfect construction there is no limit in theory to what a telescope can do in revealing distant worlds On the other hand, with the microscope there is a very definite limit details one-hundred-thousandth of an inch apart cannot be distinguished But something may be gained by the use of ultra violet light instead of visible light It then becomes necessary to work by photography This method offers some hope of progress in connexion with the fundamental problem of the nature of viruses Paradoxically, for certain radiations we can make optical converging lenses out of empty space, or, alternatively, we can make optical observations without any lenses at all Cathode rays can be bent by electric or magnetic forces, constituting what has been called an electrostatic or magnetic lens With this it is possible to form a magnified image of the source of electrons on a fluorescent screen or on a photographic plate Colour vision is one of Nature's most wonderful achievements Anatomy has told us little of how the marvel is achieved no anatomical peculiarity is known to distinguish the colour-blind Artificial resources can improve colour discrimination The spectroscope is such an instrument, and there are now a number of the spectroheliоscopes in different parts of the world making continuous observations

We cannot supplement the retina, but in certain cases we can do better—we can substitute an artificial sensitive surface The photographic plate is not the only useful substitute, we have another in the photo electric surface, and this can be used at the focus of an astronomical telescope Its great interest lies in the possibility of accurate measurement, and it has been developed further into the basis of television There is a photo electric mosaic, each element of the surface forms a separate tiny condenser, scanning is achieved by rapidly traversing a beam of electrons over the mosaic line by line The process is reversed as the beam of electrons falls on the luminous receiving screen and makes it light up more or less brightly according to the intensity of the electron beam It seems not unlikely that the electric eye or iconoscope may have other uses It might be used to make visible the image in the ultra violet microscope, which would be much too faint for direct projection on a screen or for photography Concluding this part of his subject, Lord Rayleigh said "Much of modern scientific doctrine appears at first sight to have an elusive and even metaphysical character, and this aspect of it seems to make the strongest appeal to many cultivated minds"

Dealing with "Science and Warfare," in the second part of his address, Lord Rayleigh said

that it had been urged that science was the source of all the present trouble and we might look to scientific men for some constructive contribution towards finding a remedy He then proceeded to show that all the modern terrors of war were either applications of old discoveries or of discoveries that had the most innocent of origins Shakespeare lamented the use of the high explosives of the time Poison gas killed Pliny at Vesuvius in A D 79 Thermite was developed for welding iron pipes Aircraft, apart from balloons began as a means of sport in gliding It is true that novelists have foretold the horrors that may come to pass but experienced organizers of military objectives poured scorn upon their suggestions Summing up what may be learned from the experience of the past Lord Rayleigh said "I think we may say that the application of fundamental discoveries in science to purposes of war is altogether too remote for it to be possible to control such discoveries at the source For good or ill, the urge to explore the unknown is deep in the nature of some of us and it will not be deterred by possible contingent results, which may not be and generally are not fully apparent till long after the death of the explorer Can we then, do nothing? We hope that our discussions on the social relations of science will bear useful if modest fruit in promoting international amity"

JAUNDICE AND ARTHRITIS

The effect of jaundice on rheumatoid (atrophic) arthritis and primary fibrositis has been the subject of intensive research by Dr Philip Hench[1 2] at the Mayo Clinic during the past five years and also by such workers as Thompson and Wyatt Sidel and Abrams And it is interesting to recall that so long ago as 1903 Dr John Wishart[3] in a short note to this *Journal* wrote "When jaundice of an obstructive type becomes fully established in the system of a patient suffering from chronic rheumatism rheumatoid arthritis or muscular rheumatism the pains characteristic of these diseases disappear entirely" Dr Hench whose paper read at the International Conference on Rheumatism at Bath this year appears elsewhere in this issue has observed forty five cases altogether these included twelve of primary fibrositis four with lumbago or sciatic pain and one of hypertrophic arthritis The relief was most pronounced in fibrositis and rheumatoid arthritis—a remission of symptoms lasting from three weeks to many months—but in no case was there a complete cure There was a general but not a specific relation between the time the remission lasted and the intensity and duration of the jaundice The type of jaundice did not appear to be of any importance A large proportion of patients had intrahepatic jaundice due to cinchophen but gouty arthritis was not relieved Margolis has recorded that in one instance gouty arthritis appeared during the course of the jaundice Thompson and Wyatt[4] studied the effect of the biliary constituents alone and in combination They found that neither bilirubin alone nor bile salt alone was of any use but that the two in combination gave definite relief On the other hand Hench observed that the analgesic effect continued in the presence of severe hepatitis when presumably there was a reduction in the amount of circulating bile salts Injection of bilirubin alone in substantial amount was of no avail and no improvement in the articular symptoms followed the oral administration of bile In some instances analgesia was experienced before the jaundice became obvious but in most the zone of therapeutic effectiveness seemed to begin at a level of 8 to 10 mg of bilirubin The relief was generally prompt speedy and complete with a remarkable retrogression of the general arthritic symptoms but this proved to be only temporary although it occasionally lasted for some time after the jaundice had disappeared Hench considers that the relief of arthritis often observed during pregnancy is most probably due to some similar agency and points out that a close chemical relation exists between such substances as cholesterol ergosterol bile acids cortin and some of the sex normones Najib-Farah[5 6] studying the effect of bile upon pneumococci found that bilirubin in concentration of 4 to 5 mg per litre caused disintegration to begin while complete lysis occurred at 8 mg He noted that the solubility varied directly with the virulence of the strain employed and that avirulent strains were unaffected even at 10 mg per litre virulent streptococci were equally unaffected He also observed cases of pneumococcal infection in which the symptoms of acute rheumatism appeared with a bilirubinaemia of 1 5 to 2 units (van den Bergh) He concludes from this and other observations that bilirubin is mobilized in the blood as a defence against pneumococcal infection and that the toxic substances liberated from disintegration of the organisms may give rise to an allergic reaction expressed as acute rheumatism Najib Farah advances the view that bilirubin is a factor in the processes of defence and immunity Race[7] has observed that in arthritis the icteric index and the concentration of serum bilirubin are lower than normal and that the bilirubin deficiency was not the chief cause of the low icteric index The common factors in these various observations would seem to indicate the need for an investigation of the part played by bilirubin in acute chronic infections

SILICOSIS AND PULMONARY CARCINOMA

One of the most striking instances of carcinoma induced by extrinsic factors is the carcinoma of the lung which occurs in a very high proportion of workers in the Schneeberg and Joachimstal mines The miners in these areas are also liable to pneumonoconiosis and although the carcinogenic agent has not been identified most

[1] *Arch intern Med* 1938 61 451
[2] *Proc Mayo Clin* 1938 13 161
[3] *British Medical Journal* 1903 1 252
[4] *Arch intern Med* 1938 61 481
[5] *Lancet* 1937 1 65
[6] *J trop Med Hyg* 1938 41 40
[7] *Rep Chronic Rheum Dis* 1935 1 55 1938 3 40

observers suspect arsenical derivatives or radio active substances rather than silica Bronchial carcinoma has, however, occasionally been described in cases of silicosis, and three cases of this sort observed by Dible[1] suggested to Anderson and himself that a determination of the silica content in a series of cases of bronchial carcinoma might be instructive, their results have now been published[2] The series consists of forty eight controls and seventy consecutive cases of primary carcinoma of the lung both series being drawn from the same hospitals The cases in the control series were not "especially selected except that cases of malignant disease were excluded, as were also examples of gross pathological abnormality" In these the total silica content of the two lungs averaged 0 26 gramme and the range of variability was small In the carcinoma series 83 per cent (58) had the same mean silica content as the controls, but in 17 per cent (12) there was a very high silica content (mean 2 29 grammes) Of these twelve cases there was gross histological evidence of silicosis in ten and in the other two there was such fibrosis as "would only arouse a suggestion of silicosis" Further, in five of the cases the patients had followed occupations in which silicosis is a known risk, and four others were liable to be exposed to siliceous dust These observations are of considerable interest, but the authors' conclusion that "the role of silicosis is aetiological in a group of cases of pulmonary carcinoma" is not justified from their findings even though it be true The primary fallacy is one of sampling No mention is made of the post-mortem incidence of primary carcinoma of the lung or of silicosis, taking 2 5 per cent as the average [illegible] incidence of carcinoma of the lung would have been in the likelihood of 3,000 rather than fifty if the relation between silicosis and bronchial carcinoma were to be compared Further, in the control series cases with gross pathological abnormality—and so, presumably, pulmonary fibrosis—were excluded Anderson and Dible's assumption is unjustified from another aspect Although silicosis and pulmonary carcinoma were associated in ten cases yet these patients were all from different occupations in which silica was only one of the risks to which they were exposed This is emphasized in the careful study of the incidence of pulmonary cancer carried out by N J and E L Kennaway[3] In examining the death certificates of all the pulmonary cancers (8,808) recorded between 1921 and 1932 they gave special attention to the possible relation between exposure to siliceous dust and cancer of the lung They found that although a raised incidence occurred in metal grinders, pavers, sand-blasters, stonemasons, and pottery-ware makers, yet there were normal or low figures in stone miners, quarriers, pottery kiln workers and coal-miners, and concluded that the "factors which lead to silicosis are not very active in producing cancer of the lung" Apart from its intrinsic merit Anderson and Dible's work is of value in that it calls attention to the need for publishing the post-mortem changes in a large series of cases of silicosis Vorwald and Kerr,[4] working at the Saranac laboratories, have collected all the published accounts of cases of silicosis together with a smaller series of their own According to the radiological evidence of 57,000 persons exposed to dusts there were signs of silicosis in 12,000, and of a pulmonary tumour in only three (0 005 per cent) At the Saranac laboratories 15,000 dust exposed persons were examined, of these, 1,357 were diagnosed as cases of silicosis, and in one there was a tumour (0 074 per cent), in the remaining group showing no radiographical evidence of fibrosis there were two cases of tumour (0 014 per cent) With reference to post mortem evidence the authors state that of the 444 published cases, a neoplastic condition was found in ten, of which four were pulmonary (1 3 per cent) The figures of the South African Miners' Phthisis Bureau show that of 3,000 necropsies on European miners there was evidence of silicosis in 47 per cent, and that pulmonary carcinoma occurred in twenty two cases, the incidence being the same in the silicotic and the non-silicotic groups—0 7 per cent At the Saranac laboratories a series of 178 necropsies revealed silicosis in 76 per cent and six neoplasms, of which two (1 1 per cent) were pulmonary This mass of evidence is strongly against Anderson and Dible's hypothesis, but it is interesting to note, in view of Turner and Grace's[5] observations at Sheffield, that of the four pulmonary tumours (one case appears in both series) observed in dust-exposed persons at Saranac, three were in men who had worked in iron mines A recent review by Nordmann[6] suggests the possibility of asbestosis being predisposing to pulmonary carcinoma, but the recorded instances are as yet too few to be significant There is still need for a critical pathological study of a large series of dust-exposed persons, but it is imperative that they should be considered in relation to their various occupations as well as to their "silicosity"

[1] *Lancet* 1934 2 982
[2] *J Hyg Camb* 1938, 38, 185
[3] Ibid, 1936, 36 236
[4] *Amer J Path* 1938 14 49
[5] *J Hyg Camb*, 1938 38, 90
[6] *Z Krebsforsch* 1938 47 288

THE ROLE OF ADRENALINE IN ANGINA PECTORIS

When it was found that after total thyroidectomy for angina pectoris the improvement observed could not be correlated with the fall in the basal metabolism, several workers claimed that a diminished production of, or a diminished sensitivity to, adrenaline was responsible[7 8] It is now suggested by Raab, however, that adrenaline plays a chief part in all cases of angina of effort[9] So important does he think adrenaline to be that he recommends vigorous treatment directed towards a reduction of suprarenal activity He adduces many arguments in favour of his view, pointing particularly to those cases of paroxysmal hypertension (both with and without suprarenal tumour) and paroxysmal tachycardia which are accompanied by anginal pain, he quotes a case of a doctor in whom a subcutaneous injection of 1 3 mg of adrenaline led to precordial pain and a rise in systolic pressure from

[7] *Amer Heart J* 1935 10 736
[8] *Presse med* 1936, 44 1307
[9] *Arch Kreislaufforsch* 1937, 1 255

120 to 220 mm Hg Later there was collapse with a great fall in blood pressure when the pain disappeared An attack of auricular flutter supervened but this was cured with quinidine Raab believes that adrenaline is responsible in those cases of angina decubitus in which there is a definite increase in the blood pressure and pulse rate and it is stated that during these attacks the iodine content of the blood rises a finding also reported during effort and on exposure to cold the change in iodine content is held to be secondary to increased output of adrenaline The angina which may happen in association with insulin hypoglycaemia and also as a result of smoking is likewise thought to involve an adrenaline effect The author admits that in many cases of hypertension with tachycardia angina is absent but without any evidence suggests that increased production of adrenaline does not occur in such cases In brief the thesis presented is that every factor which leads to angina is an 'adrenalina gogue The author has sufficient faith in his hypothesis to use deep x ray therapy for reducing suprarenal activity in the treatment of angina He suggests that it is practically harmless but admits that Addison's disease has resulted and has been fatal details of twenty cases are given and good results are claimed In so far as adrenaline is involved in the physiological reactions of the cardiovascular system to effort and emotion so far it may be conceded is it concerned in effort angina But Raab attributes to it a more direct role than this believing that it interferes with the utilization of oxygen by the myocardium The evidence brought forward is unconvincing the arguments appear illogical and treatment designed to inhibit the suprarenals cannot yet be regarded as a rational procedure in angina

DEMONSTRATION OF TUBERCLE BACILLI IN THE SPUTUM

In a report[1] on this subject published by the Joint Tuberculosis Council and compiled by Professor W H Tytler Dr Peter W Edwards and Dr H G Trayer the methods of demonstrating the bacilli by the microscope by culture and by animal inoculation are all reviewed and discussed in detail Comparing the efficiency of the three methods the authors note that apart from sensitivity each has advantages and disadvantages related to convenience and possibility of error Hence two sections are devoted to the application of the methods in clinical routine and to sources of error The authors hold that the concentration culture and inoculation methods are far better than direct film examination Since for the all important end of early diagnosis the most delicate methods are needed when clinical suspicion rests on indefinite evidence these should logically be applied whenever there is any suspicion These methods are technically less complicated than many in constant use in the more advanced general hospitals The authors believe that it is for financial reasons alone that medical officers treating tuberculosis are denied laboratory aid of the quality available to those treating other diseases Another reason may be that the knowledge of the superiority and clinical value of these methods is by no means recognized by all the authorities responsible for treatment of tuberculosis The report should do something towards remedying this The authors conclude that the specimens to be examined are so numerous that the public health and other laboratories serving most of the tuberculosis organizations of this country cannot undertake as a general routine any but the simplest tests without important increases in their staffs and accommodation "In general the greater the need the more inadequate are the attempts to meet it If the laboratory facilities available to the tuberculosis services of Great Britain are to be brought up to the levels already reached in smaller and much less affluent countries an important increase in the expenditure on this object is essential They conclude with little more than a mention of the examination of gastric contents for tubercle bacilli but point out that though this method has not so far found great favour in this country it is of special value in infants and in adults who swallow their sputum

THE TEACHING OF MEDICINE

An interesting and useful footnote to the discussion on the medical curriculum is to be found in the report of a subcommittee of the Association of Scientific Workers appointed to examine the clinical period of instruction Like the recent conference of the National Union of Students on 'The Training of the Doctor [1] the report presents in the main the observations of the learner and not of the teacher and is therefore admittedly incomplete but this point of view is if considered and deliberate of paramount importance The report is contained in the current number of *The Scientific Worker*[2] and has been reprinted as a pamphlet entitled "The Teaching of Medicine It is so succinctly drawn up as to preclude further summarizing but in its main observations and criticisms it is in general agreement with the reports of the British Medical Association and of the universities and examining bodies which now constitute the basis of discussion of this subject in this country Beyond these points of agreement not all of which have yet been incorporated in the Rules and Recommendations of the General Medical Council some findings have a distinct significance It is pointed out that the University Grants Committee report (1935) suggests a lack of individual teaching in medical subjects which is so important In certain teaching hospitals there is only just over one teaching bed per student there are clinical 'teaching rounds consisting of thirty or more students classes of fewer than ten students do not occur and there is no attempt at tutorial teaching properly so called Moreover it is notorious that even the minimum requirements of the General Medical Council are not complied with in every instance especially with reference to obstetrical cases and anaesthetics (*though it must be noted that in regard to this* last these requirements have now been differently phrased) Thus the relation of available teaching facilities to the number of students though varying

British Legion Press Preston Hall Industries Incorporated Kent

[1] See *British Medical Journal* July 23 1938 p 192
[2] Volume X No 3 July–September 1938

widely in different schools, is, speaking generally, sadly deficient Further, it is alleged that the methods of teaching, as well as the facilities have noteworthy shortcomings more especially perhaps in pathology, bacteriology, and forensic medicine , and it is stated that lectures on occupational diseases and child guidance seem conspicuous by their absence and that the psychoneuroses are " sometimes introduced into lectures on neurology " or may be represented by " six lectures on insanity " An interesting statistical observation is that the percentage of those qualifying who subsequently held house appointments in their own hospitals varied from twenty to ninety, though no doubt others held internships elsewhere The practical suggestions of the report under the heading of " the medical curriculum as it might be " will perhaps not command very wide assent at present The relationship of the ordinary medical curriculum and research is possibly misconceived , but though the scheme of the report for the three-year clinical period is not universally practicable or desirable, it would be interesting and valuable to have it tried out as an experiment

LIMITATION OF OPIUM PRODUCTION

The Advisory Committee of the League of Nations on the Traffic in Opium and Dangerous Drugs has recently been in session in Geneva preparing for a conference to be convened with a view to the limitation and control of the cultivation of the opium poppy and the production of raw opium The objective is a necessary and indeed a prerequisite step to the effective restriction of narcotic drugs to legitimate and scientific purposes While the existing Conventions of 1912, 1925, and 1931 appear to have largely secured the limitation of licit traffic, there can be no doubt that superabundant supplies of raw opium in certain countries have led to an increase in the clandestine manufacture and distribution in large quantities of morphine and heroin The suppression of illicit factories and traffickers in the Near East has transferred such commerce to the Far East Excessive production of raw opium there and clandestine manufacture of dangerous narcotics therefrom have proved to be perilous to other countries, to which they find their way by underground channels The due carrying out of international obligations by contracting countries is thus disturbed and the progressive abolition of opium smoking hindered or postponed The Committee realizes that opium is being produced in quantities in excess of recognized world requirements, even including those of Government monopolies in countries where opium smoking continues It is estimated that the world's annual need of raw opium is about 1 100 tons 300 tons for the manufacture of preparations for legitimate medical purposes 300 tons for the smoking monopolies, and some 500 tons for " other non-medical legitimate consumption " On the other hand, statistics show that, even excluding unrecorded production in Afghanistan and in the Far East the world production in the year 1936 amounted to 2,300 tons Moreover, there were in addition in that year estimated stocks in the producing countries of the alarming total of 3,500 tons Accurate information as to the actual production in China, Manchuria, and Jehol is not available, but it is estimated to exceed by far the production of the whole of the rest of the world The magnitude and difficulties of the problem before the Committee are obvious, and the principles to be applied by the promised Convention in fixing world production, in allocating to each producing country its quota, in regulating imports, exports, and stocks, and in controlling the whole system, will be submitted to the Governments for their observations, and they will be considered at the next meeting of the Advisory Committee

MEDICAL POSTGRADUATE STUDY

In 1909 an International Committee on Postgraduate Medical Study was formed in Budapest, and two international congresses were held before the war, there and in London For twenty-four years the movement was at a standstill The original general secretary, Professor Adam of Berlin, with an *ad hoc* preparatory committee, restarted it in 1937 and gathered delegates from forty-four countries to the third conference in Berlin The full report of that congress, in the form of the speeches and lectures, with translations into English, is now published in a volume of 410 pages[1] At the further International Congress held this year in Budapest, a permanent office was formed in Berlin to arrange congresses, organize interchange of teachers, students, and literature, and so on, under the title of the " International Academy of Postgraduate Medical Education " The report of the 1937 Congress gives the origin and history of this proceeding, and is therefore of considerable interest It also gives details of postgraduate work in many countries, and a series of lectures on the problems of postgraduate study in obstetrics, surgery, radiology, psychiatry, and other special subjects, and of sessions devoted to postgraduate study in relation to cancer research and industrial medicine Of particular interest are the speeches of the German delegates and of Dr Wagner, the Reichsarztefuhrer, on the place of the doctor in the New Germany and what National Socialism expects of him, on the " refresher course " system for German doctors, and on the new attitude to homoeopathy and " natural medicine " To most people what is here written, and still more what can very easily be read between the lines, will give rise not only to surprise but to very grave misgivings concerning the future of medicine under National Socialism A pleasant feature of the speeches is the stress laid by delegates of all countries on the friendly atmosphere of the conference and on the value of international relations between doctors as a means of furthering mutual understanding between nations, and on the essential wish of all doctors for peace

[1] *Bericht uber den III Internationalen Kongress fur arztliche Fortbildungswesen* Berlin, August 21–25 1937 Edited by Dr Blome and Professor Adam (RM 18 , bound, RM 20) Jena Gustav Fischer 1938

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

TREATMENT OF TENOSYNOVITIS AND GANGLION *

BY

E PEARCE GOULD, F R C S

Simple Tenosynovitis

This is a frequent affection and involves most commonly the sheath of the extensor tendons on the back of the wrist It is also met with in the foot and may here involve either the sheaths of the dorsiflexors beneath the two portions of the anterior annular ligament or those of the peroneal tendons behind and below the external malleolus In any of these situations the diagnosis depends upon the recognition of the exact extent of the local swelling which is soft in consistence and yields a characteristic soft tremitus to the examining hand when the appropriate tendons are actively moved In some cases there is a history suggesting overuse of these tendons either at work as for instance in typewriting or at play as after vigorous lawn tennis or squash rackets

In all cases treatment should take the form of the application of elastic strapping to the swollen area for ten days and the avoidance for double this period of that use of the limb which appears to have been the cause of the condition When a toxic element in its aetiology is discoverable—for example gout or fibrositis—appropriate medical treatment in the form of colchicum or a mixture of sodium salicylate and iodide of postassium is worth a trial in addition to the local treatment Should the condition persist after the above mentioned period a plaster of Paris case similar to that used in the treatment of a fractured scaphoid bone is applied to the wrist hand and forearm and left in position for two weeks On its removal elastic strapping is reapplied for a further week whilst full use of the hand is regained

Stenosing Tendovaginitis

This condition occurs in two forms (1) as a chronic thickening of the sheaths of the extensor pollicis brevis and abductor pollicis longus and (2) as a strictly localized thickening of the tendon sheath of a finger flexor opposite the metacarpo phalangeal joint causing the clinical condition of snap-finger In the first case there is found an elongated swelling situated over the radial styloid process Palliative treatment is disappointing Operative treatment is simple and satisfactory After infiltrating the skin over the swelling with 1 per cent novocain an incision one and a half inches long is made in the line of the swelling and the dissection carried down to and through the superficial layer of the tendon sheath The thickened layer encountered is dissected away until the tendons are found to move freely The skin is then carefully resutured The operation is preceded by a cleansing of the skin with soap and water ether and spirit Its swift and accurate performance is facilitated by operating in a bloodless field This is obtained satisfactorily and simply by elevating the arm for two minutes with a sphygmomanometer cuff applied above the elbow With the arm still elevated the cuff is quickly pumped up to a pressure of 130 to 140 mm Hg and the operation then begun Under no circumstances must this pressure be maintained for more than twenty minutes lest serious and possibly permanent nerve paralysis result The pressure should be relaxed before closing the wound so that accurate haemostasis with 00 catgut ligatures is secured A firm dressing is maintained until the skin sutures—of medium silkworm gut—are removed on the seventh day after which full use of the hand is allowed

The cure of snap finger requires the operative exposure and removal of the offending local fibrosis This operation involves a careful dissection in the palm of the hand and is best regarded as a major surgical procedure

Gonorrhoeal Tenosynovitis

This condition is often associated with gonorrhoeal arthritis and may complicate but rarely gonorrhoeal ophthalmia and the vulvovaginitis of young girls Either of these conditions or the more usual urethritis in the male or cervicitis in the female will continue to receive appropriate treatment The treatment of the local condition is governed by regard for the possible development of an abscess within the affected sheath and the extreme probability of the late formation of troublesome adhesions The tendon sheaths most often involved are those of the extensor tendons of the hand or foot The acute phase of onset calls for the local application of 10 per cent ichthyol in glycerin painted on twice daily and covered by white lint and a bandage and rest to the part As the redness of the skin subsides and the pain lessens this treatment is replaced by firm elastic pressure maintained until all pain has gone Active movement with use of the part is now encouraged Return of pain without redness of the skin demands a further period of rest and pressure

Return of pain with localized redness indicates local suppuration As soon as fluctuation is evident after cleansing of the skin an incision should be made the pus evacuated and zinc and castor oil ointment and sterile gauze applied This is changed daily until healing is complete When return of function is delayed owing to adhesions inductotherm is extremely useful followed by passive movements

In obstinate cases in which an interval of three months has elapsed since the last sign of activity manipulation under gas and oxygen anaesthesia should be employed

Tuberculous Tenosynovitis

This disease is most commonly met with as an affection of the radial and ulnar bursae still commonly called in this country compound palmar ganglion a chronic elastic or fluctuating bilobed swelling is found on the front of the wrist and palm the two prominent parts of the swelling communicating beneath the tense anterior annular (anterior carpal) ligament Involvement of the whole of the flexor sheath of the thumb or little finger may produce a prolongation of the palmar prominence along one or both of these digits Rarely, the disease is

* The treatment of acute infections of the tendon sheaths of the hand is omitted from this article This condition will be dealt with later

confined to the flexor sheath of the index, middle, or ring finger, and still more rarely to the common extensor sheath on the back of the hand

Treatment varies with the stage reached by the disease when first seen, and also by the pathological variety encountered If the case be an early one in which the history of swelling is recent and in which no fluctuation or melon seed-body fremitus is detected, complete immobilization of the wrist and hand by a plaster-of-Paris case should be tried This splint is left undisturbed for three weeks If at the end of that time there is obvious improvement a further splint is applied In a favourable case, at each successive inspection the swelling is found to be lessening, and when this is reduced to little more than a localized induration splintage is omitted, and cautious use of the hand supplemented by inductothermy or other form of heat application gradually overcomes the resultant stiffness

If, however, the disease is more advanced when first seen, and fluctuation is easily obtainable throughout the swelling, plaster-of-Paris fixation should be preceded by an incision into the affected sheath to allow of evacuation of all the fluid or semi-fluid contents, including melon-seed bodies if present In the common type, the compound ganglion, the incision should be above the wrist into the upper compartment, and must avoid the line of the median nerve It will be remembered that the nerve lies to the ulnar side of the tendon of the flexor carpi radialis, between it and the palmaris longus tendon if present The ulnar border of the former tendon can always be felt in the forearm above the upper limit of the distended flexor sheath, and gives the necessary guide to the course of the nerve Secondary infection of the sheath is to be avoided at all costs, and careful cleansing of the skin must therefore precede the incision For the same reason accurate suture of the incision must follow emptying of the sheath contents, and the wound should be sealed with a mastisol, collodion, or Whitehead's varnish dressing before the plaster case is applied A similar procedure should be adopted if, when the plaster applied as initial treatment is removed, it is clear that fluid has accumulated Here again a bloodless field is of great assistance, but the warning given above as to its danger if used carelessly must be repeated

Some cases come for treatment late, or, in spite of early treatment, the pathological changes progress A doughy swelling with loss of clear definition of its edges and perhaps adhesion of the skin over it indicates a progressive fibro-caseous degeneration Confirmation of this more serious condition may be found in loss of function of one or other tendon, due to its necrosis within the sheath or loss of sensation in part of the skin area supplied by the median nerve, caused by involvement of the nerve, which readily becomes adherent to the diseased sheath In cases of this kind a wide opening-up of the sheath with free excision of the diseased and destroyed tissues alone offers any hope of cure Such operations, together with subsequent attempts to replace lost tendons, come under the heading of major surgical procedures

Simple Ganglion

In the great majority of cases the swelling to which this diagnostic label is attached is the result of the mucinous degeneration of a fibrotic change in a limited area of the wall of a tendon sheath In a few cases a distended protrusion of the synovial membrane of a carpal joint produces a local swelling with much the same clinical features In either case the actual disability caused by a simple ganglion is as a rule less than the annoyance occasioned by the conspicuous lump on hand or foot These considerations have a bearing upon treatment, the latter by emphasizing the unwisdom of embarking hastily upon operative measures difficult of performance and not entirely free from complications, and the former as suggesting in advance that attempts to aspirate a substance of the consistence of glycerin jelly through a small hollow needle are bound to fail

If the time-honoured method of "dispersing" the swelling by a smart blow with the broad end of the family Bible savours of lay rather than medical practice, there is much to be said in favour of its surgical equivalent —namely, the disruption of the gelatinous material into the surrounding tissues by the pressure of the surgeon's superimposed thumbs If this manœuvre is adopted at a time when the local proliferation has undergone complete degeneration into the mucinoid material, and is followed by a firm pad of elastoplast worn for a day or two, a lasting cure is effected Sometimes the swelling will not yield to such pressure as the patient is willing to stand, in such a case a further attempt after a few weeks' interval will probably succeed Apparent re collection of the contents some weeks later is due either to degeneration in a part of the lesion which was still fibrous at the time of the treatment, or to the original swelling having been in fact an instance of the true joint synovial pouch In this latter case fixity of the swelling on its deep surface and its exact anatomical site will confirm the diagnosis In this variety operation is the proper course

After due preparation of the skin the sac should be exposed in a bloodless field (see above) and dissected carefully to the joint margin At this level it should be cut away and no attempt made to close the small aperture in the capsule The skin should be carefully sutured and local pressure applied until the wound is healed But in the common variety of simple ganglion open operation is to be avoided for the following reasons (1) In the course of the operation the thin fibrous membrane which contains the mucoid material is almost certain to give way it then becomes difficult to define (2) An attempt to make sure of a complete cure by removing all this membrane leads to a wider dissection than at first envisaged, with possibly considerable exposure of tendons (3) Especially in the front of the wrist, important structures lie in close proximity to the swelling the files of medical defence societies contain more than one instance of threatened action by the patient against his doctor for such complications of an operation for ganglion as injury to the median nerve

If treatment by compression is unacceptable or fails, a prudent and satisfactory alternative is as follows After cleansing the skin and raising a wheal at one edge of the swelling with 1 per cent novocain insert a narrow scalpel of adequate length, or, better, a pointed tenotome, through the skin at this point across the swelling and just through its opposite edge A slight rocking movement of the knife will then tear the limiting membrane without penetrating the skin on the distal side When the knife is withdrawn the minimum of pressure with the fingers will now disperse the swelling, a little of the characteristic jelly-like contents perhaps escaping from the puncture wound A drop of collodion on a wisp of wool seals this puncture, and a patch of elastoplast left on for a day or two completes the treatment

A STRICT VEGETARIAN DIET

BY

Sir LEONARD HILL, LL.D., M.B., F.R.S.

It may be that the fuel value of the man's diet is put as high as 3,400 calories because a diet largely consisting of meat white bread cheap margarine and sugar is badly selected and therefore eaten in large amounts not only to satisfy appetite excited by cooking and flavours but also to secure more of the vitamins and minerals which are inadequate in these foods.

The calorie and protein values can in this case be lessened when the diet is largely one of fresh fruit and vegetables. It must be kept in mind that protein in particular stimulates heat production. Hindhede at the age of 80 claims that he bicycles all over Denmark with ease on a diet of skimmed milk and potatoes. The Japanese rickshaw runners can pull a passenger even sixty miles in a day on a diet of rice salad and a little fish. On the other hand the Eskimos are healthy and free from rheumatism on a diet of raw meat liver, blood, etc. with some fish duck and a little sorrel and moss.

The Boy and his Dietary

In the above respects the following is of interest in regard to the diet of a boy whose parents people of culture are strict and ardent vegetarians. His home is in a wood isolated from other houses and two miles from any shop. He is aged 9, weighs 59 lb. and is 52 inches high; he is bright and intelligent with clear skin and eyes, walks ten miles a day with ease, takes a cold bath every morning and an air bath out of doors. He has a remarkable power of chest expansion and abdominal retraction due to breathing exercises. He does well at school and holds his own with other boys. He eats no meat, fish, eggs or bread at home and scarcely any milk or cheese but is allowed to eat bread and butter and cake when he goes out to tea about once a week.

He goes to a day school two and a half miles away and there has vegetables for dinner with some fruit. He may of course get a few sweets from other boys but boys are not ready to give away much.

The following is typical of a day's diet which his parents guarantee to be given to me correctly. By personal inspection and inquiry I have not been able to find any source of error.

Breakfast.—After walking five miles to church and back. One fairly thick slice of pineapple weighing about 6 oz.

Lunch.—Baked spinach and onion pie with a very thin crust made of wholemeal flour cheese and milk about 10 oz. in all.

Tea.—Two apples, one orange, two small tomatoes in all about 12 oz. including the skin of the orange. One small ice.

As variants for any one of these meals he may have salad and 2 oz. of raisins or eight dates, two apples and 1 oz. of sour milk, or a vegetable pie and 1 oz. of honey.

Grapes, pears, bananas, water-cress, cauliflower eaten raw with a little salad oil may substitute any of the above.

His father writes:

> He is in fine form, full of life and energy and getting stronger and tougher rapidly. Anybody who likes could come and observe; there is no deception, only the workings of God's laws of nature in a clean young organism. It is only due to too many tea parties and consequent starch and sugar consumption that he ever gets mildly out of sorts and is not at his best until the poisons have been eliminated sometimes by a short fast. But his vitality is so strong that he can clean his small body internally—*i.e.* blood and tissues—with extraordinary speed. I am quite satisfied that it is not possible for him to develop any serious symptoms due to infection—from which he has so far remained free.

Confirmatory of his father's claim that the boy lives on a diet much like that given by his parents is the fact that the total nitrogen determination was 4·43 grammes in the twenty-four hours' urine, equivalent to a consumption of 28 grammes of protein. The urea came out as 2·05 per cent. and a total of 9·65 grammes in twenty-four hours. A second sample of twenty-four hours' urine taken some weeks later gave figures in good agreement. Dr. H. E. Archer, who made the determinations for me, said he had not come across so low a value for protein metabolism before. Dr. W. A. R. Thomson examined the boy and determined his basal metabolism for me at St. Thomas's Hospital. The boy was brought there in a car at 9 a.m. having had no breakfast and then rested on a bed for an hour. The result was slightly above normal. The excitement would naturally put his oxygen use up. The figure was 215 c.cm. per minute. Dr. H. J. Taylor found his excretion of vitamin C in the urine was six times as great as is normal for people on an ordinary diet.

Comparison with Apes' Dietary

In striking contrast to this boy's diet which from the data given for one week scarcely came to 800 calories a day is that of the chimpanzees and gorillas at the Zoo, particulars of which were kindly given me by Dr. G. M. Vevers.

The diet of the Zoo chimpanzees weighing male about 175 lb. and female 120–130 lb. gives approximate values for protein 145 grammes, carbohydrate 850, fat 220, calories 6,000. The animals probably get about four-fifths of this or 4,800 calories. The diet of the gorillas was even more ample. The post-mortem examination of Mok, the gorilla which died, showed besides a subacute pneumococcal septicaemia evidence of over-feeding but the chimpanzees keep slim and in good condition.

Mona, the female gorilla, diet has now been reduced by one-third while the same wide selection of foods is maintained.

Average Daily Amount of Food for Adult Chimpanzee.

Food	Weight in grams	Extra Winter Food Weight
Bananas	1,320	Grams
Apples	450	
Oranges	315	
Grapes	450	
Lettuce	250	
Bread*	300	300
Eggs	55	
Milk	1,747	
Carrots	450	
Potatoes	450	
Nuts	225	112
Biscuits	225	112
Margarine	30	30
Jam	25	25

* Each 2 lb. loaf contains 2 oz. soya flour and 4 oz. bone flour.

R. J. Boursais (*These Paris* 1938, No. 166) who records fourteen cases in women aged from 20 to 43 states that chancre of the vaginal walls is much less frequent than chancre of the cervix. It appears to be commoner in prostitutes than in other women in whom it is probably often overlooked. Failure to recognize vaginal chancre explains the discovery of syphilis only in the secondary stage—the so-called syphilis without chancre which is more frequent in women. Vaginal chancre offers a great risk of infection. On the other hand if it is detected early a source of contagion may be removed which is all the more dangerous as it may remain unrecognized for weeks until the secondary symptoms appear.

INTERNATIONAL HEALTH MEASURES

THE PERMANENT COMMITTEE'S SURVEY

The report of the Medical Director of the International Health Office on the proceedings at the session of the Permanent Committee held in Paris last May has now been published[1] Dr M T Morgan of the Ministry of Health was again the delegate of the United Kingdom The detailed rulings and opinions of the Permanent Committee on the interpretation and application of the various international sanitary conventions have been transmitted for the information of Governments in the reports of the special Commissions

Defence against Cholera

The extension of cholera in the Far East during 1937 has led certain countries to increase their defence measures, and an exchange of views became necessary between the delegates of the countries concerned, particularly as regards the conditions under which anti cholera vaccination should be imposed Also in connexion with cholera—and particularly arising from an epidemic in the Celebes Islands, in which a vibrio exactly corresponding to the El Tor type had been isolated—the committee expressed the view that at the present time cases in which the clinical symptoms and signs lead to a diagnosis of cholera should be, from the administrative and preventive point of view, treated as cases of true cholera

The value of "O' antigen for the diagnosis of *V cholerae* was the subject of interesting reports from the Research Institute, Kasauli, and elsewhere Studies on the specificity of agglutinating sera carried out at the Institute of Public Health, Rome, seem to show that the Inaba 'O" antiserum contains active agglutinins which are specific for all proved strains of cholera vibrio and gives better results than the Ogawa and Napoli 'O' antiserum The American authorities, in accordance with the U S Quarantine Regulations, have required since August, 1937, compulsory bacteriological examination of the stools of passengers coming by sea into the Philippines from places where cholera is present In practice it was possible to exempt about 50 per cent of the passengers from this examination but nevertheless 10,407 passengers were thus examined of whom 296 were found to have the cholera vibrio in their intestines

Destruction of Rats in Ships

On the application of Article 28 of the Convention (periodic "deratization of ships) the committee recalled that deratization or exemption certificates should always be drawn up in such a way as to give the port sanitary authorities of subsequent ports of call all the necessary information, that operations for destruction of rats should be carried out with the maximum efficiency including if necessary, an increase in the concentration of gas and the time of exposure if the circumstances are such that uncertain results might be expected, and that inspection or deratization of a loaded ship is relatively ineffectual

An inquiry carried out in British ports showed that the proportion of rat-infested vessels is not, on the average, higher than 10 per cent, the proportion of seriously and repeatedly infested vessels is about 1 per cent These results are in general agreement with those obtained by a similar inquiry in Atlantic ports of the United States The committee reiterated its opinion, already expressed several times, that deratization within the period laid down under the Convention could only be justified by exceptional circumstances

Yellow Fever and Air Traffic

As regards the International Sanitary Convention for Air Navigation special attention as usual was given to the danger from yellow fever A precaution recently adopted in America requires from passengers coming from a zone which might be considered infected or suspected a declaration of origin in a form drawn up by the Pan-American Sanitary Bureau after consultation with the Governments concerned and the air transport companies The committee examined this form which seemed to have a practical value and, without wishing to suggest the general compulsory adoption of such a document, it considered that the air transport companies might usefully provide passengers with similar forms at their embarkation The forms are, in fact, designed to facilitate the inquiries which passengers may have to undergo under the terms of the Convention at subsequent air ports of call

Further study was made of the disinsectization ' of aircraft The committee took note of the researches in progress in British India and in the Union of South Africa The number of notifications concerning the creation of sanitary and anti amaril aerodromes received by the International Health Office bears witness to the development of the organization laid down by the Convention There appears to be steady progress in the destruction of mosquitos, especially in the neighbourhood of aerodromes, and information on the Stegomyia index in various African countries was laid before the committee

Experiments in the destruction of insects with an automatic apparatus were carried out on an Imperial Airways flying boat at Durban The substances used were pyrethrum extracts diluted with either five parts of carbon tetrachloride or ten parts of water Mosquitos placed in cages in various parts of the aircraft were killed in less than ten minutes In the United States a survey of five types of plane used by Pan American Airways showed that both on the external surface and in the interior of these aircraft there were a large number of places in which mosquitos might take refuge and to which "disinsectants" could not penetrate, except by direct spraying More complete streamlining, the use of appropriate screens, and the suppression of most of the hollow spaces are the means suggested to eliminate most of these harbourages

Immunization against yellow fever of the flying and ground staffs of Pan-American Airways, as well as of members of the United States Public Health Service, was begun in the Panama Canal Zone in August, 1937 By April 1, 1938 983 vaccinations had been carried out, and in the near future vaccination will be extended throughout Central and South America as far as latitude 30° S The strain used is 17 D The problem of the prevention of the carriage of mosquitos in aircraft flying in yellow fever areas without imposing undue restrictions on air traffic, continues to occupy the attention of the sanitary authorities of various countries Of these measures some concern the destruction of mosquitos during flight, others are concerned with the details of construction of aircraft so as to eliminate as much as possible the opportunities for carriage of these insects, while others are related to yellow fever vaccination of the personnel

Yellow Fever in Brazil

In Brazil jungle fever presents a problem with which the authorities are seriously concerned A vast region covering parts of the States of Minas Geraes, Rio de Janiero, and Sao Paulo is infected and a high death rate has been observed among howler monkeys, many thousands of protection tests carried out with the serum of different wild animals appear to confirm the opinion that several species of monkeys play an important part in the spread of the jungle virus No explanation is, however, as yet forthcoming of the method of preservation of the virus from one season to another in the south of Brazil, where several months go by each year without any human cases of yellow fever coming to light In Brazil use is made for mass vaccinations, of a pantropic virus known as Virus 17 D, obtained by culture on chick embryo from which the central nervous system has been removed This vaccine, which has in this way lost the greater part of its neurotropic virulence, confers a definite immunity which begins three weeks after inoculation, in 90 per cent of the cases no reaction occurs and it is slight in the remaining 10 per cent Considerably more than 200 000 persons have been inoculated up to the present in Brazil by this method

[1] Paris Office International d Hygiene Publique 195, Boulevard Saint Germain

Small pox

Morbidity and mortality statistics of small pox in Poland show that during the last twenty years the disease has decreased progressively since the introduction of compulsory vaccination in July 1919 This is illustrated by the fact that whereas in 1921 there were over 5 078 cases and 823 deaths in 1937 there was only one non fatal case Small pox in Poland may thus be regarded as extinct. The annual figure for vaccinations and revaccinations is round about 2 000 000 and up to the present no case of post vaccinal encephalitis has come to notice A severe epidemic of small pox occurred in the Gezira area of the Anglo Egyptian Sudan during the first months of 1938 It was responsible for 177 cases and 64 deaths a mortality rate of 36 2 per cent women were much more seriously affected than men the rate for the former being 70 per cent against only 30 per cent for the latter

From 1933 to 1937 28 cases (with 17 deaths) of post-vaccinal encephalitis were notified in Norway One case of this complication was notified from the Punjab in a Hindu baby of 11 months

Other matters with which the Permanent Committee concerned itself included the control of vitaminized products periodic medical examination and the issue of health record cards various communications on mental hygiene cancer and other subjects and reports on typhus dengue dysentery tuberculosis malaria psittacosis and tularaemia In all more than one hundred papers and communications were received and considered

JUBILEE OF INTERNATIONAL CONGRESS OF PHYSIOLOGISTS

The jubilee of the Physiological Society founded in 1876, was celebrated by a most interesting personal history of its members and proceedings written by Sir E Sharpey-Schafer, published as a supplement to the *Journal of Physiology* and reviewed at length by Sir John Rose Bradford in these columns (1928, 1 313) The International Congress of Physiologists first met at Basle in 1889, but as the arrangements were made in 1888 the Congress to be held this year at Basle may be regarded as the meeting of the jubilee, and has been commemorated by an admirable history of these triennial congresses by Dr K J Franklin of Oxford[1] The idea of an International Congress of Physiologists was originally put forward by Gerald F Yeo professor of physiology at King's College London, and honorary secretary of the Physiological Society from its start until 1889 This at once received a warm welcome from Michael Foster, then at the zenith of his influence, Burdon Sanderson of Oxford Schafer of University College, Purser of Dublin, Rutherford of Edinburgh, McKendrick of Glasgow and Gaskell of Cambridge, who circularized their Continental colleagues with such success that the Congress in September 1889, had a membership of 180 The main objects of the Congress were exchange of ideas mutual friendly criticism and opportunities of making personal acquaintance with other physiological workers Foster, to whom formality was a crime (Sherrington), was very active in establishing a happy atmosphere at the congresses thus anxious to make the meetings as informal as possible he sat himself down in the front row at the opening session of the first congress and rather ostentatiously, as he afterwards confessed smoked his pipe He carried his colleagues with him in agreeing that the proceedings should be characterized by the greatest simplicity, and that feasting receptions, and official addresses should be barred Communications were to be usually limited to fifteen minutes and preferably to take the form of demonstrations A good example in this respect was set at the first congress by von Mering and Minkowski's production of diabetes mellitus by pancreatectomy by Mosso who showed his ergograph Goltz who brought his decerebrate dog and Beevor and Victor Horsley's operative skill in demonstrating the motor functions of the cerebral cortex in the monkey

Except during the war the congresses have met every third year, successively at Liege Berne Cambridge Turin (1901) where Foster, the perpetual honorary president had a remarkable ovation Brussels Heidelberg Vienna Groningen (1913) Paris (1920) Edinburgh Stockholm Boston Rome, and at Leningrad and Moscow (1935) where Pavlov was president 485 communications were made and more than 1 300 members were present Dr Kenneth Franklin has accumulated and most skilfully arranged an enormous amount of interesting matter about the congresses has collected from the eleven survivors of the first congress details which otherwise might have been lost and has affectionately dedicated what he modestly calls A Short History of the International Congresses of Physiologists to Charles Scott Sherrington one of the general secretaries of the congresses from 1892 to 1907 who by his experimental demonstrations at successive meetings and by his personal encouragement of younger physiologists has for half a century put into practice the principles laid down by the founders of the congresses

H D R

[1] "A Short History of the International Congresses of Physiologists" By K J Franklin D M M R C P *Annals of Science* London 1938 3, 241

ROCKEFELLER TRAVELLING FELLOWSHIPS

The Medical Research Council has awarded Rockefeller Fellowships to the following for the academic year 1938–9

Richard Raymond Bomford B M M R C P Assistant Physician London Hospital

Thomas Colver M B M R C P Out patient Medical Registrar, Hospital for Sick Children Great Ormond Street London

Robert Morton Heggie M B Assistant Lecturer in Pathology and Bacteriology the Welsh National School of Medicine Cardiff

Ian MacKenzie M B F R C S Ed Assistant Surgeon St Giles's Hospital London

George Geoffrey Evanson Smyth M D M R C P Dickinson Research Scholar National Hospital Queen Square, London

Ivor Glyn Williams, M B F R C S D M R E Senior Assistant Radiotherapist Meyerstein Institute of Radiotherapy Middlesex Hospital

All the Fellows propose to work at centres in the United States with the exception of Dr Smyth who intends to study in Paris Dr Williams will hold his fellowship for six months only

In addition the Rockefeller Foundation has awarded fellowships on the recommendation of the Medical Research Council to the following candidates in the special field of psychiatry, neurology and related subjects

Thomas Russell Cumming Fraser M B M R C P Assistant Medical Officer Maudsley Hospital London

William Walters Sargant M B Medical Officer Maudsley Hospital London

Michael John Francis McArdle M B M R C P Assistant Medical Officer Maudsley Hospital London

The friends and pupils of Dr Louis Ombredanne professor of orthopaedics in the Paris faculty of medicine are proposing to offer him a medal engraved by M Charles Pillet on the occasion of the thirtieth anniversary of his professional instruction The presentation will be made at 11 a m on October 6 at the Hopital des Enfants Malades Subscriptions should be sent to M Georges Masson 120 Boulevard Saint Germain, Paris

Local News

SCOTLAND

Health of Edinburgh

The annual report of Dr John Guy, who is retiring from the position of medical officer of health for the City of Edinburgh, contains a review of the work of the public health department during the twenty-five years in which he has been associated with it The gross expenditure in 1913 was £37,618, in 1937 it had risen to £432,489 In the former year there were only two assistants to the medical officer of health, at the present time there are fifty-two full-time assistants in the department which also uses the services of fifty-nine part-time medical men The total staff in the department twenty-five years ago was 490, to-day it is 1,570 Twenty-five years ago there were no schemes for the treatment of tuberculosis and venereal disease, no child welfare schemes, and no school medical services The death rate from all forms of tuberculosis in 1913 was 1 9 per 1,000 and last year 0 8, a reduction of 58 per cent, or a saving of 441 lives The child welfare department was started in 1917, when the infant mortality rate was 127, to-day the rate has fallen to 70, representing a saving of 421 infants The venereal disease department was instituted in 1919, and the examination of school children about the same time Medical examinations of school children have increased from 23,641 to 100,645, and children under treatment from *nil* to 53,840 The report of the chief sanitary inspector states that the attitude of the people to sanitary requirements has now entirely changed from one of apathy and obstruction to a widespread desire for reform During the past twelve months 474 families have been removed from overcrowded houses to corporation houses, while in fifty other cases of overcrowding the inhabitants have been transferred to better private dwellings Since 1923 the local authority has dealt with 6 650 insanitary houses affecting a population of 22,069 A scheme was adopted by the local authority in 1934 to prevent the transference of infested furniture to new houses During the year the furniture of corporation tenants has been inspected, and it has been found that in 32 per cent of cases the furniture was bug-infested The Department has paid special attention to the smoke nuisance and the railway companies have taken measures to prevent the emission of smoke in the city

Montessori Congress

A Montessori congress attended by delegates from various European countries and America and by Dr Maria Montessori, was held in Edinburgh during the week ending July 30 Dr H Crichton Miller spoke on the subject of the changing responsibility of the teacher The three great things to a young child, he said, were security valuation and freedom, and the Montessorian principles promoted these Parents in all directions were failing in the great responsibility of providing them, and the burden fell upon the teacher Dr Montessori gave a series of four lectures in which she pointed out that a child's education should begin at an early age and that the child was guided along certain lines by his inner needs and also by the help of adults Environment had a stimulating effect on a child and his problem did not call for a negative policy of reducing studies The child in development passed through certain phases which had to correspond to relative phases in education She had devoted special attention to the first period of development from birth to 6 years when the child was passing through a formative period from a biological point of view During this time the child discovered a valuation of his personality, which came from finding that he could do things for himself It was necessary, therefore, to put him in a free environment where he could make his own social contacts This freedom was not freedom to do anything that he liked but freedom to do anything that helped him The child of 7 years changed completely, became less attractive, wanted to know many things, and developed feelings towards the abstract parallel with those towards the concrete which he had in the first phase He now needed greater independence, and had a need for more rigid environment with wider social contacts An example of social response to this need was found in the organization of the boy scouts The third phase was that of adolescence, when the social sense developed in the individual Some of the failures of the secondary schools were due to the use of mnemonic methods, which were no longer adapted to development at this stage In all walks of life discipline was necessary Freedom and discipline were two things which should go together, and if discipline was lacking in a class there must be some defect in freedom The teacher must not be an authoritarian person, but at the same time he must not be a passive and negative person

Edinburgh Foot Clinic

At the annual prizegiving on July 28 of the Edinburgh Foot Clinic, Sir William M Kechnie, who presided, expressed great satisfaction at the recognition of schools of chiropodists accorded by the Representative Body of the British Medical Association at its meeting in Plymouth He said that this would be a good thing for the Society of Chiropodists, and also a good thing for hundreds of thousands of people in this country Dr Lechmere Taylor said that forty years ago chiropody was unknown to the medical profession, and it never occurred to a doctor that a patient might with advantage be sent to a chiropodist This branch of public service had now achieved a reputation and a status which was very satisfactory Mr T M'Walter Millar remarked that a very full investigation had been made into the status of the Edinburgh school by the chairman of the Hospitals Committee of the B M A, and he considered, speaking as a surgeon, that it was well that the previous decision of the Representative Meeting had been rescinded

ENGLAND AND WALES

Welsh Board of Health's Report

The report of the Welsh Board of Health for 1937-8, which has just been published as part of the annual report of the Ministry of Health (H M Stationery Office, Cardiff, price 5s), reviews in detail the many-sided activities of the Department It includes separate chapters dealing with public health, public assistance, national health insurance, and contributory pensions, and these throw interesting light on the steady development of the Department and of the public health and social services of the country A new feature which is likely to prove of value to students and administrators is the presentation, in one table, of the principal vital statistics of the country over a number of years This table shows the remarkable decreases which have occurred in both the birth rate and the death rate since the beginning of the twentieth century Whereas in 1901 there were 63,233 births in a population of just over two millions, in 1937 there were only 37,175 in a population of nearly 2½ millions, in other words, the birth rate has declined from 31 3 to 15 per thousand of the population, or by more than 50 per cent, since 1901 During the same period the death rate has decreased by 42 per cent, from 18 1 to 10 5 per thousand While the infant mortality rate has undergone little change during the past four years, the 1937 rate of 63 per thousand live births, compared with 135 for 1911 and 161 for 1901,

indicates a considerable improvement since the beginning of the century One of the most gratifying features in the report is the reduction in the maternal mortality rate from 6 61 per thousand births in 1934 to 4 54 in 1937 which is the lowest rate shown in the table The report calls the attention of public health authorities to the problem of the high death rate from cancer which for the last four years has exceeded 1 per thousand of population—a figure substantially in excess of the tuberculosis death rate

MATERNITY AND CHILD WELFARE TUBERCULOSIS

The domiciliary service of salaried midwives under the Midwives Act 1936 is now generally speaking in operation throughout Wales The number of midwives employed in the new service at the end of 1937 was 702 and they had up to that time, attended 13 684 cases (including 3,316 maternity nursing cases) The report shows that increasing use is being made of the facilities provided for both ante natal and post natal examinations During 1937 over 17 000 women attended clinics for ante natal examination and nearly 1 700 mothers attended for post natal examinations either at post natal or ante natal clinics Forty authorities in Wales provide the services of consultants under their maternity arrangements, and during 1937 such services were provided in ninety eight cases where assistance was sought by a general practitioner

The decline in the mortality from tuberculosis which has been a feature of recent years was checked slightly in 1937 but the rate for that year of 0 862 per thousand of population is the lowest but one yet recorded for Wales and shows a fall of 43 per cent compared with the figure of 1 508 for 1911 which is the earliest year for which comparable figures are available The King Edward VII Welsh National Memorial Association, which carries out the treatment of tuberculosis in Wales on behalf of the county and county borough councils, received £295 000 from the contributing authorities in respect of the year 1937–8 The Minister's scheme for the third fixed grant period (1937–42) has been amended to provide for payment of £337,675 in lieu of £301 000 for 1938–9 This amendment was made in view of the increases in the cost of provisions, coal materials and other items The working of the arrangements for the prevention treatment and after care of tuberculosis in Wales has been the subject of investigation by a Committee of Inquiry appointed by the Minister of Health and composed of Mr E Clement Davies, K C, M P (Chairman), and Dr F J H Coutts, C B

Bristol Health Services

A report relating to the extension of the Bristol Health Services has been adopted by the City Council This document is the work of a committee which received reports and recommendations from the Health and Education Committees on three matters (1) the appointment of additional health visitors and school nurses and an amended scale of salaries for such officers, (2) the appointment of additional assistant medical officers, and (3) a revision of the salary scale for nursing staffs in the hospitals

The report states that the work of the health visitors has grown considerably in recent years The staff is now responsible for supervision of the three nursery schools and the seventeen classes premises to accommodate eight more classes are being erected Supervision of the provision of meals for mothers and infants is undertaken at four centres mentally defective children under 5 years of age are also supervised while the recent extension of the City boundaries has also added to the volume of work

With respect to the school medical services this work increased enormously between 1929 and 1934 the comparative figures being

	1929	1934
Number of visits to school	2 135	2 431
Number of examinations	107 050	139 061
Number of visits to houses	9 177	15 407

In accordance with directions from the Board of Education a complete review of the school medical services was made in 1936 The survey scheme which has been adopted in certain parts of the City of Bristol provides for the examination of every child attending school and if a child is not progressing mentally or physically the case is referred for special examination by a doctor Much of the work now undertaken by the nurses obviates examinations by doctors and in this way cost are reduced An indication of the good result of early and regular examination is given by the increased number of children referred for eye examination in 1934 before the survey commenced 2 998 children were referred for eye examination in 1937 the number had increased to 3 911 It is now desired to extend the survey scheme to the whole of the City and to allocate a special nurse for ear testing for deafness Attendances of children at health centres have increased from 22 915 in the March quarter of 1937 to 35 212 in the corresponding quarter of 1938

As the result of propaganda the ordinary work in connexion with ante natal clinics and infant welfare centres has increased since 1931 provision has had to be made for five additional ante natal sessions and sixteen infant welfare sessions weekly health visitors are also working in the voluntary infant welfare centres to the extent of five additional sessions weekly while the introduction of post natal work has resulted in a further ten sessions weekly The Health and Education Committees recommend that the present staff of fifty be increased by the appointment of fourteen additional health visitors and school nurses eight being for health services and six for school services The committees also recommend that the scale of salary for these officers be revised including special provision for sisters in charge at health centres The Health Committee has recently approved an extension of these part time medical services by six sessions a week while nursery schools and classes will be further extended by six sessions per week diphtheria immunization also occupies one session a week

The Health and Education Committees have recommended that they be authorized to appoint two additional whole time medical officers In addition to the sessions mentioned above ten sessions a week are held by part time doctors in connexion with the school medical service

For some time the Health Committee has been concerned with problems relating to the recruitment of probationers and the retention of trained nursing staff in the hospitals under their control The problem has recently become much more acute and it is now very difficult to obtain nurses Various measures have been adopted to meet the situation including the introduction of a scheme for the training of girls and filling the gap between the time girls leave school and the age at which they are eligible to start as probationer nurses and by the appointment of male nurses and orderlies and female attendants to undertake certain duties formerly performed by nurses The shortage of trained nursing staff appears to be due mainly to the unattractive rates of remuneration The shortage is not confined to Bristol it is the same in other areas where girls are able to find better paid employment with shorter hours of work and the opportunity of living at home The Health Committee recommends that the scale of salaries for nurses in the institutions under its control be revised

---

E Pouch (*These Paris* 1938 No 125) records thirty illustrative cases of recurrent chancres of the penis in which there was an interval ranging from three months to twenty years between the appearance of the first and the second chancres Five cases were examples of three successive chancres In each case the reappearance of a chancre was due to a fresh syphilitic infection Although it was impossible to prove that the patients were cured of their syphilis the new chancre appeared only in persons whose previous disease was attenuated as shown by an absence of nervous and visceral symptoms and an almost invariably negative Wassermann reaction In no case did the nature or duration of treatment seem to have had any influence on the appearance of the second chancre

Correspondence

Pelvic Measurements

SIR,—I read with great interest the leading article, ' Are Pelvic Measurements Worth Taking? ' which appeared in the *Journal* of August 6 (p 291) The writer, I imagine, like myself, rather regrets the necessity for further elaboration of mechanical devices for purposes of diagnosis, I fear however, it is inevitable in all branches of medicine in which they are applicable It certainly is so in respect of pelvic radiography Only by means of x rays is it possible to measure the pelvis with mathematical exactness, although, admittedly, the obstetrician of experience can by means of his hands and callipers, predict with a surprising degree of accuracy whether or not a foetal head will pass through a pelvis of abnormal formation The best I could secure was 6 per cent to 10 per cent Caesarean sections in the cases in which I deemed it probable that the child would pass—in other words, in the cases in which I permitted a trial of labour Certainly some children are lost in "trial labour," but very few if it is judiciously employed

In one period of three months in the Royal Maternity Hospital, Glasgow, the late Dr Shannon, Dr Fraser Lee (Edinburgh), who was at the time my house-surgeon, and I lost not a single mother and only one mature child (prolapse of cord) It was one of my most interesting clinical experiences Our object was to determine what could be secured in cases of recognizable pelvic malformation by rational conservative measures and Caesarean section judiciously selected Day and night Dr Shannon or I went to the hospital and discussed with our house-surgeon the procedure that should be employed Incidentally, can you wonder that I am a supporter of staffing a maternity hospital with a Master, as is the custom in the Rotunda Hospital, Dublin, and that I advocate that obstetric practice should be, so far as circumstances and the locality will permit, in the hands of obstetric experts (well trained specialists and general practitioners interested in obstetrics)?

There is no objection nor is there any hardship involved, in making it a routine practice to have a pelvic radiograph taken of every primigravida The suggestion that the measurements should be engraved on her wedding ring emanates I doubt not from minor critics of a like kidney to those who in times past held up antiseptics to scorn, scoffed at the employment of rubber gloves, and criticized the use of masks

What, it may be asked are we going to gain with a perfect radiograph of pelvis and foetal head? Will it permit us to dispense with a ' trial of labour ' in borderline cases? I fear that dream can never materialize Adjustments of head to pelvis moulding of head and the efficacy of the driving forces cannot be predicted Consequently a trial of labour will always remain an accepted procedure The radiograph will help the experienced obstetrician to select his cases with more exactness, and especially if he employs in addition intrapartum radiography should this be deemed advisable in a particular case It is interesting to note that in some of the most modern hospitals in which pelvic radiography has been extensively employed there is a decline in the number of Caesarean sections That might be the outcome in this country The danger that the incompetent or *amoral* obstetrician who freely employs Caesarean section will "get away with it" and pursue his nefarious trade is a passing danger Sooner or later, like other wrongdoers he will be brought to justice To hasten such a desirable issue what about making the mode of delivery notifiable on all intimations of birth? That would be rather a nasty blow to him

In my opinion maternity practice, in so far as circumstances and the locality will permit, should be entirely in the hands of obstetric experts—well trained specialists, and general practitioners interested in obstetric practice Only by these means can we ever appreciably reduce the maternal death rate and the neonatal death rate Much has been written in respect of the former, and I make bold to predict that very soon the seriousness of the continued high stillbirth and neonatal death rates will cause alarm Several thousands of children are being lost annually by *bad* obstetrics With a falling birth rate can this unsatisfactory state of matters be allowed to continue?—I am, etc,

Canterbury, August 11 J M MUNRO KERR, M D

Trial Labour The Plastic Head

SIR,—I was greatly interested to read your leading article "Are Pelvic Measurements Worth Taking? in the *Journal* of August 6 (p 291) It is still not widely appreciated how easy it is to acquire the technique of cephalometry, and how useful and reliable are the results The success of "trial labour" depends on several factors, one of which, the efficiency of the uterus, can never be foretold It is, however, quite certain that it is an unjustifiable risk to attempt trial labour if the true conjugate is known to be less than, say, 3 5 inches It is also certain that it is unjustifiable to induce labour without exact measurement of the foetal head It is not suggested that a successful outcome is impossible in such circumstances, but that the risks to mother and child are far greater than with Caesarean section The serious decision to allow delivery to take place by labour in a case of known contraction of inlet or outlet demands accurate knowledge of the size of the head Induction performed at a selected date assumes that the date of term is known, and this is far from true The case for induction in minor degrees of contraction depends upon knowledge of the size of the head, and in this lies the supreme value of cephalometry

In a maze of uncertainties it is heartening to have one fact to cling to, and I suggest that it is a fact that a foetal head with a bi-parietal diameter of 3 6 inches or less is always plastic and will mould, if necessary during labour, to a grotesque extent If left to term the bones may be hard, and gross overlap will be necessary, with a knife like edge to lacerate the maternal tissues and the certainty of foetal injury With a true conjugate of, say 3 5 inches and a bi-parietal diameter of 3 3 inches there would be almost a certainty of a living child, while a more mature foetus with a diameter of 3 5 inches could be extracted, probably living, but certainly without damage to the mother

There are now large collections of cases which show that induction of labour by rupture of the membranes performed through an antiseptic medium such as 10 per cent dettol in glycerin, does not raise the figures of morbidity, and I believe that if this method be adopted, with careful measurements and keeping the concept of the plastic head in mind, the whole question of trial labour will be raised from the level of inspired guesswork to on of an attempt to deal scientifically with a difficult problem

With regard to induction by rupture of the membranes I have been sorry to read of a number of ingenious

instruments designed to puncture the membranes and withdraw fluid This practice is likely to bring the whole method into disrepute for I am certain that it is not the withdrawal of liquor which is mainly responsible for starting labour, but the tearing of a considerable hole in the membranes and the resulting contact of the foetal head with the uterus without the intervening membranes We have all seen cases in which spontaneous leakage of large quantities of liquor amnii has failed to start labour for many weeks but after an experience of over 250 cases I have yet to see a failure where a hole of an inch or two has been made even if it is effectually plugged by the head and the escape of liquor is negligible My own technique is to pinch up a fold of the membranes with a forceps applied to the side of the head and with a finger to tear through the fold enlarging the hole as much as possible It is quite unimportant how much liquor escapes

Measurement of the pelvic inlet is now firmly established, but the outlet is usually ignored or measured by elaborate methods There is a simple way of obtaining useful information on this point to which I have seen no reference If a film be taken in the sitting position as described by Rowden Orley and others at a focus film distance of 30 inches the tips of the ischial spines are clearly seen projecting into the pelvic oval If the distance between these tips be measured and ½ inch subtracted to correct for magnification, any serious degree of contraction of the outlet can at once be detected The normal direct measurement on the film is about 5 inches and if it be reduced below 4·25 inches spontaneous delivery at term is highly improbable

If attention be given to these factors—the inlet the outlet, and the plastic head—I believe that Caesarean sections early and late will be greatly reduced and that many of the tales of the horrors of labour will go out of circulation —I am, etc

Bexhill on Sea August 6 NORMAN REECE

Quinsy and its Treatment

SIR,—Ever since 1899 I have performed tonsillectomy on the first appearance of oedema of the palate or anterior pillar By dissecting the anterior pillar off the tonsil from below one never fails to open the abscess In 1922 I sent a letter to the *American Journal of Laryngology* stating I had performed this operation at least once a week for twenty three years with no deaths Since that date I have had one death but it was due to the anaesthetist using chloroform instead of ether while I was washing my hands we got the patient round but he died about an hour after the operation was finished In thirty nine years I must have operated on over 2 000 cases I have had two or three close shaves, but a stab laryngotomy saved the situation It seems that ether occasionally increases the oedema of the septic laryngeal condition and so blocks air entry In thirty two years at the Children s Hospital I saw only one or two cases a year In twenty-three years at the Royal Melbourne Hospital I always had one case and sometimes three or four, a week

Cocaine and its derivatives are in my opinion quite useless and by no means harmless I have had six cases of severe oedema of the glottis, in two of them the patients died—one as mentioned above and one hospital patient who refused operation The latter had pus in the pericardium It seems to me wicked to let a patient suffer agony for days while waiting for the abscess to point Some of my early cases must have inspired pus but no unhappy consequences followed Double quinsy is not common, and in the few cases I have had both tonsils were removed If the patient is not seriously ill I always remove both tonsils as I have frequently seen quinsy supervening in the other tonsil In these cases there must be some anatomical peculiarity allowing entrance of septic material into the intratonsillar fossa which the patient is unable to extrude —I am etc

W KENT HUGHES MB FRACS
Consulting Surgeon Children s Hospital Melbourne
late Senior Laryngologist Royal Melbourne Hospital
and Laryngologist St Vincent s Hospital

Melbourne July 27

Stelnach II Operation for Prostatic Enlargement

SIR —I am very interested in the notes of Lieutenant-Colonel T Hunter s two cases of prostatic obstruction successfully treated by the Steinach II operation (August 13 p 376) All that I had intended to convey in my article published in the *Journal* of July 9 was that a critical attitude must be maintained to this operation owing to the fact that the patient suffering from obstruction frequently showed a temporary and spontaneous remission of symptoms a remission for which the Steinach operation might receive the credit I did not deny that favourable results had been obtained and I think that one may regard Lieutenant Colonel Hunter s cases as examples of these I sincerely hope however that he will keep these patients under observation and let us know the sequel Unfortunately, I have had to carry out a subsequent prostatectomy on several cases on which I had previously performed a Steinach operation the amelioration of symptoms only proving temporary Lieutenant-Colonel Hunter does not state whether he noticed any reduction in the total mass of the prostate as felt per rectum after his operation I suspect that although clinically the patients were much improved, the prostate still remained enlarged —I am etc

London W 1 August 12 KENNETH WALKER.

Subvesical Diathermy Prostatectomy

SIR —I am naturally glad to find that I have the support of so experienced a urologist as Mr Terence Millin in advocating the need for sparing the trigone when performing perurethral prostatectomy (*Journal* July 30 p 239) At the same time I do not think that this is generally recognized, for an examination of current literature including the illustrations will show that many surgeons undoubtedly consider it necessary to remove a large portion of it If Mr Millin will experiment with the instrument which I employ I feel sure he will find that it is possible to undercut the trigone from within the urethra not only posteriorly but also laterally with considerable accuracy Therefore the risk of recurrent obstruction due to a ball valve mechanism seems to me to be no greater than after prostatectomy by enucleation whether this be performed by the suprapubic or the perineal route —I am etc,

London W 1 August 12 R OGIER WARD

Undescended Testicle

SIR —Mr Denis Browne is of course correct in his contention that many people are unaware that most cases described as an undescended testicle lying in the inguinal canal are really examples of superficial inguinal ectopia but he flogs the point to excess and is certainly grossly unfair in the suggestion given in his letter in the *Journal* of August 13 (p 374) that most examiners are ignorant of this knowledge

Although it may be a bright ray of light to many people, and doubtless even to some examiners, I think I should say that Mr C H Figge who was an examiner well known at the Royal College of Surgeons for many years, used to teach this point consistently in the wards at Guy's Hospital I learnt it from him close on fifteen years ago, and I do not doubt that he had been teaching it for many years before this and had asked many questions on the same point at the College During the last five years I have always made it a special point to bring this question up during the final Fellowship course held at Guy's Hospital—I am, etc,

London, W 1, August 13 R C BROCK

Sulphonamide Chemotherapy in Gonorrhoea

SIR,—There are certain points in your annotation "Chemotherapy in Gonorrhoea" (August 6, p 294) which we feel require comment

First we hope that your question "which of the available compounds is the most effective and how it should be used" is largely answered by an article published in the current number of the *Lancet* (August 13) In this article we analyse the results of 633 followed-up male and female cases of gonorrhoea treated with sulphanilamide, we have also treated to date more than 150 cases with uleron and more than 100 cases with 2-(*p*-aminobenzenesulphonamido)pyridine (M & B 693)

Our views on the effects of uleron in gonorrhoea have already been stated Any extensive experience with followed-up cases will show it to be markedly less effective in all stages of the disease than either sulphanilamide or M & B 693, although in isolated cases its effect appears to be little short of miraculous We cannot, however, agree with your implication that uleron is a more toxic substance than M & B 693, or for that matter than sulphanilamide The occurrence of five examples of peripheral neuritis is practically the only toxic effect observed in our 150 cases, though admittedly of more serious significance than most others Neither is it our experience that "excessive dosage does not appear to be a factor in producing this condition"

Our experience suggests that M & B 693 is probably as effective as sulphanilamide in gonococcal infections, but not more so It is, however, by no means as free from toxic effects as your annotation might lead one to suppose In fact, in our cases M & B 693 has produced a proportion of toxic manifestations similar to that seen with sulphanilamide, these being if anything, more pronounced It would be interesting to hear the opinion of other workers who have used this drug in a similarly large number of cases of both sexes

Finally we feel that Dr H M Hanschell's letter in the *Journal* of August 13 (p 375) may give an erroneous impression of both the efficacy and non-toxicity of uleron Unfortunately his claim that uleron has proved more effective than sulphanilamide is not supported by figures and is therefore possibly based on immediate results only Where uleron fails is to produce an adequate proportion of *final* cures and we feel that if Dr Hanschell's cases could be followed up for three months his claim would not be substantiated Similarly the remarkable freedom of his cases from uleron neuritis might also be attributed to the fact that most of his patients are seamen who may have developed their neuritis *after* their return to sea—We are, etc

London, W 1, August 13 G L M MCELLIGOTT
A J COKKINIS

Lavage for Gonorrhoea

SIR—How refreshing it was to read in Dr F J T Bowie's article on this subject (*Journal* August 6, p 283) that a V D specialist had treated and cleared up six cases of acute gonorrhoea without artificial urethral lavage! One only regrets that Dr Bowie prescribed lavage in the other twenty-four cases, "mainly for psychological reasons" perhaps Dr Bowie would tell us whether these were to keep the patient attending or to ease his own conscience!

There are many physiological reasons against lavage by artificial methods, thus (1) The point of entry of the infection is the meatus, whence it spreads backwards—syringing in the same direction can only tend to increase the rate of spread and decrease localization (2) No antiseptic short of a caustic can reach and destroy the *intracellular* diplococcus (3) The pressure of syringing, however slight, may certainly dislodge surface debris (casualties), but this is forced into the crypts and glands of the urethra (dugouts), where the gonococci (wounded only, maybe) may recover and multiply for a fresh and more penetrating invasion of healthy tissue (4) A cardinal principle of the treatment of inflammation is *rest*, on this basis the trauma of syringing is contraindicated

A good psychological reason against syringing is the patient's hatred of the paraphernalia and discomfort of the whole business, in many cases he can ill afford the time or money for fares to attend a clinic for this treatment The result is that co-operation is prejudiced, and the patient may neglect treatment because it is worse than the disease

Physiological lavage can be obtained by instructing the patient to drink at least four quarts a day of lemon barley water (so easy to make nowadays), and giving him (or her) pyridium, caprokol, or some other urinary antiseptic Combined with rest, preferably in bed for a week or more, with a diagnosis of "inflammation of the waterworks," this treatment has given good results for twelve years, but it would appear that the introduction of disulphanilamide will relegate the morbidity of acute gonorrhoea to that of the common cold if physiological principles are observed in treatment—I am, etc,

Greenford, Middlesex, August 13 ALISTAIR FRENCH

Mental Factors in Medicine

SIR—Dr T A Ross has raised one or two points of considerable interest and importance in his paper on the mental factors in medicine in the *Journal* of July 30 (p 209) He indicates, for example, the difficulties that exist in teaching students the art of clinical psychology Obviously the direct and public methods of examination which are effective in the ordinary medical and surgical case will not be applicable to the neurotic The question, "What are you complaining of?" is merely to be regarded as the opening gambit, and detailed investigation can only be done in private Discussion of the case can be carried out after the patient has left the room, and obviously, on account of the incomplete insight obtainable at this stage will have to be concerned with theoretical possibilities of structure and interpretation rather than with any definite problems that have been elicited Skill in technique can only be obtained by experience, but a good theoretical grounding is necessary for at least all of the more radical forms of psychotherapy

A particular difficulty Dr Ross appears to have is in deciding who is the right and proper person to be allowed

to give instruction in the neuroses He does not like the psychiatrists and he mentions three rather formidable obstacles in the way of making physicians and surgeons teachers of the subject On the whole he seems to prefer the neurologists So far as the psychiatrist is concerned he asserts that there is nothing in his study of insanity which will lead him to understand the neurotic mind more fully than will a man brought up in general medicine This remarkable statement will be read with astonishment by the ordinary psychiatrist who as part of the daily round the common task has to deal with such symptoms as depression, anxiety agitation obsessions and conversion phenomena to mention a few which are the common features of the neuroses I should have thought without going into further detail that Dr Bernard Hart's well known *Psychology of Insanity* has been for long a standing refutation of this argument

Finally is not Dr Ross in objecting to the neuroses being looked upon as a specialty protesting to high heaven against the inevitable? As he himself admits specialization is taking place more and more in medicine and the signs surely indicate not only that it is bound to continue but that owing to the piling up of knowledge it will before very long become impossible for a student to qualify in medicine surgery, and the associated subjects within anything like a reasonable period of time He will therefore be compelled to specialize on certain subjects before qualification If this is part of the march of events it behoves us to make the best of psychotherapy as a specialty even if the psychiatrists have to take a hand in it!—I am, etc,

London, W 1 August 11 FREDERICK DILLON

Maternal Mortality and Medical Education

SIR—The education of general practitioners in midwifery was criticized by Dr Summerskill member of Parliament for West Fulham in the recent debate on health administration in the House of Commons The House had received from the Minister certain figures which indicated that the maternal mortality for England and Wales was 3 13 per 1 000 during 1937—the lowest rate ever recorded Dr Summerskill expressed her indignation at this rate for what is supposed to be a normal physiological process, and somewhat inconsistently declared her opinion that every woman undergoing this normal physiological process should go into a hospital for her confinement - Because she herself as she explained in great detail had taken her qualification in medicine (M R C S, L R C P) with no other practical experience in midwifery contributed by her school than that obtained by simply being in a room where twenty confinements were conducted without going near a bed or touching a patient she assumed that that is a universal experience, and that consequently general practitioners so trained should not be allowed to go out and attend confinements because it is a kind of confidence trick played on the mothers They believe that every doctor is fully qualified

That there is a difficulty in obtaining adequate midwifery experience for the medical student must be admitted and it is not altogether clear how the new regulations requiring increased midwifery experience to come into operation in November 1938 can with the existing accommodation be actually carried out demanding as they do a period of two months attendance in a maternity hospital or maternity wards of a general hospital with residence in the hospital or in a hostel attached thereto The Labour Party to which Dr Summerskill belongs has materially increased this difficulty by the objections it has raised from time to time to the system of education of the medical student in midwifery which obtains in London and other great cities by which the student is enabled to visit parturient women in their own homes and conduct labours on his own responsibility always backed by immediate accessibility to the highest specialist skill inasmuch as he can call upon the whole of the obstetric staff of a great hospital when he is in difficulty How well this system has worked in London is I think evident from certain figures which I obtained some time ago on the rate of maternal mortality in the districts served by the great teaching hospitals the average rate having been returned as under 2 per 1 000 The profession however I think must be prepared for a drive to provide more maternity hospitals or at any rate many more maternity beds and in this connexion I would like to say a word about a particular voluntary effort to provide such accommodation which has not in my submission received the support and commendation it richly deserves

With Lord Snell then Chairman of the London County Council I was privileged to speak at the annual meeting of the Salvation Army Mothers Hospital in Whitechapel a few weeks ago (May 28) I was surprised to learn and I think my readers will be surprised to hear that this hospital founded some twenty five years ago is the second largest maternity hospital in London Started at first to receive unmarried mothers in whom the maternal mortality is highest of all the enterprise has been sustained chiefly upon voluntary gifts and contributions from patients Of an income for the last financial year (1937) of £19 930 only £5 500 was contributed by public authorities (the Ministry of Health and the London County Council) in respect of the maternity and V D work rendered The rest of the income was derived from annual subscriptions and occasional gifts (£2 101) nurses and probationers fees (£1 814) King Edward's Hospital Fund (£950) fees from patients (£9 243) and funds derived from local entertainments and other voluntary efforts to raise money

Over an average of three years—the births being 1 543 in 1935 1 596 in 1936 and 1 595 in 1937—the rate of mortality was 2 3 per 1 000 a remarkable achievement in view of the fact that there was in those years a great preponderance of primiparae nearly twice as many as the multiparae and a large proportion of unmarried mothers in whom mortality is always high

Associated with and attached to the hospital are homes for mothers and infants district nursing centres a school for midwives (for the hospital is recognized by the Central Midwives Board as an institution for training midwives) pre natal and ante natal clinics In addition to the in patient activities the hospital conducts an extensive out patient service Thus for the year 1937 there were over 21 000 attendances at ante natal clinics 7,500 attendances at child welfare clinics 2 500 attendances at post natal clinics There were further 750 births in the district with 20 800 visits Countess Baldwin recently opened a new isolation wing which we were able to inspect very fully on our visit It provides single-ward accommodation with verandas for twelve patients two nurseries and a very up-to date and scientific installation for sterilizing

This admirable institution seems to me to present a typical example of the genius of the English people for voluntary service which they carry out so much more successfully, as a rule than any form of State service Unless voluntary institutions of this kind are now multiplied and adequately supported to meet the need there can be little doubt that the much more expensive and much less efficient State service desired by the Labour Party will be imposed upon us—which God forbid!—I am etc.,

Ramsgate August 4 E GRAHAM LITTLE.

Abdominal Pregnancy

SIR,—In his interesting article on this subject in your issue of June 18 (p 1301) Mr Ronald Reid has discussed the stage at which operation should be undertaken In India with the uneducated females one cannot choose one's time for any operation, but has to be thankful that permission to operate at all has been granted Consequently it is not surprising that in neither of the two cases I have seen in the last three years had the patient consulted a doctor before finally coming to hospital with abdominal tumours each of which is described in the case notes as being the size of a seven and a half months pregnancy

Both were nulliparous One was aged 20 married six years and had had normal periods until a year previously, the other aged 25 married fourteen years had also had normal periods until a year previously For twelve months both had had amenorrhoea and steady enlargement of the abdomen but no pain The less stupid of the two said she had felt flickering movements in the tumour eight months previously and that for the last three months it had decreased in size She had also noticed changes like those of pregnancy in her breasts but the other woman had noticed nothing except a slight vaginal discharge for two days shortly before admission

In both a diagnosis of extra-uterine pregnancy was made, the one being confirmed by a radiograph which showed a full-term foetus lying transversely though in the second case as the result of a negative screening report the operation was listed as an exploratory laparotomy In the former case my colleague Rao Bahadur Dr Onkar Singh, removed an almost full term dead foetus complete with membranes and placenta which were extremely adherent to omentum and adjacent structures while my laparotomy revealed a disorganized mass the basis of which was a foetus of perhaps six months This also was very adherent but was finally removed *in toto* together with the left ovary to which it was fixed and the remains of the left tube, from the centre of which it had originated

Both patients made uneventful recoveries and were discharged within three weeks blissfully ignorant of the dangers of haemorrhage and peritonitis but keenly intent on doing their duty by producing a living male child on the next occasion—I am, etc,

Jodhpur India July 26 E W HAYWARD

Small-pox and Vaccination

SIR,—Dr C Killick Millard's letter in the *Journal* of July 16 makes me think I, too, may be out of touch 'with current views of those most familiar with the questions of the aetiology and prophylaxis of small-pox' The views expressed by Dr Millard may be quite right for Leicester and even England *now that small-pox has been almost extinguished* but surely it would be unwise to generalize such views might be misunderstood by persons in different circumstances thus causing them to run serious risks For instance residents in Leicester are quite safe from wolves now that wolves have been exterminated unless they escape from a menagerie or zoo, and even then they are at once reported and searched for till they are caught But people living where these animals abound are wise to take precautions against them Is it not so with small-pox?

I have been in medical practice as a missionary about forty years in China—thirty years in the interior where small pox abounded and still does to a less extent, and latterly on the coast where it also occurs In the interior I can remember meeting only two adult unvaccinated Chinese who had not developed small-pox and one of them would not "take" when vaccinated more than once On the other hand, there was a large and increasing proportion of people who had been vaccinated and had never contracted the disease As to foreigners—that is, non Chinese—a friend of mine who for conscientious objections would not have himself or his family vaccinated was badly marked by the disease and lost two of his three children who also developed it I could mention other similar cases I and my five brothers were all vaccinated in infancy, and though we were brought up until about the age of 10 among the Chinese, who neither notify nor segregate their infectious diseases, we have never contracted it

In the school for foreign missionaries children, of which I have been medical officer for several years, most of the 2,000 children educated there during these fifty odd years were brought up in similar surroundings until they came to school, and, having been vaccinated, have not contracted small-pox, with perhaps very few exceptions Four years ago the Chinese servant, who in the preparatory department of that school sees to the wardrobes and is always in and out of the bedrooms, developed the disease He did not mention it until the third day, after having handled all the clean Saturday laundry He was sent home I revaccinated the whole staff, servants, and scholars, over 100 persons, and nobody developed the disease We thought that, apart from special prayer vaccination saved them, and also the other members of their families who reside in inland China and are frequently exposed

Perhaps Dr Millard, while condemning vaccination or compulsory vaccination in England, would recommend it for those residing abroad May I, as a medical man, at present on furlough, in a large Mission which has about 1,000 members actually in China, nearly all in the interior, living among the Chinese with their own children and their Chinese co-workers, ask Dr Millard what he would advise them to do instead of vaccination? Up to the present we have relied on this, and almost this alone, and found it to be almost an absolute preventive We dare not abandon vaccination until we have a more sure, or as sure a prophylaxis, and shall be glad to hear of one

May I add that in the above mentioned school we think we have practically prevented the occurrence of diphtheria for years by inoculation, but there are a few parents who have refused it Vaccination is compulsory in our Mission and in this school, and I think the only case of small pox among the scholars for many years—probably twenty or thirty—has been the son of the conscientious objector already referred to, who was a day scholar—I am, etc

FRED H JUDD, M B

China Inland Mission, London, August 6

Purpura from Sedormid

SIR,—In view of your annotation on thrombocytopenic purpura from sedormid (July 30, p 229), the few cases described in the literature, and the letter of Dr F E Loewy in your issue of August 6 (p 320), the following would seem to be of interest

On March 4 1938 I was asked by a colleague to see a patient of his a woman of 26 years, on account of her having severe epistaxis and continuous oozing of blood from the gums This had begun suddenly and had been continuing for several hours When I saw her she was extremely pallid with thirst air hunger a subnormal temperature, and a very rapid pulse rate The bleeding was most difficult to control in spite of thorough packing of both nostrils with gauze soaked in viper venom and the giving of the usual remedial agent including vitamin C Where these had been given hypo-

dermically extensive bruising occurred Later there were purpuric spots over the whole body and bleeding from all mucous membranes

The case was one of pulmonary tuberculosis just commencing artificial pneumothorax treatment in a nursing home where she had been since February 11 From that day till the day I saw her she had received two sedormid tablets every night As I had read of purpura from sedormid in Price's *Medicine* where it is actually indexed under this heading we decided this might be a possible example The drug was not given again A platelet count was not done The patient gradually recovered She has had no further haemorrhage nor was there any previous history of purpura She had amenorrhoea from February to June

—I am, etc,

West Worthing August 7 H IVOR BALFOUR

Abortion and the Law

SIR,—If the intention underlying the recent case of Rex v Bourne was to reveal an unsatisfactory state of the law with a view to securing amendment, I cannot see that this object has been achieved Rather the reverse the principle behind the law—the tacit understanding that the parties shall act in good faith—has been emphatically reaffirmed Surely this is the one essential point the very crux of the matter, upon this point alone rests the justification for surgical intervention whatever the circumstances

The law (I think wisely) does not attempt to confine its position within narrow limits, however carefully legislation were framed it would certainly from some points of view involve oppressive restriction or permit irresponsible abuse To lay down hard and fast rules for general application would be virtually impossible without entailing individual hardship Circumstances alter cases, there are wide divergencies of legitimate opinion ranging from the view, backed by professional and religious opinion that therapeutic abortion is never justifiable in any circumstances to the opposite extreme view referred to by Dr C A H Franklyn (*Journal* August 13 p 373) that no woman should be forced to become a mother unless she is willing and anxious so to be; in other words, that a pregnancy which is unwanted is a pregnancy which should be terminated Professional, moral and social arguments can be advanced to support either of these extreme views or to justify any shade of intermediate opinion Where such a wide range of considered opinions exists no view can be wholly condemned as wrong or exclusively upheld as right each contains some germ of truth The point at issue is, Where in practice does intervention become justifiable?

No rigid rule is I think, possible or even desirable, no single criterion is sufficient in itself Thus, for example I cannot believe that every pregnancy originating from rape should *ipso facto* be terminated nor every pregnant woman below a certain age refused the chance to bear her child for that reason alone By all means let these factors be considered but in proper proportion to the other circumstances of the individual case The responsibility is a grave one and there is much to commend the established practice of sharing it between responsible persons preferably with special experience to guide them

The recent trial has not solved all the difficulties but it has simplified them by widening the scope of the issues at stake It has now been judicially approved that we are entitled to take into consideration in determining whether to advise the termination of a particular pregnancy not only immediate risk to the life of the mother but also wider dangers to her bodily and mental health This is nothing really new for it lays down more clearly than ever the general principle that whatever our personal opinions may be the law requires us to consider each case on its own merits to exercise reasonable skill and care in forming our decision to take every factor into consideration in its proper proportion and above all to act in good faith Individual decisions may be very difficult but the law is content that we should act honestly and for the best according to our lights

I think this is the real answer to Dr Franklyn's suggestion that the course of the trial was neither logical nor consistent Admittedly issues were raised—sentimental moral and professional—which were never fought out to their logical conclusions I do not think many of the issues were capable of conclusive decision—*quot homines tot sententiae* but I think it is fair and just to base a professional opinion upon them all taken together much as it is both logical and consistent to base evidence in any other type of criminal trial on circumstantial evidence no part of which is capable of absolute proof or refutation but which gathers force from the way it hangs together and points consistently in one direction only I do not pretend that it is an infallible system but it is the best that can be done, and it is an established method of legal procedure

I hardly think it is a fair comment to suggest as Dr Franklyn does that Mr Bourne made his decision on sentimental moral and sympathetic grounds and justified it in court on medical grounds Even if this were so, I feel it would have been both logical and consistent but all aspects of the case were discussed in court and laid before the jury I do not attach much importance to Dr Franklyn's contention that Mr Bourne made his decision before seeing the patient The essential features of the case—her age the fact that she was pregnant and her unfortunate story—required no further demonstration Moreover I think I am right in stating that the decision was not finally made until the results of his clinical examination had excluded the danger of infection

To sum up I think it has been clearly demonstrated that the law neither encourages nor forbids therapeutic abortion it recognizes that it may be necessary as a surgical operation and as such requires it to be performed skilfully by properly qualified persons activated by reasonable motives The law cannot be expected to provide us with a rule of thumb to relieve us of individual responsibility—I am etc

Lincoln August 14 ALLAN H BRIGGS

Hygiene of Sea Bathing

SIR,—In the *Journal* of August 13 (p 367) I am reported to have said He advised women not to bathe in the sea the day before and the first day *after* menstruation whereas what I did say was that I advised women not to bathe the day before or on the first day *of* menstruation Otherwise I entirely agreed with Dr Doreen Nixon that sea bathing during menstruation was generally harmless, provided that a favourable reaction followed the bathe

The same principle is involved when deciding whether any persons should indulge in sea bathing It depends upon the individual's reaction If a favourable reaction follows the bathe sea bathing may be continued If an unfavourable reaction follows sea bathing is contraindicated At the same time it is well to point out that it is possible in probably the majority of persons to gradually convert unfavourable reactions into favourable ones by simple hydrotherapeutic procedures—I am etc,

Torquay August 13 K R COLLIS HALLOWES

London Emergency Bed Service

SIR,—Recently I was called to a case of ptomaine poisoning a mother and child of 3 years, in addition there was a 2 months old baby (not infected) The mother and child were in need of urgent hospital treatment I rang up King Edward's Fund Emergency Bed Service and explained the case within fifteen minutes I was informed that a suitable hospital would accept the cases and also admit the baby for care while its mother was in the hospital! Such service cannot be too highly praised I had anticipated an hour's telephoning to try to get the two cases into hospital, I hardly dared to hope to find a hospital willing to care for a normal baby during its mother's illness I feel every practitioner should know of this excellent service.—I am, etc,

London E 13 August 6 P G S KENNEDY, M B

The Services

HONORARY PHYSICIAN TO THE KING

The King has approved the appointment of Major General P S Mills C I E, I M S, as Honorary Physician to the King, with effect from March 29 1938, in succession to Major-General D P Goil, I M S, who has retired

AWARD OF MILITARY CROSS

The King has awarded the Military Cross to Captain M F Kelleher R A M C for gallant and distinguished services in Palestine

PROPHYLACTIC ANTI-TETANIC INOCULATION

The issue of the *Royal Army Medical Corps Journal* for May 1938, included a comprehensive paper by Major (now Brevet Lieutenant-Colonel) J S K Boyd of the Department of Pathology, R A M College, on active immunization against tetanus

The work recorded was undertaken at the suggestion of the Director of Pathology to explore the possibility of introducing active immunization against tetanus as a routine measure in the British Army Major Boyd found that the standard of immunity given by the well-spaced two dose system compared favourably with that achieved by other methods, and it is believed to confer adequate protection for a considerable period of time Recommendations were accordingly made to introduce this method on a voluntary basis for all Regular troops An announcement on the subject has been made by the War Office Press Bureau and an Army Council Instruction is issued on inoculation against tetanus with tetanus toxoid

PROCEDURE

The procedure follows the same principles as those that have been so successfully applied in the prevention of diphtheria It consists of two subcutaneous injections, each of 1 c.cm of tetanus toxoid given at an interval of six weeks No unpleasant after effects are produced by the toxoid Within a few weeks following these inoculations defensive substances develop and persist in the blood these effectively neutralize the toxin of the tetanus bacillus It is not necessary to repeat the injections since the protection lasts for many years Officers and men will be encouraged to take advantage of this simple method of securing protection To avoid interference with the normal duties of serving soldiers the inoculations will be undertaken after the training season Recruits will be inoculated during recruit training the first dose being given when the recruit attends for vaccination Tetanus toxoid will be issued in bottles of 50 c.cm and 10 c.cm a record of the injections being made in accordance with Regulations for the Medical Services of the Army Although the reaction after inoculation is very slight it is advisable that no active exercise should be taken for twenty four hours

DEATHS IN THE SERVICES

Surgeon Commander HENRY BAKER HALL R N (ret) died in the Royal Naval Hospital, Plymouth, on July 16 aged 72 He was educated at Edinburgh University where he graduated M B C M with first class honours in 1891 He entered the Royal Navy in 1892 and attained the rank of surgeon commander on May 11 1908 On the outbreak of war in August 1914 he became fleet surgeon in H M S *Challenger* and took part in the Cameroon Expedition He returned to England in 1915 and was invalided from the Service Later he became one of the medical officers for recruiting in Plymouth, and afterwards served as medical officer for the Ministry of Pensions in London and Bristol He became a member of the B M A in 1921 and had long associations with Plymouth

Lieutenant Colonel WILFRID BURRELL THOMSON R A M C (ret) died at Alverstoke Hampshire on July 19, aged 81 He was born in Burma on June 7 1856, and was educated at Sheffield and St Mary's Hospital He took the M R C S Eng and the L R C P Ed in 1881 entered the Army as surgeon on July 29, 1882 became lieutenant colonel after twenty years service and retired on June 7 1911 After his retirement he was employed for some time from 1912, at Northampton

Correction.—The late Lieutenant Colonel J C Gordon Carmichael R A M C (ret) was born on August 27, 1878 and not on the date mentioned in our obituary notice published on August 6

Universities and Colleges

UNIVERSITY OF LONDON

At a meeting of the Senate held on July 20 it was announced that Sir Cooper Perry had been reappointed by the King in Council as a member of the Court for a further period of five years from October 1

Recognition of Teachers

The following have been recognized as teachers of the University in the subjects indicated in parentheses *Guy's Hospital Medical School* Mr H J B Atkins (Surgery) Mr Arthur Bulleid M R C S L R C P (Dental Surgery) *Middlesex Hospital Medical School* Mr C P Wilson (Oto rhino laryngology) Mr W R Winterton (Obstetrics and Gynaecology) *St Mary's Hospital Medical School* Dr G F Buchan (Hygiene and Public Health), Mr J F Simpson (Oto rhino-laryngology) *King's College Hospital Medical School* Dr J C Hoyle (Medicine), Mr E G Muir (Surgery) Mr J H Peel (Obstetrics and Gynaecology) *King's College Hospital Medical School and Maudsley Hospital* Dr S Nevin (Medicine) *London School of Hygiene and Tropical Medicine* Dr J J C Buckley (Tropical Medicine) *Maudsley Hospital* Professor W E Le Gros Clark (Anatomy) Dr A F Tredgold (Mental Diseases)

Grants

Grants were made out of the Central Research Fund the Dixon Fund, and the Thomas Smythe Hughes Medical Research Fund for 1938–9 to the following A W M Ellis (professor of medicine at London Hospital Medical College), C A Lovatt Evans, F R S (Jodrell professor of physiology at University College) W J Hamilton (professor of anatomy at St Bartholomew's Hospital Medical College) Samson Wright (John Astor professor of physiology at Middlesex Hospital Medical School) R J O Connor (demonstrator in anatomy at University College) W H Newton (reader in physiology at University College) D H Smyth (lecturer in physiology at University College) G Stella (lecturer in biochemistry at University College)

Amendment of Regulations

Amended regulations were approved for the second examination for medical degrees for internal and external students It was resolved that in and after 1940 candidates for the second examination for medical degrees who have passed in Part I of the second examination for medical degrees under former regulations be required to take the biochemistry portion only of the paper and practical examination in organic chemistry and biochemistry Copies may be obtained on application to the Academic and External Registrars

The regulations for the examination for the academic postgraduate diploma in public health (*Red Book* 1937-8 p 651) were amended as follows

(i) By the substitution of the following for the first fifth and sixth paragraphs on page 651 Part I of the examination will consist of two papers and practical and oral examinations in the subjects of Part I of the course Part I of the examination will be held twice a year beginning on the Monday of the week prior to that in which Christmas Day falls and on the first Monday in April or if that be a Bank Holiday on the second Monday in April Part II of the examination will be held three times a year beginning on the last Monday in June on the fourth Monday in September and on the first Monday in January

(ii) By the inclusion in the seventh paragraph of November 21 as the latest date for the receipt of entries for the December examination

(iii) By the inclusion of the following approved areas in which candidates may receive the prescribed instruction in public health administration (see last paragraph of revised regulations approved in December 1937 to which reference is made in the *London University Gazette* of February 9 1938 pp 87 and 90) the Royal Borough of Kensington the Metropolitan Borough of St Marylebone and the Borough of Willesden The regulations for the external diploma in public health (*Blue Book* September 1937 pp 1005–9) were similarly amended

It was resolved that in and after 1939 the examination for the academic postgraduate and external diplomas in clinical pathology should be held in the week beginning on the first Monday in October instead of the second Monday in December and the regulations (*Red Book* 1937-8 p 616 *Blue Book* September 1937 p 1105) were amended accordingly

Medico-Legal

A NURSE IS A WORKMAN

Under the Workmen's Compensation Acts a workman is anyone who enters into or works under a contract of service The Court of Appeal has often been called on to consider whether certain classes of workers—for example professional footballers film stars and Salvation Army officers—are entitled to workmen's compensation for injury In Wardell v Kent County Council[1] a trained nurse acting under the direction of a ward sister was preparing a poultice of antiphlogistine it exploded in the can in which it was being heated and caused her injury She applied to the county court judge at Maidstone for an award of compensation but he held that she was not acting under a contract of service but under a contract to perform services as an independent expert She appealed to the Court of Appeal who decided by a majority of two to one that she was a workman and was entitled to compensation There was much argument whether Hillyer v St Bartholomew's Hospital with its distinction between the skilled technical duties of a nurse and her ministerial or administrative duties could be applied to the present case Lord Justice Greer thought that it could and that when she was doing her work as a nurse the hospital governors were liable neither to pay damages for her negligence nor to compensate her as a workman His two learned brethren however disagreed Lord Justice Slesser considered that her contract of service could not be divided and that although the hospital authority might from time to time choose the person under whom this nurse was called upon to obey she was always under obedience to them Lord Justice Mackinnon also considered that the negligence cases could not properly be applied to the question at issue "In fact so manifestly are nurses in the service of their hospital he said, that for that very reason it is necessary in a negligence case to inquire whether the hospital is liable for their negligence The nurse is the servant of the hospital for general purposes and is under a contract of service with them within the Workmen's Compensation Acts The court therefore sent the case back to the judge to assess the compensation payable They also gave the council leave to appeal to the House of Lords and as the decision will affect all the hospitals and many thousands of nurses the case may well be argued before the supreme tribunal in due course

1938 3 All E R 473
1909 2 K B 820

Obituary

SIR COLIN MACKENZIE

A correspondent in Canberra sends the following personal memoir of Sir Colin MacKenzie founder and first director of the Australian Institute of Anatomy supplementing the obituary notice published in the *British Medical Journal* of July 9 (p 99) The photograph of Sir Colin was taken while he was at work in the Institute in 1934

The death of Sir Colin MacKenzie removes from the medical profession in Australia one of its best known and most picturesque personalities Of pure Highland descent he was a piece of Scotland transplanted to Australian soil In appearance generally, and especially in the contours of his head the Celtic strain was distinctly marked His death at the age of 61, when at last he might have expected to reap some harvest from the unremitting toil of his early years, was a misfortune For more than twenty-five years he had worked to consolidate his ideal of an Institute of Comparative Anatomy dealing mainly with the Australian fauna The cup was dashed from his lips almost before the magnificent building at Canberra, with its two large museums containing his anatomical dissections and specimens, had been fully completed MacKenzie's anatomical work was always his only hobby, and he found no time for relaxation in games etc A steady increase in blood pressure, after several warnings resulted in a major cerebral haemorrhage



Colin MacKenzie belonged to that very small group of Australian medical men whose writings and medical work are known beyond the borders of the island continent Although well past its first centenary, Australian medicine is still in tutelage to Europe and to America The Australian textbooks of medicine surgery midwifery etc have yet to be written for use in Australian medical schools Some independence of thought has already emerged, but it can hardly be said that so far the influence of Australian ideas or discoveries on world medicine has been profound MacKenzie joins that select band of Australian workers whose names include Bancroft of Brisbane Hamilton Russell and Dunhill of Melbourne Elliot Smith, Harris, and Hunter of Sydney As might only be expected at this early stage of her history the contributions to medical literature of a definitely original character which have emanated from Australia have been comparatively few The gravitational pull of the large medical centres in Great Britain has always resulted in a steady loss from Australia of some of the best products of her medical schools It is in England that their mature work is undertaken and published, and Australia loses the credit of their achievements Although Sir Colin MacKenzie visited England on four occasions and America three times yet he always returned to his home land with his devotion to it unimpaired His intense loyalty to Australia accompanied by his devotion to ideals which would advance his native country and especially add to its scientific standing in the eyes of the world was almost a passion with him.

William Colin MacKenzie had an unusual career which divided itself into three parts He graduated to a

professorship of comparative anatomy in the Government of the Commonwealth from the ranks of general practitioners of medicine, with an intermediate period as a specialist in orthopaedics The youngest of six children, and the third of four sons to be educated for the profession of medicine at Melbourne University, he was born at the small old-fashioned Victorian township of Kilmore, about forty miles from Melbourne He completed his course, taking first-class honours in medicine and surgery, within a few weeks of his twenty-first birthday Three years of resident posts at metropolitan hospitals followed, fitting him for general practice, which he began in 1901 near the gates of the Melbourne University He had previously been appointed demonstrator of anatomy at the Medical School, and later on he was to become lecturer in surgical and applied anatomy A further early appointment which was to determine the main lines of his career for many years was that of clinical assistant to out patients at the Children's Hospital, Melbourne Here he became greatly interested in the treatment of the deformities following upon infantile paralysis Although this was a narrow field of specialism he was later able to make it a lucrative one, and to make important discoveries in it

In 1904, despite the exigencies of a growing general practice, he found time to sit for the degree of master of surgery of the Melbourne University His attempt was unsuccessful, and after spending some time in the study of the German language he determined to visit Europe This was a momentous decision which was to have a profound influence upon his professional work and future career On his way to Edinburgh he visited Heidelberg to work with Professor Vulpius, a well-known orthopaedic surgeon After obtaining the Fellowship of the Royal College of Surgeons of Edinburgh he went to Liverpool to investigate the practice of the conservative school of orthopaedics founded in that city by the famous Hugh Owen Thomas and carried on by his brilliant nephew Robert Jones Returning to Melbourne impressed by the operative work on tendons being performed by Vulpius, and greatly influenced by the principles of muscle rest and muscle recovery then being enunciated by Robert Jones he proceeded to put this new learning into practice At that time (1905) knowledge of the various new splints then being used at Liverpool and of the basic ideas which underlay their use in treatment of muscle pareses, was possessed by comparatively few in Australia Soon after his return the Melbourne Children's Hospital was faced with a severe epidemic of infantile paralysis The treatment of the recent and remote effects of this disease became, as his writings testify, the dominant influence in his mind for many years

MacKenzie was not a slavish copyist of other men's work and ideas He was an innovator, and suffered a great deal of misunderstanding and adverse criticism of his work the results of which were sometimes doubted, especially in Melbourne In consequence at one period before the great war he became somewhat embittered and solitary in his professional life In the special work on infantile paralysis he was although greatly influenced by Thomas, Vulpius and Robert Jones, continually attempting to improve upon their methods In the surgery of old cases of poliomyelitis his aim was always to relieve the weak muscle groups by tenotomy of the tendons of the overacting muscles followed by adequate anatomical rest and accompanied by re-education of function in the overstretched paresed muscles He did not do any transference of tendons In early treatment before the onset of crippling deformities and the need for surgical intervention he for some time followed the lead of Robert Jones by splinting the overstretched weakened muscles in the position of relaxation and hoping for recovery by rest Gradually he went on from this point and, not content to wait until relaxation by itself produced recovery he evolved his well known theories relating to muscle re-education These were ultimately embodied in the textbook now used so freely in massage and muscle re-education departments of hospitals, *The Action of Muscles including Muscle Rest and Muscle Re education* Although so well known to-day, the original conceptions of this departure in treatment were revolutionary at the time He was the first to use the special term "muscle re-education," and to depart from the rigid rules regarding continuous rest until recovery which had hitherto been followed His most striking advance was to stress the great importance of the action of gravity in all educational attempts to regain muscle function after paresis of any nature The idea of the minimal load, the zero position for recovery, and the use of the smooth powdered surface of board or cardboard for re educational muscle work were advances which must always be associated with MacKenzie's name Sir Arthur Keith, in his review of orthopaedic surgeons and their methods, given in his book *Menders of the Maimed* accords MacKenzie full credit for this definite advance in the treatment of weak muscles

For some years before the great war MacKenzie had relinquished general practice and specialized as an orthopaedic surgeon in Collins Street, Melbourne He rapidly built up an extensive practice, mainly dealing with tuberculous joints and the deformities following upon paralyses In the intervals of practice he embarked upon an investigation of the special anatomical problems associated with the structure of the native fauna of Australia These were afterwards to play a predominant part in his life A fervent admirer of John Hunter's work and principles the idea germinated in his mind that he might possibly found in Australia an Anatomical Museum, which would deal principally with the Australian monotremes and marsupials, and attempt to correlate functional adaptations and structural change As his plan developed he saw comparative anatomy as a stepping-stone to surgery, and his dream eventually was to make the Institute of Anatomy at Canberra affiliated with the Royal Australian College of Surgeons and comparable to the Hunterian Museum at Lincoln's Inn Fields

It was during an early dissection of the deltoid region in the koala (*Phascolarctos cinereus*), illustrated in his article on infantile paralysis (*British Medical Journal* February 24, 1917), that he became especially interested in the functional powers of such a well developed and differentiated muscle Function and structure as the two essential correlations of life were constantly in MacKenzie's mind and inspired his work Watching the koala in its native environment, he carefully observed its capacity of raising the arm and hand above the head For a long time he had been worried by the bad results which followed upon a severe attack of infantile paralysis affecting the muscles of the shoulder girdle and upper arm The wasted almost absent deltoid, with dropped head of the humerus, flail shoulder-joint, and dangling arm had become a nightmare to him Out of these observations and anxieties was born the acute realization of the damaging gravitational effect of the weight of the arm and its ultimate preventive—the deltoid or upper arm abduction splint for use in all cases of upper arm paresis After careful inquiry I have no doubt that MacKenzie was the originator of this splint, his abduction splint was featured in his writings in 1908 The splint itself, with full explanation, was sent to an orthopaedic congress and exhibition of splints held at Bologna, Italy, in that year

For several years before 1914 MacKenzie devoted all his spare time to dissections of the unique Australian animals I have vivid recollections of days spent in active orthopaedic practice, with every evening and every week end devoted to unravelling the anatomical structure of the platypus koala wombat, echidna, etc A battered old copy of Richard Owen's incomparable work on the *Comparative Anatomy of the Vertebrates* was our inseparable companion in this work At the outbreak of war a valuable collection of dissections had been accumu

lated Leaving for England early in September 1914 to join the R A M C I took with me the manuscript of Colin MacKenzie's first article to be published in England This was The Treatment of Infantile Paralysis A Study in Biology An interview with the Editor of the *British Medical Journal* Sir Dawson Williams in the old office in the Strand resulted in publication of these results of eight years work on this subject on January 9 1915 I was also entrusted with a mission to Sir Arthur Keith at the Royal College of Surgeons Museum to ascertain if room could be found for MacKenzie on the voluntary staff A very gracious reception resulted in MacKenzie coming to England with many of his specimens for the Museum early in 1915 and working with Sir Arthur especially on the cataloguing of war specimens for two years Realizing early in 1917 the urge to do some active surgical work in connexion with war injuries he consulted me about the possibilities of obtaining employment at the special Orthopaedic Military Hospital at Shepherd's Bush London Having obtained an interview with Sir Robert Jones on his behalf I was able to complete arrangements for a muscle re education department to be established there with MacKenzie in charge as a voluntary worker In order to counteract enemy propaganda against British hospitals he was requested by the War Office to write a lengthy article on Military Orthopaedic Hospitals showing their scope and details of work This was published in the *British Medical Journal* of May 26 1917 During that year also he wrote *The Action of Muscles* It was a great pleasure for me to collaborate in the manuscript of this work and to go over every detail of the text with him When MacKenzie returned to Australia at the end of 1917 I arranged publication with Messrs H K Lewis and corrected the proof sheets The reprint, which was required in 1919 was entrusted to me as editor *The Action of Muscles* was an immediate success in England and many copies were also sold in America Some of the statements aroused controversy, but nearly all the criticisms were laudatory and the value of the exposition of the principles of muscle re education has never been questioned

After the conclusion of the war MacKenzie devoted himself more and more to comparative anatomy His collection of Australian faunal specimens eventually became too great to be housed and maintained by any private individual Negotiations were opened with the Commonwealth Government for its acquisition as a gift to the Australian people These were successful and culminated in 1924 in an Act of Parliament by which the Government of Australia undertook to house and maintain the dissections at Canberra and agreed to appoint the donor first director with what amounted to a life tenure of the position Soon after this had been accomplished Colin MacKenzie was rewarded by the honour of knighthood In 1930 the collections were transferred to Canberra and have since been housed with many other substantial gifts in the two spacious well lit museums attached to the Australian Institute of Anatomy This beautiful building occupies a commanding position in the new Federal capital The museums are well patronized by the public they will be a lasting memorial to the vision and genius of one who loved Australia and its heritage with all his being

Dr CLAUDE ALFRED HEATH GEE who has died at the age of 61, was an old student at the Bristol General Hospital, and after qualifying in 1899 and holding a resident appointment there he began practice at Evercreech Somerset He took the M B B Ch degrees of the University of Bristol in 1911 The war found him a very busy practitioner but the claims of service in the field proved irresistible and as soon as he could arrange for his work to be carried on he joined the R A M C and served in France as a battalion medical officer for one year and in Salonika for two years After the Armistice he resumed general practice at Evercreech Dr Gee had always been interested in dermatology and in 1923 he sold his practice went to Portbury to live and joined the staff of the Bristol General Hospital as assistant to Dr Kenneth Wills In 1927 he was appointed physician in charge of the skin department at the Children's Hospital and held that appointment at his death He built up a considerable reputation as a dermatologist and his kindness and skill will long be remembered among a large circle of patients and colleagues Dr Gee joined the British Medical Association in 1912

News has been received from Grenada British West Indies of the death of Dr G N ALEXIS on June 22 at the age of 67 Dr Alexis was one of the oldest and most respected members of the Grenada Branch of the British Medical Association and was very regular in his attendance at meetings He will be greatly missed by his fellow practitioners of the island At the annual scientific meeting of the Branch held on June 25 before proceeding with ordinary business a resolution was passed placing on record the deep regret of the members at his death and tendering sincere sympathy to his family The honorary secretary carried a wreath from members at the funeral which was attended by many other medical colleagues Dr Alexis joined the Association forty four years ago

The late Dr LOUIS WILLIAM LA CHARD who was for many years Commissioner of Police coroner and magistrate in Northern Nigeria did not start medicine till the age of 53 and some years after his retirement from the Service After studying in Vienna and St George's Hospital he took the L M S S A in 1937, and that year was appointed a medical officer to the Leeward Islands, where he *died on July 21 six weeks after landing* To go through the medical curriculum at his age required courage and perseverance and his friends will regret that he was not given a longer opportunity of showing his worth in the profession to which he had been attracted all his life

We regret to announce the sudden death on August 7 of Dr ALFRED GELSTHORPE OSBORN one of the best-known medical practitioners in Windsor, where he had worked for over thirty five years A student of Guy's Hospital, Alfred Osborn graduated M B Lond in 1899 and B S in 1902 between which years he served as house-surgeon and clinical assistant at Guy's and house physician at the Hospital for Sick Children in Great Ormond Street At Windsor he held many appointments medical officer to St Andrew's Hospital, Clewer, honorary medical officer to H R H Princess Christian's Infant Nursery police surgeon and medical officer and public vaccinator under the Berks County Council He was also a member of the Eton College Medical Board Dr Osborn joined the British Medical Association in 1919 and was an active member of the Windsor and District Medical Society He served with a temporary commission as captain R A M C during the war and afterwards was county commissioner for the St John Ambulance Brigade

The death took place on August 6 in an Edinburgh nursing home of Dr ALEXANDER SHEARER who was a well-known personality in the North and West of Scotland Born in Glasgow Dr Shearer took a medical course in the University of that city where he graduated M B, C M in 1894 He afterwards settled in Auchtermuchty where he engaged in general practice for a number of years before receiving an appointment under the Highlands and Islands Medical Services Board some twenty years ago When this Board was merged in the Scottish Board of Health and later in the Department of Health for Scotland Dr Shearer continued his work as Medical Officer for the Highlands and Islands The important development of the medical services which has taken place of late in the North and West of Scotland has been brought about

largely as the result of his energy, planning, and administrative ability, and this recently received official recognition by the award of the O B E He was highly popular both among his colleagues in the Department of Health and with the officials and people in the remote islands with whom his inspecting work brought him into contact Dr Shearer was a member of the British Medical Association, which he joined in 1903 He is survived by a widow and daughter

Mr ARTHUR STANLEY BARLING who died on August 8, was the senior magistrate for Lancaster and a past-president of the Royal Lancaster Infirmary He was born at Belle Grange, Windermere on November 11, 1863, the son of John Barling and received his education at the Leeds Grammar School and the Yorkshire College After obtaining the M R C S diploma in 1886 and the L R C P in the following year he was house surgeon and house-physician at the General Infirmary at Leeds for twelve months, and senior house-surgeon at the North Staffordshire Infirmary, Stoke on-Trent, from 1889 to 1893 He then settled in practice at Lancaster, becoming surgeon to the borough and county police and the fire brigade, district medical examiner for the Admiralty, and surgeon to H M Prison at Lancaster Castle He was for many years honorary surgeon to the Royal Lancaster Infirmary, and on retiring from the active staff was elected consulting surgeon Mr Barling joined the British Medical Association in 1889 and for many years was a prominent figure in the North Lancashire and South Westmorland Branch, serving as honorary secretary from 1904 to 1913, and president 1915–19, and again in 1922 , he had also been an associate member of the Border Counties Branch He wrote several papers on abdominal surgery

Dr ETHEL ROSALINE GRIFFITHS died in Hampstead on August 8 at the age of 61 While a student at the London School of Medicine for Women she won the prizes for chemistry and anatomy and the first Mackay scholarship, and graduated M B , B S Lond in 1911, taking the English Conjoint diplomas five years later The appointments she held included those of assistant resident medical officer at Lord Mayor Treloar s Cripples Hospital, Alton, assistant medical superintendent of Middleton-in-Wharfedale Sanatorium at Ilkley, and senior assistant medical officer to Cheshire Joint Sanatorium, Market Drayton Dr Griffiths joined the British Medical Association in 1929 and resigned at the end of last year owing to continued ill-health Her brother is Dr S A E Griffiths of Southfleet, Kent

Dr ERNEST JAMES MAXWELL *who died in retirement at* St Leonards-on-Sea on August 10, studied medicine at Cambridge and Guy s Hospital He graduated B A in 1890 obtained the English Conjoint diplomas in 1895, and took his M B and B Ch degrees in 1896 He had been a medical missionary under the North African Mission and medical officer to the Manchester Medical Mission and was for some time medical superintendent of the Eversfield Chest Hospital at St Leonards Dr Maxwell joined the Hastings Division of the British Medical Association in 1923

The death of Professor C E F RASCH on July 6 has evoked many memories of a man who at one time was Denmark s greatest dermatologist Born in 1861 he took care to broaden his postgraduate medical education on general lines for several years before adopting dermatology as his specialty One of his earliest works appeared in 1889 and dealt with the syphilitic arthropathies In 1902 he was put in charge of the dermatological polyclinic of the Frederiks Hospital and in 1906 he was attached to the University of Copenhagen first as a docent and later as professor It was mainly as a clinician that he made his mark and he did much to classify and throw light on the diseases of the skin of artificial origin It was no secret that he was the first to define that form of prurigo which is now commonly associated with the name of Besnier He also undertook pioneer work with regard to light dermatitis and certain hysterical skin diseases Much of his work on the mycoses was also original and he was courageous in his advocacy of large doses of salvarsan in the treatment of syphilis He will long be remembered as an inspiring teacher

Dr FREDERICK TILNEY a neurologist and neuro anatomist of international reputation, died on Center Island, New York, on August 7, at the age of 62 For some considerable time he had been in indifferent health Born in Brooklyn on June 4, 1876, he studied at Yale University and at Long Island College Hospital, where he took the M D in 1903 In the same year he went to Berlin to work under the neurologist Hermann Oppenheim At Columbia University he started his long and distinguished career with an appointment as instructor in anatomy in 1909, when he came into intimate contact with that master anatomist, George Sumner Huntington Five years later he became professor of neurology, and in 1931 was offered the medical directorship of the Neurological Institute, which had been moved to its new home at the Columbia-Presbyterian Medical Center in 1929 One of the greatest authorities of his day on the brain, Tilney was a prodigious worker and a prolific, elegant, and charming writer of books and articles which were published chiefly in the *Archives of Neurology and Psychiatry* the *Transactions of the American Neurological Association* the *Bulletin of the Neurological Institute* and the *Journal of Comparative Neurology* His book *The Brain from Ape to Man* is a neurological classic Criminology in its medico-psychological aspects was one of his favourite studies, and he devoted much of his time to the problems presented by juvenile delinquents In 1929 he delivered the Weir Mitchell Oration before the College of Physicians of Philadelphia, taking as his subject "The structural basis of behaviorism" His researches into the structural evidence of evolution in the brain of apes and man more than once led him into conflict with the Church He repeatedly pleaded for the establishment of a brain institute, which, as he told the New York Academy of Medicine in 1928, "liberally supported and effective, would prove an incomparably more profitable investment for civilization than the most powerful battle fleet that ever sailed the seas"

Dr HAROLD DICKINSON SENIOR professor of anatomy at New York University 1910–36, died after a prolonged illness in New York City on August 6, aged 67 Born at Croydon in 1870, he took the M D at Durham University in 1895 and in the same year obtained the Fellowship of the Royal College of Surgeons of England After serving as demonstrator of anatomy and as medical registrar at Charing Cross Hospital, he was appointed demonstrator in the anatomical department of the Medico Chirurgical College at Philadelphia in 1902 Before going to New York University he worked for some time at the Wistar Institute and at Syracuse University

Dr FREDERICK PETERSON ("Pai Ta-Shun"), who died in New York City on July 9 at the age of 79, was one of America's most eminent neurologists A connoisseur of the finer things in life, his collection of Chinese paintings was one of the most complete in the country, and of his poetry 'The Sweetest Flower that Blows' is widely known as a popular song

Dr POLYVIUS N CORYLLOS, director of surgery at the Sea View Hospital Staten Island New York, and formerly professor of clinical surgery at the Cornell Medical School died on July 26 at the age of 57 At one time Surgeon General in the Greek Army, in 1923 he went to America, where he specialized in thoracic surgery

Nova et Vetera

THE AFFAIR OF THE "1613" PRINTING OF JOHANNES RUMELIN'S "CATOPTRON"

This is the title of a scholarly and well illustrated article by Dr W B McDaniel[1] Librarian of the College of Physicians of Philadelphia and follows up the discovery in the College's Library of a copy of this rare first edition of Rumelin or Remmelin's (1588–1680) *Catoptron Microcosmicum* or Microcosmic-Mirror a set of three large folio size anatomical plates employing the device of superimposed flaps perhaps first suggested by Vesalius in his *Epitome* (1540) This first edition of the *Catoptron* has commonly been regarded as a plagiarism by the publisher Stephan Michelspacher of Ulm and Augsburg though Garrison (1929) briefly rejected this legend Dr McDaniel tentatively suggests that the perhaps unintentional originator of the reflection on the publisher's honesty was James Douglas who in his *Bibliographiae anatomicae Specimen* (1734) quoted from Rumelin's preface to the 1619 edition that he had not contemplated publication of the *Catoptron* but had

> fashioned it only for his own use in order to view many parts by means of a few and to call to mind a variety of facts through the aid of summaries but it so happened that the general talk of it among his friends caused the work to be wrested away from him for inspection and circulation until through their persuasion and at their expense it began to be published without his knowledge and so to be enjoyed like an unripe fruit but when he discovered that it abounded in defects and teemed with numerous intolerable errors made by the engraver and printer he again albeit unwillingly took up the work which he had designed 14 years earlier revised it and thus offered it in another dress

In 1931 Karl Schadelbauer pointed out that in 1615 Michelspacher in the dedication of a book to Rumelin made it clear that Rumelin gave permission for the 1613 edition to be published, but with singular modesty declined to allow his name to appear though his portrait and crest might well have given the reader the clue to the authorship After discussion of the reasons such as the occurrence of errors in the 1613 edition for Rumelin's conduct, Dr McDaniel concludes that the publisher should no longer be regarded as the villain of the piece, though no doubt both author and publisher were difficult customers It may be added that it is not unknown for the first edition of a book to be sent up as a *ballon d'essai* and then when success calls for a second edition for the author's name to appear on the title page as Samuel Johnson suggested in reference to the unauthorized editions of Sir Thomas Browne's *Religio Medici* (1642)

> a stratagem by which an author panting for fame and yet afraid of seeming to challenge it may at once gratify his vanity and preserve the appearance of modesty

---

One hundred years ago Charles Edouard Brown Sequard then aged 21 left his native town Port Louis on the island of Mauritius (at that time a French colony) where he had been a clerk in the general store to show his plays and novels to the literary critic Charles Nodier in Paris On receiving the shrewd advice to try a surer means of obtaining a livelihood such as medicine Brown Sequard after the bitterness of disillusionment had passed obediently embarked on a medical career which was to bring lustre to his name in France England and America Curiously enough at the same age Claude Bernard submitted his play *Arthur de Bretagne* to Saint Marc Girardin to have his literary ambitions crushed with the identical advice

[1] McDaniel W B (1938) *Trans Studies Coll Phys Phila* 4 s 6 60

Medical News

The fifty first annual conference of the Sanitary Inspectors Association will be held at Edinburgh from September 5 to 10 under the presidency of Sir Leonard Hill F R S The programme includes discussions on shell fish and the laboratory control of milk supply

The first meeting of French speaking microbiologists will probably be held in the middle of October at the Pasteur Institute Paris Further information can be obtained from Drs Pierre Lepine or Prevot Institut Pasteur 25 Rue du Docteur Roux Paris

The annual meeting of the Society of German Urologists will be held at Eisenach and not in Vienna as previously arranged from October 6 to 8 under the presidency of Professor Boeminghaus of Frankfort The subjects for discussion will be urology in infancy and early childhood nephritis nephrosis and nephrosclerosis the importance of allergy in urology relief of pain in urology and interruption of pregnancy on urological grounds Further information can be obtained from Dr Karl Heusch Rudolf Virchow Krankenhaus Berlin

The third Combined Congress of Tropical Medicine and Malaria will be held at Amsterdam from September 26 to October 1

The 250th anniversary of the birth of John Freke was mentioned in these columns on June 25 Sir D'Arcy Power tells us that John Freke's chandelier now hangs over the staircase of the Great Hall of St Bartholomew's Hospital it was removed from the steward's office some years ago and is opposite the Hogarth paintings for which Freke chose the figures from hospital patients

The July issue of *Surgery Gynecology and Obstetrics* is devoted to the memory of the late editor Dr Allen B Kanavel, whose death was announced in the *Journal* of July 16

Volume XVI of the *Guide to Current Official Statistics* has just been published by the Permanent Consultative Committee on Official Statistics It is a systematic survey of the statistics appearing in all official publications issued in 1937 and provides a ready means of ascertaining the nature of the information available on any subject and the official publication in which it is contained The *Guide* contains 406 pages and is obtainable from the sales offices of H M Stationery Office or through any bookseller price 1s (by post 1s 5d)

A map of the United States published in the *Journal of the American Medical Association* for July 16 shows that 98 5 per cent of the population live within thirty miles of a hospital

The June issue of the *Bulletin de l'Office International d'Hygiene Publique* contains articles on yellow fever psittacosis in Germany, England and Wales acute and chronic rheumatism in Italy and dental fluorosis in the United States An illustrated supplement is devoted to the prophylaxis of leprosy in the French Colonies

A Leverhulme Research Grant has been awarded to Dr Gerald E Friend for an inquiry into gain and loss of weight of 5000 boys in day and boarding school during term and holiday as a possible manifestation of fatigue

The membership of the newly formed London Manchester Medical Society is steadily rising but the committee is convinced that a considerable number of ex Manchester men in practice in and around London are still unaware of its existence The purpose of the society is to bring together old Manchester students and intending members are urged to communicate with the secretary Mr Albert Davis F R C S 93 Harley Street

Dr W E Thompson said to be the oldest practising physician in the United States of America celebrated his 103rd birthday on July 6 at Bethel Ohio Oddly enough poor health prevented him from entering the army as a surgeon during the Civil War

Frederick William Vanderbilt, grandson of Commodore Cornelius Vanderbilt, died on June 29 at Hyde Park, New York aged 82 A graduate of the Sheffield Scientific School at Yale University he gave millions of dollars for philanthropic purposes He helped to build the Sloane Hospital for Women in New York City and the Vanderbilt Clinic of the Columbia-Presbyterian Medical Center is named after him Retiring by nature, he had been in ill health for several years

For the first time in its history the Trudeau Medal of the National (American) Tuberculosis Association has been awarded to a woman, Dr Florence Barbara Seibert of the Henry Phipps Institute, University of Pennsylvania

The number of medical students in German universities has been restricted to 6 000 in Berlin 2 700 in Cologne, 4,800 in Munich, 2 500 in Leipzig 2 400 in Munster 1,700 in Hamburg, 1 600 in Frankfort and 600 in Dusseldorf

Dr Turchini, honorary electroradiologist to the Paris hospitals, has undergone his eighteenth operation for cancerous radiodermatitis

The first woman doctor in Persia has recently been qualified She received her medical education in Paris

By order of the President of the Turkish Republic the celebrated harem of Aga Ismail at Istanbul has been converted into an obstetrical clinic containing 200 rooms

The widow of Dr Chaboux, honorary physician to the Rouen hospitals has bequeathed 100,000 francs to the French Medical Association

EPIDEMIOLOGICAL NOTES

Poliomyelitis

During the first six months of 1938 the number of cases of acute poliomyelitis was higher than the corresponding figures for 1937 in England Germany and Hungary, while in most of the other countries of Europe and the United States fewer cases were notified than in 1937 The increase in England and Wales was observed in the early weeks of July the notifications for the four weeks ending July 9 16 23 and 30 being 7 (1) 9 (1) 30 (9) and 41 (8) respectively The figures in parentheses refer to the numbers notified in the county of Essex where the first outbreak of importance appeared In the week ended August 6 the figures rose to 61 (16) these cases were distributed thus Essex 16 (Braintree 8, Halstead 6 Chelmsford 1 Dagenham 1), Lincolnshire 10 (Grimsby 6, Administrative County 4) Glamorgan 6 (all in Swansea) Surrey 4 (Farnham 3 Beddington and Wallington 1) Sussex 4 (all in Worthing) Carmarthen 4 (Carmarthen 3, Kidwelly 1) County of London 3 East Riding of Yorkshire 2 (both in Kingston-upon Hull), Bedford 2 (both in Luton) Berkshire 2 (Reading 1 Easthampstead 1), 1 each in Cornwall Cumberland Derby, Durham Hertford Leicester Salop and Suffolk In Germany during the four weeks ended July 23 the figures reported each week were 35 38 40 and 62 respectively of these 62 cases, 11 occurred in Wurtemberg 8 in Saxony and 17 in Bavaria In Hungary of the 47 cases reported between July 17 and August 6 25 occurred during the last week of July including 9 in Szaboles Department and 5 in the Department of Jasz

Enteric Fever Small-pox

During the week under review the incidence of typhoid fever rose from 32 to 49 of which 24 (in 23 cases the disease was confirmed) belong to the Farnworth (Lancs) outbreak, in the week following 9 additional cases were removed to hospital and several more suspected cases were reported to the health authorities Another death in this week brings the total number to 3 Although the source of the infection has not been determined it is probable that the later notifications do not belong to the primary crop but have followed on infection derived from those already in hospital

During this same week also 3 cases of small pox were notified in the Urmston urban district (Manchester)

Diphtheria and Scarlet Fever*

Notifications of diphtheria in England and Wales during the week ending August 6 fell from 1,007 to 825, and in London from 154 to 113 There was a rise in the notifications for Scotland—126 as against 106—but in Eire an appreciable drop was noted—39, compared with 46 in the previous week in Northern Ireland on the other hand, there was an increase—20 as against 14 in the previous week Deaths from diphtheria in the 126 Great Towns of England and Wales fell from 19 to 16 while in London there were no deaths, compared with 3 in the previous week, of the 16 deaths recorded in the 126 Great Towns 2 each occurred in Manchester (3), South Shields (2), Norwich (0) There was 1 death from diphtheria —in Aberdeen (0)—in the 16 principal towns of Scotland during the week There was a drop in the notifications of scarlet fever in England and Wales and in London during the week—1,248, compared with 1,553, and 112, compared with 128 respectively, both these figures were well below the median values for the last nine years There were 2 deaths from scarlet fever in the 126 Great Towns during the week—1 each in London (1) and Acton (0)

Primary and Influenzal Pneumonia

There was a decrease in the notifications of primary and influenzal pneumonia in England and Wales during the week under review—423 as against 589—and in London—40 as against 43, both these figures were less than the median values for the last nine years

Summary for the Four Weeks ended July 30

In the four weeks ended July 30, 1938, 6,846 cases of scarlet fever, 4,105 cases of diphtheria, 2,016 cases of primary pneumonia, and 88 cases of enteric fever were notified in England and Wales The notifications of scarlet fever diphtheria, primary pneumonia, and enteric fever were 104 per cent 112 per cent, 105 per cent, and 41 per cent respectively of the expected numbers (deduced from the median values of the corresponding weeks of the years 1929-37)

Measles and Whooping-cough

The incidence of measles in England and Wales continues to decline During the week under review there were 3 deaths in the 126 Great Towns, compared with 5 in the previous week—1 each in Kingston upon Hull (0), Leeds (1), Plymouth (0) The average daily admissions to the L C C fever hospitals were 6, as against 8 in the previous week Notifications dropped in six of the metropolitan boroughs in which measles is notifiable, remained the same in three, and rose in two—Shoreditch 7 (2) and Stepney 4 (2) In Scotland the figures for measles rose from 62 to 66 in the week under review of the 66 cases, 24 (31) occurred in Kirkcaldy, 22 (20) in Dunfermline, 10 (1) in Edinburgh There was an appreciable decrease in the figures for Northern Ireland during the week —4 (all in Belfast) compared with 14 in the previous week In the 126 Great Towns of England and Wales there were 5 deaths from whooping cough during the week, compared with 7 in the previous week 1 each occurred in Gateshead (0) Liverpool (0) Manchester (0), Birmingham (1) and Wallasey (0) In Scotland 27 (25) cases of whooping cough were noted —21 (18) of which were in Glasgow—and 3 deaths (all in Glasgow)

Cholera

During the week ended August 6 1 265 cases of cholera and 254 deaths from this disease were reported in Shanghai and in Hong Kong 30 cases with 17 deaths Further increases in the incidence of cholera were noted in the Central Provinces —6 078 cases with 2 987 deaths—in Bombay (Presidency)—287 cases with 113 deaths—and in the North West Frontier Province—70 cases with 36 deaths

* Except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

No. 51

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended August 6 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year for (a) England and Wales (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths and of Deaths recorded under each infectious disease are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 13 principal towns in Eire (e) The 10 principal towns (9 in 1937) in Northern Ireland

A dash — denotes no cases a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929-37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	13	3	6	1	—	19	3	13		1		
Deaths		—	—				1	—				
Diphtheria	825	115	126	39	20	794	75	146	52	17	812	135
Deaths	16	—	1	2	—	20	1	1	—	—		
Dysentery	19	3	39		—	10	4	9		—		
Deaths				—	—				—	—		
Encephalitis lethargica acute			—		—	2	—	—		—		
Deaths		—					1					
Enteric (typhoid and paratyphoid) fever	49	3	18	5	1	47	5	5	4	1	59	9
Deaths	2	—	—	—	—	2	—	1	—	—		
Erysipelas			54	7	—			41	2	4		
Deaths		—					—					
Infective enteritis or diarrhoea under 2 years												
Deaths	34	9	10	4	2	38	10	11	5	2		
Measles			66		4			35		1		
Deaths	3	—	—	—	—	5	—	1	—	—		
Ophthalmia neonatorum	134	12	22		1	129	12	40		—		
Deaths												
Pneumonia influenzal‡	423	40	6		9	373	30	—	1	—	445	42
Deaths (from Influenza)	13	4	3	—	—	9	2	1	—	—		
Pneumonia, primary			125	4				111	7			
Deaths		10		5	9		6		7	4		
Polio-encephalitis acute	2	—				4	1					
Deaths		—					—					
Poliomyelitis acute	61	3	9		—	20	6	1		1		
Deaths		—					—					
Puerperal fever	2*	2	5	3	1	30	3	22		—		
Deaths		1†					1†		1			
Puerperal pyrexia	179	21	20		—	138	15	27		—		
Deaths												
Relapsing fever	—	—			—	—	—	—		—		
Deaths												
Scarlet fever	1 248	112	258	67	47	1 364	107	273	56	31	1 607	204
Deaths	2	1	—	1	—	3	1	—	—	—		
Small pox	3	—	—		—	—	—	—		—		
Deaths	—	—		—	—	—	—		—	—		
Typhus fever	—	—	—	—	—	—	—	—	—	—		
Deaths				—	—				—	—		
Whooping-cough			27		17			40		19		
Deaths	5	—	3	—	1	16	7	2	—	2		
Deaths (0-1 year)	247	43	56	15	12	284	58	52	28	10		
Infant mortality rate (per 1 000 live births)	41	35				48	48					
Deaths (excluding stillbirths)	3 809	691	554	138	100	3 743	684	533	148	111		
Annual death rate (per 1 000 persons living)	9·4	8·8	11·3	9·3	8·9	9·3	8·6	10·9	10·8	10·6		
Live births	5 953	1 115	909	268	242	5 895	1 112	909	286	214		
Annual rate per 1 000 persons living	14·6	14·2	18·5	18·1	21·5	14·6	14·0	18·6	19·5	20·5		
Stillbirths	258	46				236	36					
Rate per 1 000 total births (including stillborn)	42	40				38	31					

* After October 1 1937 puerperal fever was made notifiable only in the administrative county of London.
† Death from puerperal sepsis
‡ Includes primary form in figures for England and Wales London (administrative county) and Northern Ireland.

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone, unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary, B M A House Tavistock Square W C 1 on receipt of proofs Authors overseas should indicate on MSS if reprints are required as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary B M A House, Tavistock Square W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are

EDITOR OF THE *BRITISH MEDICAL JOURNAL* *Annology Westcent London*

SECRETARY *Medisecra Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Irish Free State Medical Union (I M A and B M A) 7 Kildare Street, Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Hypertrichosis

'E C would like suggestions for treatment of hair on chin in a lady of 30 She has had electrolysis twice at a beauty parlour with no benefit, A radiologist does not advise x rays Is there any centre in London or the provinces for treatment of such cases?

"Typhoid Mary"

Dr J D ROLLESTON writes Dr J Rosslyn Earp who kindly answered my query about this interesting person some weeks ago (see *Journal* June 4, p 1247), has been good enough to send me further information about her as follows 'I have just received the following memorandum from Dr Stebbins Since I informed you as to the recent history of Typhoid Mary, I find that I was in error in stating that she had died My informant was apparently in error and I failed to check up the truth of the statement I find that Typhoid Mary recovered somewhat following a cerebral haemorrhage approximately a year ago and is at present a bed patient at Riverside Hospital in New York City

Income Tax

Motor Car Expenses

'W S had two cars in 1937, both used in the practice One was sold in June 1937 for £20 the other was taken over at £80 in part exchange for a new car—list price £240—in October 1937 What amount can be deducted from the receipts for 1937-8?

* The original price of the car sold in October 1937, less £80 As the other car was not replaced no allowance is due We assume that annual depreciation was not claimed If so the result is unfortunate and this case illustrates a point we have called attention to on previous occasions—that is that the failure to claim depreciation often leads to pecuniary loss

Expenses as Part time M O H

CAR gave up practice owing to ill health and is working for the Ministry of Health on a sessional basis His duties take him to different towns and it is imperative that he uses his car for travelling to the various towns How does he stand as regards a car allowance?

Our correspondent is entitled to a deduction representing the actual cost of travelling—probably the best estimate will be on a mileage basis In the event of the local officials objecting that no allowance is due for the expense of travelling to the place where the work is performed CAR should point out that the work he does comes under one appointment not one for each particular piece of work, and that cost of travelling is always allowed in such circumstances

LETTERS, NOTES, ETC.

Thomas Annandale

Professor G GREY TURNER (Taplow Bucks) writes May I draw attention to a small error which has crept into your note at the end of Nova et Vetera on page 360 of the *Journal* of August 13 Thomas Annandale was appointed Regius Professor of Clinical Surgery in Edinburgh not in 1871 as you state, but in 1877 This was the year in which Sir William Fergusson died and Lister accepted the invitation to come to London to succeed him as Professor of Clinical Surgery in King's College Hospital Curiously enough this mistake as to the date has crept into the notice of Annandale in Plarr's *Lives of the Fellows of the Royal College of Surgeons* Incidentally may I say that Professor Annandale was the second son of Thomas Annandale who practised at Newcastle on Tyne and was surgeon to the infirmary in that town from 1854 to 1866 It was at Newcastle that the Edinburgh professor received his baptism in practical surgery

Sensitiveness to Bee Stings and Ant Bites

Dr C MCGUIRE (Dooars Bengal) writes In the case described by Dr F Alexander in the *Journal* of June 18 (p 1348) death may have been due to the patient being sensitized to the poison of the wasp and not to the amount of poison injected In 1934 I was called to see a tea planter's wife who had suddenly collapsed When I saw her she had regained consciousness and there was an extensive urticarial eruption all over the body, the pulse was very feeble and the rate 130 On being questioned as to her diet that day she mentioned that she was stung by a bee an hour previously As she had previously reared bees in Scotland and been frequently stung without any symptoms she never thought anything about it I gave her an injection of adrenaline and the symptoms quickly subsided I advised her to keep a syringe and some ampoules of adrenaline in the house in case she was stung again as she had now become sensitized to bee stings Between 1934 and 1937 she was again stung by a bee and on two occasions by ants and in each case the symptoms recurred and subsided after adrenaline administration In 1938 about a month ago, she was once again stung by a bee but this time nothing happened and no adrenaline was required In 1933, a year before the first bee sting she was treated for a severe attack of bacillary dysentery which may have caused her to become sensitized to bee stings and ant bites, now she has become desensitized

Fountain Pen Found

Mr MICHAEL COHEN (10, Fairway Prestwich Manchester) writes to say that his daughter wishes to restore to its owner a fountain pen found by her The pen is evidently a keepsake and has a gold band inscribed 'Dr J Johnston From L C H Patients, 1935"

Corrigenda

The first line of Surgeon Lieutenant Commander D F Walsh's paper on Treatment of Gonorrhoea with Uleron published in the *Journal* of July 30 (p 215), should read A case record and clinical observations on forty three cases etc and line 48 in column 1 of page 217 should read feel that at least two five day or even seven day

The General Superintendent of the Prince of Wales's Hospital Plymouth writes as follows with reference to an item published last week (p 379 col ii line 10) in the report of the meeting of Council of the Royal College of Surgeons of England at which certain hospitals were recognized under the Fellowship regulations The position is as follows This hospital consists of three amalgamated hospitals of which the former Royal Albert Hospital at Devonport is one It is to this hospital that the time limit of the recognition of the Royal College of Surgeons applies and *not* also to the Plymouth sections as your notice would indicate In *this* sense I consider the notice to be misleading had the words Plymouth and been omitted the reference would have been quite in order as it is a fact that the post referred to at Devonport is recognized only until December next although as a result of alterations that have recently been made there we hope that recognition will be permanently granted after a further inspection by the Royal College of Surgeons

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Deutsche Medizinische Wochenschrift

Berlin vol 64 June 10 1938

Contributional Factor in Tuberculous Processes *(to be continued)*—K Klare
Treatment of Extrapulmonary Tuberculosis in French Mediterranean—I Bérard and G Hermann
Value of Collapse Treatment of Pulmonary Tuberculosis—J Lommel
Treatment with Prontosil of Mixed Infections of Bone Tuberculosis and of Osteomyelitis—M Wendekamp
Serological Investigations in Tuberculosis with Special Reference to Meinicke's Reaction—A Hasskó and F Müller
Case of Tuberculosis Mitralis Lenta—K Buinewitsch
Paroxysmal Haemoglobinuria and its Treatment—P Berde and K H Jaeger
New Way to Oesophagoscopy and Bronchoscopy—R Korbsch
Orthopaedics in Service of Health Movement—H G van Schnack

Collapse Therapy—This statistical study from Jena shows that the collapse treatment of pulmonary tuberculosis considerably improves the prognosis. It is argued that an interval of at least two years is required before claims of successful treatment can be made. Years after this interval there is still apt to be a certain falling away from the originally good results.

Journal of the American Medical Association

Chicago vol 110 June 11 1938

Metabolic Studies of Patients with Gout—J Talbott and F Coombs
Role of Carbon Monoxide in Causation of Myocardial Disease—H Beck and G M Suter
Abdominal Manifestations of Hyperactive Carotid Sinus Reflex—J E Stern
Concentrated Haemolytic Streptococcus Antitoxic Serum in Puerperal Fever—A F Lash
Peptic Ulcer in Syphilis of Central Nervous System—E P Simons D Plummer J R Ewalt and R C Gaskill
Vitamin D Complex in Keratoconus—A A Knapp
Benzedrine Sulphate—D Rosenberg R Arens P Marcus and H Necheles
Haemoptysis in Malignant Hydatid Mole—E Pund R Greenblatt and C Thompson
Hospital Air Conditioning—C P Yaglou

Klinische Wochenschrift

Berlin vol 17 June 11 1938

Function and Significance of Mineral Substances *(concluded)*—H Glatzel
Survival of *Spirochaeta pallida* after Exposure to Lowest Temperatures (−271.5 C only 1.7 C above absolute zero)—F Jahnel
Is Present-day Enucleation of Tonsils Justifiable?—V Lautenschläger
Leukaemia with Undulating Leucocytosis—H Kammerer and M Wertheimer
Concerning Renin—G Hessel
Case of Cushing's Syndrome—K Reinhertz and B Schuler
Meningitis in Infancy caused by Meningococci and *Bact. enteritidis* Breslau
Pathogenic Properties of Breslau Bacillus—V Welcker and H Voss
Quantitative Estimation of Salvarsan in Cerebrospinal Fluid by Pulfrich Photometer—H Hullstrung and J Nordmeyer
Demonstration of Vitamin C in Tuberculous Foci—E Tonutti and J Wallisch

Cushing's Syndrome—In the case described the syndrome was caused by a tumour of one suprarenal. The pancreas, thyroid and hypophysis were normal. Some changes were found however in the ovaries.

Vitamin C in Tuberculous Foci—Vitamin C was found in appreciable quantities in the epithelioid cells of tuberculous foci. These cells are probably derived from the reticulo-endothelial cells. The vitamin was found in the cells surrounding the tubercle bacilli.

Lancet

London vol 234 June 11 1938

Pursuit of Shadows—W Langdon Brown
Treatment of Splenic Anaemia and Banti's Disease—L Howells
Cyclohexyl-ethyl triazol in Convulsion Treatment of Schizophrenia—W Mayer Gross and A Walk
Primary Tumours of Lacrimal Sac—G G Penman and E Wolff
Pregnancy and Oleothorax—J G Scaddin
Congenital Isolated Dextrocardia developing Auricular Flutter—H Davis
Globulin Test for Cerebro-spinal Fluid—K O Newman.

Splenic Anaemia and Banti's Disease—Ninety-four cases of splenic anaemia and Banti's disease have been followed up. Two-thirds—that is eighteen—of the untreated cases showed substantial spontaneous improvement. In the whole series splenectomy which was performed in fifty-one cases did not appear to improve the expectation of life or prevent the third stage complications as compared with medical treatment in forty-three cases. Iron after or without splenectomy was very effective in some but by no means all cases.

Medizinische Klinik

Berlin vol 34 June 10 1938

Diagnosis and Treatment of Affections of Nails—W Engelhardt
General Practitioner's Task in Haemoptysis *(concluded)*—W Winkler G Ehrenbusch H Alexander K Lydtin Kayser Petersen O Stegmeyer K Schubarth and O Schedtler
Normal and Pathological Anatomy of Old Age *(concluded)*—L Aschoff
Injury to Tissues following Intramuscular Injection of Calcium Sandoz—E. Hering
Ce Ferro in Anaemia of Childhood—E Turk
Production and Secretion of Thyroid Hormone—K Tsuji
Recognition of Wilful Simulation of Affections of Haematopoietic Erogenic and Respiratory Organs and of Metabolic Disturbances—P Reckzeh
Pronounced haemoglobinuria and Other Pathological Changes in Blood produced by Sulphanilamide—V Stiasser and K Singer
New Publications on Physiology and Pathology of Digestive Organs—L Norpoth

Thyroid Hormone—The follicular epithelium of the thyroid contains little iodine but the iodine forms part of an active thyroid substance while the colloid thyroid substance contains much iodine which is however in an inactive state. The follicular epithelium contains no thyroxine. The follicular epithelium has two functions: the production of the thyroid hormone and the production of the colloid substance. Iodine, insulin, suprarenal cortex and corpus luteum hormone stimulate the production of the colloid substance and thereby inhibit the thyroid function. Thyroid preparations and hormones of the anterior lobe of the pituitary (thyreotropic hormone) stimulate the production of thyroid hormones. The blood of patients suffering from hyperthyroidism contains a substance which is not unlike the thyroid hormone.

Medizinische Welt

Berlin vol 12 June 11 1938

Pathological-anatomical Principles in Diagnosis of Bone Tuberculosis—T Konschegg
Sun and High Altitude Therapy in Extrapulmonary Tuberculosis—A Rollier
Breaking Down of Adhesions as Necessary Adjuvant in Production of Artificial Pneumothorax—A Heymer
Tuberculosis in the Aged—J E Kayser Petersen
Chronic Non-tuberculous Diseases of Lungs—F V Kovats
How do Weather and Climate influence Course and Cure of Tuberculosis?—W Amelung
Treatment of Haemorrhoids with Xylocain—H Hennen

Extrapulmonary Tuberculosis—Rollier publishes some statistics from his sanatorium at Leysin. Of his cases of extrapulmonary tuberculosis 80 per cent. were cured (of these 85 per cent. were quite fit for work) 16 per cent. were improved 3 per cent. remained stationary and 1 per cent. died. Treatment lasted from fourteen to twenty-five months. He draws attention to the fact that surgical tuberculosis is a general infection and must be treated as such. Sun and high altitudes have a beneficial effect on the lungs circulation, nervous system skin muscles and bones. Heliotherapy requires a special technique and careful dosage. In addition to sun and high altitude therapy Rollier uses orthopaedic methods and physical therapy in the treatment of these patients.

Munchener Medizinische Wochenschrift

Munich vol 85 June 10 1938

Germany s Spas —J Mayer
Balneotherapeutic Possibilities of Austria —E Maliwa
Spa at Bad Gleichenberg —F Blumauer
Spa at Solbad Hall in Tyrol —G Kaiser
Spa at Bad Ischl —A Hochsmann
Spa at Wildbad Gastein —A Thaler
Climate in High Altitudes in Austria as a Healing Agent especially for Asthma —W Weygandt
Treatment of Alimentary Diseases in German Sanatoria —L Romheld
Insomnia in Climacteric occurring in Mothers of Small Families —M Breuinger
Indications and Contraindications of Spa Treatment —E Oldemeyer
Anti tuberculosis Campaign in Austria —R Griesbach
Birth and Death Rate in Austria —R v Ungern-Sternberg

Nature

London vol 141 June 11 1938

Similarity and Dissimilarity —W H George
Enzymatic Removal of Bound Carbohydrate from Normal Horse Serum Pseudoglobulin —A G Ogston
Schultz s Law and Clotting of Blood —T Astrup
Synthesis of α Tocopherol (Vitamin E) —P Karrer H Fritzsche B H Ringier and H Salomon
Stratified Blood Sedimentation Isolation of Immature Red Cells —J G Stephens
Piltdown Bone Implement —A S Woodward

New England Journal of Medicine

Boston vol 218 June 9 1938

Conservative Methods in Surgery of Chronically and Severely Infected Kidney —D M Davis
Intraperitoneal Rupture of Urinary Bladder —E A Gaston
Recent Progress in Physiology —H E Hoff

Nordisk Medicinsk Tidskrift

Stockholm vol 15 June 11 1938

Tuberculosis of Myocardium —H Sundt
Technique in Determination of Quinine resistant Serum Lipases according to Rona —G Birath
Regulation of Heart s Minute Volume —H Christensen
Hygienic Basal Principles for Judging Quality of Water in Open air Baths — —G Nordgren
So called Transverse Striation of Skeletal and Heart Muscles as Expression of Helicoidal Arrangement of Certain Structures in Muscle Fibres — G Aurell and G Wohlfart

Norsk Magasin for Laegevidenskapen

Oslo vol 99 June 1938

Interpretation of Serological Diagnosis of Syphilis with Meinicke s Klarungs Reaction II (M K R II) —H Sacthre and A Bretteville Jensen
Acrodynia (Selter Swift Feers Disease) —A Sundal
Investigations of Prognosis in Schizophrenia and Reflections on its Diagnosis —G Langfeldt
Family with Multiple Neurofibromatosis (Recklinghausen s Disease) —F Harbitz
Case of Severe Gas gangrene Ending in Recovery —H F Harbitz and H Natvig
*Experimental Investigations of Action of Prontosil in Gas Oedema Infections —H Natvig

Prontosil —The authors experiments *in vitro* and *in vivo* (mice) fail altogether to confirm the good results claimed for sulphanilamide in the treatment of gas oedema infections by H R Bohlman in the *Journal of the American Medical Association* for July 24 1937

Policlinico

Rome vol 45 June 6 1938 (Sez Prat)

Clinical Features and Treatment of Cardiospasm —A Bonadies
Torsion of Spermatic Cord —A Catalani
Non traumatic Stasis of Gall bladder —L Loso
[illegible]

Presse Medicale

Paris vol 46 June 8 1938

*Chemical and Therapeutic Investigations on Tetany —R Leriche and A Jung
Massive Coagulation of Pleural Fluid as Sign of Compression of Hilar Vessels by Neoplastic Process —R Poinso
Parkinson s Syndrome as Complication of Heine Medin s Disease —V Veil and V Ristic

Tetany —As a result of the investigation of eleven cases of tetany the authors come to certain conclusions (1) The blood calcium is not invariably low in tetany (2) The urinary calcium is usually low (3) The amount of calcium in the faeces is normal or slightly raised (4) The very marked lowering of the ratio of urinary to faecal calcium is chiefly due to the low calcium content of the urine (5) The total calcium does not appear to be lowered, and the skeletal calcium is not affected (6) Calcium gluconate had only a very slight effect on the urinary calcium (7) In some cases of tetany the convulsions are unaffected by the administration of calcium, parathormone, or A T 10 (8) Bone transplantation had very little effect on the blood or urinary calcium but it stopped the convulsions (9) Bilateral ablation of the middle cervical sympathetic ganglion would seem to be the most effective treatment, as it acts in cases in which calcium parathormone and A T 10 have failed

Paris vol 46 June 11 1938

Treatment of Prostatic Hypertrophy by Whole gland Testicular Extract — B Cuneo and J Jomain
*Agranulocytosis and Haemorrhoidal Strangulation —M Rachev and M Petrov

Agranulocytosis and Piles —A fatal case of progressive agranulocytosis is described in a man of 39 with strangulated necrotic piles The authors are inclined to think that the rectal condition was responsible for the agranulocytosis and not vice versa They stress the close relationship which appears to exist between the haematopoietic and the digestive systems

Schweizerische Medizinische Wochenschrift

Basle vol 68 June 11 1938

Significance of Modern Doctrines of Heredity in Connexion with Neurology and Psychiatry —H Urban
Acute Syphilitic Anterior Poliomyelitis —R Stahli
Rheumatism and its Behaviour towards Other Morbid Conditions —E Stotter
*Functional After tests in Eczematous Patients —J Gomez Orbaneja and E Barrientos

Eczema —In 106 patients one to three years after treatment, it was found that if contact with specific sensitizing substances had been eliminated the skin had remained healthy and in two thirds of the cases had lost its hypersensibility In 391 other cases in which sensibility was assessed by patch tests a positive response to oil of turpentine—of which floor polishes as used in Zurich contain 80 per cent —was noted

Science

New York vol 87 June 3 1938

Is Agglutination an Explanation for Occurrence and for Chromomere Specificity of Synapsis —C C Lindegren and C B Bridges
Root and Shoot Production induced in Cabbage by Beta(3)-Indole Acetic Acid —Ethel Goldberg

New York vol 87 June 10 1938

Viruses—Living or Non living —R A Gortner
Vitamin A and Rod-cone Dark Adaptation in Cirrhosis of Liver —C H Kao S Hecht and A J Patek jun
Cholinergic Action of Oestrin —S R M Reynold
Influence of Bile Acids on Erosions of Chick Gizzard Lining —H J Almy

Ugeskrift for Laeger

Copenhagen vol 100 June 9 1938

Osteomalacia in Resulting from Abuse of Laxatives particularly Carlsbad Salts —L Meulengracht
McCarthy's Transurethral Resection of Prostate combined with Removal of Concretion from Bladder and Ureter —T Brems
Substitute for Merfen — Uses of Mercury Acetate —B J Le Moller
Devegan Applicator —S A Lilania
Tuberculoid Structures in Tonsil —K Barnwater

Osteomalacia from Abuse of Laxatives—The case recorded by Professor Meulengracht is that of an engineer aged 71 who for thirty five years had taken Carlsbad salts daily The extreme decalcification of his bones was traced to inadequate absorption of calcium from the food in the digestive tract owing to the partial conversion of some of the calcium into insoluble calcium sulphate

Wiener Klinische Wochenschrift

Vienna vol 51 June 10 1938

Pathological Anatomy of Suicides.—H Beitzke
Albuminuria in Childhood —K Dietl
Hematological Diagnosis of Multiple Myelomata —I Zadek
Suprarenals and Angina Pectoris —W Raab
Enhancement of Axillary Lymph Glands —A V v Frisch
Diagnosis and Therapy of Chronic Inflammations of Internal Female Organs —V Fuchs

Suprarenals and Angina Pectoris—With the exception of acute coronary occlusion angina pectoris is believed by Raab to be due to the release of quantities of adrenaline in persons whose coronary arteries are suffering from sclerotic changes This release is due to a variety of factors including psychic stimulation cold nicotine and muscular effort Raab argues that a partial suppression of adrenaline secretion by x ray irradiation of the suprarenals is therapeutically helpful In seventeen cases thus treated there were two failures and of the remaining fifteen cases the majority were cured

Wiener Medizinische Wochenschrift

Vienna vol 88 June 11 1938

Care of Mother Milk and Capacity for Breast Feeding —A Meier
Elimination of Phrenic Nerve in Collapse Therapy of Pulmonary Tuberculosis —A Sattler
X Ray Investigation of Large Intestine —R Pape
Vitamin C Metabolism in Diseases of Stomach and Duodenum —R Singer

Vitamin C Metabolism in Gastro intestinal Disease—In patients with gastric or duodenal complaints hypovitaminosis C is frequent It was found in twenty one out of twenty five cases The lowest figure for the ascorbic acid content of the urine was found in achlorhydric patients Treatment with vitamin C proved successful there being a marked curative effect only when the saturation point had been passed In cases of hyperchlorhydria this point is attained with smaller quantities (300 mg) than in cases of hypo or achlorhydria (at least 2 100 mg)

SPECIAL JOURNALS

American Heart Journal

St. Louis vol 15 May 1938

Comparison of Percussion and Radiography in Locating Heart and Superior Mediastinal Vessels —D Mainland and C B Stewart
Injection plus Dissection Study of Coronary Artery Occlusions and Anastomoses —M J Schlesinger
Role of Nutritional Deficiencies in Production of Cardiovascular Disturbances in Alcohol Addict —R Goodhart and N Jolliffe
Study of Myocardial Hypertrophy of Uncertain Aetiology associated with Congestive Heart Failure.—B I Kaplan E Clark and C E de la Chapelle
Abnormal Distribution of Superficial Muscle Bundles in Human Heart.—J S Robb and R C Robb
Effect of Digitalis on Form of Human Electrocardiogram with Special Reference to Changes occurring in Chest Lead —H J Stewart and R F Watson

Comparison of Percussion and Radiography—A comparison of the outline of the heart and superior mediastinal vessels as obtained by percussion under favourable conditions—that is using young male students—was made with the outlines obtained in teleradiographs (film tube distance of 2 metres) The mean differences in the two kinds of measurement were less than 1 cm in most intercostal spaces but in an individual case might be as much as 3 5 cm in the fourth left intercostal space The influence of stature and weight chest size and shape and of the position of the diaphragm was investigated A method by which an observer could estimate his own error of percussion is described

American Journal of Hygiene

Baltimore vol 27 May 1938

*Simple Method of Estimating 50 per cent End points —L J Reed and H Muench
Mosquito Studies on the Ilha de Marajó Para Brazil —H W Kumm and O Novis
Immunity in Monkeys that Remained Symptomless following Injection with Poliomyelitis Virus —J F Kessel and F D Stimpert
Immunologic Comparison of Los Angeles Strain of Poliomyelitis Virus with M V Strain —J F Kessel F D Stimpert and R T Fisk
Use of Serum as Protective Diluent for Vaccine Virus —G J Buddingh
Sex Differences in Trends of Tuberculosis Mortality —C C Dauer
Malaria and Anopheline Survey of Grenada British West Indies —F M Root and J Andrews
Pathogenicity of Strain of Small Race *Entamoeba histolytica* —W M Frye and H E. Meleney
Analysis of 5.0 Cases of Pellagra reported in California from 19.8 to 1935 — C E Smith and I M Stevens
Plasmodium lophurae New Species of Malaria Parasite Pathogenic to Domestic Fowl —L T Coggeshall
Limitations to Control of Helminth Parasites in Egypt by Means of Treatment and Sanitation —J A Scott and C H Barlow
Blood Protozoon of Turkeys transmitted by *Simulium nigroparvum* (Twinn) —E P Johnson G W Underhill J A Cox and W L Threlkeld
Studies on Metabolism of *Trichinella spiralis* Larvae —J N Stannard O R McCoy and W B Latchford
Some Aspects of Carbohydrate Metabolism of Hookworm *Ankylostoma caninum* and its Host —Th v Brand and G F Otto
Relative Frequency of Ring-stage Plasmodia in Reticulocytes and Mature Erythrocytes in Man and Monkey —Robert Hegner
Frequency of Rheumatic Manifestations among Siblings Parents Uncles Aunts and Grandparents of Rheumatic and Control Patients — F E. M. Read A Ciocco and H B Taussig

Estimation of End points—In the titration of sera and viruses the end point is taken as the dilution at which a certain proportion of the test animals react or die Chance variations tend to make the end point indeterminate The method advocated is to take the 50 per cent reaction point instead of the usual 100 per cent By mathematical calculation or more simply by a graph on arith log paper the dividers may be used to mark off the exact end point which lies between the last two effective dilutions

Sex Differences in Tuberculosis Mortality—A statistical survey is made of the deaths from tuberculosis in four States over a period of sixty years and the change in mortality rates is noted together with crowding and occupation factors These do not account for the more rapid decline in female mortality and no satisfactory explanation is advanced

Rheumatism in Relatives—The family histories of thirty three rheumatic children and thirty three corresponding non rheumatic children were intensively investigated The occurrence of rheumatic manifestations—for example chorea acute rheumatic fever or rheumatic carditis—was invariably higher in the groups related to the rheumatic children—up to eight times as high among grandparents The findings are taken as supporting though not determining a familial or constitutional susceptibility to the disease the exposure factor not being eliminated

American Journal of Obstetrics and Gynecology

S Louis vol 35 May 1938

Bio electric Correlates of Menstrual Cycle in Women—H S Burr and L K Musselman
Duration of Secretory Activity in Glands of Decidua Vera—S H Sturgis
Comparative Study of Posterior Pituitary Extract administered at Onset of and after Completion of Third Stage of Labour—F F Fortin
*Elderly Primiparae—C Tew N C Raleigh and K Kuder
Pneumococcus Infection of Genital Tract in Women—H Nuckols and A Hertig
Experimental Study of Acidosis and Alkalosis in Labour—W Pride J R Reinberger and D T Holland
Weight Changes in Pregnancy—P N Bray
Wheat germ Oil Therapy—E Shute
Epilepsy and Pregnancy—A Baptisti
Uterine Motility resulting from Inflammatory Processes in Myometrium in Absence of Ovarian Hormones—M W Laufer and R M Reynolds
Analgesia during First Stage of Labour—W A Ruch
Experimental Transplantation of Ovaries—G H Romberg
Blood Loss in Menorrhagia—A P Barer and W M Fowler
Apparatus for procuring Essential Data in Differential Diagnosis of Pelvic Pathology in Female—G Lyford
Amplification of Foetal Heart Sounds—W T Pommerenke and F W Bishop
Correlation between Blood Pressure and Nembutal Dosage in Toxaemias of Late Pregnancy—J W Ross
Clinical Experience with Ergonovine—J I Kushner and P B Wahrisinger
Chorion Epithelioma of Fallopian Tube—T J Williams
Management of Pregnancy and Labour complicated by Triplets—J C Hirst
Hyperplasia in Epithelium of Uterine Tubes—E Allen
Tubal Pregnancy—P Graffagnino L Seyler and M Bannerman
Irreducible Strangulated Complete Prolapse of Uterus complicated by Sliding Hernia of Caecum and Intestinal Obstruction—R T Frank
Adenomyosis in Primipara resulting in Spontaneous Rupture of Uterus at Onset of Labour—M Stone
Pyelitis of Pregnancy due to *B dysenteriae* Flexner—H L Stewart
Bilateral Ovarian Dermoid Cysts—L K Schottenfeld and E V Littauer
Placenta Accreta—C B Sacher
Cerebral Complications following Nitrous Oxide Anaesthesia—H Brown G Collins and F Vaughan
Ruptured Extra uterine Pregnancy complicating Unusually Large Multiple Fibroids of Uterus—A J Gordon
Spontaneous Fracture of Femur in Neonatal Period—E Cornell
New Model Head Stethoscope—A F Daro

Elderly Primiparae—Of all primigravidae 2 per cent are aged 35 or over and in these cases there is an increased incidence of toxaemia of pregnancy, placenta praevia, occipito-posterior presentations and post partum haemorrhage Also increased is the maternal and infant mortality and the operative delivery incidence

American Journal of Pathology

Boston vol 14 May 1938

*Degenerative Arthritis Comparison of Pathological Changes in Man and Equines—G R Callender and R A Kelser
Studies on Experimental Rickets in Rats II Healing Process in Head of Tibia and Other Bones—G S Dodds and H C Cameron
Pars Intermedia Basophil Adenoma of Hypophysis—V F Rasmussen and A A Nelson
Study of Submaxillary Gland Virus of Guinea pig—F S Markham
Bone and Cartilage Lesions of Protracted Moderate Scurvy—A W Ham and H C Elliott
Tuberculosis in Allergic and Desensitized Guinea pigs Study of Histological Changes—H S Willis and C E Woodruff
*Fatty Infiltration of Liver and Development of Cirrhosis in Diabetes and Chronic Alcoholism—C L Connor
Primary Reticulum Cell Sarcoma of Lymph Nodes of Cow with Widespread Metastases—J S Bengston
Experimental Infection in Mouse produced by Intratracheal Inoculation with *Haemophilus pertussis*—W L Bradford

Degenerative Arthritis—A detailed description is given of the gross and microscopical appearances, and of the apparent sequence of changes in an arthritis which causes lameness in equines and other animals The changes, which are purely degenerative and of unknown causation begin in the articular cartilage and are symptomless in the earlier stages, hypertrophic bony changes follow A comparison of fifty four such specimens from horses and mules with sixty specimens from human beings showed the lesions to be identical in the two species The condition in man is not seen in early life, but early stages of it are almost constantly found in the fifth decade and in a small proportion of cases they progress later to a stage causing disability

Fatty Infiltration and Hepatic Cirrhosis—It is argued in this paper that the primary change in alcoholic cirrhosis is a fatty infiltration, due in part to the action of alcohol in preventing tissue oxidation, and in part to inadequate food intake Cases are described which died at this stage, following extreme and sometimes comparatively brief alcoholic excess Long continued fatty infiltration is considered to cause cirrhosis mechanically by direct pressure on the peripheral cells of the lobule, and by interference with vascular supply leading similarly to atrophy and hence fibrous replacement Intermediate stages are observed between the enlarged liver of fatty infiltration and the shrunken liver of advanced alcoholic cirrhosis, in the author's experience this gradation is so complete that he regards the mechanism of production of alcoholic cirrhosis as demonstrated That fatty infiltration is the primary change is also suggested by two cases in which this condition was due to diabetes and went on to cirrhosis in the absence of alcoholic excess

American Journal of Roentgenology and Radium Therapy

Springfield Illinois vol 39 May 1938

Roentgenographic Studies of Excretion of Dusts from Lungs—A E Barclay K J Franklin and R G Macbeth
Mediastinal Hernia in Absence of Pneumothorax—H C Maier
The Meningiomas A Roentgenological Viewpoint—C W Schwartz
Persistent Right sided Aortic Arch—L H Garland
*Developmental and Life Cycles of Thoracic Aortic Aneurysms—E Freedman C S Higley and H Hauser
Myelography with Thorotrast and Subsequent Removal by Forced Drainage An Experimental Study—W A Nosik and O A Mortensen
Rupture of Congenital Solitary Kidney—L G Ericksen
Calcinosis Universalis—S E Gould and F T Rainford
Leucopenia and Leucocytosis in Lymphoblastoma—F H De Leer E T Leddy and A U Desjardins
*Cervical Lymph Nodes in Intraoral Carcinoma Surgery or Irradiation?—J J Duffy
Irradiation of Cervical Glands in Carcinoma of Mouth and Lip—H W Jacox
Is Roentgen Irradiation of Value in Treatment of Pulmonary Metastasis from Mammary Cancer?—N Treves
Protracted Roentgen Therapy of Pharyngeal Lymphosarcoma—A Jutras
Study of Back scatter—E H Quimby L D Marinelli and J H Farrow
Methods of Applying Radium Element in Form of Needles and Tubes—G C Wilkins

Thoracic Aortic Aneurysms—A saccular aortic aneurysm may develop in the course of a few weeks, and by its rapid increase may suggest the presence of a malignant mediastinal neoplasm A period of survival of almost ten years is not incompatible with a large aortic aneurysm with extensive vertebral erosion Although a thoracic aneurysm may destroy adjacent vertebrae, it may furnish in their place partial support for the vertebral column

Irradiation of Cervical Glands in Mouth and Lip Carcinomata—This paper is based on an analysis of 252 cases of carcinoma of the lateral border of the tongue treated at the Memorial Hospital, New York and of 1,363 cases of intraoral cancer It gives the relative indications for dissection or irradiation of the cervical glands Surgery offers a better chance in the operable group, whereas patients with advanced disease will live longer and more comfortably, and have a greater chance of cure, when the glands are treated by irradiation

Annales de l'Institut Pasteur

Paris vol 60 May 1938

*Influence of Skin on Susceptibility and Resistance to Fowl Sarcoma—A Besredka and L Gross
Contribution to Study of Paralytic Accidents following Antirabic Inoculation Case with Necropsy—G Marinesco and S Draganesco
*Tumours and Viruses Observations on Virus of Lymphogranuloma—R. Schoen
Properties of Venom of Principal Species of Snakes in Venezuela—J Velarde
Experimental Tumours in Plants caused by Various Chemical Agents Suggested Explanation—J Gheorghiu
Unsuspected Action by Fertilizer Industry in Diminishing Fertility of Soil—G Bertrand

Skin and Fowl Sarcoma—Whereas subcutaneous injection of a suspension made from a fowl sarcoma is followed by the slow development of a progressive tumour, the intradermal

injection of the same material causes the rapid appearance of a tumour which then remains stationary and sometimes regresses An immunity develops with regression which is not passively transferable

Tumours and Viruses—The virus of lymphogranuloma inguinale (poradenitis venerea) administered intracerebrally to a mouse which has also been given a transplantable sarcoma subcutaneously appears in the tumour and is transferable with it in series without loss of virulence in the virus and without any apparent effect on the tumour (This capacity of malignant tumours for carrying and serving as a kind of culture medium for quite unrelated viruses has been reported before but not in the case of this virus)

Archiv fur Experimentelle Pathologie und Pharmakologie

Berlin vol 189 April 27 1938

Action of Calcium in Warm-blooded Animals—W Heubner A Krautwald and M Stuhlmann
Experimental Study of Action of Rare Earths on Liver Functions and Anatomical Structure of Liver—F Fichler
Irregular Composition of Alveolar Air (Observations on Dirken's article of same title)—K Matthes
Action of Magnesium on Aconitine Poisoning—E F v Hueber and D Lehr
Permeability of Living Membranes IV Permeability of Branchial Epithelium of *Gasterosteus* to Felepathine—E Macovski and Eufrosine Macovski
Blood Picture in Horse after Prolonged Administration of Histamine—E Akerblom and K Sjoberg
Action of Sympatol on Carbohydrate Metabolism and Creatine Metabolism—F Pflug
Influence of Vitamins A and C on Carbohydrate Metabolism in Hyperthyroidism—F Steffen and T Zois
Influence on Calcium and Phosphorus Balance in Experimental Suprarenal Insufficiency of Suprarenal Cortical Extracts and Vitamin C—H Lucke and E Heckmann
Crystalline Insulin XI Solubility and Stability of Crystalline Insulin as Produced in Bonn Clinic—H H Neumann Kleinpaul
Action of Acetylcholine on Joints and Muscles—F J Erlacher

Archiv fur Gynakologie

Berlin vol 166 1938

*Heart Disease in Pregnancy—Jaschke
Operation and the Circulation—Straub
Heart Minute Volume in Post maturity—Schmidt and Elmendorff
Functional Diseases of Circulation in Healthy Pregnant Women—Probst
Prognosis and Therapy of Diseases of Circulation in Pregnancy—Schultz
Heart Disease and Therapeutic Abortion—Scipiades
Treatment of Placenta Praevia—Holtermann
Treatment of Disorders of Circulation in Eclampsia—Wirths
Electrocardiographic Researches Before and After Operation in Healthy Women and Women with Cardiac Disease—Frigyesi
Functional Diseases of Circulation before Operation—Bickenbach
Evaluation of Operative Results—Dietel
Is Low Blood Pressure a Contraindication of Spinal Anaesthesia?—Delmas
Pharmacological Aspects of Ergot Problem—Rothlin
Is the New Ergometrine an Alkaloid and Ecbolic?—Antoine
Treatment of Ovarian Insufficiency by Sex Gland Hormones—Kaufmann
Gonadotropic Hormones in Blood Urine and Other Body Fluids—Engle
General Treatment of Ovarian Insufficiency—Grote
Question of Gonadotropic Hormones Prolan A and B—Schultze Rhonof and F Muller
Gonadotropic Hormones in Senile Pituitary—Nurnberger
Pregnancy Changes in Newborn—Philipp
Sympathetic Nerve endings of Ovary—Goecke
New Factor for Determination of Follicular Rupture—Clauberg
Mode of Action of Sex Hormones—Kovacs
Climatic Factors in Ovarian Function—Breipohl
Hormonal Hypofunction Resulting from Starvation—Sommer
Actiology of Genital Hypoplasia—Kleine
Ovarian Hypofunction during Lactation—Engelhart
Suprarenal Secretion in Lactation—Schultze
Vaginal Cycle in Castrated Women—Murray
Cause and Treatment of Ovarian Dysfunction—Tietze
Treatment of Ovarian Hypofunction—Kraul
Treatment of Ovarian Insufficiency—Busse
Treatment of Metropathia Haemorrhagica by Intravenous Folliculin—Ten Berge
Critical Review of Hormone Therapy in Disorders of Female Genitalia—Siegert
Results of Sex Hormone Therapy—Buschbeck
Effects of Ovarian Hormones on Human Fallopian Tube—Caffier
Bleeding Factor in Menstrual Cycle—Heim
Researches on Metabolic Effect of Sexual Hormones—Rupp
Hormone Therapy in Pregnancy—Albers
Treatment of Bladder Incontinence with Follicular Hormone—Hoffmann
Treatment of Post abortion Tetanus—Jaroschka
Intra abdominal Radium Treatment in Carcinoma of Cervix—Daels
Dissordant Characteristics in Similar Twins—Goecke
Pathology of Newborn—Kleine
Operative Treatment of Prolapse—Wibel
Anatomy of Pelvic Connective Tissue—Burger
Giesen Method for Treatment of Prolapse—Rossenbeck
Murter Method for Treatment of Prolapse—Hollstein
What is Basis of Operation for Cystocele—Borner
Theory and Cure of Prolapse—Scipiades
Results of Halban Operation—Schmid
Intestinal Reconstruction—Sussmann
Role of Appendicitis in Connexion with Sterility in Women—Mikulicz Radeck
Common Gynaecological Symptom-complex—Martius
Actiology of Interstitial Pregnancy—Huber
Operative Technique for Very Large Ovarian Cysts—Hartung
Influence of Dentogenic and Tonsillar Focal Infection on Gynaecological and Obstetric Diseases—Nahmmacher
New German Birth Statistics—Pohlen
Connexion between Marriage and Birth Rate Statistics in Town and Country—Reichert
Various Types of Caesarean Section and their Indications and Results—Naujok and Wahl
Prognosis and Therapy of Pregnancy Anaemia—Jacobi
Importance of Anaemia in Connexion with Puerperal Sepsis—Runge
Epidemiology of Streptococcal Infection in Puerperium—Thies
Treatment of Birth Injury in Newborn—Naujoks
Biological Allergy of the Newborn—Vogt
Premature Child—Haselhorst
Birth Fractures and their Sequelae—Tausch
Intra uterine Deformities—Kasterdieck
Cephalhaematoma—Ottow
Clinical Aspects of Mongolism—Reifferscheid
Deficiencies in Lactation—Feldweg
Management of Carcinoma of Cervix—Frommolt
Radium in Cervical Carcinoma—Dietel
Contact Radiation in Gynaecology—Schafer
Value of Histological Colposcopic Examination—Mestwerdt
Basal Metabolism in Normal and Toxic Pregnancy—Siedentopf
Liver in Pregnancy—Stieve
Carotin and Vitamin A Content in Puerperium—Gaethgens
Cell Growth and Arsenic—Guthmann

Heart Disease in Pregnancy—Every type of heart disease may be encountered during pregnancy The modern tendency is in favour of careful observation during pregnancy and the institution of operative measures to hasten delivery Prognosis is difficult to assess as so many non pregnant cardiac patients die at a relatively early age It would appear however that the strain of labour and lactation causes a definite shortening of the expectation of life in these patients

Archives of Otolaryngology

Chicago vol 27 May 1938

Sulphanilamide in Treatment of Experimental Streptococcal and Pneumococcal Meningitis—J A Kolmer
Studies in Mechanism of Action of Sulphanilamide II Sulphanilamide in Treatment of Experimental Streptococcal Meningitis—P E Adolph and J S Lockwood
Retropharyngeal and Cervical Emphysema Case Report—S H Gidoll
*Endaural Intauricular Surgical Approach to Temporal Bone Principles Involved in this New Approach Summary Report of 1780 Cases—J Lempert
Air Cells of Petrous Portion of Temporal Bone in Child 4½ Years Old Study Based on Wax Plate Reconstructions—B J Anson J G Wilson and J P Guardsmoe
Treatment of Chronic Catarrhal Deafness with Eustachian Heat Bougie—E. Simon

Endaural Approach—The author has abandoned the post-auricular approach to the temporal bone He performs all the various types of mastoid operations through a window which is cut in the outer part of the external auditory meatus The operative technique is described in great detail and the results obtained in 1780 consecutive cases are recorded

Archives of Pathology

Chicago vol 25 May 1938

Post mortem Examination of Stillborn and Newly Born Infants—E L Potter
Experimental Atherosclerosis I Effect of Prolonged Administration of Thyrotropic Factor of Anterior Lobe of Pituitary on Experimental Atherosclerosis in Rabbits—M Bruger and F Fitz
Comparative Bacteriological Studies of Human Blood Viscera and Teeth obtained at Necropsies—C G Burn and L W Burket
Effect of Carbon Dioxide on Clotting of Blood—J Tannenberg
Experimental Investigation of Leptospirosis Poisoning—F P Mathews

Lymphocytic Response of Guinea pigs to Epinephrin Hydrochloride Sodium Bicarbonate Solution and Culture of *B coli* with Particular Reference to Effect of Anti neutrophilic Serum on Lymphocytic Curves —J S Lawrence and W B Chew
Teratoma of Thyroid Gland —E L Potter
Review Role of Vitamin B in Resistance *(concluded)* —D Perla

Experimental Atherosclerosis —Bruger and Fitz administered the thyrotropic hormone of the anterior pituitary for periods of over 100 days to rabbits fed with excessive amounts of cholesterol in the expectation that it would diminish cholesterol deposition in the arteries It had the opposite effect which is possibly to be explained by the development of an anti-thyrotropic substance and a consequent fall in the rate of metabolism during the latter part of the experimental period (metabolic rate estimations were not made) There are analogies between details in these experimental findings and the data acquired in man which suggest that cholesterol deposition in both species may depend on hypercholesterol-aemia combined with other factors

Beitrage zur Klinik der Tuberkulose

Berlin vol 91 May 24 1938 Heft 5

Influence of Cholesterin and Neutral Fats on Course of Experimental Tuberculosis —E Rix and O Schedtler
Influence of Lactation on Healed Calcified Pulmonary Foci —L Vajda
Contribution to Differential Diagnosis of Pulmonary Tuberculosis and Pulmonary New Growth —H Grebe
Pulmonary Tuberculosis and Karlsbad Drink Cure —O Hahr and E Stransky
Studies in Allergy with Groer Reaction with Special Reference to Tuberculosis in Adults —J E Szantó Z Bernath and O Riedl
Question of Tuberculosis Inheritance —K Klare Scheidegg
Results of Tests of Function of Lung in Relation to Collapse Therapy —G Petzold
Simultaneous Occurrence of Bronchial Carcinoma and Pulmonary Tuberculosis —A Bergmann

Canadian Public Health Journal

Toronto vol 29 April 1938

Place of Mental Hygiene in Public Health —B T McGhie
*Muscle Conservation and Re education in Post poliomyelitis Paralysis — G A Ramsay and R A Johnston
Survey of Tuberculous Patients in the Home Vancouver B C 1936 — W Morris
Vital Statistics in Public Health Programme —D V Currey
*Trichinosis in Montreal —J H Gervais
Recent Health Legislation in Canada —R D Defries

Muscle Conservation and Re education —This is a review of the methods employed in treating the paralyses which appeared after the outbreak of poliomyelitis in Ontario in 1937 The importance of testing the amount of recovery from time to time in affected muscles and of the proper graduation of re educative exercises is emphasized

Trichinosis in Montreal —This is a critical description of two outbreaks (six cases with one death and sixty eight cases with no death) in Montreal in 1935, the first untraced and the second due to the ingestion of infected pork in a German community

Deutsches Archiv fur Klinische Medizin

Berlin vol 182 May 28 1938

Effect of Vitamin C in Thyrotoxic Creatinuria —H J von Pichwe
Pathogenesis of Real Chlorosis —L Heilmeyer
Optical Estimation of Haemoglobin as Oxyhaemoglobin reduced Haemoglobin and Haematin —L Heilmeyer and L von Muralt
Clinical Examination of Effect of Analeptic Drugs in Insufficiency of Circulation —J Schleoter and H Schwarz
The *Osteo-arthropathie Hypertrophiante Pneumique* (Pierre Marie Bamberger) —E Stephan
Changes in Mineral Content of Plasma and Erythrocytes during the Day observed on Lead Calcium and Phosphorus in Healthy People under Varying Experimental Conditions Lead Content of Bile —F Schmidt and W Base
Observations on Effect of S-Hydril in Lead Poisoning —F Schmidt and H Losse
Contribution to Diagnosis of Congenital Malformations of Heart (Open Ductus Arteriosus Botalli) —W Wilken
Bibliography and Statistical Study of Course of Pneumonia and its Complications —R Schubert

436 I

Diabetes Mellitus and Heredity Expectation of its Occurrence in Children of Diabetic Parents —F Schmidt
Influence of Different Salts on Movement of Electrolytes in Plasma Erythrocytes in Diseases of Heart and Kidneys —F Schmidt

Pathogenesis of Real Chlorosis —In two cases of typical chlorosis a lack of iron in the blood plasma was found with a reversible disturbance of iron resorption Chlorosis is considered to be a primary juvenile defect of iron metabolism in which a congenitally deficient deposition of iron (because of chlorosis in the mother) an increased consumption of iron during the period of growth, loss of iron during the period and an iron deficiency coincide with a deficiency in iron resorption The possible causation of this last deficiency is discussed

Deutsche Zeitschrift für Nervenheilkunde

Berlin vol 146 April 20 1938

Effects of Climate on Neuritis —J Schorn and G Schaltenbrand
Clinical Investigations into Effect of Prostigmin in Myasthenia Gravis —G Saker
Experimental Investigations into Effect of Prostigmin in Myasthenia Gravis — E Kruger and G Saker
Effect on Disturbed Sensitivity to Pain and Touch of Skin Stimuli of Different Quality —K v Bagh
Tobacco Polyneuritis —I r V Kepp
Lipase Content of Cerebrospinal Fluid —O Seuberling
Snout like Protrusion of Lips and Neck Combined Oral Automatism —L Benedek and L v Antyal
Ophthalmic Migraines in Cases of Arteriovenous Aneurysm —L Deutsch and J Friedmann

Journal of Bacteriology

Baltimore vol 35 May 1938

Studies on Anaerobiosis I Nature of Inhibition of Growth of Cyanide treated *E coli* by Reversible Oxidation reduction Systems —R H Broh Kahn and I A Mirsky
Decomposition of Nitrogenous Substances in Sea Water by Bacteria —S A Waksman M Hotchkiss C L Carey and Y Hardman
Growth Rates of Phytopathogenic Bacteria —E M Hildebrand
Method for Concentration of Poliomyelitis Virus in Nasopharyngeal Washings —J R Paul
Physical Characteristics of Cells of Azotobacter Rhizobium and Streptomyces —H Lineweaver
Dissociation of Single Cell Cultures of *Staphylococcus aureus* —R E Hungate and G P Youmans
Influence of Diet on the *L acidophilus* Content and H Ion Concentration of Intestine —L Weinstein J L Weiss and R W H Gilmer
Metabolism of Pathogenic Bacteria I Bacteriological and Chemical Methods —F E Friedemann
Factors influencing Rate of Fermentation of *Streptococcus lactis* —O R Rahn C P Hegarty and R E Deuel

Journal of Immunology

Baltimore vol 34 April 1938

Bacteriolysis by Lysozyme —E H Boasson
Studies on Serum Fractions V Fraction of Anti-diphtheritic Horse Serum Precipitable by Diphtheritic Toxin and that Precipitable by Antitoxin prepared with Floccules of Diphtheritic Toxoid antitoxin —K Ando K Manako and S Takeda
Studies on Serum Fractions VI Close Serological Relationship of Diphtheria Anti bacterial Antibody globulins —K Ando S Takeda and M Hara
Specificity of Some Mammalian Spermatozoa —W Henle
Constituent of Peptone Broth as Cause of Cross reactions with Antisera Prepared against Group C (Lancefield) Haemolytic Streptococci —E A Bliss

Journal of Infectious Diseases

Chicago vol 62 May-June 1938

Pollution Flow from Pit Latrine when Permeable Soils of Considerable Depth Exist Below the Pit —E L Caldwell
Direct Measurement of Rate of Ground Water Flow in Pollution Studies — E L Caldwell and L W Parr
Studies of Subsoil Pollution in Relation to Possible Contamination of Ground Water from Human Excreta Deposited in Experimental Latrines — E L Caldwell
Experimental Investigations in Haemorrhagic Encephalitis —A B Baker C W Buggs
Effect of Various Blood Mediums on Growth Characteristics of *H pertussis* —J A Toomey and W S Takacs
Study of Organisms Recovered from Filtrates of Cultures of Haemolytic Streptococci —E E Nicholls

Influence of Temperature upon Proliferation of Infectious Fibromas and Infectious Myxomas Viruses in Rabbits—R L Thompson
Effect of Washing and Physical Agents on *H pertussis*—J V Lumsden and W S Takaki
Studies on Bacteriology and Immunology of Chronic Staphylococcal Osteomyelitis I Cultures Involved Anti-haemolysin in Patients Serum Local Inflammatory Reaction—E E Hare S W Blank and C M Davis
Decomposition of Ascorbic Acid by Certain Bacteria Studies in Bacterial Metabolism CIX—V J Kordatzki and H Chinn
In vitro Action of Immune Rat Serum on Nematode *Nippostrongylus muris*—M P Sarles.

The Bacterial Decomposition of Ascorbic Acid—By repeated subculture in a broth containing ascorbic acid many strains of bacteria mainly of coliform type were isolated from faeces or gastric contents which decomposed ascorbic acid Some strains were also found which under the same conditions retarded its decomposition The rate of disappearance of ascorbic acid in cultures of these various bacteria was studied under different conditions It is considered possible that bacterial action in the bowel may be a factor in vitamin C deficiency

Radiology

St Paul Minnesota vol 30 June 1938

Calcification and Ossification of Kidney Review of Literature and Report of Cases Part II—A E Goldstein and B S Abelhouse
Roentgen Treatment of Chronic Sinusitis—F E Butler and I M Woolley
Pain Its Surgical Relief and Role of X Ray Localization Therein—M B Greene and J Kaufman
Biological Influence of Gamma Rays on Glandular and Hair System of Skin in Normal and Pathological Conditions—V Talumbo
Dosage Duration of Treatment and Reactions in Protracted Fractional Roentgen Treatment with Special Reference to Carcinoma of Upper Air Passages—J Juul
Apophyseal Intervertebral Articulations Roentgenologically Considered—A Oppenheimer
Primary Bronchus Carcinoma Diagnostic and Therapeutic Consideration—W L Matthew
Effect of Fractional Roentgen Technique on Incidence of Vaginal Fistulae in Carcinoma of Cervix—F R Smith
Direct Radio-cinematography—V de Maele
Radiotherapy of Bladder Carcinoma Five year Results Failures Future Therapy—B S Barringer
Reflecting Photo-electric Erythema Evaluator Preliminary Report—O R Troje
Ancient Arthritis—E Burnham Chamberlain and R B Taft
Case of Severe Injury to Chest Wall and Diaphragm—E W Rowe
Object Reconstruction by Planigraphy Reconstruction and Localization of Planes—J Kaufman

X Ray Treatment of Chronic Sinusitis—Good results are reported in infection of the nasal accessory sinuses One treatment is usually sufficient The dose varies according to the penetration of the radiation used It is about 600 *r* for medium hard radiation and about 450 *r* for hard radiation

Vaginal Fistula—The incidence of this complication of carcinoma of the cervix is more than twice as high in untreated as in irradiated patients Fistulae are therefore more often prevented than caused by radiation therapy

Revue d'Orthopedie et de Chirurgie de l'Appareil Moteur

Paris vol 25 March 1938

Volkmann's Paralysis Its Essential Lesion—Tavernier and Dechaume
Infantile Kyphosis—B Frejka
Fibro-cartilage of Lower Radio-cubital Articulation in Adult—J Guillermo
Influence of Vascular Disorders on Axial Growth of Bones—S Pereira
Pathological Fracture of Femur Twenty-eight Years after White Tumour of Knee Operation Cure.—F de Moraes
Tibio-tarsal Dislocation without Fracture—F Lazard

Paris vol 25 May 1938

Considerations on Fractures and Pseudarthroses of Neck of Femur—R Hoffmann
Isolated Pyramidal Fractures—R Garraud
Fracture of Trapezium—F de Moraes
Some Aspects of Primary Osteomyelitis in Adult—G Leclerc
Programme of Work in Laboratory for Study of Orthopaedic Apparatus and Accessories—J Hanausek
Madelung's Disease without Radius Curvus (Congenital Dismorphosis of Both Wrists through Internal Radial Epiphyseal Hemiatrophy)—H Merz and J A Parlange

Rivista di Patologia Nervosa e Mentale

Sicily vol 51 March April 1938

Progressive Paralyses and Endemic Malaria—V Desogus
Experimental Lesion of Brain and Spinal Cord Induced by Cyanide of Potassium—I Jedlowski
Further Data in Knowledge of Anatomical Basis of Reversible Functional Changes in Optic Nerve in Quinine Intoxication—P Jedlowski
Histological Anatomy of Syndrome of Guillain Barre's Acute Curable Polyradiculitis with Dissociation of Albumin and Cell Count in Cerebro spinal Fluid—O Balduzzi
Acute Febrile Hyperkinesis—V Longo
Simmonphare Test in Symptomatology of Nervous Disease—O Balduzzi

Progressive Paralyses and Endemic Malaria—The important question as to whether an attack of endemic malaria protects the individual from general paralysis has been examined especially in the malaria infested island of Sardinia The author concludes definitely that endemic malaria is not associated with a diminution of incidence of general paralysis Endemic malaria is generally associated with a low grade of civilization and in such regions syphilis may spread more readily and be treated less efficiently But however such considerations and the question of the dermotropism of the spirochaete in lower grades of culture and its neurotropism in higher grades complicate the statistical records the conclusion that the fact of having had malaria does not protect the individual from general paralysis of the insane is not affected

Experimental Lesions Induced by Potassium Cyanide—Parenteral administration of potassium cyanide will produce disseminated demyelinating lesions of the white matter throughout the nervous system Donaggio's technique shows the stages through which the degenerated areas pass These resemble the lesions seen in Schilder's disease and the author suggests that this represents one of the rare occasions on which experimental lesions in animals are identical with the changes observed in acquired human disease

Reversible Functional Changes in Optic Nerve in Quinine Intoxication—The amblyopia and blindness which may occur when quinine hydrochloride is administered is due to primary degeneration of the nerve fibres which may be demonstrated by Donaggio's technique and is not due to secondary effects induced by vascular changes This initial stage of primary degeneration is reversible

Strahlentherapie

Berlin vol 62 May 18 1938 Heft 1

Vegetative Nervous System and *X* Rays—R Glauner
A New X Ray Effect—K Staunig and J Lobering
Protracted *X* Ray Dosis—K Nitze and H Iven
Irradiation of Curved Surfaces—A Proppe
Radium Moulds made of Wax and of Dental Impression Compound—W Luther
The Fiction of the Effective Dose (*Wirkungsdose*)—L Fiedler
The Fiction of the Effective Dose (*Wirkungsdose*) Remarks on the Paper by Fiedler—H Holthusen
Standards of German Roentgen Society (DRG) Rules for Measuring X Ray Dose in Medical Practice
Teaching of Radiology in Germany—H Mayer
Principles of Radiotherapy of Inflammatory Conditions—W v Wieser
Effect of *X* Rays on Cellular Metabolism—D Laszlo and W Fleischmann
Mode of Action of *X* Rays on Inflammatory Processes—F Freund
Conservative Treatment of Gynaecological Inflammatory Conditions by Means of *X* Ray—H Wintz
Effect of Weak *X* Ray Doses in Gynaecological Affections—E Gaizago
X Ray Therapy of Whitlow—O Spitzenberger
X Ray Therapy of Tonsilitis—G Schwarz
Different Phases of Effect of *X* Ray Treatment of Tonsils and their Significance for Radiation Therapy of Different Affections of Tonsils—F Windholz
X Ray Therapy of Acute Inflammatory Perionsillar Infiltration—A Frank
X Ray Therapy of Calcaneal Spur—L Pokorny
X Ray Therapy of Absolute Glaucoma—G Wachner
X Ray Therapy of Neuritis—H Hammer

X Ray Treatment of Whitlow—The author advises small doses not more than a total of 400 to 500 *r* in daily doses of 50 *r* In more chronic cases doses of 100 *r* may be given every second day up to a total of 500 to 800 *r* Whitlows of

trophic origin as in syringomyelia, for example do not respond to this treatment

X Ray Treatment of Calcanean Spur—This has proved successful in a number of cases The following technique was used field 6 by 8 cm four applications at intervals of five days 110 r at each sitting 160 kV filter 0 5 mm of copper and 1 0 mm of aluminium The series was repeated after eight weeks A third series may be given at a later date

Virchows Archiv fur Pathologische Anatomie und Physiologie und fur Klinische Medizin

Berlin vol 302 June 17 1938

Importance of Pathological Anatomy of Domestic Animals in Comparative Pathological Anatomy—J Dobberstein
Pancreatic Fat Necrosis in Cyprinoid Fishes—M Plehn
Vascular Changes in Diffuse Sclerodermia—M Masugi and Ya Shu
Pathological Anatomy and Histology of Lymphogranulomatosis—H v Braitenberg
Case of Inflammatory Stenosis of Large Intestine—F C Meltz
Ten Cases of Accessory Pulmonary Tissue in Animals—I P Sjolte and M J Christiansen
Bone Marrow and Blood Picture in Sensitized Animals—H Holderlin
Autolysis of White Blood Cells in Buffer Solutions of Various H Ion Concentrations—W Hagemann
Swim bladder Inflammation in Fish—J Jahnel
Lymphogranulomatosis—K Stojalowski
Endophlebitic Spleen Tumours Comparison of Endophlebitic Tumours of Spleen in Cases of Kala azar and Banti's Disease—G Oberson
Development and Fate of Umbilical Artery Study of Vascular Pathology—G Schallock
*Relation of Thrombosis Emboli and Apoplexy to Weather—P H Kayser
Intraneural Growth of Optic Nerve Glioma—W Eickhoff
Study of Normal Thyroid Glands from Patients in Coastal Regions of Turkey and especially from Region of Istanbul—O Saka
Effects of Carbon Monoxide and Coal Gas on Growth of Tissue Cultures—E Rix and L Ehrhardt
Renal Damage in Oxalic Acid Poisoning—H Tobben's

Thrombosis Embolism Apoplexy and the Weather—Post-mortem examination of 253 persons showed that the formation of thromboses and the onset of apoplexy are more frequent in warm weather than in cold weather or when a damp south wind prevails, but are infrequent during a period of settled weather No seasonal fluctuations were observed in the occurrence of vascular diseases Thromboses seldom occur in countries with continental climates Patients sensitive to weather react pathologically to every change in weather Fat people tend to thromboses more than thin ones It is suggested that the active factor in weather is possibly atmospheric electricity which may affect the vegetative nervous system by way of the skin and thus lead to retardation of blood flow and to thrombosis

Wiener Archiv fur Innere Medizin

Vienna vol 32 May 31 1938

Studies of Objective Factors in Hunger and Satisfaction of Appetite—J Monaunt
*Nerve and Hormone Regulation of Basal Metabolic Rate—W Winkler
Effect of Weak X Ray Irradiation on Production and Composition of Lymph of Dogs—J Granatowicz
Pathogenesis of Acute Thrombopenic Purpura Purpura after Sedormid—A Vogel

Regulation of Basal Metabolic Rate—The figure expressing the basal metabolic rate is the sum of the metabolic processes of the tissues during rest, especially of liver and muscle Three endocrine glands—the pituitary thyroid and adrenal—have an influence partly directly and partly through the peripheral and central nervous system There is a centre for the regulation of all these functions in the middle brain

Thrombopenic Purpura—Purpura occurring after the administration of sedormid is not due to a toxic condition but is purely allergic Chronic cases are caused by recurrent allergic reactions while the drug is being administered The platelets completely disappear within a few hours and reappear two to three days after the medication has been stopped Apart from one case of purpura cerebri the patients recovered completely

Zeitschrift fur Immunitatsforschung und Experimentelle Therapie

Jena vol 93 May 1938

Comparative Studies of Immunizing Capacities of Diphtheria and Tetanus Formol Toxoid—M v Eisler and F Gottdenker
Effect of Minimal Doses of Other Bacteria on Fever Produced by H paratyphosus—S Nukada and T Yoshu
Effect of Minimal Doses of Bacteria on Fever Produced by Gonococci—S Nukada and T Yoshu
Ultracentrifugation of Immune Bodies and Normal Bactericidal Serum Constituents—A Gratia and L Goreczky
Further Studies of Specificity of Tumour Antigens—G Alessandro and E Saladino
Phenol Saline as Preservative for Rabies Virus—G Olah
M L Modification of Precipitation Test for Syphilis—S Slopek
Reactions Pseudo-reactions and Method of Partially Inactivating Complement (Selective Stabilization)—L Fleck
Fixation of Complement by Herpes and Varicella Sera—A Hassko L Varga and M Thoroczkay
Technique of Hangarutziu Deicher Reaction—O Ketelsen
Studies of Action of Different Diphtheria Anatoxins—G Poch and E Schurz

Zeitschrift fur Infektionskrankheiten, Parasitare Krankheiten und Hygiene der Haustiere

Berlin vol 53 July 2 1938

Contributions on So-called Borna's Disease (Brain ill) and Infectious Anaemia of Horses—K Holz
Bartonella Infection among Cattle—O Nieschulz
Pathological Anatomy and Histology of Swine Paratyphus—Hermann Meissner
Are Rats Concerned in Distribution of Contagious Abortion?—A Sanfelice
*Diagnosis of Abortus Bang Infection (Brucellosis) of Cattle by Serological Methods—M Seelemann and A Pfeiffer
Yolk Agglutination in Chick Dysentery—E R Stollowa

Serology of Brucellosis—The authors describe in detail two procedures for the determination of brucellosis infection by flocculation—the Sachweh reaction and the Meinicke reaction—as applied to blood serum, whole milk, and milk serum The relative merits of the reactions, the consistency of the results given, and the applicability of the methods in practice are discussed Seventeen photogravure reproductions illustrate the text

Zeitschrift fur Kinderheilkunde

Berlin vol 60 June 20 1938

Schaumann's Benign Granulomatosis—O Naumann
Course of Infantile Cramp Diseases and Effect of X Rays upon Them—E Wittermann
Rickets and Development of Hand in First Years of Life—E Graser
*Influence of Vitamin E on Maternal Lactation and Infantile Growth—G Gaedke and C Bennholdt Thomsen
Phosphorus Esters in Human Cow and Goat Milk—G DeToni and G Gorini

Vitamin E—Gaedke and Bennholdt-Thomsen came to the conclusion after a long series of experiments that vitamin E has no effect whatever on the quantity of milk in the breast nor on the growth of the infant Vitamin E has been stated to have a galactogogue action, but this the authors disproved in humans and rabbits The milk of women to whose diet vitamin E had been added contained no more fat than normal human milk

Zeitschrift fur Urologie

Leipzig vol 32 June 1938

*Question of Haematogenous Origin of Bladder Purpura and Non-specific Bladder Ulcer—E Meyer
Vitamin C in Urinary Diseases—C E Alken
Question of Primary Closure of Bladder in Suprapubic Prostatectomy (Harris Operation)—Th Hryntschak
Indications and Technique of Artificial Withdrawal of Urine—E Pflaumer
Criticism of Artificial Urinary Bladder—F de Gironcoli
Scheele's Plastic Operation on Bladder with a Ring of Small Intestine—H Friedrich
Addendum to Intestinal Siphonage Bladder—L Seiffert

Bladder Purpura—Twenty three cases of bladder purpura and fifty two cases of non specific bladder ulcer are analysed In the great majority of cases some primary septic focus could be demonstrated The author inclines to the view that these bladder lesions are causally related to the presence of oral and other septic foci and stresses the importance of dealing with these primary lesions

Take THE BURBERRY *With You*



Then, if the bright morning does turn out to be a drenching afternoon or the warm breeze change to a biting Nor'-east wind, you're certain of being dry and comfortable

Under its protective cover there is comforting warmth on cold days complete security from penetrating rain airylight freedom on the closest day

The Burberry therefore has the virtues of three coats in one —

DUST COAT for hot days
WEATHERPROOF for wet
OVERCOAT when it's cold

Patterns prices and illustrated models on mention of the British Medical Journal'

BURBERRYS LTD
HAYMARKET, LONDON, S W 1

This VALUABLE INFORMATION is YOURS — for the asking

This is material of vital interest to every physician who is faced with the treating of gonococcal infections

1 A concise easy to read resume of recent literature on the treatment of these conditions by *Fever Therapy*

2 A booklet which describes in full the Victor Inductotherm—a short wave diathermy unit utilising *electromagnetic induction*—favoured agent for inducing 'artificial fever"

3 An announcement of an important new development—the all metal air conditioned, low priced Victor Fever Cabinet—designed to simplify and expedite the application of fever therapy

Regardless of whether or not you now use hyperpyrexia as a therapeutic measure, you will gain from studying this group of informative pamphlets We have them ready the handy coupon will bring them to you

WITHOUT OBLIGATION

VICTOR X-RAY CORPORATION Ltd
15-19, Cavendish Place, London, W 1

Please send me the group of booklets dealing with Fever Therapy and the Inductotherm

Name

Address

Town

AV2

A Solution to a HEALTH PROBLEM

Sunshine and blue skies farms and homesteads nestling among mountains and hills blossoms of peach and plum filling the valleys with colour the perfume of orange groves the profusion of wild flowers the camp fire and the thrill of wild game in the Low Veld the picturesque kraals and laughter-loving natives the quest of open roads trailing to far horizons the sparkling air of the High Veld sea and sun bathing on golden beaches the bright warm days and cool starlit nights—these memories and the joyous feeling of health and fitness after my last holiday in South Africa will lure me back there before long

These are a recent visitor's impressions of a South African holiday

Those concerned with problems of health might well consider the benefits to be derived from exchanging the rigours of a European Winter for Sunshine and blue skies It is now only a fortnight's voyage to

SOUTH AFRICA

Illustrated brochures including one entitled Medicinal Springs of South Africa are obtainable from the Travel Bureau South Africa House London W C.2

In acting as an executor or trustee, the Westminster Bank aims at putting itself in the position of a private trustee It is therefore its practice to employ the family solicitor, if there is one, or any other solicitor the client may name, by such means the Bank succeeds in combining domestic tradition with business efficiency A book showing the advantages of corporate executorship and the terms of appointment may be had at any branch or at the branch situated in B M A House, Tavistock Square, W C 1

WESTMINSTER BANK LIMITED

THE YORKSHIRE INSURANCE
COMPANY LIMITED Established 1824

Links with the Medical Profession

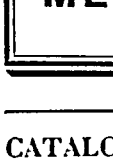
i One of the three Offices which operate and administer the Pension and Insurance Schemes arranged by the B M A for its own Members and for National Health Insurance Practitioners
ii The Office which guarantees the indemnity granted to Members of the Medical Defence Union in respect of Damages and Costs awarded in actions contested by the Council

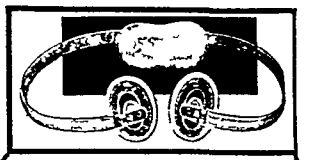
Needs of the Professional Man

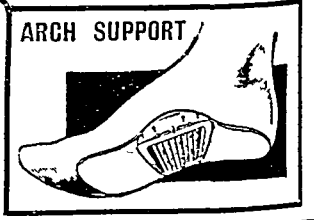
i Life Assurance contracts to meet individual requirements
ii All classes of insurance transacted, including non cancellable Sickness Insurance Trusteeships and Executorships also undertaken

Chief Offices YORK - - - - - ST HELEN'S SQUARE
LONDON "YORKSHIRE HOUSE," 66-7 CORNHILL, E C 3

If you have any OVERDUE ACCOUNTS
which require firm but tactful handling write to —
NORWICH & EAST OF ENGLAND MEDICAL PROTECTION SOCIETY
2 & 4, VALENTINE STREET, NORWICH
(*Prospectus on application*)

CATALOGUE OF SECOND-HAND SURGICAL INSTRUMENTS

OSTEOLOGY, MICROSCOPES, POST FREE Telephone Temple Bar 2206
Half Sets of Osteology Articulated Skeletons
and Disarticulated Skulls and Microscopes
MILLIKIN & LAWLEY, 67 & 68, CHANDOS PLACE, STRAND, W C 2
(Adjacent to Charing Cross Hospital Medical School)


DOCTORS PRESCRIBE
the famous
SALMON ODY BALL & SOCKET TRUSS
Most scientific and reliable yet devised Perfect support comfort resiliency
Single 30/- Double 50/
Most of our clients are sent to us by Doctors
WRITE FOR BOOKLET
NOTE NEW ADDRESS
SALMON ODY LTD
Truss Makers for 130 years
74, NEW OXFORD ST.,
LONDON, W C 1
Phone Museum 2313

ARCH SUPPORT


NAME PLATES
in BRONZE or BRASS
Estimates and Sketches sent free
H K LEWIS & Co Ltd
Medical and Scientific Stationers,
136, Gower St, London, W C 1

NAMEPLATES of chrome Brass Bronze
Send for Illustrated Brochure and Price List
F B HALL & CO 445 New Cross Rd. S E 14 TIDeway 3318

NAME PLATES
in BRONZE and ENAMEL or BRASS
Send details for sketch or leaflet
S J & A HERD Tel Clerkenwell 441
30 CLERKENWELL ROAD E C 1

NAME PLATES Brass Bronze Stainless Steel
REDUCED PRICES
Send for List 18 to the actual Makers
F OSBORNE & Co, Ltd Tel Euston 40
117, Gower Street, London, W C 1

"Suitable for persons with a rheumatic tendency"
(*Vide Report The Royal Institute of Public Health and Hygiene*)
ACKERMAN-LAURANCE
General Agents (Wholesale only) to U K and Colonies
"Dry Royal" *A sparkling wine with low sugar content*
ANDERSON DOBSON & CO LTD 13 COOPERS ROW LONDON E C 3

Obtainable everywhere
Per bottle - 8/6
Per half bottle 4/6
Per quarter bottle - 2/6
N B—Write for a useful attachment of U K Telephone (pedestal style) holding Memo Block sent post free on application
Telephone Royal 1792/3

IMPORTANT NEW EDITIONS

DISEASES OF THE EYE

By SIR JOHN HERBERT PARSONS C.B.E. D.Sc. F.R.C.S. I.R.S. Consulting Ophthalmic Surgeon University College Hospital London

New (fifth) Edition 21 Plates (10 in Colour) and 310 Text figures. 18/-

A TEXTBOOK OF SURGICAL PATHOLOGY

By C. F. W. ILLINGWORTH M.D. F.R.C.S.Ed. and B. M. DICK M.B. F.R.C.S.Ed. Lecturers in Clinical Surgery University of Edinburgh

New (3rd) Edition (In the Press) Illustrations (

J. & A. CHURCHILL LTD.,
104 Gloucester Place London W.1

FREQUENT MICTURITION

"YBWET ABSORBENT BAGS
Male day pattern 35/-
New Model Female day pattern /-

"DUPLEX BAGS
Male or Female day and night, 0/-

"SANITUBE"
For helpless bedridden patients 70/-

Our bags catch all leakage, causing mind and body Invisible under clothing and easily emptied Now worn world wide. Special patterns for motorists and aviators

Diagrams etc. on request from
HILLIARD 123 Douglas Street Glasgow C.2

MONTREUX & ZERMATT
Delightful Alpine Holiday Private Escorted Tour Limited Numbers First class Hotel No Night Travel 15 days 17½ gns including excursions. Vacancies Sept 3 Also same date to NORWAYS FJORDS — 26 gns
LESLIE LING'S PRIVATE TOURS,
28, Victoria Street, London, S.W.1
(ABBey 2159) MJ

NAME PLATES in Bronze and Enamel
Stainless Steel Brass or Chromium
Actual Makers Quick Delivery Low Price.
The WHITE BRONZE Co 100 London Rd., CROYDON

BARNWOOD HOUSE,
GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS Within two miles of the G.W. Railway and L.M. & S. Railway Stations at Gloucester the Hospital is easily accessible by rail from London and all parts of the United Kingdom It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres Voluntary Patients of both sexes are also received for treatment Special accommodation for Lady Voluntary Patients is also provided at the MANOR HOUSE, which has its own private grounds and is entirely separate from the Main Hospital For particulars as to terms etc. apply to G. W. T. H. FLEMING M.R.C.S. L.R.C.P. D.P.M. Medical Supt.
Telephone No. 6 07 Barnwood

SPRINGFIELD HOUSE
Near BEDFORD (Phone 3417)

For Mental Disorder with or without Certificates
Resident Physician CEDRIC W. BOWER.
Ordinary Terms Five Guineas per week. (Including Separate Bedrooms where suitable.)
Interviews in London by Appointment.

BISHOPSTONE HOUSE BEDFORD

A select Private Mental Home for Ladies Certified and Voluntary with separate House and Gardens for Voluntary Boarders Under personal supervision of a Resident Mental Specialist and Psychiatrist.—Medical Supt. Dr. J. LANGHAM MACAULAY Tel. Bedford 2703

CITY OF LONDON MENTAL HOSPITAL, DARTFORD KENT

Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upwards.

CRICHTON ROYAL, DUMFRIES
FOR
NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy. Cases of alcoholism and drug addiction are admitted. The Physiotherapy Department has separate and fully equipped for X-ray work Pelvic therapy short wave therapy electro-therapy and hydrotherapy (swimming bath Turkish and Vichy douches Prohibitories treatment electric and Turkish bath cabinets etc.) There is a fully equipped gymnasium under qualified instructors Facilities are provided under special recreational directions for golf tennis and other outdoor games including golf course, cricket football and hockey grounds lawn tennis and squash courts croquet and bowling greens

The Hospital has its own Cinema Library and Hairdressing Saloon Terms include regular motor drives.

Private rooms suites or villas are available and special nurses can be provided

The Hospital grounds extending to nearly 1,000 acres are situated in delightful country and include an extensive farm (Home Farm) gardens and orchards

As the Hospital is well endowed terms are exceptionally moderate e.g. First Department 3 to 5 guineas per week Second Department and 1 guineas per week Voluntary and certified patients are received Medical Certificates and any further information as to admission of patients For prospectus necessary forms and further information apply to

Physician Superintendent P. K. McCOWAN J.P. M.D. F.R.C.P. D.P.M. Barrister at Law
July 1st Tel. Dumfries 1119

SHAFTESBURY HOUSE, FORMBY BY THE SEA Nr. Liverpool

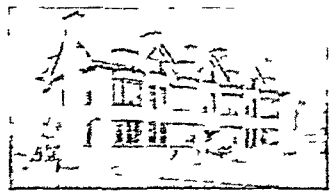
Specially built and licensed for the care and treatment of a limited number of Ladies and Gentlemen suffering from Nervous and Mental Breakdown Voluntary and certified patients received. Ladies also admitted as Temporary Patients without Certification Terms moderate

Apply RESIDENT PHYSICIAN who may be seen at 31 Rodney Street Liverpool by appointment.
Tel. No. 8 Formby

ALCOHOLISM,
OTHER DRUG HABITS, FUNCTIONAL NERVOUS DISORDERS, INSOMNIA

Old Hill House Chislehurst (25 mins from London) is charmingly situated in quiet secluded grounds Billiards and outdoor recreations Under new management with added accommodation ladies and gentlemen are admitted for treatment. Fees 6 to 8 guineas Special terms for long periods For illustrated prospectus write to the Medical Superintendent or Matron Phone Chislehurst 451

OLD HILL HOUSE
CHISLEHURST - KENT



HOME FOR EPILEPTICS
MAGHULL (near LIVERPOOL)
FARMING and OPEN AIR OCCUPATION for PATIENTS

A few vacancies in 1st and 2nd Class Houses FEES 1st Class (men only) from £3 p.w. upwards. 2nd Class (men and women) 32/- p.w.

For further particulars apply
C. EDGAR GRISEWOOD A.C.A.,
Secretary 20 Exchange Street East Liverpool 2

THE GROVE HOUSE,
CHURCH STRETTON SHROPSHIRE.

A private Home for the care of and treatment of a limited number of Ladies mentally afflicted Voluntary and Temporary Patients received under the new Mental Treatment Act 1930
Medical Superintendent Dr. McCLINTOCK

Tel. and Telegrams Haynes Brentwood 45
-LITTLETON HALL, BRENTWOOD ESSEX.

Large grounds 400 ft. above sea. HOME for ladies Mentally afflicted Voluntary Boarders received Stations Brentwood and Shenfield 1 mile. Liverpool St. 26 min. Apply Dr. HAYNES.

RUSSELLS
HEMEL HEMPSTEAD RD., WATFORD
Tel. phone WATFORD 391

A convalescent home for the care and treatment of mild and recoverable nervous conditions in both sexes. The house is situated high up in 40 acres of grounds 1½ miles from London at the terminus of the Watford by-pass One Medical Officer is in residence and two others are in daily attendance. Fees from ten guineas a week inclusive.

Apply RESIDENT MEDICAL OFFICER

THE GRANGE,
near ROTHERHAM

A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental Disorders Both certified and voluntary patients received Approved for temporary Patients This is a large country house with beautiful grounds and park five miles from Sheffield. Tel. No. 4030 Ecclesfield Res. Phys. GILBERT E. MOULD L.R.C.P. M.R.C.S. *Station* Grange Lane. L. & N.E. Rly.

WYE HOUSE BUXTON AND CLINIC,

for the PREVENTION and TREATMENT of NERVOUS and MENTAL DISORDERS in both sexes Large country house beautifully situated in its own ground Croquet lawns hard tennis court, billiards wireless installation throughout. Every facility for specialised modern treatment, including hydrotherapy occupational therapy ultra violet light diathermy Private rooms with special nurses if required Voluntary Temporary and Certified patients received.—For terms apply to the Medical Superintendent HELEN S. E. MURRAY M.D.
Nat. Tel. 130

HALLIFORD HOUSE, UPPER HALLIFORD, SHEPPERTON *Established in* 1841

This handsome secluded residence standing in a park of 36 acres, situated 16 miles from London is licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections

Voluntary or certified cases received Terms moderate. Patients are under the constant personal care of the Resident Medical Superintendent Dr. R. A. Stewart from whom full particulars can be obtained Tel. Sunbury-on-Thames 70

HERMOSA, TEIGNMOUTH, S. DEVON PAYING GUESTS

Highly recommended Restful home Good garden tennis courts. Hot and cold in bedrooms South aspect Terms from 3 guineas weekly Phone 84

WANTED SEPTEMBER FOR CHRONIC alcoholic lady 6 easily managed BOARD-RESIDENCE Country near London. Moderate terms.—Address No. 810, B.M.A. House Tavistock Square, W.C.1

ST. ANDREW'S HOSPITAL

FOR MENTAL DISORDERS

NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

President THE MOST HON THE MARQUESS OF EXETER C M G A D C

Medical Superintendent THOMAS TENNENT M D M R C P D P H D P M

This Registered Hospital is situated in 120 acres of park and pleasure grounds Voluntary patients who are suffering from incipient mental disorders or wish to prevent recurrent attacks of mental trouble temporary patients and certified patients of both sexes are received for treatment Careful clinical biochemical bacteriological and pathological examinations Private rooms with special nurses male or female in the Hospital or in one of the numerous villas in the grounds of the various branches can be provided

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders It contains special departments for hydrotherapy by various methods including Turkish and Russian baths the prolonged immersion bath Vichy Douche Scotch Douche Electrical bath Plombieres treatment etc There is an Operating Theatre a Dental Surgery an X ray room an Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment It also contains Laboratories for biochemical bacteriological and pathological research

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres Milk meat fruit and vegetables are supplied to the Hospital from the farm gardens and orchards of Moulton Park Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves in farming gardening and fruit growing

BRYN-Y-NEUADD HALL

The seaside house of St Andrew's Hospital is beautifully situated in a park of 330 acres Llanfairfechan amidst the finest scenery in North Wales On the North West side of the Estate a mile of sea coast forms the boundary Patients may visit this Branch for a short seaside change or for longer periods The Hospital has its own private bathing house on the seashore There is trout fishing in the park

At all the branches of the Hospital there are cricket grounds football and hockey grounds lawn tennis courts (grass and hard courts) croquet grounds golf courses and bowling greens Ladies and gentlemen have their own gardens and facilities are provided for handicrafts such as carpentry etc

For terms and further particulars apply to the Medical Superintendent (Telephone No 2356 and 2357 Northampton) who can be seen in London by appointment

HAYDOCK LODGE

NEWTON-LE-WILLOWS LANCASHIRE

Telegs Street Ashton in Makerfield *Phone* Ashton in Makerfield 7311

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntary temporarily or under Certificate Patients are classified in separate buildings according to their mental condition

Situated in park and grounds of 400 acres Self supported by its own farm and gardens in which patients are encouraged to occupy themselves Every facility for indoor and outdoor recreation For terms prospectus etc apply MEDICAL SUPERINTENDENT

NORTHUMBERLAND HOUSE,

GREEN LANES, FINSBURY PARK, N 4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses Conveniently situated and easy of access from all parts Six acres of ground highly situated facing Finsbury Park Voluntary and Temporary Patients received without certification Occupational Therapy Psychotherapy and other modern forms of treatment

Telephone STAMFORD HILL 2688 Telegrams SUBSIDIARY LONDON

Convalescent Home KEARSNEY COURT DOVER For further particulars apply to the Medical Sup

COURT HALL, KENTON, near EXETER,

for the treatment of eight Ladies, voluntary temporary, or certified patients Large gardens and own dairy

CLIFFDEN TEIGNMOUTH for early and convalescent cases A well appointed house with spacious balconies and extensive views of the South Devon coast Sub tropical gardens own dairy in 25 acres Private road to beach

		Telephones
Resident Physicians	BERTHA M MULES M D B S	Starcross 59
	ANNE S MULES M R C S, L R C P	Teignmouth 289

THE COPPICE, NOTTINGHAM

HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted Occupational Therapy Voluntary and Temporary Patients received

Tel 64117 *For terms etc apply to the Medical Superintendent*

BAILBROOK HOUSE, BATH

For sufferers from Nervous and Mental Disorders with or without certificates

The house is gloriously situated in wooded grounds of 20 acres with magnificent views of the City and the Avon Valley (See *Medical Directory* page 2322)

For terms apply A GUIRDHAM M A D M B Ch D P M Resident Physician

Telephone Batheaston 8189

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded grounds For Ladies and Gentlemen suffering from Nervous or Mental Illness Voluntary Patients Temporary Patients and Patients under Certificate are admitted for treatment Fees from 4 guineas a week upwards according to requirements A few vacancies exist for Ladies and Gentlemen at reduced fees on the recommendation of the Patient's own Physician Apply to Dr J A SMALL Telephone 80 Norwich Telegrams Small 80 Norwich

TYKEFORD ABBEY,

NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest standing in 15 acres of garden and grounds and is situated 14 miles from Northampton and 12 miles from Bedford on the main London to Northampton Road fifty miles from London Both sexes are accommodated Psycho-therapeutic Treatment is used extensively in suitable cases Radiant Heat X ray and Ultra Violet Light Diathermy and Foam Baths Billiards Tennis etc

Apply Dr D E M DOUGLAS-MORRIS Telephone Newport Pagnell 171

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS (20 miles from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on modern lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital Convalescent or mild cases can be treated in a delightful country mansion with extensive grounds known as

HIGHFIELD HALL,

situate about a mile away from the Hospital FEES TWO TO THREE GUINEAS PER WEEK For further particulars apply to the Medical Supt W J T KIMBER L R C P D P M

ST ALBANS, HERTS

CHISWICK HOUSE, PINNER, MIDDLESEX

Telephone PINNER 231

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes

A modern country house 12 miles from Marble Arch in beautiful secluded ground

Fees from 10 guineas per week inclusive Cases under Certificate Voluntary and Temporary patients received for treatment

Douglas Macaulay M D, D P M

STRETTON HOUSE,

Church Stretton Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders Alcoholism and the Drug Habit All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provisions of the Mental Treatment Act 1930 Bracing hill country (See *Medical Directory* p 2328)—Apply to the Medical Superintendent Phone 10 P O Church Stretton

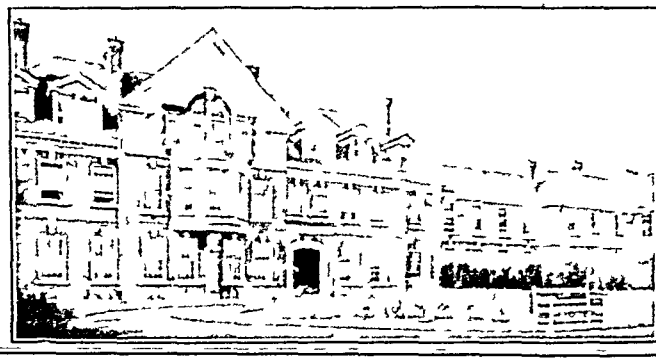
FENSTANTON,

CHRISTCHURCH ROAD

Streatham Hill, S W.2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders Certified Voluntary and Temporary Patients received Large Mansion with 12 acres of grounds (*See Medical Directory* p 2312) Apply Resident Physician *Telephone* Tulse Hill 7181

ROOKSDOWN HOUSE, NEAR BASINGSTOKE, HANTS.



FOR THE RECEPTION and TREATMENT OF
NERVOUS AND MENTAL ILLNESS

A Superior Modern and Attractive Building situated in a charming and bracing locality 400 ft above sea level
Extensive pleasure grounds with croquet tennis bowling and putting greens
Occupational Light and Hydro Therapy

ONE HOUR RAIL JOURNEY FROM LONDON

Ladies and gentlemen can be received as private patients on a voluntary basis or with certificates written application alone is required for the former

FEES including all necessaries except clothing from THREE to FIVE GUINEAS A WEEK

Brochure and information may be obtained from the MEDICAL SUPERINTENDENT
Telephone 15 Basingstoke

CALDECOTE HALL

NUNEATON
WARWICKSHIRE
(Phone Nuneaton 241)

Residential treatment of
FUNCTIONAL NERVOUS DISORDERS
Including Alcoholism and other Addictions
(Certifiable Cases are not received)

This beautiful mansion situated in the heart of the country (less than two hours from London by L.M.S.R.) and surrounded by charming pleasure grounds in which games and outdoor occupational therapy are available is devoted to the treatment of Functional Nervous Disorders by psychotherapeutic and ancillary methods

Illustrated booklet and particulars obtainable from F. E. CARVER, M.D., D.P.M. Resident Medical Superintendent

CAMBERWELL HOUSE, 33, Peckham Road, London, S.E.5

Telegrams PSYCHOLIA LONDON — FOR THE TREATMENT OF MENTAL DISORDERS — *Telephone* RODNEY 4 42 (2 lines)

Also completely detached villas for mild cases with private suites if desired. Voluntary patients received. Twenty acres of grounds. Hard and Grass Tennis Courts, Putting Greens, Bowls, Croquet, Squash Rackets, Recreation Hall with Badminton Court and all indoor amusements including Wireless and other Concerts. Occupational Therapy, Callisthenics and Dancing Classes. *X* ray and Actino therapy. Prolonged Immersion Baths. Operating Theatre. Pathological Laboratory. Dental Surgery and Ophthalmic Dept. Chapel. Senior Physician Dr. HUBERT JAMES NORMAN, assisted by three Medical Officers also resident and visiting Consultants.
An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary

The Convalescent Branch is HOVE VILLA, BRIGHTON, and is 200 feet above sea level

PECKHAM HOUSE, 112, Peckham Road, London, S.E.15

Telegrams Alleviated, London. Telephone Rodney 2641 2642

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders. Certified voluntary and temporary patients are received. Separate houses for treatment and accommodation of special cases adjoin the Institution. Occupational therapy, physical drill and other forms of modern treatment. There is a seaside branch, Kearsney Court near Dover, to which patients may be sent for treatment or on holiday. Motor drives are arranged when required. Tennis courts. Entertainments, dances and indoor amusements held throughout the year. Terms from £3 3s. per week. Illustrated prospectus and further particulars can be obtained from the Medical Superintendent.

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date. Lovely house and grounds (18 acres). Certified and uncertified cases taken. Facilities for going to the seaside

ESTABLISHED OVER 200 YEARS

Apply to Med. Supt. for illustrated brochure Tel. SALISBURY 2612

CHEADLE ROYAL HOSPITAL

CHEADLE CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay, N. Wales is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES.
The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary.
In addition to the Main Building there are separate villas. Extensive grounds. Hard and grass tennis courts, cricket and croquet grounds and a court for badminton. There are also wireless installations. Golf may be had within easy distance. Occupational therapy.
VOLUNTARY, TEMPORARY AND CERTIFIED PATIENTS received.
The Hospital is nine miles from Manchester, 10 minutes by rail from Liverpool and 3½ hours from London.
For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT.
Telephone GATLEY 2231 (3 lines)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds Detached Villas Chapel Garden and dairy produce from own farm Terms very moderate.

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds, with tennis courts etc. which Voluntary, Temporary or Certified Patients may visit by arrangement for long or short periods

Illustrated Brochure on application to the Medical Superintendent, The Old Manor, Salisbury 'Phone Salisbury 2251.

HARROGATE *for health....*

Health in the spa waters, which are specially suitable for treatment of Disorders of the Liver — congestion, cirrhosis, jaundice, cholecystitis, cholelithiasis, and tropical liver Diseases of the Skin — eczema, psoriasis, the coccal infections of the skin, etc the Chronic Rheumatic Diseases—Arthritis, Fibrositis, Neuritis, Gout, Hyperpiesis, Mucous Colitis, Functional Disorders of the Heart, Pelvic Disorders of Women, Convalescence from acute illness

..and holiday

A wide range of Sulphur waters, strong and mild, and of Iron waters, both saline and pure chalybeate, is available for dealing with the large group of disorders amenable to Spa treatment Prescribed diets obtainable at hotels and boarding houses, without extra charge **Complimentary and reduced price facilities for the Cure, Accommodation and Amusements are available for Members of the Medical Profession**

Full descriptive Booklet of cure and holiday facilities from Spa Manager, Information Bureau, Harrogate, 1, or any L N E R Office or Agency

"IT'S QUICKER BY RAIL"
Cheap monthly return tickets to Harrogate from all stations Any train, any day

TOR-NA-DEE SANATORIUM
MURTLE DEESIDE ABERDEENSHIRE
FOR THE DIAGNOSIS AND TREATMENT OF ALL FORMS OF TUBERCULOSIS

Managing Director DAVID LAWSON, M D, F R S E

Southern aspect Low rainfall Pure bracing air Sheltered grounds Beautiful surroundings All modern equipment for diagnosis and treatment including operating theatre **No extra charge for X Rays, Artificial Pneumothorax, Ultra-Violet Light, or other special treatment**

Day and Night Nursing Staff All bedrooms have central heating electric light, hot and cold running water, and wireless (headphones) Comfortable and airy public rooms

Medical Superintendent J M JOHNSTON M B M R C S D P H For terms and prospectus apply to the Secretary Telephone CULTS 107

PENDYFFRYN HALL SANATORIUM
PENMAENMAWR, NORTH WALES
All Modern Methods of Treatment Available

Ideally situated for the treatment of Tuberculosis Sheltered from E and N E winds Climate mild and bracing Low rainfall high average of sunsh... The Sanatorium is situated in its own park There are miles of graduated walks through pine gorse and heather rising to 1 000 ft and commanding extensive sea and mountain views Central heating electric light X ray installation Wireless in all rooms Full day and night nursing staff Special ... supply from a tuberculin tested herd Easily accessible from LONDON (4½ hours) MANCHESTER LIVERPOOL BIRMINGHAM and the North

Resident Physicians **Dennison Pickering M D J W Pugh M B B Ch**

For particulars apply to the Secretary Pendyffryn Hall Penmaenmawr North Wales P or ...

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S S W, sheltered from North and East, elevation 800 feet Pure bracing air **Special Treatment by Artificial Pneumothorax (X ray controlled) Tuberculins and Ultra-violet Rays** are available when necessary without extra charge X ray plant Fully equipped Dental Department Electric light Radiators hot and cold baths and Wireless in all rooms Up to date main drainage

Terms 5 gns to 7½ gns a week inclusive

M ... COLERET ... HOFFMAN B A M B T C Dub *Asst Phys* MARGARET V HARRISON M B B S Lond *Pathologist* EDGAR ... DA ... M ... B C ... *Consulting Dental Surg* GEORGE V SAUNDERS L D S ... *Sec* The Cotswold Sanatorium Cranham Gloucester *Tel* 81 and 82 WITCOMBE *Grams* HOFFMAN

NEW LODGE CLINIC, WINDSOR FOREST

This Clinic was founded in 1921 in order to provide for the scientific investigation and treatment of disease by a team of physicians and specialists.
All forms of non infectious medical cases are admitted special attention being paid to disorders of digestion and metabolism arthritis anaemias asthma heart and kidney disease and functional and organic nervous disorders
Particulars can be obtained on application to the Secretary New Lodge Clinic Windsor Forest Berks
Telephone 181 and 182 Winkfield Row

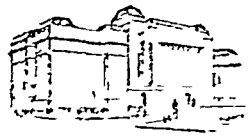
THE CLINIC

20 Devonshire Place
London, W 1

Tel Welbeck 4411 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns to 18 gns per week (Average—14 gns) 8 Operating Theatres
150 State Registered Nurses Resident Medical Officers (for emergencies)
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary



DOCTORS OWN SPA for RHEUMATISM

Sunny Pistany

Mud from Pistany in packs ready for home use Simplest and most economical treatment may be entrusted to any patient. Cost 6s for 40 treatments Literature on request.

VOLCANIC-SULPHURIC MUD SPRINGS
in delightful surroundings
21 DAYS
INCLUSIVE CURE
Special facilities for doctors and their wives
Second Class Fare with Sleeper £12 18 0 return.

Particulars from
PISTANY AGENCY LTD 310 Regent Street London W 1 *Tel* LANgham 4214 or PISTANY SPA BUREAU 25 Cockspur Street S W 1 *Tel* WHItehall 2994



THE STANBOROUGHS HYDRO

Delightfully situated in private wooded park of 60 acres 300 feet above sea level. Only 18 miles from London

Recent structural alterations have greatly improved the facilities Additions to the equipment include the installation of 100 KV X Ray etc

The well regulated Diet Department for the supervision of individual diets the Physiotherapy Departments including Hydrotherapy Electrotherapy Light Therapy Occupational Therapy in addition to outdoor amusements and the lawns and gardens make The Stanboroughs very desirable for rheumatic and metabolic disturbances neuroses and fatigue states

Surgical and Maternity Section—
Two Resident Physicians

Medical Superintendent —
J E CAIRNCROSS L R C P & S

Prospectus and full information on application to the Manager

The Stanboroughs Hydro
Stanborough Park
Watford, Herts

Telephone Garston (Watford) 2626

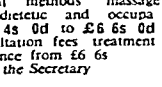
Smedley's
Great Britain's Greatest Hydro
Matlock

Full range of Hydriatic Treatments including Electrical and Manual Remedial Exercises Medical Massage Diathermy Ultra Violet Infra Red Faradic Galvanic Static Ionic Medication Inhalations Radiant Heat Baths Continuous Baths Douche Massage Vapour Baths Special Baths Sitz Baths Foot Baths Spinal Douche Colonic Irrigation Nauheim Baths Oxygen Baths Carbonic Acid Baths Brine Baths Pine Baths Peat Baths Sea Water Baths Sea Water Swimming Pool Fresh Water Swimming Pool Needle Baths Electric Baths Aperient Waters Mineral Waters Natural Gas Baths Over 60 trained Male and Female Nurses Masseurs Attendants etc

Terms 13/ to 18,6 per day inclusive board
Illustrated Brochure MJ on request.
Resident Physicians
G C R HARBINSON M B B Ch B A O (R U I) R MacLELLAND M D C M
Phone No 17 Grams Smedleys Matlock

A SPA UNDER ONE ROOF

In Rockside are combined all the amenities of a modern spa including treatment rest, and entertainment.
SHELTERED SITUATION SPACIOUS GROUNDS HIGHLY QUALIFIED STAFF
The Baths and Treatment Rooms occupy a special wing accessible by lift from all floors and are fully equipped for every form of physical treatment including the most modern hydrological and electrical methods massage and remedial exercises dietetic and occupational therapy Terms £4 4s 0d to £6 6s 0d
Inclusive terms for consultation fees treatment board residence and attendance from £6 6s
Write for Tariff to the Secretary
Consulting Physician
C R L ESTRANGE
ORME M B B Ch
(Camb) M R C P (Lond)



ROCKSIDE PHYSIOTHERAPEUTIC ESTABLISHMENT
MATLOCK

TORQUAY
GRESHAM COURT HOTEL

RECENTLY OPENED A small luxury Hotel 2 mins Sea almost on level Luxurious comfort combined with an earnest desire to please
The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure M" TEL 3638

EXPERIENCED COACHING IN PHYSIOLOGY Pathology and Medicine by M D Lond (Hons) M R C P Lond B Sc Physiology Lond All exams Classes held—Address No 790 B M A House Tavistock Square W C 1

EPILEPSY

Attendance at school is a necessary part of the satisfactory treatment of Epilepsy in Children

COLTHURST HOUSE SCHOOL

meets all the requirements of children of middle class parentage Extensions made necessary by the success of the school have created several vacancies

Only bright and intelligent boys and girls are eligible for admission

Apply to the Director Colthurst House School Warford, Alderly Edge.

ST MARY'S HOSPITAL MEDICAL SCHOOL, W 2
(UNIVERSITY OF LONDON)

PRIMARY FRCS COURSE.

A Course of Instruction for the November EXAMINATION will begin on Monday September 19th 1938 Fee for the Course £16 16s or £9 9s for either section separately
For further particulars apply to the School Secretary

ADVICE ON THE CHOICE OF SUITABLE SCHOOLS AND TUTORS
for BOYS and GIRLS with prospectuses of recommended establishments will be given free of charge to parents stating age of pupil district preferred range of fees and type of school required.

J & J PATON
143 Cannon Street London E C 4
Publishers of
Paton's List of Schools & Tutors Post free 5/6.

"ECCLESFIELD," Staplehurst, Kent
(Removed from Ashford Middlesex)

PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large mansion beautifully situated in 100 acres of parkland Extensive views Home farm R C Chapel Under the management of the Sisters of the Good Shepherd Apply Rev Mother Tel Staplehurst 61

MIDDLESEX HOSPITAL
LONDON, W 1

FERENS INSTITUTE OF OTO-LARYNGOLOGY

Applications are invited for the **BERNHARD BARON RESEARCH STUDENTSHIP**, vacant on October 1st, 1938 and tenable at the Ferens Institute

The appointment is for one year in the first instance, but a suitable candidate will be eligible for re election for at least a year beginning on October 1st 1939

The honorarium is at the rate of £300 per annum with holiday leave amounting to one month in each twelve

Candidates must be males of pure British descent and citizens of Great Britain or Northern Ireland and must hold a registrable qualification The selected candidate will be expected to devote his whole time to research in connection with Anatomy Physiology or Pathology of the Nose, Throat or Ear, under the general direction of the two Senior Surgeons to the Department Full opportunities are offered for Clinical and Operative work No strict limits are placed upon the nature of the research undertaken, and in it the selected candidate may expect to avail himself to the full of the resources of the Department, both clinical and pathological These include a large and fully equipped laboratory, providing special facilities for and with a staff familiar with the technique of temporal bone preparation

Applications should reach the School Secretary, Middlesex Hospital W1 not later than September 3rd 1938

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)

CITY ROAD EC1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Dental Clinics and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Re dential) Nearly 2 000 patients annually

RALPH B CANNINGS Secretary

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17, RED LION SQ, LONDON, W C 1

FOUNDED IN 1882

by E S WEYMOUTH M A (Lond)

POSTAL OR ORAL PREPARATION FOR ALL MEDICAL EXAMINATIONS

SOME SUCCESSES

M D (Lond)	1901 37 (11 Gold Medallists during 1913 37)	413
M S (Lond)	1901 37 (including 4 Gold Medallists)	24
M B, B S (Lond)	*First* 1918 37 (Complete Exam)	255
F R C S (Eng), 1919-37	*Primary*	199
	Final	192
M R C P (Lond)	1919 37	286
D P H	(Various) 1906-37 (Completed Exam)	348
F R C S (Edin)	1918 37	65
M R C S L R C P	*Final* 1919-37 (Completed Exam)	606
M D	Various By Thesis Many successes	

Preparation for the above also for Medical Preliminary and all examinations leading up to M R C S L R C P or M B of various Universities also for M R C P (Edin) D P M D O M S D T M & H D L O D C H D A D M R E M M S A L M S S A D C O G and some exams of Dominions Universities

ORAL CLASSES

M R C P M D Primary and Final F R C S F R C S (Edin) also Final M B B S and M R C S L R C P Museum and Micro cope Work Also Private Tuition

MEDICAL PROSPECTUS (47 pp)

CONTENTS The method and the cost of entering the Medical Profession *Particulars of all Medical Examinations* Postal Courses and Oral Classes Suggestions for the Higher Medical Examinations Suggestions for the Higher Surgical Examinations Suggestions for the Special Diploma Examinations Refresher Courses Open Entrance Scholarships How to prepare for Medical Practice Hints for writing Theses

Medical Prospectus free along with list of Successes on application to the Principal 158 159 & 160 Temple Chambers Temple Bar Avenue E C 4 (Telephone Holborn 2181)

MEDICAL CORRESPONDENCE COLLEGE

19, Welbeck Street, London, W 1

PROVIDES COACHING FOR ALL MEDICAL EXAMINATIONS

POSTAL, ORAL CLINICAL, AND PRACTICAL

by a Staff of highly qualified Tutors Honours men and Gold Medalists

Courses may be commenced at any time for the newer Diplomas

Diploma in Anaesthetics
Diploma in Child Health
Diploma in Psychological Medicine
Diploma in Laryngology & Otology
Diploma in Radiology
Diploma in Tuberculosis
Mastery of Midwifery
M C O G, and D C O G

Remarkable percentage of first attempt successes at all the higher medical examinations

The Guide to Medical Examinations sent post free on application gives full information relating to the various higher examinations

The following booklets may also be had post free —

How to Pass the M R C P London
How to Pass the F R C S England
Hints on writing a Thesis for the M D degree

SEND COUPON BELOW

Name

Address

Examination in which interested

STAMMERING, SPEECH DEFECTS

BEHNKE METHOD Established 1880 Classes non residential treated at 39 Earl's Court Sq S W 5 and in residence in the Summer holidays at Miss BEHNKE's house on the Chilterns Free consultation in education and treatment of stammering and other speech defects — Times Thoroughly physiological principles — Lancet The method is scientifically correct and perfectly effective — Guy's Hospital Gazette

Stammering Cleft Palate Speech Lisping Voice Miss BEHNKE 39 Earl's Court Sq S W 5

LONDON HOSPITAL MEDICAL COLLEGE AND DENTAL SCHOOL

THE WINTER SESSION will open on MONDAY, OCTOBER 3rd

The London Hospital serves the East End of London and with eight hundred and ninety beds is the largest voluntary Hospital in England The Out patient Department which deals with a hundred thousand new patients per annum is extensively used for teaching

The size of the Hospital necessitates a large number of resident medical officers Every year seventy resident house physicians and house surgeons and eighty salaried non resident clinical assistants are appointed from among recently qualified students The opportunities which these appointments offer for obtaining clinical experience are invaluable

The Medical College is attached to the Hospital and is staffed by Professors of Anatomy Physiology Bacteriology Chemical Pathology Morbid Anatomy and Medicine of the University of London

Special Courses in Anatomy and Physiology for the Primary F R C S and advanced courses in Surgery for the Final F R C S Examination and in Medicine for the M D and M R C P Examinations are held twice a year

Entrance Scholarships and prizes of the total value of £950 are awarded annually Research Funds to the value of £113 000 permit of assistance being given to students and graduates engaged in medical research

The Medical College contains a modern Museum of Pathology and a Library provided with all the current medical periodicals in charge of a full time librarian There is also an Athenaeum Club and Dining Hall a Gymnasium a Fives Court and two Squash Courts in the Students Hostel The Athletic Ground of 13 acres at Hale End is within easy distance of the Hospital

The Hospital is only 20 minutes from Charing Cross and Baker Street Stations For those who wish to live in immediate proximity to the Hospital there is accommodation for seventy five students in the Students Hostel

Further details may be obtained from the Dean Dr A E Clark Kennedy M D F R C P Physician to the Hospital and Fellow of Corpus Christi College Cambridge who is always pleased to meet students wishing to see the Hospital and College and to whom application for admission should be made

Turner Street London E 1

THE ROYAL CANCER HOSPITAL (FREE)

(Incorporated under Royal Charter)

FULHAM ROAD LONDON S W 3

The Course of Study in **PHYSICS** and **MEDICAL RADIOLOGY** qualifying for the Diploma in Radiology of the University of London and the Royal Colleges of Physicians and Surgeons will be held as usual at the above Hospital and commence on Monday October 3rd 1938

Application should be made as soon as possible to the Secretary at the Hospital from whom all particulars can be obtained

CLEMENT COBBOLD Secretary

F.R.C.S (Edin.)

EDINBURGH POSTAL COURSES

Full details of above and Oral Classes — H C ORRIN F R C S Surgeon's Hall Edinburgh

DIPLOMAS IN MEDICAL RADIOLOGY

ST BARTHOLOMEW'S HOSPITAL, E.C.1

A complete course of study for —

(a) The ACADEMIC DIPLOMA of MEDICAL RADIOLOGY University of London and

(b) The DIPLOMA of MEDICAL RADIOLOGY Conjoint Board

will be given by St Bartholomew's Hospital and College beginning Monday 3rd October 1938

Tuition will be provided for both Parts I and II of the above.

If accommodation is available a limited number of students will also be accepted for a course of instruction in Practical Radiology for Part II of the Diploma in Medical Radiology and Electrology of Cambridge University

Application should be made to the Dean of the Medical College, St Bartholomew's Hospital E.C.1

LONDON HOSPITAL MEDICAL COLLEGE

PRIMARY FELLOWSHIP EXAMINATION

A SPECIAL COURSE OF INSTRUCTION for the above Examination will begin on Monday September 12th

The fee for the Course is 15 guineas

Further particulars may be obtained from — DR A E CLARK-KENNEDY M.D. F.R.C.P. Dean, Turner Street, London, E.1

LONDON HOSPITAL MEDICAL COLLEGE

F.R.C.S.

A Course of Instruction for the FINAL FELLOWSHIP EXAMINATION will begin on Thursday, September 1st 1938. Fees (exclusive of Operative Surgery) 25 guineas. Operative Surgery 10 guineas.

Further particulars may be obtained from — DR A E CLARK-KENNEDY M.D. F.R.C.P. Dean, London Hospital Medical College, Turner Street, London, E.1

DIPLOMA IN ANAESTHETICS — D.A.

DIPLOMA IN CHILD HEALTH — D.C.H.

Courses of Postal and Oral preparation for these examinations may now be commenced

For full details write to the SECRETARY Medical Correspondence College, 19 Wellbeck Street, London, W.1

UNIVERSITY OF LONDON

The Senate again invite applications for the UNIVERSITY CHAIR OF RADIOLOGY tenable at the Royal Cancer Hospital. The holder of the Chair will be Head of the Department of Radiology at the Hospital. Salary £2,000 a year.

Applications (twelve copies) must be received not later than first post on September 20th 1938 by the Academic Registrar, University of London, Senate House, London, W.C.1, from whom amended particulars should be obtained.

NORTH EAST LONDON POST GRADUATE COLLEGE.

PRINCE OF WALES'S GENERAL HOSPITAL, N.15

The Practice of the Hospital is limited to Medical Practitioners. Particulars from J. BROWNING ALEXANDER, M.D., Dean.

ROYAL COLLEGE OF PHYSICIANS OF LONDON

The next ordinary PROFESSIONAL EXAMINATION for the MEMBERSHIP will commence on WEDNESDAY, OCTOBER 5th, 1938.

Candidates are required to give twenty-one days notice in writing to the Registrar of the College of their intention to present themselves at the Examination, and to transmit, not later than the Bye-Laws require, the certificates and testimonials required by the Bye-Laws and Regulations.

Candidates who propose to submit published work to the Censors for consideration prior to the examination are requested to give early notice of their intention to do so, and should convey such work to the Registrar with as little delay as practicable.

HENRY LETHEBY TIDY, M.D., Registrar.

11, Chandos Street, Cavendish Square, London, W.1.

DERBYSHIRE EDUCATION COMMITTEE

SCHOOL MEDICAL SERVICE

ASSISTANT SCHOOL MEDICAL OFFICER (Male)

Applications are invited for the post of Assistant School Medical Officer (male) at a salary of £400 per annum, by annual increments of £25 to £450 per annum, together with a travelling allowance in accordance with the County scale.

Candidates must be registered medical practitioners of at least three years standing. The duties will include work under the Maternity and Child Welfare Service and experience in this work and in Medical Inspection is desirable.

The appointment will be a superannuable post under the Local Government and Other Officers' Superannuation Act, and the successful candidate will be required to pass a medical examination.

The officer appointed will not be allowed to engage in private or consulting practice, but will be required to devote the whole time to the duties of the office and will act under the direction of the School Medical Officer.

Forms of application may be obtained from the undersigned to whom they should be returned completed together with copies of not more than three recent testimonials on or before September 5th, 1938, endorsed "Assistant School Medical Officer." The appointment will be terminable by three months' notice on either side.

County Offices, Matlock. W. M. ASH,
St. Mary's Gate, Derby. School Medical Officer.

UNIVERSITY OF GLASGOW

BARCLAY LECTURESHIP IN SURGERY AND ORTHOPAEDICS IN RELATION TO INFANCY AND CHILDHOOD

The Selection Committee gives notice of a Vacancy in the Barclay Lectureship in Surgery and Orthopaedics in Relation to Infancy and Childhood tenable at the Royal Hospital for Sick Children, Glasgow.

The post carries with it the appointment as a VISITING SURGEON to the Royal Hospital for Sick Children. Salary (for the combined post) £700.

Information regarding the Lectureship may be obtained on application to the Secretary of the University Court. The University, Glasgow, W.2, to whom applications should be sent not later than September 30th 1938.

August, 1938. J. S. MUIRHEAD, Secretary of University Court.

BRITISH POSTGRADUATE MEDICAL SCHOOL

Applications are invited for the post of RESIDENT ANAESTHETIST on the staff of the British Postgraduate Medical School at Hammersmith Hospital (L.C.C.), Ducane Road, Shepherd's Bush, London, W.12. The appointment will be for six months to commence duty on October 1st 1938.

Salary will be at the rate of £1 0 per annum with board, lodging and laundry. Preference will be given to candidates who have held a similar appointment.

Applications with copies of testimonials should be sent to the Dean, British Postgraduate Medical School, Ducane Road, Shepherd's Bush, London, W.12, not later than the morning of Wednesday, August 31st 1938.

BRITISH POSTGRADUATE MEDICAL SCHOOL

There are two vacancies for HOUSE SURGEONS to the Surgical Unit, British Postgraduate Medical School, Hammersmith Hospital. The appointments are for six months and are not renewable.

Salary £105 per annum with board, residence and laundry. Duties to commence on October 1st 1938. Duties are mainly in General Surgery. Applicants must have held a previous House appointment.

Applications with copies of testimonials should be sent to the Dean, British Postgraduate Medical School, Ducane Road, Shepherd's Bush, London, W.12, not later than the morning of Wednesday, August 31st 1938.

KENT EDUCATION COMMITTEE

SCHOOL MEDICAL SERVICE

APPOINTMENT OF WHOLE-TIME ASSISTANT SCHOOL MEDICAL OFFICER (Ophthalmic)

The Committee invite applications for the post of Assistant School Medical Officer (Ophthalmic). Diplomas in Ophthalmology will be considered an advantage.

Salary £[illegible] per annum, plus travelling expenses.

The appointment is subject to the provisions of the Local Government and Other Officers' Superannuation Act, 19[illegible], and is terminable by three months' notice on either side. The successful candidate will be required to pass a medical examination, and to produce satisfactory physical fitness.

Applications, stating age, full qualifications and experience, and accompanied by copies of three testimonials, should be forwarded to the undersigned by September 2nd, 1938.

No other form of application will be issued, and any application received from [illegible].

CONSTANT LONDER, M.D.,
School Medical Officer.

Sessions House, Maidstone,
August 2nd, 1938.

APPLICATIONS ARE INVITED IN WRITING from suitable candidates for the EUNICE OAKES RESEARCH FELLOWSHIP at the HOSPITAL FOR SICK CHILDREN, Great Ormond Street, London, W.C.1, tenable from January 1st 1939.

Candidates must be medically qualified and fully equipped technically and by experience to conduct research work upon the prevention and cure of Children's Diseases. They must be under 35 years of age and the salary is to be not less than £700 per annum.

Applicants who should give full particulars of the candidate and of the proposed line of research and be accompanied by references and copies of recent testimonials, should be addressed to the undersigned.

July 1938. H. F. RUTHERFORD, Secretary.

CITY OF MANCHESTER

CRUMPSALL HOSPITAL (1,543 Beds)

The Public Health Committee invites applications from registered medical practitioners for the post of RESIDENT ASSISTANT MEDICAL OFFICER at the above-named hospital.

The salary for the appointment is £400 per annum with board, residence and laundry, in addition, subject to the Manchester Corporation conditions of service. The duties of the appointment are mainly of a medical nature.

The appointment will be made in the first instance for a period of six months, renewable for a further six months but not renewable thereafter.

Full information and forms of application may be obtained from the Medical Officer of Health, Town Hall, Manchester 2, and applications for the post must be received by him not later than September 3rd 1938.

Town Hall, Manchester, August 12th 1938. F. E. WARBRECK HOWELL, Town Clerk.

CITY AND COUNTY OF NEWCASTLE UPON TYNE

BARRASFORD SANATORIUM (100 Beds)

RESIDENT MEDICAL ASSISTANT

Applications are invited for the above post from duly qualified and registered Medical Practitioner who have held a previous resident appointment.

The sanatorium is fully equipped for the treatment of male and female cases of pulmonary tuberculosis.

The salary in respect of the appointment which is tenable for one year only is £[illegible]0 per annum with board, lodgings, etc. The post does not provide facilities for the taking of the D.P.H.

Applications on the prescribed form which can be obtained on application to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne must be submitted not later than Saturday, September 3rd 1938.

CITY AND COUNTY OF NEWCASTLE UPON TYNE.

NEWCASTLE GENERAL HOSPITAL (600 Beds)

APPOINTMENT OF ASSISTANT RADIOLOGIST

Applications are invited from duly qualified and registered Medical Practitioners for the whole-time appointment of ASSISTANT RADIOLOGIST in charge of the Deep Therapy Department at the above-mentioned Hospital. Salary £600 per annum rising by two annual increments of £50 to £700.

Applications which should give full details of training and experience, together with copies of two testimonials, should be submitted to the Medical Officer of Health, Health Department, Town Hall, Newcastle-upon-Tyne 1, not later than Saturday, September 3rd 1938.

ROYAL NAVAL MEDICAL SERVICE

Vancancies exist for Medical Officers in the Royal Navy, and applications are invited for entry in September, 1938

Candidates below the age of 28 years are preferred, and they must be registered under the Medical Acts No examination in professional subjects will be held, but candidates will be required to attend for interview by a Selection Board

Selected candidates will be entered for Service for a period of three years, which if desired is usually extended to five years at the discretion of the Admiralty

Officers who leave the Service at the end of the initial period of three years will be eligible for a gratuity of £400, and those who leave at the end of five years for a gratuity of £1,000

At the end of five years' Short Service, permanent commissions will be given to selected officers who wish to make the Naval Medical Service their permanent career Officers transferred to the permanent list will receive a gratuity of £1,000 (less Income Tax)

Full opportunities exist for transfer to the permanent list, and periods of unemployed or half pay are very rare The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Opportunities are available for officers on the permanent list for postgraduate study, to specialise, to take higher examinations, and to obtain further qualifications

Naval Medical Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers

Copies of the regulations for entry and conditions of service, including rates of pay, allowances and retired pay, may be obtained from the Medical Director-General of the Navy, Admiralty, S W 1, and from the Deans of all Medical Schools

Applications for entry from intending candidates must be received not later than August 31st, 1938

ROYAL NAVAL DENTAL SERVICE

Applications are invited for appointment to commissions as DENTAL OFFICERS in the ROYAL NAVY

Candidates who must be British subjects below the age of 28 years must hold the degree or diploma of a British University or College of Surgeons and be registered under the Dentists Acts or Medical Acts Unmarried candidates are preferred No examination in professional subjects will be held but candidates will be required to attend at the Admiralty for interview and for physical examination as to their fitness for service in any part of the world

Successful candidates will be appointed to short service commissions as Surgeon Lieutenants (D) and will receive a grant of £50 towards the cost of providing the necessary uniform on entry Vacancies in the permanent list will be filled by selection from among officers holding short service commissions who desire to make the Royal Naval Dental Service their permanent career Officers not transferred to the Permanent List will on the termination of their short service engagement after six years service be eligible for a gratuity of £1 000

Opportunities are available for officers on the permanent list for post graduate study The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Naval Dental Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers

Application Form and copies of the regulations for entry and conditions of service rates of pay and allowances etc may be obtained from the Medical Director General of the Navy Admiralty S W 1 and from the Deans of Dental Schools

NORTH RIDING INFIRMARY Middlesbrough

(General Hospital 143 Beds Three Residents)

WANTED SENIOR HOUSE SURGEON to take charge of Surgical Department and Casualty Cases Candidates must be unmarried and of British nationality Forms will be sent to applicants who have had a year's hospital appointment

Salary at the rate of £150 per annum with board residence and laundry

Applications stating qualifications age and previous experience should be accompanied by copies of three recent testimonials and delivered to the undersigned on or before Saturday August 27th 1938

GERALD V KENYON
Secretary Superintendent

COUNTY BOROUGH OF HALIFAX

THE HALIFAX GENERAL HOSPITAL
(400 Beds)

JUNIOR RESIDENT MEDICAL OFFICER
(Male)

Applications are invited from duly qualified registered Medical Practitioners for the above appointment

Salary £150 per annum together with board residence and laundry The appointment is for a term not exceeding one year and is not renewable

Forms of application and conditions of appointment can be obtained from the Medical Officer of Health Powell Street Halifax

Completed applications together with copies of not more than three recent testimonials endorsed Junior Resident Medical Officer must be forwarded so as to be received by the undersigned not later than Monday August 29th 1938

Canvassing either directly or indirectly will be a disqualification

The Council has not adopted a superannuation scheme

The Town Hall PERCY SAUNDERS
Halifax Town Clerk
August 6th 1938

COUNTY BOROUGH OF WEST HARTLEPOOL

PUBLIC ASSISTANCE COMMITTEE

ASSISTANT (RESIDENT) MEDICAL OFFICER

Applications are invited from fully qualified ladies under 45 years of age for the appointment of Assistant Medical Officer at HOWBECK INFIRMARY West Hartlepool containing 356 beds Salary £350 per annum rising by annual increments of £5 to £450 per annum together with furnished rooms washing and rations valued at £160 per annum for superannuation purposes

The lady appointed will be required to devote her whole time to the service of the Corporation undertake to give lectures in Surgical and Medical Nursing to Probationer Nurses and carry out the instruction of the Superintendent Medical Officer

Applications stating qualifications age and previous experience should be accompanied by copies of three recent testimonials and delivered to the undersigned on or before Saturday August 27th 1938

W E TUNNELL
Public Assistance Officer
Public Assistance Office
Hart Road West Hartlepool

DERBYSHIRE COUNTY COUNCIL

WOMAN ASSISTANT MATERNITY AND CHILD WELFARE MEDICAL OFFICER

The Derbyshire County Council require the services of a fully qualified whole time Woman Assistant Maternity and Child Welfare Medical Officer with experience in Ante natal work Midwifery and Children's Diseases to hold (under the direction of the County Medical Officer of Health) consultations at the Ante natal and Maternity and Child Welfare Centres of the Derbyshire County Council and (under the like direction) to perform such other duties as appertain to the office

The salary will be £600 per annum rising by £25 per annum to £700 per annum

The appointment will be a designated post under the Local Government and Other Officers Superannuation Act and the successful candidate will be required to pass a medical examination

Forms of application may be obtained from the undersigned to whom they must be returned together with copies of not more than three recent testimonials not later than September 5th 1938

New County Offices W M ASH
St Mary's Gate County Medical Officer of Health
Derby
August 12th 1938

BLAENAVON URBAN DISTRICT COUNCIL

APPOINTMENT OF MEDICAL OFFICER OF HEALTH

The Council at a meeting to be held on September 14th 1938 will proceed to make the appointment of a Medical Officer of Health for the Urban District of Blaenavon at an annual salary of £90

In accordance with Article 12 of the Schedule to the Officers (Outside London) Regulations 1935 the appointment will in the first instance be for a specified term ending on March 31st next and the appointment may be determined at any time without notice by the Minister of Health or by the Local Authority with the consent of the Minister

Attention is directed to Art 6 of the above mentioned Order as to qualifications and in accordance with Article 9 the appointment will be subject to the approval of the Minister of Health

Written applications together with copies of testimonials to be forwarded to the undersigned not later than September 14th next

Blaenavon J G GWYN THOMAS
August 11th 1938 Clerk to the Council

CITY OF BIRMINGHAM

MENTAL HOSPITALS DEPARTMENT

RUBERY HILL AND HOLLYMOOR DIVISION

The Committee of Visitors invite applications from duly qualified medical men for the post of JUNIOR FULL ASSISTANT MEDICAL OFFICER. The successful candidate will be required to reside in the Hospital.

The commencing salary will be £350 per annum, with the usual emoluments of Board, Lodging, laundry and attendance. An increase of £40 will be granted on completion of twelve months satisfactory service, and thereafter increases of £45 per annum up to a maximum salary of £600 per annum. An additional £10 per annum will be paid to a holder of the D.P.M. qualification or to a medical man who on the D.M.M. after appointment. All fees received in connection with private work will be required to be paid into the Hospital Fund, but facilities for taking private patients and Coroner's cases and Coroner's inquests the fees can be retained.

A veteran who has served for at least three months in a medical or surgical division of a general hospital will be regarded as having essential qualification. Previous mental hospital experience is not essential but experience in the administration of anaesthetics is desired.

The candidate appointed will be required to pass a medical examination and will be eligible to join the superannuation scheme after one year's satisfactory service when he will be required to contribute under the Widows, Orphans and Old Age Contributory Pensions Act, 1929. He will be required to serve in such institution or institutions of the Mental Hospitals Committee as the Committee may from time to time direct. The appointment is subject to three months' notice on either side.

Applications, stating full particulars of qualifications, experience and appointments held, accompanied by copies of three recent testimonials, must be addressed to the undersigned so as to be received not later than September 1st, 1938.

Town Clerk's Office, Council House, Birmingham 1. F. H. C. WILTSHIRE, Clerk to the Committee of Visitors.

SURREY COUNTY COUNCIL

PUBLIC HEALTH DEPARTMENT

EPSOM COUNTY HOSPITAL
(200 Acute Beds, 126 Chronic Beds)

FIRST ASSISTANT MEDICAL OFFICER
(Acting Deputy Medical Superintendent)

Applications are invited from registered Medical Practitioners for the appointment of First Assistant Medical Officer at the Epsom County Hospital, Dorking Road, Epsom. The Hospital with Ewell Park Annexe provides accommodation for 376 patients at present but a programme of extension and improvement is contemplated which will increase the accommodation to 500 beds.

The Medical Officer appointed must have had considerable previous experience in surgical appointments and should preferably possess a Higher Surgical Qualification.

The tenure of the appointment is limited to a period of five years but the appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act, 1922. The cash salary is at the rate of £350 per annum rising by annual increments of £25 to a maximum of £400 per annum to either with full residential emoluments valued at £125 per annum. The First Assistant Medical Officer will receive an additional salary at the rate of £20 per annum while acting as Deputy Medical Superintendent.

Applications stating age, qualifications and experience and enclosing copies of not more than three recent testimonials should be addressed to the County Medical Officer, County Hall, Kingston-on-Thames, so as to be received not later than August 29th, 1938.

DUDLEY AUKLAND,
Clerk of the Council.

County Hall, Kingston upon Thames.
August 9th, 1938.

CITY OF LIVERPOOL

ASSISTANT RESIDENT MEDICAL OFFICER CITY INFECTIOUS DISEASES HOSPITALS

Applications are invited for the above appointment for a period of one year at a salary of £250 per annum together with the usual residential allowances. The person appointed will not be allowed to engage in private practice and will be required to devote whole time service to the duties of the office.

Candidates will be required to possess a registered Medical and Surgical qualification and should have a knowledge of Bacteriological methods.

Applications to be made upon forms obtainable from the Medical Officer of Health, Hospitals Department, Municipal Annexe, Dale Street, Liverpool, to be endorsed "Assistant Resident Medical Officer" and returned to the undersigned so as to be received not later than Wednesday, August 31st, 1938.

Municipal Buildings, Dale Street, Liverpool 2. W. H. BAINES, Town Clerk.
August 1938

COUNTY BOROUGH OF DARLINGTON

ASSISTANT MEDICAL OFFICER OF HEALTH

Applications from qualified Medical Practitioners are invited for the combined appointment of Assistant Medical Officer of Health for Tuberculosis, Public Assistance under the terms of the Public Assistance Order, 1930, and other Public Health duties (not including Committee Clerkship) for the Public Assistance Committee.

Applicants must not exceed 40 years of age and should have had at least three years' post graduate experience in general medicine and surgery and in Public Health work. The person appointed will be required to give full time service under the direction of the Medical Officer of Health to pass a medical examination to be contributor to the Superannuation Fund and to reside in a house provided by the Authority for which a rental of £40 per annum exclusive of rates will be charged.

The initial salary will be £500 per annum rising to £600 per annum by annual increments of £25 plus a full share of £100 per annum added fees or emoluments received will be paid over to the Local Authority. The appointment will be terminable on three months' notice.

Application forms may be obtained from the Medical Officer of Health, Health Centre, Green Street, Darlington, and completed and delivered to the undersigned, together with not more than three recent testimonials, not later than August 31st, 1938.

H. HOPKINS,
Town Clerk.

August 3rd, 1938.

COUNTY BOROUGH OF DERBY

DERBY CITY HOSPITAL

ASSISTANT RESIDENT MEDICAL OFFICERS

Applications are invited for the posts of Assistant Resident Medical Officers (male) at the above Hospital of 300 beds. This Hospital provides treatment for acute medical and surgical cases, obstetrics and children's diseases, etc.

Candidates must be registered in medicine and surgery. The appointments are for periods of six months, two months' notice of termination of duties may be given on either side. One successful applicant will be required to commence duties on or about September 1st and the other to commence during October.

Salary at the rate of £200 per annum with board and residence.

Applications stating age, experience and accompanied by three recent testimonials should be sent to the undersigned as soon as possible.

Public Health Department, 1 Derwent Street, Derby. CORDON LILICO, Medical Officer of Health.

LANCASHIRE COUNTY COUNCIL

BIDDULPH GRANGE ORTHOPAEDIC HOSPITAL

Applications are invited from duly qualified and Registered Medical Practitioners (unmarried) for the post of JUNIOR HOUSE SURGEON at the above Hospital which contains 88 beds.

Salary is at the rate of £200 per annum together with board, residence and laundry.

Preference will be given to candidates who have held resident hospital appointments and who are competent anaesthetists. The appointment will be for a period of six months in the first instance and for a further six months at the option of the County Council but will not be renewable after that time.

Applications with copies of two recent testimonials should be sent not later than September 3rd, 1938 to Dr. F. HALL, School Medical and Child Welfare Department, County Offices, Preston. Duties to commence October 1st, 1938.

County Offices, Preston. GEORGE ETHERTON, Clerk of the County Council.
August 15th, 1938.

COUNTY BOROUGH OF WOLVERHAMPTON

NEW CROSS HOSPITAL (350 Beds)

ASSISTANT MEDICAL OFFICER (RESIDENT)

Applications are invited from single gentlemen duly qualified for appointment as Assistant Medical Officer at the above Hospital which contains Medical, Surgical, Maternity, Children's and Isolation Departments and is modernly equipped. Experience in Anaesthetics a knowledge of Clinical Pathology and previous Hospital experience will be deemed additional assets.

Salary will be at the rate of £200 per annum with apartments, board, attendance etc. The appointment will be limited to a term not exceeding one year. Further information as to duties etc. may be obtained from the Medical Officer of the Hospital.

Applications stating age, qualifications and nationality, together with copies of recent testimonials should be addressed to—

Stafford Street, Wolverhampton. A. G. ALDRIDGE, Public Assistance Officer.

COUNTY BOROUGH OF BARNSLEY

ASSISTANT MEDICAL OFFICER OF HEALTH
(Clinical Duties)

Applications are invited from fully qualified registered medical practitioners for the above post which will be vacant from October 1st, 1938, at a salary of £600 per annum rising by annual increments of £50 to £600 per annum.

The duties of the post will consist mainly of those of a Resident Medical Officer for the Isolation Hospital of 110 beds and as Assistant in the Venereal Diseases Clinic. Additionally the successful candidate may be called upon to perform other duties in the Public Health and School Medical Services as may be determined by the Medical Officer of Health. The officer appointed will devote whole time duties to the post and will not be allowed to undertake any private practice.

The possession of a Degree or Diploma in Public Health will be an essential qualification.

The appointment will be to a designated post under the Local Government and Other Officers Superannuation Act, 1922, and the successful candidate will be required to pass a medical examination. The appointment will be determinable by three months' notice on either side.

Application forms can be obtained from the undersigned and should be returned accompanied by copies of not more than two recent testimonials and endorsed "Assistant Medical Officer of Health" not later than August 25th, 1938.

Town Hall, Barnsley. ERIC GILFILLAN, Town Clerk.
August 3rd, 1938.

MONMOUTHSHIRE COUNTY COUNCIL

ASSISTANT MEDICAL OFFICER

The Council invite applications from duly qualified and registered Medical Practitioners, male or female, not exceeding 35 years of age, holding a Diploma in Public Health and State Medicine for the appointment of Assistant Medical Officer to undertake mainly the Medical Inspection and Treatment of School Children and Maternity and Child Welfare work.

The salary will be £400 per annum rising by annual increments of £15 to £470 with third-class rail fares and subsistence allowance according to the Council's scale.

The successful candidate will be required to act under the direction and supervision of the County Medical Officer, to devote whole time to the service of the County Council and to reside in such place as the Council may determine.

The post will be subject to the provisions of the Local Government and Other Officers Superannuation Act, 1922.

A schedule of the duties to be performed together with conditions of appointment and a form of application can be obtained from the undersigned to whom applications accompanied by copies of not more than three recent testimonials are to be sent by September 1st, 1938.

The County Hall, Newport, Mon. D. ROCYN JONES, County Medical Officer.
August 5th, 1938.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

ASSISTANT TUBERCULOSIS OFFICER

The County Council of the West Riding of Yorkshire invite applications for the appointment of an Assistant Tuberculosis Officer. Candidates must be qualified in accordance with the Regulations of the Minister of Health. The possession of the D.P.H. will be an advantage.

Salary £500 per annum rising by annual increments of £15 to £700.

The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act, 1922.

Further particulars and forms of application may be had from the undersigned to whom applications together with copies of not more than three recent testimonials should be addressed not later than Monday, August 29th, 1938.

County Hall, Wakefield. J. CHARLES McGRATH, Clerk of the County Council.
August 1938.

COUNTY COUNCIL OF ROSS & CROMARTY

Applications are invited for the appointment of RESIDENT MEDICAL OFFICER (male) for Lewis Sanatorium and Infectious Diseases Hospital for a period of six months with option of extension. Salary at the rate of £200 per annum with board, lodging and laundry. Duties: Resident Medical Officer at the Sanatorium and Infectious Diseases Hospital and other Public Health duties as required by Medical Officer of Health or his resident Assistant.

Applications giving particulars of qualifications and previous experience and stating when able to take up duty, accompanied by six copies thereof and of testimonials to be lodged with the undersigned on or before August 27th current.

County Clerk's Office, Dingwall. T. S. H. BURNS, County Clerk.
August 12th, 1938.

COUNTY BOROUGH OF ROTHERHAM

DEPUTY MEDICAL SUPERINTENDENT ALMA ROAD HOSPITAL AND OBSTETRIC OFFICER

Applications are invited from fully qualified Medical Practitioners for the post of Deputy Medical Superintendent at the Alma Road Hospital Rotherham and Obstetric Officer at a salary of £750 per annum less emoluments to the value of £35 The successful applicant will be required to reside either at the said hospital or in such house as the Council may direct

Candidates must be qualified registered Medical Practitioners and must have held previous resident appointments in maternity hospitals and have had experience in ante natal work

The officer appointed will be responsible for the care and supervision of the obstetric work at the Alma Road Hospital and at Ferham House Maternity Home and in addition will be required to perform duties in the various maternity and gynaecological clinics at the hospital and elsewhere and to assist in the supervision of district midwives and any other duties assignable to midwifery The officer appointed will act under the direction of the Medical Officer of Health and the Medical Superintendent

The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination as to physical fitness

The appointment will be terminable by three months notice on either side

Applications stating age experience and qualifications accompanied by copies of not more than three recent testimonials and endorsed Deputy Medical Superintendent and Obstetric Officer should be received by the undersigned not later than Tuesday September 6th 1938

Forms of application may be obtained from the Medical Officer of Health Municipal Offices Rotherham

Municipal Offices CHAS L DES FORGES
Rotherham Town Clerk

COUNTY BOROUGH OF ROTHERHAM

OAKWOOD HALL SANATORIUM

ASSISTANT MEDICAL OFFICER

Applications are invited from duly qualified Medical Practitioners (male) for the post of Assistant Medical Officer Candidates must be under 35 years of age unmarried and of British nationality They must have held a resident hospital appointment (general) or have engaged in private practice Previous experience in the treatment of tuberculosis while being an additional qualification is not regarded as essential

The duties are those of resident medical officer at Oakwood Hall Sanatorium (100 beds) together with other work as required at the Fever Hospital or in other departments The post offers excellent opportunities for experience in all modern methods of diagnosis and treatment of tuberculosis

The salary is £300 per annum with board residence and laundry

The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 *and is for one year* being terminable at any time by two months notice on either side

Forms of application and addressed envelope may be obtained from the Medical Officer of Health Town Hall Rotherham and must be returned to the undersigned endorsed Assistant Medical Officer Oakwood Hall Sanatorium not later than noon on Tuesday August 30th Canvassing will be deemed a disqualification

Municipal Offices CHAS L DES FORGES
Rotherham Town Clerk

COUNTY BOROUGH OF ROTHERHAM

MEDICAL SERVICES COMMITTEE

ASSISTANT RESIDENT MEDICAL OFFICER

Applications are invited from fully qualified Medical Practitioners with the necessary knowledge and experience of hospital work for the appointment of a full time Resident Assistant Medical Officer at the Alma Road Hospital Rotherham at a salary of £350 per annum together with the usual emoluments The appointment will be made for a period of twelve months Candidates must be married registered practitioners of at least five years standing and must have had a resident appointment in general hospital or municipal hospital for at least six months

The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination

The assistant will be required to act under the general direction of the Medical Superintendent

Forms of application may be obtained from the Medical Officer of Health Town Hall Rotherham and must be returned endorsed Assistant Medical Officer Alma Road Hospital not later than noon on Tuesday August 30th

Municipal Offices CHAS L DES FORGES
Rotherham Town Clerk

ESSEX COUNTY COUNCIL

ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

The County Council of the Administrative County of Essex invite applications for the above appointment from duly qualified registered medical practitioners holding a Diploma of Public Health and not over 45 years of age

The salary will be at the rate of £500 per annum and will rise subject to satisfactory service by annual increments of £25 to £700 per annum Travelling expenses will be allowed

The appointment will be held by the successful candidate during the pleasure of the Council and will be determinable by the officer by three months notice in writing

The person appointed will be required to pass a medical examination and to contribute to the fund established by the County Council under the Local Government and Other Officers Superannuation Act 1922

The appointment will be subject to the Council's Sick Pay Rules and Regulations a copy of which will be forwarded on application

Applications on the prescribed form obtainable from the undersigned accompanied by copies of not more than three testimonials (which will not be returned) should be addressed to me and delivered at the County Hall Chelmsford not later than 10 a m on Monday September 5th 1938

County Hall E S HOLCROFT
Chelmsford Clerk of the County Council
August 16th 1938

SAINT PANCRAS BOROUGH COUNCIL

MATERNITY AND CHILD WELFARE DEPARTMENT

Applications are invited for MEDICAL OFFICERS to take charge of the following clinics The remuneration is 1½ guineas per session of two hours

ANTE NATAL CLINICS (MONTHLY)
Ampthill Square Centre Third Wednesday (mornings)
Camden Town Centre First second and fourth Tuesday (mornings)
Somers Town Centre Last Wednesday (mornings)
Kentish Town Centre First Friday (afternoons)
INFANT WELFARE CLINICS (WEEKLY)
Camden Town Centre Wednesday (mornings)
Kentish Town Centre Tuesday (afternoons)
Queen's Crescent Centre Wednesday (afternoons)
Queen's Crescent Centre Friday (afternoons)

No special application forms will be issued Applicants are requested to state their age qualifications appointments and experience and to transmit not more than three recent testimonials (copies only) They must also specify the clinic or clinics which they are prepared to undertake Further particulars will be supplied on request Applications must be received by the undersigned not later than Monday August 29th

St Pancras Town Hall A POWELL COKE
Euston Road N W 1 Town Clerk

CITY OF SHEFFIELD

KING EDWARD VII HOSPITAL Rivelin Valley Road

RESIDENT ASSISTANT MEDICAL OFFICER (woman) required on October 1st for the above Hospital which is for the treatment of Surgical Tuberculosis and other Orthopaedic conditions (140 beds) The officer appointed will be required to attend the Out Patient Department for Surgical Tuberculosis and the Orthopaedic Clinic of the Maternity and Child Welfare Centre Salary at the rate of £300 per annum with board and laundry Appointment for twelve months

Applications with testimonials should be sent as soon as possible to the Medical Superintendent

THE RADCLIFFE INFIRMARY OXFORD

Applications are invited from qualified men or women for the post of RESIDENT MEDICAL OFFICER to that section of the Infirmary consisting of 42 beds and dealing with the diagnosis and treatment of pulmonary tuberculosis known as the Osler Pavilion Headington Oxford is from October 1st 1938

Appointment will be for six months in the first instance

Salary at the rate of £120 per annum with board etc

Application with copies of testimonials must be forwarded to the undersigned at the Radcliffe Infirmary not later than September 5th

A G E SANCTUARY Administrator

SHEFFIELD RADIUM CENTRE AT THE ROYAL INFIRMARY SHEFFIELD

Applications are invited for the post of RADIOTHERAPIST at the above Centre Salary £600–£750 per annum according to experience

Applications stating qualifications and experience with copies of three recent testimonials should be sent to the undersigned not later than August 20th

A Y GREEN
Secretary

STAFFORDSHIRE COUNTY COUNCIL

ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

Applications are invited from medical men holding the Diploma of Public Health for the above post Candidates should have had at least three years experience in the practice of their profession subsequent to qualification Preference will be given to those who have held residential hospital appointments

The person appointed will work under the direction of the County Medical Officer and the duties of the office will include school medical and maternity and child welfare work in addition to such general public health work as may from time to time be prescribed

The salary will be at the rate of £500 per annum rising by annual increments of £25 to £600 per annum subject to a deduction of 5 per cent established under the Local Government and Other Officers Superannuation Act 1922

The successful candidate will be required to undergo a medical examination and to produce a birth certificate

The appointment will be subject to three calendar months notice on either side

Forms of application may be obtained from the undersigned and should be returned by first post on September 1st 1938 together with copies of not more than three testimonials

H L UNDERWOOD
Clerk of the County Council
County Buildings Stafford
August 16th 1938

HULL CORPORATION HEALTH DEPARTMENT

ANLABY ROAD INSTITUTION (HOSPITAL) 540 Beds

ASSISTANT MEDICAL OFFICER (WOMAN)

Applications are invited from unmarried or widowed women medical practitioners for the above appointment for a period of one year

Salary £350 per annum *together with an allowance* at the rate of £150 per annum for board and residence outside the hospital

The hospital is equipped with modern X-ray and Radium Departments

Application forms etc may be obtained from and should be returned duly completed to the undersigned not later than 10 a m on Monday September 5th 1938

NICOLAS GEBBIE M D
Health Department Medical Officer of Health
Guildhall Hull
August 15th 1938

COUNTY OF LANARK AND CITY OF GLASGOW

LIGHTBURN JOINT HOSPITAL Shettleston near Glasgow

Applications are invited from Registered Medical Practitioners with previous Infectious Diseases Hospital experience for the post of RESIDENT PHYSICIAN for the above Infectious Diseases Hospital

The salary will be at the rate of £350 per annum *(with board and lodging) rising* by annual increments of £25 to £400 per annum

Applications stating age experience etc with copies of three recent testimonials to be lodged not later than August 29th 1938 with the undersigned from whom any further particulars desired can be obtained

WALTER HENDERSON
Clerk to Joint Committee
Lanarkshire House 191 Ingram Street
Glasgow C 1 August 10th 1938

COUNTY BOROUGH OF SOUTHEND-ON-SEA

SOUTHEND MUNICIPAL HOSPITAL

The Health Committee of the Town Council invite applications for the appointment of an ASSISTANT MEDICAL OFFICER (male Grade II) at their Municipal Hospital situated at Rochford Essex (beds 475) Salary £350 per annum with full residential emoluments valued for superannuation purposes at £100 per annum

The duration of appointment is limited to one year Applicants must have had previous experience in the administration of Anaesthetics

Application on forms to be obtained from the Medical Superintendent Southend Municipal Hospital Rochford Essex should be returned to him on or before Monday September 5th 1938

Town Clerk's Office H J WORWOOD
Southend on Sea

BEDFORD COUNTY HOSPITAL

Wanted SECOND HOUSE SURGEON to take over his duties for a term of not less than six months He must be fully qualified and preferably married Salary £150 per annum with board lodging and laundry

Applications stating age nationality and qualifications to be sent to the Secretary Hospital Staff Committee with three recent testimonials

KENT AND SUSSEX HOSPITAL
Tunbridge Wells (110 Beds)

Applications are invited for the appointment of HOUSE SURGEON (male) Salary £150 per annum Board residence and laundry in the Hospital

The Hospital includes the following Departments Medical Surgical Ear Nose and Throat Ophthalmic Orthopædic Gynæcological X-ray and Electrotherapeutic Massage Pathological Venereal Diseases etc

Successful applicant will be required to take up duty on 1st September 5th 1938

Applications stating qualifications together with certificates of registration and copies of not more than three recent testimonials should be sent to the undersigned at once as post is

TOM B HARRISON
August 16th 1938 Superintendent Secretary

BIRMINGHAM AND MIDLAND EYE HOSPITAL (114 Beds)

Applications are invited from duly qualified Medical Practitioners for the post of RESIDENT SURGICAL OFFICER at the above Hospital Salary £100 per annum and £10 laundry allowance

The Resident Staff consists of a Resident Surgical Officer and three House Surgeons and in the event of one of the latter being promoted to the position of Resident Surgical Officer applicants should state whether they will be willing to accept appointment as House Surgeon at a salary of £130 (rising at the end of six months satisfactory service to £140) per annum

Applications, with testimonials and evidence of registration should be forwarded to—

Church Street, J W PEARCE
Birmingham 3 House Governor

KING EDWARD VII HOSPITAL WINDSOR
(100 Beds)

HOUSE SURGEON required beginning October (preferably with Ear Nose and Throat experience) for charge of Ear Nose and Throat beds and other special departments Applicants must be fully qualified men or women and registered and unmarried

Salary at the rate of £110 per annum to ether with board residence and laundry

Applications stating age qualifications and experience accompanied by testimonials should be sent to the undersigned not later than September 2nd

A E CHURCHER Secretary

KING EDWARD VII HOSPITAL WINDSOR
(100 Beds)

RESIDENT SURGICAL OFFICER required beginning October senior of six residents Applicants must be Fellows of a Royal College of Surgeons or hold a higher degree in surgery and unmarried

Salary at the rate of £100 per annum plus board residence and laundry allowance Appointment to be for six months in the first instance

Applications with copies of testimonials to be sent to the undersigned not later than September 2nd

A E CHURCHER Secretary

GENERAL INFIRMARY SALISBURY
(Voluntary Hospital 215 Beds)

HOUSE SURGEON (male) required to commence duty September 11th 1938

The appointment is for six months with the right of applying for reappointment for a further period of six months Candidates must be unmarried fully qualified and registered The Hospital is recognized under F R C S regulations Salary £115 per annum with board residence

Applications with copies of testimonials to be sent to the House Governor from whom a copy of the rules may be obtained

DERBYSHIRE ROYAL INFIRMARY DERBY
(General Hospital 372 Beds)
Recognized under F R C S Regulations

Applications are invited for the post of HOUSE SURGEON for General Surgery (male single) Candidates must be qualified and registered under the Medical Acts Salary will be £150 per annum with apartments board etc

Applications with copies of testimonials to be sent to the undersigned

ARTHUR TAYLOR
August 16th 1938 Superintendent and Secretary

EAST SUFFOLK AND IPSWICH HOSPITAL
(350 Beds) Eight Residents

Wanted immediately CASUALTY OFFICER (male British) Salary at the rate of £144 per annum with board apartments and laundry

Applications stating age qualifications and experience to be sent to the undersigned together with copies of three recent testimonials

The Hospital ARTHUR GRIFFITHS
Ipswich Secretary
August 20th 1938

NOBLE'S ISLE OF MAN HOSPITAL AND DISPENSARY
Douglas Isle of Man (112 Beds)

The Committee of Management invite applications for the post of (male) RESIDENT HOUSE SURGEON Candidates must be single have double qualifications and be registered under the Medical Acts The duties in addition to Ward and Dispensary Work comprise about 300 visits per annum to Out patients in their own homes Salary (with board and laundry in addition) £175 per annum which is usually augmented to about £250 per annum through opportunities which arise for special services

Applications stating age and experience, with copies of recent testimonials must reach the undersigned before August 7th The appointment may be held for twelve months and will be from October 1st

Westmoreland Road E K KELLY
Douglas Isle of Man. Hospital Secretary
August 6th 1938

MANCHESTER ROYAL INFIRMARY
SECOND RESIDENT CLINICAL PATHOLOGIST

The Board of Management of the Manchester Royal Infirmary invite applications for the above post to start on September 26th 1938 Applicants must hold a medical qualification and be registered

The duties are wholetime working under the Director of the Clinical Laboratory

Salary £110 per annum with board residence and allowance for laundry plus a proportion of fees

Ten sets of applications with two testimonials stating age, to be sent to the General Superintendent not later than August 31st 1938

By Order
F J CABLE
August 10th 1938 General Supt and Secretary

PRESTWICH MENTAL HOSPITAL
Near Manchester

LOCUM TENENS (with a possibility of permanency) male MEDICAL OFFICER age not exceeding 35 required at the above Hospital which is a training school Salary £7 7s per week with board lodging and laundry Copy testimonials only must be sent

Candidates must be unmarried and registered under the Medical Act Appointment terminable by one week's notice on either side

Apply as soon as possible stating age hospital and other experience qualifications and full particulars to the Medical Superintendent as above

MANCHESTER AND SALFORD HOSPITAL FOR SKIN DISEASES
(4 Beds 14 00 Out patients per annum)

HOUSE SURGEON

Applications are invited for the post of House Surgeon Must be registered The appointment is for six months from Oct 1st Salary at the rate of £110 per annum with board and residence

Applications with copies of three testimonials to be sent to the undersigned Quay Street Manchester not later than September 6th

JOHN NALL Secretary

MANSFIELD AND DISTRICT GENERAL HOSPITAL
Notts (110 Beds)

Application are invited for the post of HOUSE SURGEON (male) for the six months commencing September 14th Salary £150 per annum with board residence and laundry

Two other Resident House Surgeons

Applications stating age and qualifications together with copies of three recent testimonials to reach the undersigned as early as possible

V ASHWORTH Secretary

ROYAL ISLE OF WIGHT COUNTY HOSPITAL
Ryde Isle of Wight

HOUSE SURGEON (Senior Resident) wanted for October either sex unmarried qualified and registered State age and nationality Salary at the rate of £140 a year with board residence and laundry

Apply enclosing copies of testimonials to Secretary before Wednesday September 7th Return third-class fare for selected candidates

A S GORDON Secretary

ROYAL ISLE OF WIGHT COUNTY HOSPITAL
Ryde Isle of Wight

HOUSE PHYSICIAN with care of Casualty and Special Departments wanted for October either sex unmarried qualified and registered State age and nationality Salary at the rate of £130 a year with board residence and laundry

Apply enclosing copies of testimonials to Secretary before Wednesday September 7th Return third-class fare for selected candidates

A S GORDON Secretary

ST MARY'S HOSPITALS MANCHESTER
HONORARY ANÆSTHETIST

Applications are invited for the post of Honorary Anæsthetist Candidates should possess the Diploma in Anæsthetics and the successful candidate will be required to supervise anæsthetists generally to give instruction to the resident medical staff and pupil midwives and to conduct at least one weekly operating session

Application and three testimonials together with certificates of registration should be sent to the undersigned on or before September 3rd Candidate should forward 9 copies of their application and testimonials

V R WISE
Superintendent and Secretary

THE STAFFORDSHIRE GENERAL INFIRMARY STAFFORD
Appointment of HONORARY CONSULTING PSYCHIATRIST

The General Committee invite applications for the position of Honorary Consulting Psychiatrist Candidates must be duly qualified under the Medical Acts and have had previous experience in Mental diseases

Applications stating age and particulars of experience together with copies of three recent testimonials should be sent to the undersigned not later than first post on August 25th 1938

V E COLLINS Secretary
Stafford August 15th 1938

THE STAFFORDSHIRE GENERAL INFIRMARY STAFFORD
Appointment of HONORARY ANÆSTHETIST

The General Committee invite applications for the position of Honorary Anæsthetist Candidates must be duly qualified under the Medical Acts and have had previous experience in the administration of Anæsthetics

Applications stating age and particulars of experience together with copies of three recent testimonials should be sent to the undersigned later than first post on August 25th 1938

A E COLLINS Secretary
Stafford August 15th 1938

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY
Wigan (110 Beds)

Wanted for twelve months commencing October 1st 1938 RESIDENT MEDICAL AND SURGICAL OFFICER AND REGISTRAR Candidates must have held previous resident appointments at a hospital Preference will be given to those possessing the F R C S or M S Degree The salary is at the rate of £150 per annum with board residence and laundry

Applications giving proof of registration and not more than three testimonials to be sent to the undersigned as soon as possible

A STANLEY BRUNT
August 13th 1938 General Supt and Secretary

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY
Wigan (110 Beds)

A vacancy occurs for an HONORARY ASSISTANT SURGEON who must be legally registered to practise Medicine and Surgery and reside preferably within six miles of the Infirmary

Applications with copies of two recent testimonials stating age qualifications etc to reach the undersigned (from whom further information can be obtained) by Wednesday August 31st Canvassing will be a disqualification

By Order of the Board of Management
A STANLEY BRUNT
August 13th 1938 General Supt and Secretary

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY
Wigan (110 Beds)

Recognized under F R C S Regulation

HOUSE SURGEON (male) required October 1st 1938 for a period of six months Salary £110 per annum with board apartments and washing Staff consists of R S O and three House Surgeons

Applications stating age and qualifications with copies of three recent testimonials should be addressed to the undersigned as soon as possible

A STANLEY BRUNT
August 13th 1938 General Supt and Secretary

ROYAL SOUTH HANTS & SOUTHAMPTON HOSPITAL (c 6 Beds)

Applications are invited for the following appointment

One RESIDENT ANÆSTHETIST for the period ending December 31st 1938 at a salary of £150 per annum with board lodging and laundry Candidates must be male and unmarried

Applications accompanied by not more than three testimonials should be sent to the undersigned immediately

S W BARNES
House Governor and Secretary

ROYAL SALOP INFIRMARY SHREWSBURY
(156 Beds enlarging to 226 Beds)

APPOINTMENT OF RESIDENT SURGICAL OFFICER

Applications are invited from fully qualified men for the appointment of Resident Surgical Officer vacant September 1st

The appointment is for a period of twelve months at a salary of £250 per annum with board residence etc The Resident Surgical Officer is Senior Resident Officer of the Hospital

House Staff comprises House Physician and two House Surgeons

Applications stating age qualifications experience nationality and accompanied by copies of three recent testimonials to be sent to the undersigned not later than August 25th

Board Room J W NOBLE
August 8th 1938 Secretary Superintendent

SOUTHEND ON SEA GENERAL HOSPITAL

(235 Beds) Eight Residents
Hon Specialist Staff of Twenty Members

Applications are invited for the posts of

(1) RESIDENT ANAESTHETIST (male) salary £125 p a with board residence and laundry
(2) HOUSE SURGEON (male) including work in the Ear Nose and Throat Department salary £100 p a with board etc

The Hospital is recognized by the Royal College of Surgeons in respect of this post

The appointments are for six months

Applications with copies of two recent testimonials should be sent to the undersigned immediately

P H CONSTABLE Secretary

ROYAL EYE HOSPITAL
Pevensey Road Eastbourne

NON RESIDENT HOUSE SURGEON required to commence duty in August The appointment will be for six months in the first instance

Salary £100 per annum and allowance in lieu of board residence £175 per annum

Applications stating age qualifications and ophthalmic experience together with recent testimonials should reach the undersigned as soon as possible

Before engagement candidates have to be interviewed by the Hon Surgeon from whom further particulars could be obtained in person

H BYGRAVE Hon Secretary

ROCHDALE INFIRMARY AND DISPENSARY
(110 Beds)

The Board of Management invite applications for the appointment of SENIOR HOUSE SURGEON The salary attached to the appointment is at the rate of £250 per annum including board residence and laundry

Applications stating age nationality etc together with copies of three recent testimonials to be sent to the Secretary endorsed House Surgeon Conditions of the appointment may be had on application to the Secretary

Infirmary Office W WYNNE Secretary
Rochdale Lancs

ROTHERHAM HOSPITAL
(130 Beds)

CASUALTY HOUSE SURGEON

Applications are invited from qualified men for the post of Casualty House Surgeon Duties to commence as soon as possible will include work in the Ear Nose and Throat Department Excellent experience to be gained in the treatment of fractures Salary £150 per annum with full board residence and laundry

Applications with copies of recent testimonials should be sent to the Secretary G W ROBERTS 5 Moorgate Street Rotherham Yorks

ROYAL LANCASTER INFIRMARY
Lancaster
(140 Beds) Four Residents

Applications are invited for the post of SENIOR HOUSE SURGEON Salary £100 per annum with board residence and laundry The appointment is for six months in the first place and may be renewed for a further six months

Applications stating age qualifications experience and nationality together with copies of three testimonials to be sent to the undersigned

FRANK V MILNES
Superintendent Secretary

ROYAL LANCASTER INFIRMARY
Lancaster
(140 Beds) Four Residents

Applications are invited for the post of SECOND HOUSE SURGEON Salary £75 per annum with board residence and laundry The appointment is for six months

Applications together with copies of three recent testimonials to be sent to the undersigned

FRANK V MILNES
Superintendent Secretary

THE PRINCE OF WALES'S HOSPITAL
Greenbank Road Plymouth
(Formerly South Devon and East Cornwall Hospital) (264 Beds)

Applications are invited for the post of RESIDENT ANAESTHETIST and HOUSE SURGEON to the Special Departments

Salary £120 per annum with board residence and laundry

Appointment is tenable for six months and is subject to renewal Duties to commence September 10th

The Hospital is officially recognized for the surgical practice required before admission to the Final Fellowship Examination of the Royal College of Surgeons of England

Applicants must be registered under the Medical Acts Applications stating age and qualifications with copies of three recent testimonials to reach the undersigned not later than August 26th 1938

ARTHUR R CASH
August 6th 1938 Secretary

THE PRINCE OF WALES'S HOSPITAL
Greenbank Road Plymouth
(Formerly South Devon and East Cornwall Hospital) (264 Beds)

There are vacancies for two HOUSE SURGEONS at the above Hospital Applications are invited for the same Salary £120 per annum with board residence and laundry

Appointments are tenable for six months and are subject to renewal Duties to commence September 6th and 16th

The Hospital is officially recognized for the surgical practice required before admission to the Final Fellowship Examination of the Royal College of Surgeons of England

Applicants must be registered under the Medical Acts Applications stating age and qualifications with copies of three recent testimonials to reach the undersigned by August 26th 1938

ARTHUR CASH
August 6th 1938 Secretary

THE RADCLIFFE INFIRMARY OXFORD

Applications are invited for the following post on the Honorary Medical Staff

HONORARY PHYSICIAN to the Department of Physical Medicine

The successful candidate will have the right to carry on private practice in his department under conditions to be agreed upon between himself and the Committee of Management of the Infirmary The successful candidate will be required to reside in Oxford

Thirty copies of applications with testimonials with the names of three referees must be forwarded to the undersigned from whom further particulars can be obtained not later than Friday September 30th 1938

A G E SANCTUARY Administrator

WARNEFORD GENERAL HOSPITAL
Leamington Spa (164 Beds)

HOUSE PHYSICIAN required by September 30th Six months appointment Salary £150 per annum with board and laundry

Applications from qualified registered medical practitioners should be sent together with three recent testimonials to the undersigned by August 29th 1938

EDWARD L WIRGMAN
House Governor and Secretary
August 6th 1938

WORTHING HOSPITAL

Applications are invited for the post of HOUSE PHYSICIAN vacant on October 9th The appointment is for six months Salary at the rate of £130 per annum with board lodging and laundry

Candidates (male) should forward applications stating age nationality qualifications and experience accompanied by testimonials to the undersigned

A V OAKTON
August 5th 1938 Secretary Superintendent

WORTHING HOSPITAL

Applications are invited for the post of HOUSE SURGEON vacant now The appointment is for six months Salary at the rate of £130 per annum with board lodging and laundry

Candidates (male) should forward applications stating age nationality qualifications and experience accompanied by testimonials to the undersigned

A V OAKTON
August 5th 1938 Secretary Superintendent

THE ST HELENS HOSPITAL

Applications are invited for the position of JUNIOR HOUSE SURGEON (male) Salary £150 per annum together with board residence and laundry

Applications together with copies of three recent testimonials to be sent to the Secretary the St Helens Hospital St Helens Lancashire not later than August 31st

CARDIFF ROYAL INFIRMARY
(Associated with the Welsh National School of Medicine)

Applications are invited for the post of RESIDENT MEDICAL OFFICER

Duties will include case record keeping and teaching and Medical work under the direction of the Honorary Staff

Candidates must be Doctors of Medicine of a University of the United Kingdom or Members of one of the Royal Colleges of Physicians in the United Kingdom and must have previously held a Resident Hospital post

The salary will be at the rate of £ 00 per annum with board residence and laundry The appointment is for one year and the holder will be eligible to apply for reappointment and may retain office for three consecutive years

Further particulars may be obtained from the Medical Superintendent to whom applications (endorsed R M O) with not more than three testimonials (copies) must be sent by noon on Wednesday August 31st 1938

By Order of the Council
R ARMSTRONG
Medical Superintendent

HULL ROYAL INFIRMARY

Applications are invited from Registered Medical Practitioners for the post of HOUSE PHYSICIAN (male) to the Sutton Branch Hospital vacant September 2nd

Salary at the rate of £160 per annum plus residence board and laundry

The appointment will be for six months but will at any time be determinable by one month's notice on either side

The Branch Hospital is not a recovery annex but a General Hospital of 100 beds forty five of which are reserved for medical cases The post now advertised is approved by the University of London for the M D Branch I Examination

Applications giving particulars of age experience and nationality together with copies of recent testimonials should be addressed to the undersigned

R J CARLESS
August 5th 1938 House Governor

KING GEORGE'S SANATORIUM FOR SAILORS
Liphook Hants

(Seamen's Hospital Society) for the Treatment of Pulmonary and Non Pulmonary Tuberculosis

ASSISTANT MEDICAL OFFICER (single man or female) required as from September 1st for six months Salary at the rate of £200 per annum in the first instance Applications with copies of not less than three testimonials, to be sent immediately to the undersigned

F A LYON Secretary
Seamen's Hospital Society
Greenwich S E 10
Greenwich August 3rd 1938

THE CHILDREN'S HOSPITAL SHEFFIELD
(157 Beds)

Applications are invited for the post of HOUSE PHYSICIAN vacant September 1st 1938

The appointment is for six months Salary £100 per annum with board, residence and laundry Candidates (male and unmarried) who must possess registered qualifications should forward applications stating age nationality etc together with copies of three recent testimonials to the undersigned

T H G GARTLAND
Superintendent and Secretary

JENNY LIND HOSPITAL FOR CHILDREN
Norwich

Applications are invited for the post of RESIDENT MEDICAL OFFICER Salary £1 0 per annum board residence and laundry Candidates (male or female) who must possess registered qualifications should forward applications stating age experience etc together with copies of testimonials to the undersigned not later than the first post on Wednesday August 24th 1938

FRANK INCH
Secretary
August 12th 1938

BRISTOL ROYAL INFIRMARY

Applications are invited for the post of HOUSE PHYSICIAN for the six months commencing September 1st 1938 Salary at the rate of £100 per annum Candidates who must be duly qualified to send in their applications on forms to be obtained from the undersigned together with copies of not more than three testimonials

ELLIS C SMITH FCIS
Secretary and House Governor

MANCHESTER ROYAL EYE HOSPITAL

JUNIOR HOUSE SURGEON required Salary £1 0 per annum with residence, board etc Applications (with copies of testimonials endorsed House Surgeon to be addressed to the undermentioned

H R NORTH
Gen. Supt. and Secretary

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association, B M A House, Tavistock Square, W C 1 (in the case of Scottish appointments, with the Scottish Secretary, 7, Drumsheugh Gardens, Edinburgh)

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—(*contd*)	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY (*Medical Officer*)	MID-RHONDDA MEDICAL AID SOCIETY (*Assistant Medical Officer*)	MIDDLESBROUGH EDUCATION COMMITTEE (*Senior Assistant School Medical Officer*)
BLAENAVON MEDICAL SOCIETY (*Chief Medical Officer*)	NEATH AND DISTRICT (*Medical Aid Association*)	COUNTY OF ROXBURGH (*Assistant Medical Officer of Health*)
GILFACH GOCH GLAMORGAN (*Workmen's Medical Scheme*)	OGMORE VALLEY GLAMORGAN (*Llynfi Cwmdu Medical Aid Society*) (*Workmen's Medical Scheme*)	**DISPENSARY APPOINTMENTS**
LLWYNYPIA CLYDACH VALE, PENYGRAIG GLAMORGAN (*Workmen's Medical Scheme*)	OAKDALE, MON (*Medical Officer for Medical Aid Association*)	LIMERICK CITY (*Whole-time Dispensary Medical Officers*)

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association, B M A. House, Tavistock Square, W C 1

Town or District	Hon. Sec. of Division or Branch	Town or District	Hon. Sec. of Division or Branch	Town or District	Hon. Sec. of Division or Branch
NEW SOUTH WALES (*All Friendly Societies' Appointments*)	The Medical Secretary New South Wales Branch 135 Macquarie Street, Sydney N.S.W.	**VICTORIA** (*All Institute or Medical Dispensaries*)	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria.	**WESTERN AUSTRALIA** (*Contract and Lodge Practices*)	The Hon. Sec. Western Australian Branch Brit. h Medical Association Shell House 205 St. Georges Terrace Perth Western Australia.
QUEENSLAND (*Brisbane Associate Friendly Societies Institute*)	The Hon. Sec. Queensland Branch British Medical Association B M A House 2.5 Wickham Terrace Brisbane B 17				

August 17 1938 By Order of the Council G C ANDERSON, *Secretary*

JERSEY GENERAL HOSPITAL AND POOR LAW INFIRMARY

Applications are invited for the following posts (vacant October 1st 1938)
(*a*) HOUSE SURGEON (male)
(*b*) CASUALTY OFFICER and HOUSE PHYSICIAN (male)
The appointments are for six months subject to reappointment
Salaries £175 per annum
Board residence and laundry are provided
Applications stating age nationality and qualifications with recent testimonials to be addressed to the undersigned on or before Saturday September 3rd
General Hospital H I PLYMEN
Jersey C I Secretary Accountant.

BRISTOL EYE HOSPITAL
(82 Beds) (12 Private Patients)
1937 1 017 In-patients 17 794 Out patients.

Applications are invited for the post of JUNIOR HOUSE SURGEON Salary £100 per annum Senior post available after six months Vacant October 1st, 1938
Suitable experience for D O M S
Applications stating age and qualifications etc with three recent testimonials to reach the undersigned by August 27th next
D M BABER
Secretary and House Governor

BOSTON GENERAL HOSPITAL
(70 Beds)

RESIDENT MEDICAL OFFICER required to commence duty as soon as possible Salary £1 0 per annum with board residence and laundry The appointment is for six months, and is renewable
Applications stating age qualifications and previous experience together with copies of three recent testimonials should be addressed to the undersigned
GORDON EASTO Secretary

KELLING SANATORIUM HOLT NORFOLK

ement of the Kelling sire applications from suitable qualifications SUPERINTENDENT ... Norfolk (169 beds men) Preference will be given to applicants between the ages of thirty five and fifty who have administrative experience knowledge of modern methods of Sanatorium treatment and X ray work The position is open as from October 1st 1938 salary £800 per annum with excellent house in Sanatorium grounds A Superannuation Scheme is in force
Applications stating qualifications together with three recent testimonials should be sent to the Secretary Kelling Sanatorium Holt Norfolk, by September 3rd 1938

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(220 Surgical and Medical Beds)

...phthalmic and Ear ... from fully qualified men for the above post. The appointment is for six months Salary at the rate of £150 per annum
Applications stating age together with copies of three recent testimonials should be sent to the undersigned as soon as possible
M H BOONE.
July 29th 1938 Superintendent and Secretary

HERTFORD COUNTY HOSPITAL.
(169 Beds) Three Residents

Applications are invited for the post of HOUSE PHYSICIAN (male)
Salary £1 0 per annum with board residence and laundry Duties to include Casualty and to commence September 10th The appointment is for six months in the first instance.
Applications together with copies of three recent testimonials should be forwarded to the undersigned not later than August 29th 1938
PERCY G BROOKS Secretary

MANCHESTER EAR HOSPITAL
Grosvenor Square All Saints

The Board invite applications for the following posts
RESIDENT HOUSE SURGEON Salary at the rate of £1..0 per annum
NON RESIDENT HOUSE SURGEON Salary at the rate of £1 0 per annum with partial board
Appointments six months 31 beds Candidates must be duly qualified and registered
Applications with copies of four recent testimonials to be forwarded to Mr REGINALD S MILFORD (Hon Secretary Manchester Ear Hospital) c/o Mr W J ELLAM 17 Brazennose Street Manchester 2

MANCHESTER NORTHERN HOSPITAL
(General Hospital 113 Beds)
Cheetham Hill Road Manchester 8

Applications are invited for the post of RESIDENT SURGICAL OFFICER commencing salary £1 0 per annum with board and residence The appointment is for twelve months from mid August 1938
Applications stating age qualifications and nationality with copies of not less than three recent testimonials to be sent to the Secretary Mr JAMES C. DANIELS 38 Barton Arcade Manchester 3 as soon as possible.

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL.

Applications are invited from duly registered candidates (male and unmarried) for a HOUSE SURGEON Salary £1 0 per annum.
The appointment is for six months and includes apartments board and laundry The House Surgeon must be an experienced anaesthetist.
All applications, stating age, etc. with copies of testimonials to be sent to me at once.
FRANK H TOONE,
9 Leicester Road, Secretary
Loughborough.

(*Appointments continued on p 39*)

TO ADVERTISERS

The BRITISH MEDICAL JOURNAL has a larger circulation than that of all other British weekly medical periodicals combined

CIRCULATION OF THIS ISSUE—41,000

TERMS FOR ADVERTISING

SMALL PREPAID ADVERTISEMENTS

The MINIMUM charge is 9s which covers up to 30 words Extra words are charged 1s 6d for 5 or less, *e g* 33 words would be charged as for 35 Name and address should be included when counting words for cost

If BOX NUMBER is used it should be reckoned as 5 words in the total Advertisements accompanied by remittance should reach this office not later than NOON TUESDAY for insertion in ensuing number

DISPLAYED ADVERTISEMENTS

Whole Page £24 and *pro rata* to one eighth page

Special positions dates and rates on application

EVERY EFFORT IS MADE TO ENSURE THE ACCURACY OF ADVERTISEMENTS APPEARING IN THE JOURNAL NO RECOMMENDATION IS IMPLIED BY ACCEPTANCE AND THE BRITISH MEDICAL ASSOCIATION RESERVES THE RIGHT TO REFUSE OR INTERRUPT THE INSERTION OF ANY ADVERTISEMENT

ADVERTISEMENT MANAGER
BRITISH MEDICAL JOURNAL
B M A House Tavistock Square,
London W C 1
Telephone EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA

TOBACCO GOOD SMOKES at a low price quality guaranteed Box of 50 for 25/ post free—Sole Manufacturers J J FREEMAN & CO LTD 90 Piccadilly London W 1 (GRO 1529)

"BIZIM" CIGARETTES

THESE luxurious delightfully satisfying smokes 50 s or 100 at 6/3 per 100 8/6 per 1 000 post free—Sole Manufacturers J J FREEMAN & CO LTD 90 Piccadilly London W 1 (GRO 1529)

"SOLACE CIRCLES" TOBACCO

THE finest combination ever discovered of Choice Natural Tobaccos Every pipeful an indescribable pleasure 1 lb per ½ lb tin post free—Sole Manufacturers J J FREEMAN & CO LTD 90 Piccadilly London W 1 (GRO 1529)

COACHING PERSONALLY OR BY POST FOR all final medical examinations Fees moderate —Address No 8115 B M A House Tavistock Square W C 1

TYPEWRITING—SPECIALISTS IN TYPING Medical and scientific papers Lectures etc Shorthand typists always available Typewriting by the hour—MARGARET WATSON LTD 1 Parker Chambers, Bruce Court SW1 Whitehall 8393

TYPEWRITING DUPLICATING TRANSLATIONS—Expert work Testimonials THESES [illegible] —WORLDS BUREAU [illegible] Lincoln's Inn Fields WC1 [illegible]

ASSISTANCIES

WANTED IMMEDIATELY INDOOR AND outdoor ASSISTANTS for town and country practices with and without view to partnership Good salaries offered State full particulars—BRITISH MEDICAL BUREAU 33 Cross Street Manchester 2

WANTED IMMEDIATELY MARRIED ASSISTANT British for South Wales colliery practice Salary £450 and £50 car allowance or car provided Free unfurnished house—Address No 8032 B M A House Tavistock Square W C 1

WANTED END OF AUGUST YOUNG male indoor ASSISTANT English or Scotch preferred for mixed practice in North London Time for reading Car provided Salary £300—Address No 7825 B M A House Tavistock Square W C 1

WANTED OCTOBER 1st INDOOR ASSISTANT to young energetic doctor Cornish coast interested in surgery an advantage Salary £300 Car allowance £52—Address No 8134 B M A House Tavistock Square W C 1

WANTED MALE OUTDOOR UNMARRIED ASSISTANT for colliery practice near Cardiff Salary £400 with furnished rooms and attendance Car provided Driving licence essential Young energetic principal Please furnish recent photograph and testimonials stating age and nationality with application—Address No 8116 B M A House Tavistock Square W C 1

WANTED INDOOR MALE ASSISTANT (Sept) Central practice near Cardiff Must be energetic sober Salary £350 p a Car provided or car allowance State religion—Address No 8131 B M A House Tavistock Square W C 1

WANTED OUTDOOR ASSISTANT AT once Private and panel practice near Manchester English or Scotch State married or single Salary £500 p a and rooms Prospects—Address No 8125 B M A House Tavistock Square W C 1

WANTED MALE ASSISTANT BRITISH Isles for South Yorkshire town Indoor car dispenser hospital excellent experience Salary £300 £350 p a—Address No 7801 B M A House Tavistock Square W C 1

WANTED OUTDOOR ASSISTANT MALE unmarried English or Scotch age not over 30 for panel and private practice Yorkshire £300 and all found with car allowance—Address No 7931 B M A House Tavistock Square W C 1

WANTED INDOOR ASSISTANT FOR A pleasant practice not far from London Would suit man reading for a higher diploma Prospect of partnership later—Send full particulars (personal and professional) to Address No 8111 B M A House Tavistock Square W C 1

WANTED YOUNG OUTDOOR MALE ASSISTANT unmarried for panel practice S W London Experience essential Salary £400 car provided State nationality and enclose testimonials—Address No 8126 B M A House Tavistock Square W C 1

WANTED ASSISTANT SALARY £350 ALL found—Apply DR SWANTON May Villa Dewsbury Road Leeds 11

WANTED ASSISTANT (SINGLE MALE) near Cardiff Some experience preferred Outdoor Salary £400-£450 per annum according to experience—Address No 7938 B M A House Tavistock Square W C 1

WANTED PART TIME ASSISTANT country near sea Work very light suit semi retired or delicate man motorist—Address No 8124 B M A House Tavistock Square W C 1

WANTED PART OR WHOLE TIME G P ASSISTANTSHIP London no midwifery middle October M B Ch B D P M 25 Scotch hospital experience Own car and furniture if required Wishes to continue studies—Address No 8106 B M A House Tavistock Square W C 1

ASSISTANT WANTED (OCTOBER 1st) British male Salary £400 plus £50 car allowance Mixed urban and rural practice Midlands Free partners—Address No 8115 B M A House Tavistock Square W C 1

ASSISTANT REQUIRED MALE SCOTTISH or English unmarried young some experience general practice preferred Own rooms at present home Salary £350 per annum all found £50 at a year end at once—Address No 8036 B M A House Tavistock Square, W C 1

ASSISTANT PARTNERSHIP LATER wanted Mixed practice in Kent London 30 miles Scotsman preferred Indoor or Outdoor £250 to £450 according to experience etc Start October or later Essential particulars to—Address No 8133 B M A House Tavistock Square W C 1

COUNTRY ASSISTANTSHIP WANTED—Married St Thomas's three years GP also hospital appointments Ultimate partnership or succession to one principal preferred Own car and furniture—Address No 8127 B M A House Tavistock Square W C 1

LONDON S E—UNMARRIED ASSISTANT wanted now for G P Suit man reading for higher degrees £300 a year and all found Usual bond—Address No 8110 B M A House Tavistock Square W C 1

M.D., SCOTCH PUBLIC SCHOOL, University man married extensive teaching hospital experience surgery medicine gynaecology obstetrics ophthalmology casualty also general practice seeks ASSISTANTSHIP with view PARTNERSHIP keenly interested medicine educational facilities and hospital appointment if possible—Address No 8101 B M A House Tavistock Square W C 1

PART TIME WORK REQUIRED FROM September to February in London by non graduate Experienced Morning or evening surgeries week end duty—Address No 8136 B M A House Tavistock Square W C 1

LOCUMS

DOCTOR'S SEASIDE HOUSE (HANTS) TO LET for September to very careful tenant Maid remains Garage AVAILABLE AS LOCUM 2 to 3 weeks same period—Address No 8123 B M A House Tavistock Square W C 1

PUBLIC HEALTH LOCUM OR TEMPORARY WORK M O H with experience in all departments Own car—Address No 8119 B M A House Tavistock Square W C 1

RETIRED GENERAL PRACTITIONER desires LIGHT LOCUM or ASSISTANCY WORK Reasonable terms High-class references and experience After August 22nd—LOCUM 62 Waltham Road Carshalton

YOUNG DOCTOR M B Ch B (EDIN) British West Indian experienced G P wishes position as LOCUM TENENS or ASSISTANT without view Can drive car good references—Address No 8107 B M A House Tavistock Square W C 1

MEDICAL POSTS, DISPENSERS

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request qualified and with practical experience in private practice and dispensary work also trained in Bacteriological Laboratories of the LONDON COLLEGE OF PHARMACY FOR WOMEN Preparation for Examinations—Write wire or phone (Bayswater 0969) Secretary 7 Westbourn Park Road W 2

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY and Secretary Dispensers can be supplied to Doctors So January April and September—Apply Principal School of Pharmacy Drayton House Gordon Street W C 1 Phone Euston 3930

DISPENSING CAREER FOR YOUNG LADIES FULL TRAINING for Apothecaries Hall Certificate Enrolments every three months—Apply The Principal Central School of Pharmacy 28 Moreton Street London S W 1 Telephone Victoria 1641

DOCTORS REQUIRING QUALIFIED Dispensers Nurse Dispensers Secretary Dispensers or Chauffeuse Dispensers are asked to write wire or phone Temple Bar 4343 THE DISPENSER'S BUREAU 3 Lindsay House Shaftesbury Avenue London W C 2

EDITORIAL WORK ON IMPORTANT medical publication Full time Qualified MEDICAL WOMAN WANTED who have literary talent Editorial experience advantageous—Address No 8115 B M A House Tavistock Square W C 1

M.D. D P H D P M ENGLISH unattached seeks LITERARY SECRETARIAL WORK or would train for it Lake District preferred—Address No 8117 B M A House Tavistock Square W C 1

MD (HARVARD U.S.A.) AB DIPLOMATE National Board Medical Examiners U.S.A. (1st Eng. and part 2nd yr.) studying toward Conjoint Examination desires to meet student who will tutor him during vacation. Remuneration will be awarded by the American Government on the full presentation of the Diploma. ADDRESS INSTITUTE, HOSPITAL or CLINIC. Location unimportant. Expenses C.I.F. and duty paid. Reference given if desired.—Address No. 8154, BMA House, Tavistock Square, W.C.1.

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION, 56 Eccleston Square, S.W.1 (Tel. Victoria 3922) requires qualified Dispensers, Bookkeepers, Lady Secretary Assistant, Male Nurses, Medical and Special Treatment Officers, Dental Clerk, Orderlies, Porters, Caretakers, etc., who will be glad to prove the employers.

WELL EDUCATED STATE REGISTERED Nurse, 2 years post as RECEPTIONIST to Doctor. Free to go.—Write Miss LEE, 11 New Street, Finchley, N.2.

PARTNERSHIPS

JUNIOR PARTNER WANTED FOR PRACTICE in North East District of Glasgow if desired preliminary Assistantship can be arranged; partnership should be free to take over 5 years; value approximately £700 and goodwill to be paid.—Apply with full particulars as to age, qualifications, experience, etc., to CRAWFORD HERRON AND CAMERON, Solicitors, 25 West George Street, Glasgow, C.2.

LANCASHIRE TOWN.—PARTNERSHIP YIELDING £1,000 gross. Modern well-equipped Panel 2,000. Private house with garage for sale. Premium £1,400, including drug book debts.—Address No. 7995, BMA. House, Tavistock Square, W.C.1.

LONDON PARTNER REQUIRED BY Specialist with rowing practice engaged in advanced effective treatment. Must be about 30 and of good appearance, etc. Excellent references exchanged. One-third share £1,600.—Address No. 8103, BMA House, Tavistock Square, W.C.1.

MIDLAND CITY.—PARTNERSHIP IN GOOD part in rapidly increasing practice. Panel 1,600, medical service. One-third share, yielding £1,400 per year. Finance can be arranged. Young, energetic Englishman preferred.—Address No. 7964, B.M.A. House, Tavistock Square, W.C.1.

PARTNERSHIP IN CORNISH TOWN £1,400 at two years purchase. Partner should be young married with good medical degree, experienced G.P. Good house, garden, garage.—Address No. 8110, B.M.A. House, Tavistock Square, W.C.1.

PARTNERSHIP.—A THIRD SHARE WORTH £700 yearly in rapidly growing practice in northern university town. Nice bungalow available in residential district. Small panel; little midwifery.—Address No. 8109, B.M.A. House, Tavistock Square, W.C.1.

PARTNERSHIP — GROWING PRACTICE Surrey. Third share (£1,000) two years purchase. New house can rent. Suit young married man. Cottage hospital.—Address No. 8137, B.M.A. House, Tavistock Square, W.C.1.

SOMERSET COAST — PARTNERSHIP IN country town. Panel 1,400. Over £3,000 p.a. Third share at two years purchase. House sale or rent.—THE WESTERN MEDICAL AGENCY, 22 Clare Street, Bristol, 1 (Bristol 2,659) and 15 Bedford Street, Strand, W.C.2 (Temple Bar 2537).

PRACTICES

WANTED IMMEDIATELY UNOPPOSED country PRACTICE from £1,000-£1,500 p.a. with Panel. Good garden and house essential.—Address No. 7702, B.M.A. House, Tavistock Square, W.C.1.

WANTED BARNET, SOUTHGATE, ENFIELD District, GENERAL PRACTICE. Panel of 1,000 or more essential.—Address No. 8101, B.M.A. House, Tavistock Square, W.C.1.

BIRMINGHAM OR WITHIN 20 MILES.—Wanted a PRACTICE of about £2,500 a year. No agents.—Address No. 8132, B.M.A. House, Tavistock Square, W.C.1.

DURHAM COUNTY.—NON-PANEL NON-competing Better-class PRACTICE £1,100. Excellent opening for keen man. Convenient personally installed garage. Equal to £1,500. Offers invited.—Address No. 8104, B.M.A. House, Tavistock Square, W.C.1.

FOR SALE IN NORTH MIDLANDS Established mixed PRACTICE. Income £1,400 of which £1,000 is panel and transfer by amicable arrangement. Modern house and well-equipped surgery (freehold) may be had. Excellent prospects of increase.—Address No. 8111, B.M.A. House, Tavistock Square, W.C.1.

FOR SALE VERY OLD-ESTABLISHED country PRACTICE in Northumberland with easy rent; 4 and 5 years' lease; £1,000 nearly. Premium 10 years. Commencing partnership if desired. Excellent opening for energetic practitioner.—Apply GRAHAM, DURHAM AND KNIGHT, 106 Side, Newcastle-on-Tyne, 1.

LONDON, N.W.—FOR SALE, NUCLEUS with panel from 600 to 700. Early 30's. Partnership or not.—Address No. 8113, B.M.A. House, Tavistock Square, W.C.1.

MEDICAL PRACTICE IN NORTH-EAST Scotland for sale. Centre small town; £1,000; panel 1,000. Good country practice where there is room.—Address No. 8115, B.M.A. House, Tavistock Square, W.C.1.

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed.

Applications should be separately enclosed and clearly addressed

Address No
B.M.A. House
Tavistock Square, W.C.1

All communications are forwarded to advertisers under plain cover.

MIDLAND CITY.—STEADILY INCREASING PRACTICE. Average £3,400 p.a. Panel 2,100. Premium £3,000. Excellent house £2,000.—THE WESTERN MEDICAL AGENCY, 22 Clare Street, Bristol, 1 (Bristol 2,659) and 15 Bedford Street, Strand, W.C.2. (Temple Bar 2537).

MIDLAND CITY.—WOMAN'S PRACTICE. This practice has been worked entirely independently to the above but they can easily be amalgamated and worked to either if required. Average £1,600 p.a. Panel 940. Good scope. Premium £1,800. House rent.—THE WESTERN MEDICAL AGENCY, 22 Clare Street, Bristol, 1 (Bristol 2,659) and 15 Bedford Street, Strand, W.C.2 (Temple Bar 2537).

SCOTLAND.—NURSING HOME WITH property for sale in County Town. Accommodation for 24 patients, good theatre, five bathrooms, all modern equipments and every convenience. Comfortably furnished. Beautifully situated in quiet residential district with large garden. Business well established—no opposition. Excellent connexion for indoor patients and also outdoor staff. *Proprietress retiring.*—Apply Box 117, ROBERTSON AND SCOTT, Edinburgh, 2.

NUCLEUS OFFERED (ABOUT £1,400) TO BE worked in partnership. South Coast. Rapidly growing district; excellent scope for energetic WOMAN. Scotch graduate preferred. Reasonable premium.—Address No. 8135, B.M.A. House, Tavistock Square, W.C.1.

PLEASANT SUBURBAN PRACTICE (Midland University city) panel 760, receipts average £1,750. Good house, no clubs or night work; two years' purchase. House £250 or rent £150.—Address No. 8130, B.M.A. House, Tavistock Square, W.C.1.

WELL ESTABLISHED PANEL AND PRIVATE PRACTICE of £1,500 in North London. 11 years' purchase. Scope. Easily worked. Good house and garden to be let or sold.—Address No. 8105, B.M.A. House, Tavistock Square, W.C.1.

SHROPSHIRE.—OLD ESTABLISHED UNOPposed country PRACTICE. Panel 700. Receipts about £1,100, including appointments. Good accommodation to rent. Premium, including drugs, etc., £1,000 for quick sale. Vendor taking up partnership.—Address No. 7113, B.M.A. House, Tavistock Square, W.C.1.

SOUND OLD ESTABLISHED MIXED General PRACTICE for sale near Birmingham. Income £3,000. Panel nearly 2,000 (1,700 from F.M.S.). House to rent; no branches. Premium 3 years' purchase; cash or part. Advertiser purchasing another.—Address No. 8112, B.M.A. House, Tavistock Square, W.C.1.

X-RAY PRACTICE WITHIN 100 MILES London wanted; mixed panel and private practice; also radium, infra-red, ultra-violet, electrotherapy and treatments by a thoroughly qualified assistant part or full time. Interest in both surgery and medicine. Increase by degrees. Disposal of practice later if desired. Reply, stating full particulars and salary required.—Address No. 8114, B.M.A. House, Tavistock Square, W.C.1.

MISCELLANEOUS SALES etc.

IMPORTANT

to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE. Specially Cut, Fitted and Moulded to each individual figure, made from finest Quality Material and in the Best Possible Style, not to more than reasonable ready-made clothes.

The invaluable Personal Experience and Advice of our 14 Expert West End Cutter and Fitters is always at your disposal.

ALL HALLZONE PRODUCTION are HAND FINISHED IN EVERY ESSENTIAL DETAIL.

SPECIAL OFFER

JACKET & VEST (in black or grey)	£4 4
Line I best quality Art Satin, Vest Silk or Alpaca	
SOLID FANCY WORSTED TROUSERS	£1 1
The ideal suit for Professional or Business wear	
LOUNGE SUITS to measure from	£6 6
OVERCOATS	£5 5
DINNER SUITS	£8 8
DRESS SUITS from	£10 10
PLUS FOUR SUITS from	£6 6
THE IDEAL Suit for Country and Sporting Wear	
GOLD MEDAL RIDING BREECHES from	£1 1
RIDING HABITS	£8 8
RIDING BOOTS	£3 3
COSTUMES & LONG COATS	£6 6

UNSOLICITED APPRECIATION

I strongly advise all medical men who wish to have satisfaction to patronise Harry Hall Ltd. as all the clothes I have had from them during 35 years have been perfect in Fit, Cut and Finish.
(Signed) S. J. A. MA. M.B. F.R.C.P.S.

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self measurement Form or Pattern Garments.

Visitor to London and order and fit same day. Special Patterns would then be cut and Perfect Fitting Clothes supplied after without trying on.

HARRY HALL, LTD

Governing Director Harry Hall
THE Coat Breeches Habit and Costume Specialist
181 OXFORD ST., W.1 119 CHEAPSIDE, E.C.2
Telephones
GERrard 4905 4906 and 4907 NATional 2696/7
Makers of Finest Quality Bespoke Civil Sporting and Hunting Clothes for Ladies and Gentlemen
Highest Awards 12 Gold Medals
Est. over 40 years

INCOME TAX

YOUR burden is OUR business
Tax Specialists to the Medical Profession.

HARDY & HARDY
49 CHANCERY LANE, LONDON, W.C.2
Telephone Holborn 6659
Write for free copy of Advice on Income Tax

FOR SALE.—COMPLETE THEATRE EQUIPMENT suitable for Cottage Hospital or Nursing Home.—Address No. 7917, B.M.A. House, Tavistock Square, W.C.1.

PART-TIME USE OF ROOM ON PREMISES of General Practitioner in London REQUIRED by oculist; good rent offered.—Apply Box G, HANNAFORD AND GOODMAN LTD., 57/59 Ludgate Hill, London, E.C.4.

HOUSES, CONSULTING ROOMS

ESTABLISHED 1860

BEDFORD & CO.

Surveyors Auctioneers, and Estate Agents
10 WIGMORE STREET,
CAVENDISH SQUARE, W 1
Specialists in Professional Houses, Flats, and Consulting Rooms
in Harley Street and leading Medical Positions
Telephone Langham 3927 and 3928

ESTABLISHED 1845

ELLIOTT, SON & BOYTON

(H C ROWE F S I)
VEREST, CAVENDISH SQUARE, W 1
Estate Agents Auctioneers and Surveyors
are the BEST LOCAL AGENTS for HOUSES and CONSULTING ROOMS in the Harley Wimpole Queen Anne and other streets in the Cavendish Square district Valuations for all purposes
Telephone 3204 MAYFAIR

CONSULTING ROOMS GROUND AND first floor to let from September quarter Charming sunny situation service and waiting rooms inclusive in rent Exceptional opportunity for dentist—Apply CARETAKER 6 Park Crescent Portland Place W 1

COUNTRY COTTAGE (6 ROOMS) FREE September Furnished necessities quiet rural surroundings bath telephone assured water lamps small garden garage London 50 miles Eastbourne 12 Monthly rent £6 for long let—MORTON Brooklands Horam E Sussex

CAMBRIDGE TERRACE NEAR MARBLE Arch Edgware Road W 2—CONSULTING ROOM to let together with WAITING ROOM separate living room and bathroom Rental £225 per annum exclusive—Telephone TEMple Bar 7733

DEVONSHIRE STREET TWO DOORS FROM Harley Street an excellent CONSULTING SUITE of three good rooms in one of the finest professional houses Rent only £250 p a or single rooms may be had at £100 p a with plate on the door and all services Vacant Sept 29th 1938—Address No 7610 B M A House Tavistock Square W C 1

HARLEY STREET AND MEDICAL DISTRICT

For all types of available accommodation
BERTRAM & CO., Surveyors and Estate Agents
59, Connaught Street W 2 Paddington 1617 8

HARLEY STREET AND DISTRICT—A NUMber of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application—LLGOOD AND Co 10 Henrietta Place Cavendish Square W 1 Lang 2601

IDEAL NURSING HOME OR REST OR GUEST HOUSE large beautiful grounds 1½ acres country surroundings 30 minutes London Letter only—MANSELL AND Co 59 Shrubbery Road S W 16 No agents

QUEEN ANNE STREET—ONLY £40 P A secures exceptionally fine CONSULTING ROOM for use when required with attendance and all services Residential accommodation available—Address No 6355 B M A House Tavistock Square W C 1

1, BENTINCK STREET (CORNER WELBECK Street)—Finest New CONSULTING SUITES in Medical Area Each 2 rooms and lavatory Also 4 roomed FLATS—Sole Agents ERNEST DURBRIDGE AND Co 4 Duke Street W 1 Welbeck 8295

NEAR MARBLE ARCH—WHOLE OR PART OF HOUSE to let Excellent situation—Agents ERNEST DURBRIDGE AND Co 4 Duke Street W 1 Welbeck 8295

HARLEY STREET

Well appointed House suitable for Medical Profession with 9 bedrooms 2 bathrooms 3 reception rooms and usual offices

TO BE LET ON LEASE
NO PREMIUM
Address No 7903, B M A House
Tavistock Square, W C 1

UNFURNISHED FLAT TO LET DOCTORS house Hampstead seven minutes from Harley Street Two large rooms bathroom w c kitchenette constant hot water Garages and—Address No 8127 B M A House Tavistock Square W C 1

APPOINTMENTS—Contd

VICTORIA HOSPITAL BURNLEY (150 Beds)

HOUSE PHYSICIAN (Male)

Applications are invited for the above post which will become vacant on September 1st next The duties include the giving of a certain number of anæsthetics The appointment is for six months in the first instance at a salary of £150 per annum together with board residence and laundry At the end of this period reappointment may be applied for and if granted the salary for a second six months will be at the rate of £160 per annum

Applications giving full details of qualifications and experience stating nationality together with copies of recent testimonials should be addressed to the undersigned forthwith

J E WHEATCROFT Secretary

GRIMSBY AND DISTRICT HOSPITAL (164 Beds)

Applications are invited for the post of RESIDENT ORTHOPÆDIC OFFICER Salary £155 per annum with board residence The appointment is for twelve months subject to renewal Candidates must be registered under the Medical Acts reside in the Hospital and have had experience in Orthopædic and Fracture work

Applications with copies of not more than three testimonials to the undersigned at once

H B COATES
August 16th 1938 Secretary Superintendent

OLDHAM ROYAL INFIRMARY

Two HOUSE SURGEONS required for a period of six months Salary at the rate of £120 per annum with board residence and laundry

Applications stating age experience and qualifications together with copies of three recent testimonials to be forwarded to the undersigned

HEWART MITCHELL
General Superintendent

SMALL ADVERTISEMENT FOR INSERTION IN BRITISH MEDICAL JOURNAL.

The MINIMUM charge is 9s, which covers up to 30 words Extra words are charged 1s 6d for 5 or less Example 33 words would be charged as for 35 Name and address should be included when counting words for cost
If BOX NUMBER is used, it should be reckoned as 5 words in the total
PLEASE WRITE CLEARLY—ONE WORD IN EACH SPACE

1						
2						
3						
4						
5						
6					(30 words)	9/
7						10/6
8						12/
9						13/6
10						15/

To the Advertisement Manager, BRITISH MEDICAL JOURNAL, B M A House, Tavistock Square London, W C 1

Please insert my advertisement in ____ issues Name
dated Address

I enclose remittance value £ Date

SOUTHEND-ON-SEA GENERAL HOSPITAL

135 Beds extension in progress
Light Research
Honorary Specialist Staff Twenty members

APPOINTMENT OF RMO and MEDICAL REGISTRAR

Applications are invited for the post of Resident Medical Officer and Medical Registrar which will become vacant on October 1st 1938. The appointment will be for one year with eligibility for annual re-election for a further maximum period of two years and will be resident, with board and lodging provided. Commencing salary £150 per annum.

Applicants should possess the degree of M.R.C.P. (London) and must have held resident appointment as House Physician at a General Hospital. Original medical work will be encouraged.

Application forms, with copies of the regulations and duties of the post may be obtained from the undersigned and must be returned with copies of three recent testimonials not later than September 15th 1938.

By Order of the Committee
P. H. CONSTABLE
Secretary

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST

Ventnor Isle of Wight.

SECOND ASSISTANT RESIDENT MEDICAL OFFICER (Male) unmarried required for six months commencing September 1st 1938. Salary at the rate of £100 per annum with board, residence and laundry allowance. The successful candidate will be eligible for promotion to First Assistant Resident Medical Officer for a further six months at a salary at the rate of £100 per annum with similar emoluments. Candidates must be fully qualified in Medicine and Surgery and previous experience in Tuberculosis and Bacteriological work will be an advantage. The appointment affords experience in Sanatorium and Surgical treatment of Pulmonary Tuberculosis.

Applications in candidates own handwriting stating age, qualifications and experience (with one copy of three recent testimonials) to be sent to the Medical Superintendent, Royal National Hospital for Consumption, Ventnor, Isle of Wight not later than Thursday August 25th 1938.

THE KING EDWARD VII WELSH NATIONAL MEMORIAL HOSPITAL

Applications are invited from duly registered medical practitioners for the posts of ASSISTANT RESIDENT MEDICAL OFFICERS (two vacancies—male or female) at the Glan Ely Hospital (1) wards for pulmonary and surgical tuberculosis in men women and children) Fairwater near Cardiff.

Salary £160 per annum plus maintenance. The appointments are limited to a period of twelve months.

Applications stating age qualifications experience together with copies of three recent testimonials should reach the undersigned not later than Thursday August 25th 1938.

D. A. POWELL
Principal Medical Officer
Memorial Offices
Westgate Street Cardiff

SALFORD ROYAL HOSPITAL

(c. 6 Beds)

Applications are invited from registered candidates (male) for

RESIDENT SURGICAL OFFICER for twelve months from October 1st. Salary £200 per annum.

HOUSE PHYSICIAN

HOUSE SURGEONS (Three)

CASUALTY HOUSE SURGEON

for six months from October 1st. Salary £125 per annum.

Forms of application obtainable from the undersigned should be delivered on or before September 6th next.

By Order of the Board
H. B. SHELSWELL
General Superintendent and Secretary

July 29th 1938

THE GUEST HOSPITAL DUDLEY

(General Hospital 139 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons.

HOUSE SURGEON (male) required. To commence duty on September 1st 1938. Salary at the rate of £150 per annum with furnished apartments board and laundry. Candidates must be fully qualified and registered.

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned

H. RAYMOND HURST
House Governor and Secretary

August 15th 1938

ABERDEEN ROYAL INFIRMARY

The Board of Directors invite applications for the post of GYNAECOLOGICAL REGISTRAR. The successful candidate will also be a part-time Assistant in the Department of Midwifery of the University of Aberdeen.

Salary £200 per annum. Appointment for one year which is liable to reappointment on application at expiry.

Applications with recent testimonials (four copies of each) must be lodged not later than 10 a.m. on September 3rd 1938 with the undersigned from whom particulars as to salary and terms of appointment may be obtained.

JOHN A. M'CONACHIE
Clerk and Treasurer

Royal Infirmary Aberdeen
August 11th 1938

THE PRINCE OF WALES'S HOSPITAL

Tooley Street Plymouth
(Formerly Central Hospital Tooley Street Plymouth) (70 Beds)

Applications are invited for the post of HOUSE SURGEON. Salary £150 per annum with board residence and laundry. Duties to commence September 17th.

Appointment is terminable at three months and is subject to renewal.

Applications, stating age and qualifications with copies of three recent testimonials to reach the undersigned by September 2nd.

ARTHUR R. CASH
General Superintendent.

Prince of Wales's Hospital
Greenbank Road Plymouth

GRANTHAM HOSPITAL

(100 Beds)

Applications are invited from fully qualified medical practitioners for the post of RESIDENT MEDICAL OFFICER. The appointment is for six months (renewable) and will become available on October 9th 1938. Salary £150 per annum with board residence and laundry. Preference given to applicants who have already held a resident appointment.

Applications stating age nationality qualifications and experience with copies of three recent testimonials should be sent to the undersigned.

JOHN E. RAY
Secretary Superintendent

ROYAL WEST SUSSEX HOSPITAL

Chichester
(114 Beds including 12 in the Private Patients Block Two Residents)

SENIOR HOUSE SURGEON required immediately. Salary at the rate of £175 per annum with board residence and laundry.

Applications should be sent immediately to the undersigned together with not less than three recent testimonials stating age nationality experience and qualifications.

By Order of the Board of Management
J. COXON INCE
Secretary

EAR AND THROAT HOSPITAL

Birmingham 3

FIRST HOUSE SURGEON REQUIRED (RESIDENT)

Must be fully qualified and with clinical experience. Salary at the rate of £1 0 per annum with full board and residence.

Appointment for six months commencing October 1st. Facilities for training for D.L.O.

Applications and testimonials to be forwarded to the undersigned

W. H. LOMAS Secretary

EAR AND THROAT HOSPITAL

Birmingham 3

THIRD HOUSE SURGEON wanted (non-resident). Must be qualified and with clinical experience. Salary at the rate of £1 0 per annum with lunch on six week-days and an allowance of £40 per annum in lieu of board and lodging.

Appointment for six months commencing October 1st. Candidates are eligible for election to senior posts. Facilities for training for D.L.O.

Applications and testimonials to be forwarded to the undersigned

W. H. LOMAS Secretary

THE LADY CHICHESTER HOSPITAL

Hove Brighton
For Functional Nervous Diseases.
(60 Beds)

SENIOR HOUSE PHYSICIAN (woman) required. Six months appointment £100 per annum all found. Valuable experience for Diploma in Psychological Medicine.

Also JUNIOR (woman) at £75 per annum.

Applications with testimonials to be sent to the Secretary Mr. P. F. SPOONER, 33 West Street, Brighton.

July 25th 1938

THE PRINCESS ELIZABETH OF YORK HOSPITAL FOR CHILDREN

Shadwell London E.1
(Formerly East London Hospital for Children)
(135 Beds)

A HOUSE SURGEON is required on September 1st 1938 by the above Hospital. Candidates are invited to send in their applications addressed to the Secretary not later than Monday August 29th accompanied by copies of not more than three recent testimonials and evidence of having held a resident hospital appointment. The appointment is for four or seven months according to arrangement. Salary at the rate of £125 per annum with board residence and laundry.

Candidates must be properly registered in this country. Forms of application and copies of the rules can be obtained from the Secretary Superintendent.

ROYAL BERKSHIRE HOSPITAL READING

The following resident appointment will become vacant on October 1st 1938.

RESIDENT MEDICAL OFFICER (male) at the Battle Branch Hospital and Assistant to the Pathologist (combined appointment). To reside at and have charge of 64 bed at Branch Hospital and to work as Assistant in the Pathological Department of the main Hospital. (Previous experience in Pathology not essential.)

The appointment is for six months and candidates must be fully qualified and registered.

Remuneration at the rate of £100 per annum with board residence and laundry.

Applications stating age and experience with copies of testimonials to be sent to the undersigned on or before Friday September 9th 1938.

H. L. RYAN
Secretary and House Governor

ROYAL EAST SUSSEX HOSPITAL

Hastings

Applications are invited for the posts of Honorary SURGEON and Honorary ASSISTANT SURGEON to the above Institution.

Candidates must be Fellows of the Royal College of Surgeons of England Edinburgh or Ireland or Graduates in Surgery of one of the Universities of the United Kingdom or Ireland and also be duly registered under the Medical Acts.

Applicants for the post of Hon. Assistant Surgeon must be under 45 years of age.

An Hon. Assistant Surgeon is an applicant for the post of Hon. Surgeon.

Applications accompanied by copies of three recent testimonials should reach the Secretary not later than Saturday September 10th 1938.

WILFRID G. KEMSLEY Secretary.

THE PRINCE OF WALES'S GENERAL HOSPITAL London N.15

The following Resident Posts will be vacant on September 1st next.

(a) One JUNIOR HOUSE PHYSICIAN
(b) Two JUNIOR HOUSE SURGEONS

Salary at the rate of £70 per annum board residence and laundry. Appointments held for six months but holders are eligible for a further term as Senior.

Candidates (male and unmarried) must be fully qualified and registered and applications (on the prescribed form) to either with copies of three recent testimonials should be sent to the undersigned on or before August 31st 1938.

I. C. BURDETT
July 21st 1938 Director and House Governor

GENERAL LYING IN HOSPITAL

York Road Lambeth S.E.1

Applications invited for the post of JUNIOR RESIDENT MEDICAL OFFICER AND ANAESTHETIST. Salary at the rate of £100 per annum with board residence and laundry. Appointment for three months commencing October 1st 1938. The successful candidate will subject to satisfactory service be required to succeed to the Senior Medical Officer's post for a further three months.

Applications stating age and qualifications with copies of three recent testimonials to be sent to the Secretary not later than Saturday September 3rd 1938.

THE ROYAL EYE HOSPITAL,

St. George's Circus Southwark S.E.1

SENIOR HOUSE SURGEON and TWO ASSISTANT HOUSE SURGEONS required at the above Hospital. The appointment is in the first instance for a period of six months with board and residence as from October 1st.

Salaries Senior House Surgeon at the rate of £100 per annum Assistant House Surgeons at £160 per annum. Candidates must be registered practitioners.

Applications with copies of three recent testimonials should be sent to the Secretary not later than Thursday September 1st.

F. E. DALTON Secretary.

QUEEN MARY'S HOSPITAL FOR THE EAST END
Stratford London E 15

RESIDENT MEDICAL OFFICER

Applications are invited from fully qualified and registered medical men (only) for the above post The Hospital contains 719 beds including 50 for Maternity patients

The appointment will be for six months dating from October 1st 1938 to March 31st 1939 with salary at the rate of £150 per annum In addition to his salary the Resident Medical Officer receives certain sums paid by the National Health Insurance

Candidates who must be single and who should previously have held hospital appointments should send applications accompanied by testimonials to the undersigned not later than Thursday August 25th 1938

RAPHAEL JACKSON Major
Secretary

QUEEN MARY'S HOSPITAL FOR THE EAST END
Stratford London E 15

OBSTETRIC HOUSE SURGEON

Applications are invited from fully qualified and registered medical men (only) for the above post The Hospital contains 719 beds including 50 for Maternity patients

The appointment will date from October 1st 1938 and will be for three months as Junior at £110 per annum and three months as Senior at £130 per annum six months in all terminating on March 31st 1939

Candidates who must be single and who should previously have held hospital appointments should send applications accompanied by testimonials to the undersigned not later than Thursday August 25th 1938

RAPHAEL JACKSON Major
Secretary

CENTRAL LONDON OPHTHALMIC HOSPITAL
Judd Street St Pancras W C 1

Applications are invited from registered medical practitioners for the posts of SENIOR and JUNIOR HOUSE SURGEON vacant on September 30th The Junior House Surgeon is a candidate for the Senior post Salary £120 and £100 per annum respectively with board and residence

Applications with copies of three testimonials should reach the undersigned on or before August 31st

GLORGE WATTS
Secretary

ALL SAINTS HOSPITAL (FOR GENITO URINARY DISEASES)
Austral Street West Square S E 11

RESIDENT HOUSE SURGEON (male) required on October 1st for six months being three months as Junior House Surgeon with salary at £100 per annum followed by three months as Senior House Surgeon with salary at £150 per annum

Applications giving particulars of age experience qualifications and enclosing copies of three recent testimonials should reach me not later than September 3rd

D H EADL Secretary

GUY'S HOSPITAL S E 1

Applications are invited for the post of WOMAN MEDICAL OFFICER for the Department of Venereal Diseases commencing October 1st 1938, to attend on six sessions per week each of three hours Salary £350 per annum

Applications giving age qualifications and details of experience and accompanied by testimonials must be sent to the Superintendent Guy's Hospital London Bridge S E 1 not later than September 1st 1938

SOUTH EASTERN HOSPITAL FOR CHILDREN Sydenham S E 26
100 beds

Recognised by the examining board for post graduate study for the *diploma of child health*

Applications are invited for the post of HON DENTAL SURGEON to the above Hospital (one afternoon a week)

Applications stating age and experience should be sent as soon as possible to the Secretary at the Hospital

THE NELSON HOSPITAL MERTON S W 20
(66 Beds)

RESIDENT HOUSE SURGEON (male unmarried) required October 1st 1938 for duties in connection with Men's and Children's Wards share casualty work Appointment for six months in first instance Salary at rate of £150 per annum plus usual allowances and fees earned *Candidates* must be British by nationality and birth

Applications with copies of recent testimonials should be sent to the Secretary not later than September 10th 1938

ROYAL LONDON OPHTHALMIC HOSPITAL (Moorfields Eye Hospital)
City Road E C 1

REGISTRAR

Applications are invited for the office of Registrar Candidates must be registered Medical *Practitioners*

Salary will be at the rate of £400 per annum The Registrar will be appointed for one year and will be eligible for reappointment

Duties will embody the general supervision indexing and classification of in and out patient notes

Applications stating age and qualifications with copies of testimonials must be received by the undersigned not later than September 10th 1938

A copy of the regulations governing the post will be sent on application

A J M FARRANT
Secretary

ST MARY'S HOSPITAL LONDON W 2

MEDICAL REGISTRAR

Applications are invited for the above post Candidates for the appointment must be Registered Medical Practitioners and Fellows Members or Licentiates of the Royal College of Physicians or Graduates in Medicine of a University in the British Empire

The salary is £700 per annum with luncheon and tea provided

Copies of the regulations for the Medical Registrar may be obtained on application at the Secretary's Office

Applications with copies of testimonials should reach the undersigned on or before Wednesday September 14th 1938

W PARKES House Governor

ROYAL MASONIC HOSPITAL
Ravenscourt Park W 6

A post of RESIDENT SURGICAL OFFICER (Male) one of three Residents will be vacant on October 1st 1938 Salary at the rate of £250 per annum with board residence and laundry The appointment is for six months Candidates must be registered and must have held resident appointments at a general hospital The Institution (145 beds at present but to be increased) is primarily for paying patients of both sexes of moderate means usually unable to afford ordinary Nursing Home treatment etc

Applications stating full particulars to be sent on or before Monday September 5th 1938 to the Honorary Secretaries from whom further information may be obtained

ROYAL NORTHERN HOSPITAL
Holloway N 7

Applications are invited for the post of MEDICAL REGISTRAR Candidates will be required to attend at the Hospital from Monday to Friday inclusive The appointment is for one *year from November 1st 1938 with eligibility for re election*

Honorarium £200 per annum with luncheon and tea *provided*

Applications with copies of testimonials should be sent by September 9th to the undersigned from whom the necessary forms of application and rules can be obtained

GILBERT G PANTER
Secretary

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road N W 1

Applications are invited for the following posts RESIDENT MEDICAL OFFICER (Male) Salary £175 per annum board residence and laundry allowance

CASUALTY OFFICER (Male) Salary £120 per annum board residence and laundry allowance

HOUSE SURGEON (Male) Salary £100 per annum board residence and laundry allowance

The appointment is *for a period of six months* in each case as from October 1st Preference will be given to those who have held resident posts Candidates must submit applications stating qualifications age etc with copies of not more than three testimonials by Monday September 5th addressed to the Secretary

ROYAL FREE HOSPITAL
Gray's Inn Road London W C 1

Applications are invited from duly qualified and registered Medical Women for the following post RESIDENT CASUALTY OFFICER Duties to commence October 1st 1938 *for six months Salary £150 per annum*

Candidates must have held previous Resident hospital appointments

Application form may be had from the undersigned and should be duly filled in and returned on or before August 31st

RICHARD T BARTLEY
Secretary

WEST HAM HOSPITAL FOR NERVOUS AND DENTAL DISORDERS
Goodmayes Ilford Essex

Applications are invited for a male JUNIOR ASSISTANT MEDICAL OFFICER at the above Hospital Candidates must be unmarried

The commencing salary is at the rate of £150 per annum rising by annual increments of £25 to a maximum of £450 per annum together with emoluments consisting of board laundry and attendance valued for superannuation purposes at £150 per annum The person appointed will also be paid in addition to his salary the sum of £50 per annum on obtaining the Diploma of Psychological Medicine

The appointment is subject to six months probation and to the provisions of the Asylum Officers Superannuation Act 1909 Class I and to a satisfactory medical examination

A knowledge of bacteriological work will be an advantage

Applications stating age and experience accompanied by copies of three testimonials must reach the Medical Superintendent not later than August 31st 1938

THE DOCTOR IN PRACTICE OR ABOUT TO ENTER THEREIN SHOULD BE ADEQUATELY PROTECTED BY INSURANCE IN RESPECT OF

HIS LIFE
HIS HEALTH
HIS HOME
HIS PRACTICE
AND
HIS CAR

□

FOR ALL THESE CONSULT

The
Medical Insurance Agency
(Limited by Guarantee)
BRITISH MEDICAL ASSOCIATION HOUSE
TAVISTOCK SQUARE W C 1

□

WE CAN ALSO ARRANGE ADDITIONAL CAPITAL FOR THE PURCHASE OF A PRACTICE OR PARTNERSHIP

State age next birthday when writing

REYNOLDS & BRANSON Ltd
13, BRIGGATE, LEEDS, 1
Telegrams Reynolds Leeds
Telephone 20046 (5 lines)

1 West Cumberland old established PRACTICE Receipts approx £600 House to rent £30 Good fishing and shooting Reference No 7181

2 Country PRACTICE in delightful district of the Lancashire and Yorkshire border Vendor retiring Average receipts £1 000 Premium 1½ years purchase Reference No 2837

3 Preston mixed artisan business and professional PRACTICE Average receipts £1 031 Number of panel patients 1 002 Held by vendor 11 years Price £1 550 to include drugs surgery furniture and U V R lamp House and garage £950 cash Reference No 2834

4 Yorkshire semi industrial and rural PRACTICE near Halifax Held by vendor 9 years Average receipts £1 141 Number of panel patients 1 154 House can be rented £45 Premium £1 000 Reference No 2836

5 West Riding town PARTNERSHIP for sale in old established practice Average receipts last 3 years £3 341 House available rent £60 Panel patients 2 742 Premium for one third share 3 years purchase Reference No 2839

PERCIVAL TURNER
LTD
MEDICAL AGENCY
ESTABLISHED 60 YEARS

25, MAIDEN LANE, STRAND W.C.2
(Corner of Bedford Street)

Telegrams "Physician London"
Phones Temple Bar 9011 (3 lines)

Advice at the Hours Most Convenient to Principals

Assistants and Locums Provided without Fee to Principals. Practices Introduced. Valuations. Partnership Deeds Completed etc.

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE EXCLUSIVE OF BOOK PROPERTY £5 0 FULL TERMS ON REQUEST

FOR DISPOSAL.

DEVON.—UNOPPOSED ASSY WITH new to panel and susan Half share 1 £1,400 Premium £1,000 Very exceptional terms to effective Aug —1

SURREY.—NEAR LONDON £800 P.A. (approx) Assets £ Partnership £ 0 Small house £75 p.a. Premium £1,000—2

LONDON S.W.—LOCK UP LADY'S PRACTICE £4,5 p.a. Panel 60 (about 1) Premium £600—3

FRENCH RIVIERA.—OVER £1,000 p.a. Old established Fees all Good assets Premium £4,000 M.D. essential—4

DERBYSHIRE.—COUNTRY PRACTICE, about £700 p.a. good class select panel increasing and scope choice of house Premium 11 years purchase—5

NORTHERN TOWN.—ABOUT £2,000 p.a. Very old-established Panel Clubs and Appts £1,200 p.a. Visits 5 to 6/ Prem. £3,000 incl. book debts etc. House only £700—6

KENT COAST.—WOMAN'S PRACTICE Average £600 p.a. Panel over 300 Visit fees 5/ to 10/6 Premium £1,000 House 4 bed etc. Rent £75 p.a.—7

MIDDLESEX.—HALF SHARE OF £1,000 p.a. with scope Panel 700 Appts over £100 p.a. Premium £1,000 Nice house to rent—

LONDON W.5.—ABOUT £550 P.A. Panel 600 Visits 3/6 to 5/ Premium 4 years purch House, 4 bed etc to rent—

LONDON N.W.—ONE FIFTH SHARE of over £5,000 p.a. Panel 6,000 Appts over £100 Fees 2/6 to 10/6 Term 2 years purch Small manorette to let—10

NUCLEI.—LONDON W.10 £400 Panel 3,000—N.7 £—0 Panel 600—Harrow £900 Panel 350—Devon Coast, £250—11

SCOTLAND (N.).—COUNTRY OVER £1,000 p.a. incl. Panel of £,000 p.a. Visits 5/ to £5 5s Premium 11 years purchase, or offer Good house rent or sell—12

MIDDLESEX.—SUBURB £1,030 P.A. Panel 600 increasing 1 M.S. £100 Premium 2 years purch Comfy house (4 bed) sell or let—13

SURREY SUBURB.—HALF SHARE of £3,000 p.a. Old-est. increasing modern house garden and garage to let Premium £3,000—14

HYDE PARK NEAR.—PHYSICO-THERAPY PRACTICE, about £1,600 p.a. Well est. good class. Ample accommodation on rental Premium £1,000—15

LANCSTOWN.—OLD EST. INCREASING £1,100 p.a. Select panel of 1,000 Nice house ample accommodation Premium £150 incl. drugs and surgery furniture—16

KENT SUBURB.—GOOD MIDDLE-CLASS about £700 p.a. increasing select panel visits 7/6 up surgery 5/ Nice Tudor house for sale might let Premium 11 years purchase—17

SOUTH COAST.—OLD EST. NEARLY £1,400 p.a. increasing Fair panel mixed middle and better class Detached house garden and garage for sale or might let Premium £2,500—18

COUNTY TOWN WITHIN 100 MILES OF LONDON.—PARTNERSHIP with early succession in E.N.T. Practice about £1,300 p.a. and appointments £850 p.a. 2 years purchase. Purchaser should have F.R.C.S. Choice of house—19

BIRMINGHAM NEAR.—NEARLY £600 p.a. good scope panel nearly 600 developing area. House garden garage for sale at £2,0 or let at 2/3 6d p.w. Premium £1,000—20

HANTS.—OLD EST. AVERAGE £1,000 p.a. Panel 1,000 Appts about £1,0 p.a. Good family house nice garden and garage Rent £105 Premium 11 years purchase—21

YORKSHIRE DALES.—BEAUTIFUL country old-estab. £1,000 p.a. Large house and grounds rent only £60 p.a. Suit resident patients Smaller house available. Panel worth £1,0 p.a. Premium £1,000—22

NO CHARGE TO PURCHASERS
FINANCIAL ASSISTANCE ARRANGED

ASSISTANTS — VACANCIES IN Town and Country Indoor and Outdoor List on application.

THE MEDICAL AGENCY, Ltd.
DUDLEY HOUSE 36 38 SOUTHAMPTON ST STRAND W.C.2

Telegrams—Temple Bar 1013-10 4 Established 1908

WEST COUNTRY.—PARTNERSHIP [illegible] established Panel Fees [illegible] Capital required with option of half [illegible] panel Premium [illegible]

DEVON.—ASSISTANTSHIP [illegible] with Panel [illegible] Partnership Premium £1,000 Receipts £1,000 [illegible]

LONDON W.—Mixed [illegible] Doctor required [illegible] Receipts nearly £1,000 [illegible] Fees £1,000 Premium £1,000

LONDON S.E.—Well [illegible] Receipts approx £1,000 Premium £1,000 Fees 1/6 up Premium £1,000 [illegible]

LONDON W.—Early [illegible] West End Middle aged G.P. Hour [illegible] Partnership £1,000 Premium £1,000 Fees 1/6 up Premium £1,000 [illegible]

N.E. COAST [illegible] Partnership [illegible] Capital [illegible] Income [illegible] Premium [illegible]

YORKSHIRE [illegible] Partnership [illegible] Premium [illegible]

LONDON W.—PARTNERSHIP [illegible] Premium [illegible]

MIDDLESEX.—W.C.1 [illegible] Partnership [illegible] Premium [illegible] Free [illegible]

LONDON S.E.—Well [illegible] G.P. Receipts [illegible] Premium 3 years [illegible]

MANY OTHERS TOP SALE DETAILS ON REQUEST

ESTABLISHED 1877

LEE & MARTIN, LTD
The Birmingham Medical Agency
71, TEMPLE ROW BIRMINGHAM

Telegrams Locum Birmingham *Telephone* 23 Midland Birm

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED
MAXIMUM FEE £5 [illegible] charged to vendor

ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORT NOTICE. ASSISTANTS

WANTED TO PURCHASE

1 BIRMINGHAM (or within 10 miles) Good Mixed PRACTICE with [illegible] over and receipts of from £1,000 to £2,000 URGENTLY REQUIRED CAPITAL AVAILABLE.

2 REQUIRED.—Good Established [illegible] LOCUMS immediately. Also ASSISTANTS good posts [illegible] for with and without cars

FOR DISPOSAL

1 *GLOUCESTERSHIRE.*—Well established mixed and [illegible] PRACTICE Receipts about £1,000 p.a. Panel 1,000 scope to increase and good house with all services

2 *STAFFS.*—Rapidly increasing Mixed Private and Panel PRACTICE Receipts last year £1,000 and Panel 1,000 over Excellent House

3 *MIDLANDS.*—Old established industrial and middle-class PRACTICE Receipts average £1,000 p.a. Panel 900 with scope to increase and good house

4 *SOUTH WALES.*—Well-established middle and working-class PRACTICE Receipts average £1,000 p.a. Panel 900 ample scope to increase and good house

5 *WEST COUNTIES.*—Old-established working class PRACTICE Receipts £1,000 Panel 500 Good detached corner house which may be rented

6 *MIDLANDS.*—Rapidly increasing mixed private and panel PRACTICE Receipts £1,000 Panel 1,100 Excellent house with all services

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partnerships on very reasonable terms. Full particulars on application

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE

THE WESTERN MEDICAL AGENCY

Dr. K. H. BENNETT and Dr. W. J. PARAMORE, who give personal attention to every client

22 CLARE STREET BRISTOL, 1
Telegs Medicine Bristol. *Tel* Bristol 24689

15 BEDFORD ST., STRAND W.C.2
Tel Temple Bar 2532.

THE NEW MENTAL NURSES CO-OPERATION

66 Queen's Gardens, Lancaster Gate W.2
(Late of 13) Edgware Road W.2)

Specially trained Nurses for Mental and Nerve cases. (All Nurses are insured under the Employers Liability Act 1906.) Apply the Supt.

Telegrams Psyconurse Padd Lond. *Telephone* No 6105 Padd.

ESTABLISHED 1878

PEACOCK & HADLEY, Ltd.,
MEDICAL TRANSFER AGENCY

68 Chandos Place Bedford St Strand W.C.

Telegrams Herbals Lesquare London *Telephone* Temple Bar 6[illegible]

LOCUM TENENS and ASSISTANTS supplied for all [illegible]

FOR DISPOSAL

1 NEAR HENDON N.W.—[illegible] PRACTICE Receipts [illegible] Panel [illegible] Premium £[illegible]

2 DURHAM.—Large [illegible] PRACTICE Receipts [illegible] Panel [illegible] Premium £[illegible]

3 NORTHANTS.—Delightful [illegible] PRACTICE Receipts [illegible] panel 900 and [illegible] appointments [illegible] farm house Premium £[illegible] £1,000 Good [illegible]

4 MIDDLESEX.—[illegible] Well-established PRACTICE Receipts £4,000 p.a. panel over 600 [illegible] corner house Good scope Premium for practice and house £3,500 payable [illegible] down

5 WELL KNOWN TOWN hour from London.—Well-established PRACTICE Receipts about £700 p.a. panel 450 Charming house with old garden on rental Good scope Premium £[illegible] for quick sale

6 A number of small PRACTICES at low premium Excellent opportunities for practitioners wishing to acquire a practice with scope

7 KENT COAST.—Well known town SEVEN TENTHS SHARE of old-established good class PRACTICE Total receipts £400 p.a. Fine house on rental Premium open to offers

8 LARGE MIDLAND TOWN (Suburb).—PRACTICE held 16 years by vendor Receipts average nearly £4,000 p.a. good panel Attractive house on rental Premium about £1,000

9 WANTED IN LONDON OR PROVINCES PRACTICES with incomes £500 to £1,000 p.a. Many purchasers waiting and quick transactions for immediate cash

No charge made to purchasers or for inquiries

Telephone Welbeck 27 8
Telegrams "ASSISTIAMO LONDON

NURSES
MALE OR FEMALE

TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES

Nurses reside on the premises and are available for urgent calls Day and Night

THE NURSES ASSOCIATION
(In conjunction with the MALE NURSES' ASSOCIATION)

29 York St., Baker St., London, W.1
Mrs MILLICENT HICKS *Supt*
W. J. HICKS *Secretary*

British Medical Bureau

(The SCHOLASTIC, CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1880)

Tele Address
Triform, Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W.C.1

Telephone Euston 1644 1645

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical Scholastic and Accountancy business and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult The Manager in all transactions requiring the services of a Medical Agent
Members of the British Medical Association may take advantage of a reduced scale of charges applicable to them

REDUCTION IN FEES

In cases where the Bureau are sole Agents the commission in respect of any sale of goodwill book debts furniture drugs fittings and other effects (excluding sales of any freehold or leasehold property or of practices, effects etc outside Great Britain) is limited to a maximum fee of Fifty Pounds

FULL TERMS ON APPLICATION

Practices and Partnerships for Disposal — **Full Particulars sent free**

1 HAMPSHIRE—PARTNERSHIP in well established Practice in beautiful residential district Cash receipts 1937 £2 451 Panel 1 300 Choice of houses Premium for one half share two years purchase

2 MIDDLESEX—Old established PRACTICE of £1 000 p a in developing town Panel 880 Corner house with garage and garden for sale Premium two years purchase

3 LONDON, S E—Old established PRACTICE in good residential district Bookings year ended July 31st 1938 £1 383 Panel 600 increasing Nice well situated house (5/6 bedrooms etc) to rent Premium £2 800

4 W AUSTRALIA—PRACTICE of over £5,000 p a in suburb of important coast town Excellent house for sale or might be rented Premium £4 000

5 LONDON, W—Well established non dispensing non panel PRACTICE of £1 000 p a in nice suburb House with garage and small garden for sale Premium £1 000

6 S MIDLANDS—Well established PRACTICE about £700 p a in good town Panel 758 Detached corner house with garage and garden to rent Premium £850

7 KENT—Medical Woman's PRACTICE of £600 p a, in outlying suburb Panel 193 Detached house with garage and garden to rent Premium £850

8 S WALES—Old established PRACTICE, over £800 p a in small town Panel 600 Detached house (4 bed rooms) for sale Premium 1½ years purchase

9 S OF ENGLAND—Easily worked PRACTICE, about £1 000 p a in Cathedral city (clubs worth about £160 and panel 1 065) House (6 bed and dressing rooms) for sale or rent Premium one and a half years purchase

10 S E COAST—Easily worked middle class PRACTICE averaging £650 p a in summer resort House (6 bed rooms etc) in best part, with large garden and garage for sale Branch surgery rented at 10s weekly Panel 200 Scope Premium £1 200

11 HOME COUNTIES—Old-established country PRACTICE of about £700 p a under 50 miles from London Panel 450 Good house in excellent position with garage and garden to rent Premium £800

12 LONDON, W 12—Old-established PRACTICE about £800 p a in suburban district Panel 900 Good house (4 bedrooms etc) Freehold for sale Prem two years pur

13 S E COAST—Medical Woman's PRACTICE of about £400 in a popular seaside resort Panel 208 House with garage for sale, or to rent Premium £650

14 SURREY—PARTNERSHIP (after a preliminary Assistantship) in growing residential district about 10 miles from London Cash receipts average about £2 350 p a Panel 1 050 A three eighths share is for disposal at two years purchase

15 S E COAST—PARTNERSHIP (with succession) in non dispensing Practice about £2 000 p a Very small panel Attractive house for sale or rent Premium 7/10ths share two years purchase Hospital and possible vacancy for physician in two or three years

16 SURREY—PARTNERSHIP in Practice of about £3 000 p a in residential district Panel 630 Modern house (4 bedrooms) garage garden To rent Preference would be given to an F R C S One half share £3 000

17 E ANGLIA—Old established country PRACTICE of about £2 200 p a within easy distance of coast Panel 1 300 Well built house to rent Premium two years purchase

18 LONDON E C—PARTNERSHIP (with good scope for private practice in a specialty) in Practice mostly derived from valuable appointments Share of £800 to £1 000 at first at two years purchase Partner must possess M D or M R C P or F R C S and preferably City connections

19 S WALES COUNTY TOWN—PARTNERSHIP in Practice £2 800 p a Panel over 1,000 Visits 5/ to £1 1s medicine extra One half share on reasonable terms Partner must hold F R C S Eng Hospital and excellent opportunity for surgical scope and appointment on staff Preliminary Assistantship

20 ESSEX (Borders of Epping Forest)—PARTNERSHIP in steadily increasing Practice over £3 600 p a in growing residential district Panel 1 700 House obtainable One fourth share at two years purchase Cottage hospital Scope for anæsthetics

21 S E COAST—PARTNERSHIP in non dispensing Practice about £4,500 p a Panel 1 400 One fifth or one fourth share at two years purchase Preliminary Assistantship Scotsman preferred

22 LONDON, N 12—Middle class increasing PRACTICE in growing district Receipts past year £420 Panel 163 Modern labour saving house for sale or rent Premium £650

23 S WALES—Contract and small private panel PRACTICE over £1,900 p a in industrial district Panel over 2,100 House with surgery premises to rent Prospect of appointment Premium £3 500

24 S COAST HEALTH RESORT—OPHTHALMIC PRACTICE Receipts, 1938 £1 600 House to rent Unlimited scope Premium one years purchase

25 LONDON, S W—ELECTRO-THERAPEUTICAL PRACTICE Receipts 1937 £1 727 Large consulting room and treatment room to rent Premium £1 600 plus apparatus valued about £750

26 LONDON N—LOCK-UP PRACTICE, £390 p a run by medical woman Panel 327 Rent at surgery 25/ weekly Good scope Premium 14 years purchase

27 DEATH VACANCY—ESSEX SUBURB—Receipts average £989 p a Panel 733 Well situated house for sale Scope

28 N WALES—Popular seaside resort Good class chiefly non dispensing PRACTICE averaging £870 p a No panel Excellently situated detached residence for sale Good scope Premium two years purchase

29 LONDON, E—Cash and panel PRACTICE, averaging £2,800 p a Panel 4 300 House (5 bedrooms) Rent £156 p a Scope Premium two and a half years purchase to include drugs etc

30 W MIDLANDS—PARTNERSHIP in Practice, averaging £6 000 p a in market town Panel 3 500 One sixth share at first at two years purchase Incoming partner should be aged 28/30 and able to do general surgery and minor E N and T work Hospital Preliminary Assistantship

31 N MIDLANDS—PRACTICE in residential district near progressive town Receipts 1937 £770 Panel about 100 House for sale Good scope Premium £900

32 S OF ENGLAND—Well established SANATORIUM for the open air treatment Receipts at present at rate of about £3 000 p a Prem £1,000 include furniture etc

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)

(LICENSED TO)

Tele Address Triform Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1

Telephone Euston 1644 1645

Practices and Partnerships for Disposal (continued)

33 LONDON, S E.—PRACTICE averaging £500 p.a. in populous suburb. Panel 800. Detached double fronted house. Price of leasehold £1,250. Scope. Premium £1,750.

34 FRENCH RIVIERA.—Old established PRACTICE. M.D. essential. Vendor at present in England.

35 S.W. ENGLAND.—Country PRACTICE over £1,400 in beautiful part. Panel about 1,100. Exceptionally nice modern house standing in own grounds for sale. Hunting and shooting. Scope. Premium two years purchase.

36 S.E. COAST.—PARTNERSHIP in Practice over £4,100 p.a. in growing resort. Panel 1,350. Good House (4 beds.) to rent. One fifth share at first at two years purchase.

37 Consulting Ear, Nose and Throat PRACTICE in industrial city. Receipts average £1,350 p.a. (in addition *appointments worth about £350 p.a.*) *Centrally situated* house to rent. Purchaser should hold F.R.C.S. and have specialist experience. Premium two years purchase.

38 KENT.—PRACTICE in developing district 12 miles from London. Receipts past year over £500. Panel about 465. House (3 bedrooms) to rent. Ample scope. Premium £750 to include drugs etc.

39 BIRMINGHAM.—Medical Woman's PRACTICE averaging £1,269 p.a. Panel nearly 900. Good house with garage and garden. Price £500 leasehold. Scope. Premium one and three quarter years purchase.

40 WEST END near Lord's Cricket Ground.—PRACTICE averaging about £1,900 p.a. in ideal residential part. Panel about 1,500. With prospects of good increase. Well built detached double fronted house with garage and nice sized garden. Good introduction. Premium £3,200.

41 MIDDLESEX.—PARTNERSHIP in steadily increasing town. Practice about £2,000 p.a. Panel 1,800. House to rent. Premium one half share two years purchase. Applicant should be English or Scottish.

42 SURREY.—Medical Woman's PRACTICE over £500 p.a. in outlying suburban district. Panel 130. House for sale or rent. Scope. Premium £300.

43 S. AFRICA.—Medical Woman holding D.O.M.S. required in Ophthalmic Practice. Experienced in operative work and not over 40 preferred. SHARE about £1,000 offered after ASSISTANTSHIP.

44 S. COAST.—PARTNERSHIP in Practice over £3,000 p.a. in seaside resort. Panel about 2,000. Semi-detached house (5 bedrooms) for sale or rent. Premium one half share £3,000. Excellent hospital and scope for surgery.

45 N.E. ENGLAND.—PARTNERSHIP in non panel Practice doing about £6,000 in one of the chief towns. House available. One sixth share at two years purchase. Partner should be surgically inclined.

46 S. COAST HEALTH RESORT.—PARTNERSHIP in Practice about £1,500 p.a. Panel over 1,100. House to rent. Premium two-fifths share £1,250 to include drugs etc.

47 N. OF ENGLAND INLAND SPA.—PARTNERSHIP in Practice about £1,900 p.a. Panel 1,200. Excellent House for all. Premium one half share £1,500.

48 S. COAST.—PARTNERSHIP in non dispensing Practice over £5,000 p.a. in English resort. Panel about 600. Share worth about £900 at two years purchase.

49 WEST END OF LONDON.—Good-class non dispensing PRACTICE about £1,150. No panel. Large house to rent. Premium lease and practice £3,000.

50 BUCKS.—PRACTICE in growing town. Receipts last year £894. Panel about 700. House for sale. Well equipped hospital. Premium £1,500.

51 LONDON S.W.—Medical Woman's PRACTICE about £700 p.a. in outlying suburb. No panel. Suitable accommodation available. *Premium £90.*

52 PARTNERSHIP in increasing Ear Nose and Throat Practice in provincial town. Partner must hold F.R.C.S.

53 MIDDLESEX.—FOURTH PARTNER required in Practice over £7,000 p.a. in residential district on the Thames. Panel 1,600. House (5 bedrooms) to rent. Scope. Premium 6/8ths share £3,100.

54 LONDON N.W.—PARTNERSHIP in Practice averaging about £5,000 p.a. Panel about 6,000. Maisonette (2 bedrooms etc.) to rent. One fifth share at first at two years purchase.

55 N.E. COAST.—Middle and better working class PRACTICE over £1,150 p.a. in seaport town. No panel. Private residence for sale. Premium £750 to include furnishings etc. of consulting rooms or near offer.

56 LONDON W.9.—PRACTICE doing between £900/£950 p.a. in residential district. Panel about 60 but plenty of scope. Rent of maisonette (4 bedrooms) £100 p.a. Premium £1,000 or offer.

57 LONDON N.W.4.—Middle-class PRACTICE about £800 p.a. in developing part. Panel 700. House (3 bedrooms) for sale or rent. Scope. Premium £1,250.

58 HOME COUNTY.—FOURTH PARTNER required in Practice in growing town. Panel 3,000. Incoming partner must be energetic aged about 30 (married preferred) with a leaning towards medicine. Initial share about £1,250 p.a. Premium £3,000. Preliminary Assistantship.

59 CORNISH COAST.—PARTNERSHIP in non dispensing Practice nearly £3,000 in favourite resort. Panel 1,200. House obtainable. One third share at two years purchase. Good anaesthetist required. Short Assistantship.

60 S.W. OF ENGLAND.—Non-dispensing PRACTICE averaging £1,636 p.a. in favourite watering place. Small panel. Semi-detached house for sale or rent. Good hospital. Premium £2,800.

COLONIES.—Number of Colonial PRACTICES. Incomes range from about £750 p.a. upwards.

Purchasers can raise additional capital for the purchase of approved practices or shares. Particulars will be forwarded on application.

All communications to be addressed to The Manager

Manager W. M. SCOBIE

SCOTTISH BRANCH, 21, Alva Street, Edinburgh, 2

Telephone Edinburgh 3969

FOR DISPOSAL.

A S. OF SCOTLAND.—Country PRACTICE in lovely district. Receipts approximately £1,000. Panel 760. Exceptionally convenient house. Price £2,000. Premium for practice one and a half years purchase.

B SCOTLAND.—Old established City PRACTICE. Receipts approximately £2,400. Panel 2,500. House price £900. Premium two years purchase or near offer.

C YORKSHIRE.—Country PRACTICE. Receipts £1,200. Panel 500. Excellent house with garage. Price £1,200 freehold. Premium one and three quarter years purchase.

D E. OF SCOTLAND.—Country town. Receipts last year £685 (appointments £112 panel 565). Excellent house with garage and garden. Price £1,450. Premium £1,000.

E N. OF SCOTLAND.—Country PRACTICE. Long established. Receipts approximately £1,000. Panel 275.

F WALES.—PARTNERSHIP in country town. Receipts £1,200. Panel over 1,000. Suitable house. Price £800. One half share at one year's purchase.

G EDINBURGH.—PRACTICE doing £450. House must be bought. Premium practice and house £1,650.

H CENTRAL SCOTLAND.—Country town PARTNERSHIP both partners retiring. Receipts average £2,357. Panel 1,343. Excellent houses prices £1,500 and £1,250. Premium for practice two years purchase.

For further details apply The Manager 21, Alva Street Edinburgh.

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager to whom all communications should be addressed.

RELIABLE LOCUMS and ASSISTANTS are URGENTLY REQUIRED by ALL OFFICES of the BUREAU

BRITISH MEDICAL BUREAU

(The Scholastic, Clerical and Medical Association Ltd.)

(*FOUNDED* 1880)

NORTHERN BRANCH

33, CROSS ST., MANCHESTER, 2.

Telephones {Manchester - Blackfriars 3925 / Manchester - Rusholme 2549 (*Night Calls*)

Telegrams "Locum, Manchester"

Branch Offices at Leeds and Belfast

Recommended with every confidence to the profession by the BRITISH MEDICAL ASSOCIATION as a thoroughly trustworthy medium for the transaction of all Medical Agency business

TRANSFER OF PRACTICES AND PARTNERSHIPS INTRODUCTION OF RELIABLE ASSISTANTS AND LOCUM TENENS at Short Notice VALUATION and INVESTIGATION OF PRACTICES, Etc

Practices and Partnerships wanted Large list of bona fide purchasers with ample capital available Enquiries invited from prospective vendors All information treated in strict confidence

FOR DISPOSAL

Full particulars free on request

NORTH WEST LANCS —PARTNERSHIP in old established Middle and better working-class Practice in pleasant town near Coast owing to retirement of senior partner Cash receipts last year £6 037 Panel 3 600 and appointments £450 p a Suitable for well qualified physician or one holding diploma in ophthalmology Possible Hospital appointment Purchaser may choose own residence Premium—4th or 5th share—2 years purchase (to include drugs book debts etc)—No 1158

CHESHIRE TOWN near Manchester —DEATH VACANCY —Old established mixed Panel and Private PRACTICE Cash receipts last year £3 646 Panel 2 138 Scope Excellent detached house (in own grounds) 2 reception rooms study 4 bedrooms 3 Professional rooms garage with servants quarters and garden For sale at valuation Premium—Practice—best offer —No 1136

MANCHESTER —Old-established middle and working class PRACTICE in suburb Cash receipts last year £2 527 Panel 2 200 Good scope Good semi detached house 2 reception 3 bedrooms garage and small garden Premium—1½ years purchase —No 1154

LADY DOCTOR'S PRACTICE —LIVERPOOL — Well-established and capable of increase Cash receipts about £600 Panel 470 Good house 4 bedrooms to rent Premium—1½ years purchase —No 1157

NORTH STAFFS —Very old established better working and middle class PRACTICE Cash receipts last year £2 431 Panel 1 225 Scope as district developing Excellent house 2 reception 4 bedrooms maid's room separate surgery premises garage and garden For sale Freehold Premium—Practice—1½ years purchase or near offer —No 1120

MANCHESTER —Very old established Panel and Private PRACTICE offering scope for great increase Cash receipts approximately £1 368 p a Panel 1 464 Good house 2 reception 6 bed rooms 2 Professional rooms (separate entrance) garage and small garden Premium—Practice—£2 250 (to include book debts) —No 1155

CHESHIRE —Old established mixed Panel and Private PRACTICE in pleasant Country town Average cash receipts £2 727 p a Panel 1 592 Attractive house 3 reception 5 bedrooms garage and large garden with tennis court to rent Premium —1½ years purchase —No 1140

NORTH EAST COAST —Old established mixed Panel and Private PRACTICE Cash receipts last year £2 160 Panel 2 220 Appointments (transferable) over £400 p a Good house 2 reception 3 bedrooms 3 Professional rooms garage and small garden Price £700 Premium—1½ years purchase —No 1094

LANCS TOWN —Sound mixed Panel and Private PRACTICE close to country In present hands 38 years Cash receipts last year £1 487 Panel 1 400 Nice detached house 2 reception 5 bedrooms garage and large garden Premium—Practice—£2 000 —No 1153

NEAR MANCHESTER —Well established middle and better working class PRACTICE *in pleasant suburban district in present hands 15 years* Average cash receipts over £3 000 p a Panel 1 833 Good scope Good corner house 2 reception 4 bedrooms 3 Professional rooms garage and garden also Branch Surgery premises Both may be rented on lease Premium—1½ years purchase —No 1138

NORTH LANCS —YORKSHIRE BORDER —Old established unopposed Country PRACTICE in present hands 20 years Cash receipts £1 000 p a Panel and appointments approximately £420 p a Well built house with ample accommodation central heating electric light garage and garden of 2 acres *Rent £75 p a Premium—£1 500 Vendor retiring* —No 1119

MANCHESTER —Well established mixed Panel and Private PRACTICE in pleasant suburban district adjacent to new Housing Estate *Cash receipts* approximately £1 100 Panel about 1 000 Excellent modern house 2 reception 4 bedrooms garage and nice garden For sale or may be rented Premium —1½ years purchase —No 1115

YORKSHIRE (W R) —Old established mixed Panel and Private PRACTICE in better working-class and rural district Cash receipts last year £1 186 Panel 1 354 Scope Good house 2 reception 3 bedrooms maid's room 3 Professional rooms (separate entrance) garden with tennis court Rent £45 p a Garage rented Premium—1½ years purchase — No 1122

MONMOUTHSHIRE —Old established Contract PRACTICE Cash receipts last year £2 114 of which over £2 000 is from contract work Excellent house containing 3 reception 4 bedrooms 2 maid's rooms garage for 2 cars and garden Rent £52 p a on long lease Good prospects of increase in income Premium—best offer —No 1144

NEAR MANCHESTER —Very old established middle and working-class PRACTICE in prosperous town Very suitable for two friends in partnership or may be run by one man and an Assistant Cash receipts last year £3 320 Panel 3 000 Nice modern house 2 reception 4 bedrooms separate Professional rooms garage and large garden For sale at valuation Premium—best offer —No 1137

YORKSHIRE (W R) —Old established middle and better working-class PRACTICE in large town Cash receipts last year £1 762 Panel (not encouraged) 550 Good house 2 reception 4 bedrooms 3 Professional rooms garage For sale or may be rented Premium—1½ years purchase —No 1141

MIDLANDS —Increasing middle and working class PRACTICE in large town Cash receipts last year £1 053 Panel over 1 200 Scope Excellent modern house 2 reception 4 bedrooms garage and large garden For sale Freehold Premium —Practice—£2 000 —No 1123

LIVERPOOL —Steadily increasing mixed class PRACTICE Cash receipts last year £755 Panel 650 Good detached house 2 reception 6 bedrooms garage and Garden Premium—Best offer —No 1036

SHROPSHIRE —Old established unopposed Country PRACTICE Cash receipts last year £688 Panel 450 Modern house 2 reception 5 bedrooms 3 Professional rooms garage and large garden Electric light Rent £50 p a Premium—best offer —No 1096

MANCHESTER —Sound old-established PRACTICE in industrial district Cash receipts last year £2 200 Panel 2 230 Scope House 4 bedrooms 2 Professional rooms Rent £50 p a Premium—best offer —No 1084

NORTH WEST COAST —Medical Woman's PRACTICE offering great scope Cash receipts £267 Good house to rent at £45 p a Premium —best offer —No 1148

DERBYSHIRE —Old-established PRACTICE capable of great [illegible] Cash receipts last year £740 (increasing) Nice detached 2 reception 4 (separate entrance) garage and good garden £1 600—No 989

NEAR LEEDS —Old established middle and working class PRACTICE Cash receipts average £1 200 p a Panel 900 Excellent detached house 2 reception 4 bedrooms Professional room (separate entrance) garage and garden Price £1 000 Mortgage can be arranged Premium—Practice—1½ years purchase or near offer —No 1125

NEAR MANCHESTER —Very old established middle and better working class PRACTICE Cash receipts over £2 500 p a Panel 1 450 Excellent detached house 2 reception 6 bedrooms garage and garden with tennis court Price £1 000 Premium—1½ years

NORTH WALES COAST — [illegible] elect residential resort Cash receipts last year £[illegible] Nice detached house with splendid accommodation garage and garden Premium—Practice —2 years purchase —No 1152

NORTH MIDLANDS —Old established mixed Panel and Private PRACTICE in Country district near large town Average cash receipts £1 007 p a Panel 970 and transferable appointments £200 p a Excellent detached house 2 reception 6 bedrooms Professional rooms garage and large garden Price £1 250 —Premium—1½ years purchase —No 1117

NORTH WEST LANCS —Old established mixed Panel and Private PRACTICE in large town Cash receipts last year £1 102 Panel over 1 000 Good house pleasantly situated 2 reception 5 bedrooms garage and small garden Premium—Practice—1½ years purchase —No 1105

LANCS TOWN —Very old established mixed Panel and Private PRACTICE Cash receipts last year £1 372 Panel 1 925 Scope Good house 2 reception 4 bedrooms 3 Professional rooms (separate entrance) Premium—Practice— 1½ years purchase —No 1131

MIDLANDS —PARTNERSHIP in old established Practice in large City Cash receipts last year £2 242 Panel 3 100 Scope Nice house 2 reception study lounge hall 4 bedrooms small garden and garage Price £1 300 or Premium—half share— which substantial sum could remain on mortgage £2 240 —No 1156

MIDLAND SPA —PARTNERSHIP (after preliminary Assistantship) in old established Practice Cash receipts last year £3 774 Panel 1 300 In owner's partner may choose own residence Possibility of Hospital appointment Premium—7/24th share—2 years purchase —*Further share in three years* —No 1069

— WANTED —

ASSISTANTS and LOCUMS

For Immediate Engagements

Apply with full particulars to above address

All communications to be addressed to the Branch Manager BRITISH MEDICAL BUREAU 33 CROSS STREET MANCHESTER 2

BOVRIL MEDICAL AGENCY, LTD.

MIDNI HOUSE

10-13 BEDFORD STREET, STRAND, LONDON W.C.2

Telegrams BOVMEDICAL, LESQUARE, LONDON Telephone TEMPLE BAR 1616 (3 Lines)

Chairman and Managing Director Dr J FIELD HALL

The maximum commission payable on the sale of any Practice or Partnership in Great Britain placed exclusively in the hands of this Agency is £10 (fifty pounds) which sum covers goodwill drugs surgery fittings fixtures and furniture instruments and book debts, but not house property Schedule of Terms will be forwarded on application.

Accountancy and legal services furnished by the Agency where desired at moderate inclusive charges
No charge is made to Principals for the introduction of Locum Tenens or Assistants

1 LINCS—MARKET TOWN—Old-established PRACTICE producing about £2,000 per annum Valuation of fixtures about £600 Small deposit required Balance by arrangement Rent £50 per annum Premium £1,500 payable by instalments over 3 years

2 MIDLANDS—GOOD RESIDENTIAL COUNTRY DISTRICT—Old-established PRACTICE producing about £1,500 per annum but capable considerable extension Capital required about £1,000 Must be introduced by the Agency

3 SUSSEX—FAVOURITE RESIDENTIAL TOWN WITHIN 50 MILES—PARTNERSHIP—TWO-FIFTHS SHARE (or more if required) in well-established business producing gross fees of about £3,500 per annum Share of profits £1,500 per annum Purchase price £3,000 Panel of about 1,400 Suitable house with 3 reception 4 bedrooms etc Garage Rent £60 per annum Premium 3 years purchase Ingoing partner should be over 30 and must be energetic and about to settle down

4 OUTLYING NORTHERN SUBURB—Recently established PRACTICE producing gross fees amounting about £1,600 per annum Panel of 1,100 House with 2 reception 3 bedrooms etc Garden Free hold Rent £50 per annum Premium asked £500

5 SUSSEX—PARTNERSHIP—A half share in well-established Medical Practice producing about £3,500 per annum Panel of about 1,400 and there are prospects of increasing the panel to about 1,600 Good house with attractive consulting room large garden etc Freehold for sale Good hunting and social facilities Premium 3 years purchase Ingoing partner should be experienced and have knowledge of anaesthetics

6 HANTS—FAVOURITE TOWN—Well-established PRACTICE producing between £800 and £1,000 per annum including panel of over 1,000 Excellent freehold house with 5 to 6 bedrooms etc Easily worked On rental or can be bought Premium 1½ years purchase or near offer

7 ESSEX COAST—PARTNERSHIP—A third partner is required in old established Practice producing over £4,000 per annum Suitable house with 3 reception 4 bedrooms etc on rental Premium 2 years purchase Ingoing partner should be a well qualified experienced about 30 and preferably married

8 NORTH WEST LONDON—PARTNERSHIP—One fifth share (with increase later) in well-established Practice producing about £5,000 per annum including panel of about 600 Suitable maisonette with 3 reception rooms etc Industrial rental £50 per annum Premium 2 years purchase

9 DURHAM COUNTY—Old-established Industrial PRACTICE producing about £2,000 per annum of which only about £450 is derived from private work Panel of over 2,100 units Practice has been held by the vendor for about 20 years Premium £4,000 to include book debts drugs surgery furniture etc (part by arrangement) or £3,600 cash down.

10 COAST TOWN WITHIN 80 MILES OF LONDON—Well-established PRACTICE producing about £1,600 per annum of which about £1,100 per annum is derived from panel of approximately 1,000 patients P N S etc Good freehold house available Thoroughly modernized and redecorated throughout heating Ample accommodation garage Price £1,600 Premium 2 years purchase Scope for anyone who can do surgery

11 CITY LOCALITY—Old-established PRACTICE producing about £1,000 per annum gross, or approximately £1,000 per annum Fees 10/6 and 21/- Good class of electrotherapy done Premium £1,000 with furniture equipment, etc at valuation Hours Mondays to Fridays only 10 to 5

12 WEST END—Opportunity for physician desirous of entering West End PRACTICE M R C P minimum qualification essential Full details on personal application

13 EAST LONDON—Well-established PRACTICE producing about £1,550 per annum of which about £750 per annum is derived from panel of about 1,300 patients P N S and Public Assistance work Large proportion of cash Premium 2 years purchase

14 SOUTH DEVON—PARTNERSHIP—A third partner (after preliminary assistantship) is required in old-established mixed-class Practice Share to produce £800 per annum Suitable house available with ample accommodation on Rent £90 per annum Premium 2 years purchase Salary during preliminary assistantship at rate of £600 per annum

15 COUNTY TOWN WITHIN 120 MILES WEST OF LONDON—PARTNERSHIP—A HALF SHARE in old-established good mixed-class Practice producing approximately £2,500 per annum including large panel Fees 2/6 to 15/- Low expenses Purchaser can choose his own house as Practice is worked from central surgery Premium 1½ years purchase Ingoing partner should be experienced and under 40

16 SURREY—WITHIN 15 MILES OF LONDON—PARTNERSHIP—ONE HALF SHARE in a very good mixed-class Practice situated in growing residential district Gross cash receipts approximately £3,000 per annum with substantial panel Very nice house with all modern conveniences and beautiful garden (2 reception 4 bedrooms etc) Can be rented or purchased Premium 2 years purchase Ingoing partner must be experienced in surgery

17 LONDON S W—Old-established mixed-class PRACTICE producing for last 12 months £750 including panel of 280 Flat can be rented at £78 per annum Premium £1,250

18 LONDON EAST—Middle and working-class PRACTICE producing over £500 per annum with good scope Panel of about 750 Fees from 2/- Ten roomed corner house Price for lease £550 Premium £800 to include drugs surgery fittings etc and some furniture

19 DEVON COAST—POPULAR HOLIDAY RESORT—Old-established non-dispensing PRACTICE averaging for the past 3 years £1,600 per annum including panel of 400 Suitable house with ample accommodation Freehold £1,700 or would rent Premium £2,800

20 NORTH WELSH COAST—Good middle-class non panel PRACTICE averaging about £900 per annum with good scope Detached house overlooking beautiful bay with ample accommodation Sport of all kinds. Good schools Premium 2 years purchase Ill health reason for sale

21 WEST MIDLANDS—PARTNERSHIP with succession in 2 or 3 years. Mixed-class Practice in attractive country town in very pleasant surroundings. Average receipts for last 3 years £1,828 per annum Panel of about 800 On the [illegible] Premium [illegible] Partner [illegible]

22 BEDS—PARTNERSHIP—ONE THIRD SHARE in established middle-class Practice producing £1,500 per annum Panel of 1,600 Suitable house with garage Rent £60 per annum Premium £1,000 Debtors etc

23 WELSH COAST—Well-established and increasing PRACTICE producing over £1,000 per annum panel of 1,000 Suitable house with garage and outbuildings and about 1 acre of land Rent £50 per annum Premium £3,000 for goodwill

24 SURREY—RAPIDLY EXPANDING DISTRICT—PRACTICE at present producing about £400 per annum but being increased Panel of 900 (capable of considerable extension) Excellent house with about 1 acre of garden Rent £100 per annum Premium £1,000 for goodwill

25 S W ENGLAND—FAVOURITE COAST TOWN—HALF SHARE in well-established and increasing PRACTICE producing £1,500 per annum Small panel Chance to purchase Medical residence at present occupied by partner RENT Premium 2 years purchase of partnership

26 LONDON N E—Well-established PRACTICE producing over £1,000 per annum Cash receipts £1,000 per annum Panel about 1,000 Can be purchased on easy terms Suitable premises available Premium 2 years purchase

27 LONDON S W—RESIDENTIAL DISTRICT—Good-class established PRACTICE producing about £1,200 per annum Panel of 1,000 (capable of considerable extension) House rental £80 per annum Good scope for enterprising partner Premium 2 years purchase Rent £80 per annum

28 SURREY—Well-established PRACTICE situated in residential district Gross cash receipts £1,500 per annum Panel of 1,000 Small consulting room and waiting room Separate entrance to Private Patients Well-appointed House on rental Premium 1½ years purchase

29 GROWING RESIDENTIAL DISTRICT WITHIN 10 MILES OF LONDON—Recently established and increasing PRACTICE producing at present about £600 per annum Small panel of 350 Excellent surgery Premises comprise house with reception room 3 bedrooms Separate entrance to Private Patients Well-appointed House on rental Premium 1½ years purchase

30 LONDON S W—WITHIN EASY REACH OF CITY AND WEST END—Well-established and increasing PRACTICE with attractive scope producing about £1,500 per annum Small panel of 450 Fees 5/- and 7/6 Good-sized consulting room flat with all conveniences Purchaser should be able to assist by acting as M O H and E R C S about to be advertised

31 LONDON W C—Well-established PRACTICE producing over £1,000 per annum Panel of 1,600 Suitable accommodation available and surgery premises used as locum on rental Premium 2 years purchase

32 LONDON—WESTERN DISTRICT—Old-established non-dispensing panel PRACTICE producing about £1,000 per annum Chance of expansion especially if panel work is undertaken Well-situated corner house on main road with ample accommodation Premium 1 year's purchase Practice should be sold apart from house if wished

33 SOUTH WALES—Old-established mixed-class non-panel PRACTICE producing last year £2,200 of which £2,000 from contract work and panel Suitable house available Future prospects are considered to be excellent as new works have recently been erected in the district Premium £3,000

34 LADY DOCTOR'S PRACTICE—BIRMINGHAM—Old-established PRACTICE producing last year over £1,000 on a limited basis about £400 from panel Fees 5/- upwards Midwifery usually 5 guineas about 12 cases p.a. Suitable house available Premium 1 year purchase or would take £2,000 cash for quick sale

35 KENT COAST—FAVOURITE SEASIDE RESORT—Old-established middle-class PRACTICE producing about £670 p.a. Small panel 200 patients Very good house in best end of the town with ample accommodation Freehold available Premium £1,000 Eminently suitable for retired army officer wishing to augment pension or there is scope for younger man

36 SUSSEX—FAVOURITE COAST TOWN—Old-established PRACTICE producing about £1,000 p.a. including panel which brings in about £150 p.a. Good house on two floors, 2 reception 4 bedrooms, etc Freehold for sale. Premium 2 years purchase

37 SOUTH COAST SEAPORT—PARTNERSHIP—ONE THIRD SHARE available in old-established and rapidly increasing Practice which last year produced approximately £3,395 including a panel of over 1,600 patients. Purchaser can choose his own residence Practice is conducted from central surgery and the expenses are not high.

38 NORTHANTS—ASSISTANTSHIP with view to Partnership in an old established country Practice with good future prospects. Initial salary £500 p.a. including car allowance the assistant to live out. Full details on application

39 MIDLANDS—FAVOURITE COUNTY TOWN—SURGICAL OPENING—A QUARTER SHARE (after preliminary assistantship of 3 months) is offered in old-established increasing Practice producing approximately £125 and going

40 SOUTH SHAH [illegible] worth [illegible] purchase

41 LONDON [illegible] for last 12 months £1,284 p.a. Panel of 620. Suitable house on rental. Premium 2 years purchase or near offer

42 SOUTH AFRICA—PARTNERSHIP—Good surgical opening. Present receipts about £2,000 p.a. with ample scope for expansion with added suitable partner Full details on application.

The Agency has made arrangements for special facilities on very favourable terms to be afforded to approved purchasers for the advance of part of the premium for any suitable practice or partnership Full details on application.

INDEX TO ADVERTISEMENTS

PUBLISHERS

British Medical Association Supp ii
Churchill J & A Ltd 23
Lewis H K & Co Ltd 2
Saunders W B & Co Ltd 3
Wright John & Sons Ltd 2

ASSURANCE & INSURANCE

London & Counties Med Prot Soc Ltd Supp i
Medical Insurance Agency 40
Medical Sickness etc Society Ltd 4
Yorkshire Insurance Co Ltd 22

BANKS & FINANCE

British Medical Finance Ltd 46
Westminster Bank Ltd 22

CHEMISTS

Allen & Hanburys Ltd 11
Aluzyme Products 6
Bell John & Croyden Ltd 8
Boutalls Ltd 6
British Drug Houses Ltd 13
Burroughs Wellcome & Co 19
Carnrick G W Co Supp i
Duncan Flockhart & Co 7
Eli Lilly & Co Ltd 12
Evans Sons Lescher & Webb Ltd 9
Fellows Med Mfg Co Ltd 8
Giles Schacht & Co Cover iii
Glaxo Laboratories Ltd 20
Riddell Francis Ltd 10
Roche Products Ltd 15
Saccharin Corpn Ltd 14
Scott & Turner Ltd 17
Valentine's Liver Extract Cover iii
Wander A Ltd 13
Wright Layman & Umney Ltd 16

FOODS, BEVERAGES

Allen & Hanburys Ltd 12
Borwick George & Sons Ltd 14
Brand & Co Ltd Supp iii
Genatosan Ltd 18
International Tea Market Board Ltd Supp iv
Marmite Food Extract Co Ltd 9
Millers Mutual Assn 10
Numol Ltd Cover iv
Ramlosa Table Water 6

NAME PLATES, etc

Hall F B & Co 22
Herd S J & A 22
Lewis H K & Co Ltd 22
Osborne F & Co Ltd 22
White Bronze Co 23

SURGICAL APPARATUS

Bailey W H & Son Ltd 5
Hilliard 23
Leslie's Ltd 7
Maw S Son & Sons Ltd 4
Millikin & Lawley Ltd 22
Robinson & Sons Ltd 6
Salmon Ody Ltd 22
Salt & Son Ltd Cover ii

TAILORING & CLOTHING, etc

Burberrys Ltd 21
Dormel Fabric Co 7

TOBACCO & CIGARETTES

Carreras Ltd Supp ii
Wills's Three Castles 2

VACCINES, SERA, etc

Genatosan Ltd 11

WINES, SPIRITS, etc

Anderson Dobson & Co Ltd 22

X RAYS AND ELECTRO-MEDICAL

Allen & Hanburys Ltd 5
Victor X Ray Corporation Ltd 21

HOMES & INSTITUTIONS

Pages 23 24 25 27

HOUSE AGENTS

Page 38

HOSPITALS & CLINICS

London Clinic 27
New Lodge Clinic 27

SANATORIA

Cotswold Sanatorium 26
Pendyffryn Hall Sanatorium 26
Tor na Dee Sanatorium 26

SPAS, HEALTH RESORTS, & HYDROS

Harrogate 26
Lings Tours 23
Pistany Spa 27
Rockside Hydro 27
Smedley's Hydro 27
South Africa 21
Stanboroughs Hydro 27

MEDICAL SCHOOLS, TUTORS, & LECTURERS

Page 37 38

NURSING, etc

Page 41

TRANSFER AGENTS

Bovril Medical Agency 4
British Medical Bureau 42 43
Lee & Martin Ltd 41
Medical Agency Ltd 41
Peacock & Hadley Ltd 41
Turner Percival Ltd 41
Western Medical Agency 41

CONTRACT PRACTICE

Page 35

HOSPITAL VACANCIES, etc

Pages 29 30 31 32 33 34 35 36 39 & 40

CLASSIFIED ADVERTISEMENTS—(Wanted & Vacant)

Pages 36 37

GENERAL

Norwich & East of England Med Prot Soc 22

BMF

A Comprehensive Financial Service for Medical Men

THE scope of the facilities offered by the Company has been greatly extended and finance can now be obtained by a doctor for ANY purpose connected with the running of his practice or his house The charges are unusually low and the service is strictly confidential as between the Company and the doctor Further particulars and proposal forms may be obtained from the Company

BRITISH MEDICAL FINANCE LTD.
TAVISTOCK HOUSE SOUTH, TAVISTOCK SQUARE, LONDON, W C 1

Published by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Eyre and Spottiswoode Limited East Harding St Fleet St London E C 4 Printed in Great Britain Entered as Second Class at New York U S A, Post Office

In the treatment of

ACUTE GASTRITIS

FORMULA

Each drachm contains in a concentrated form

Liquor Bismuthi Schacht - dr 1
Pepsina Liquida Schacht - dr 1
Morphin Hydrochlor gr 1/24
Acid Hydrocyan Dil P B min 2
Tinct. Nuci Vom min 5

This preparation of pure bismuth and pepsina liquida with sedatives possesses a world wide reputation with the medical profession in the treatment of gastritis, gastric ulceration and the vomiting of pregnancy There is a wealth of medical evidence testifying to the excellent results achieved

Packed in 16 oz , 8 oz and 4 oz. bottles Dose one drachm in a little water three times a day before meals Samples and literature will gladly be sent on request

BISEDIA

A preparation of
GILES SCHACHT & CO
CLIFTON BRISTOL ENGLAND
Manufacturing Chemists for over a Century

Distributors in Eire May Roberts & Co Ltd Dublin
in India K Paul & Co Bonfield's Lane Calcutta
in Australia J G Riseal Chemical Curatives 86 Pirie St Adelaide

The Control of MACROCYTIC ANÆMIAS

★

Concentrated by a simple process Solution Liver Extract Valentine means effective and economical oral liver therapy Being an aqueous extract it contains both the Cohn Minot principle for pernicious anaemia and the Whipple fraction It is a good source of Vitamin B 2

One tablespoonful represents ½ lb of whole liver and most patients like the taste

ORAL LIVER THERAPY
Palatable-Effective-Economical

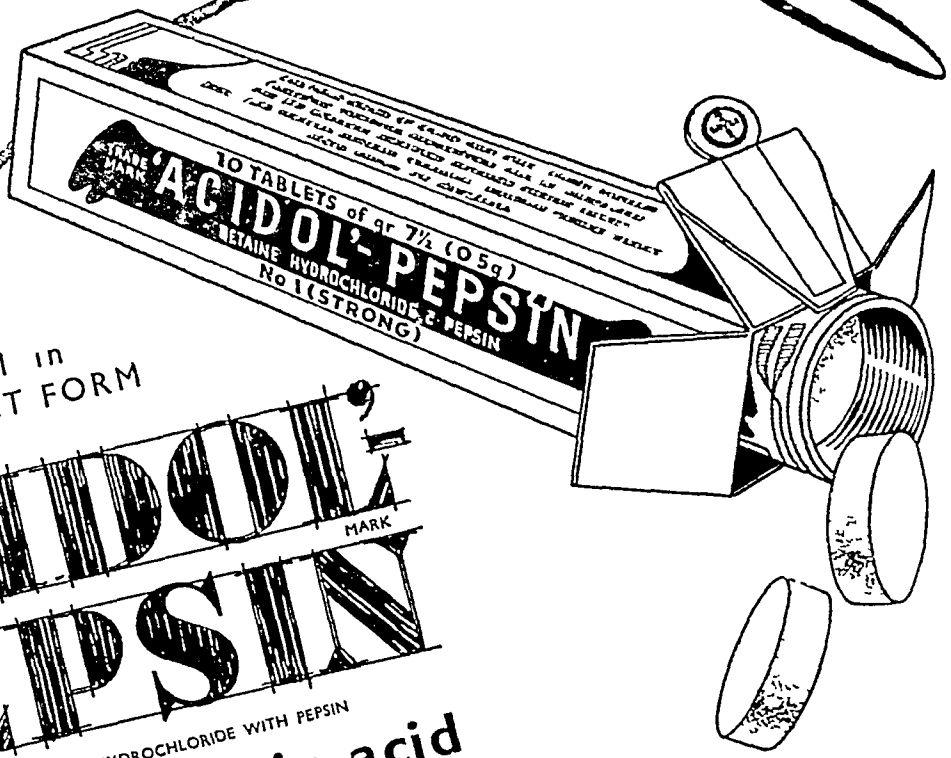
8-oz Bottles 11'6

Sample and literature showing clinical response on request from the British Distributors

BUTLER & CRISPE,
80/84 Clerkenwell Road London E C.1

Solution LIVER EXTRACT VALENTINE

ACHLORHYDRIA



HCl in TABLET FORM

ACIDOL-PEPSIN

TRADE MARK

BRAND OF BETAINE HYDROCHLORIDE WITH PEPSIN

For hydrochloric acid medication, with pepsin

ADVANTAGES—Solid form convenient to carry Indefinitely stable Pleasant taste Prolonged action

Acidol-Pepsin is issued in gr 7½ (0·5 g) tablets in tubes of 10 and cartons of 50

Two strengths — Strong (pepsin 0·1 g and 'acidol' 0·05 g) Weak (pepsin 0·2 g and 'acidol' 0·4 g)

Fifty Years of 1888 BAYER 1938 PHARMACEUTICAL PRODUCTS

One to four tablets, as indicated dissolved in water at meal times

BAYER PRODUCTS LTD.,
AFRICA HOUSE, KINGSWAY, LONDON, W.C.2

Northern Office (Information only)
BLACKFRIARS HOUSE, PARSONAGE, MANCHESTER 3

Dublin Office
MOLESWORTH HOUSE SOUTH FREDERICK ST., DUBLIN

BRITISH MEDICAL JOURNAL

AUGUST 27 1938

TABLE OF CONTENTS

ADDRESSES AND PAPERS

Toxic and Infective Jaundice C E Lakin MD FRCP 437
Methods of Testing for Colour Vision and Theoretical Deductions from Observations on Colour Vision H E Roaf MD DSc 440
Some Cardiological Fallacies J W Linnell MD and W A R Thomson MD 442
The 'Restropic" Activity of Blood C Wetzler Ligeti and B P Wiesner D.Sc 444
Treatment of Carcinoma in Pharynx and Larynx by Irradiation C Hamblen Thomas FRCS 447
Helium in Anaesthesia W Stanley Sykes MB and Reginald C Lawrence MB 448
Cardiazol Therapy in Stupor J S Harris MD and C R Birnie MD 449
Fracture of Neck of Femur Personal Experience John C Nicholson FRCS 464

SURGICAL SERIES

Dislocations and Fractures of Thumb and Fingers David Trevor MS FRCS 461

CLINICAL MEMORANDA

Suicide after Treatment as Voluntary Patients S A Mackeith MRCS and D N Parfitt, MD 451

REVIEWS

Virus and Virus Diseases 452
Diseases of Infancy 452
Injuries to Athletes 452
The Encyclopaedia Britannica Yearbook 453
Iris Pattern and its Groupings 453
Simple Instruction on Sex 454
Notes on Books 454

GENERAL ARTICLES AND NEWS

The British Association 466
Medical Unemployment in India 462
Nova et Vetera
Thomas John Maclagan 455
The Founder of the Surgeon General's Library 455
Preparations and Appliances 454
Universities and Colleges 477
Medical News 477

LEADING ARTICLES

National Insurance in New Zealand 456
New U S A Food and Drugs Act 457

ANNOTATIONS

Vitamin C in Milk 458
Suicide by Tubercle Bacilli 458
Methyl Cellosolve as an Industrial Poison 459
Experiments on Animals in 1937 459
Sensitivity to Sunlight 460
The Educational Number 460

SUPPLEMENT

Medical Practice in Germany By Karl Haedenkamp MD

Council and Committees for 1938 9

A General Medical Service Dr C E S Flemming's Views

Prophylactic Value of N H I
Investigation into Incapacity
Health of the City of London
Insurance Medical Service
Correspondence
Postgraduate News
Naval, Military and Air Force Appointments
Association Notices Vacancies and Appointments Diary

LOCAL NEWS

India—
Countess of Dufferin's Fund 467
Plague in Bombay 468
New Zealand—
The Cost of Social Services 468
National Health Scheme 468
England and Wales—
Nursing Inquiry 469
Red Cross Rheumatism Clinic 469
Port Hygiene at Liverpool 469
The Ross Institute 470
L C C Hospital Services 470
Ireland—
Medical Members of the Senate and the Dail 470
The Rotunda Report 470

EPIDEMIOLOGY SECTION

Epidemiological Notes 478
Table of Infectious Diseases and Vital Statistics 479

CORRESPONDENCE

Maternal Mortality Rates W G Willoughby MD 471
Hormone Therapy in Mastitis and Breast Cancer A W Spence MD and G Keynes FRCS 471
The Prontosil Group in *Br abortus* Infections Sir Weldon Dalrymple Champneys DM 471
Blood Groups and Legislation J C Thomas MRCS 471
Rheumatoid Arthritis and Jaundice W L Peacock MB 472
Antagonistic Diseases E Granger MB 472
Small pox and Vaccination A D Stirling MB C Killick Millard MD 47
Undescended Testicle Denis Browne FRCS 47
Sulphonamide in Gonorrhoea H M Hanschell MRCS 474
B welchii Infection after Abortion Ernst Friedmann LRCS 474
Snake Venom for Oral Haemorrhage R F Kaye Webster LRCS LDS 475
Psychosomatic Illness P Lionel Goitein MB 475
Holiday Colonies for Fitness C J L Wells BM 475
Medical Evidence at Inquests J L Barford MRCS 475
London Emergency Bed Service E M G Galton MB 476

OBITUARY

H R Jeremy FRCS 476
J C G Dickinson MB BS 476

MEDICO LEGAL

The Limits of a Guarantee 476

THE SERVICES

Military Operations in Waziristan 477
Deaths in the Services 477

LETTERS AND ANSWERS

Cleaning Slides for Blood Films 480
A Strict Vegetarian Diet 480
Adrenaline for Wasp Sting 480
Abortion and the Law 480
Medical Aid in Spain 480
New Treatment for Coryza 480
Medical Golf 480
Corrigendum 480
Vaccine with Sulphanilamide for Gonorrhoea 480

A KEY TO CURRENT MEDICAL LITERATURE will be found at the end of the JOURNAL

THREE BOOKS BY J GRANDSON BYRNE, M D

Pp xii + 298 With 51 Illustrations Demy 8vo 18s net postage 6d

STUDIES ON THE PHYSIOLOGY OF THE MIDDLE EAR

Re issue, with Supplement and New Index

Royal 8vo Pp xii + 110 With 15 Illustrations 40s net

STUDIES ON THE PHYSIOLOGY OF THE EYE

Still Reaction, Sleep, Dreams Hibernation, Repression Hypnosis Narcosis Coma and Allied Conditions

the book will be valuable It is profusely illustrated with excellent photographs of the pupils —*British Medical Journal*
(*Extract from Press Notice of First Issue*)

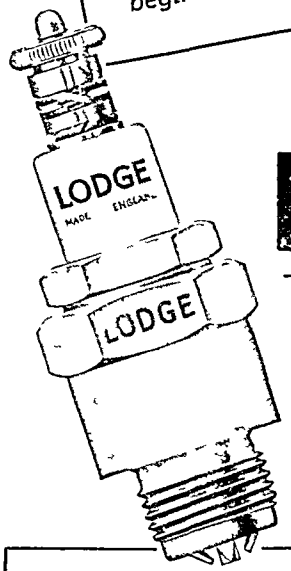
With 49 Illustrations Demy 8vo 10s 6d net postage 6d

CLINICAL STUDIES ON THE PHYSIOLOGY OF THE EYE

In this work there is collected a series of observations on the eye which are full of interest and calculated to arouse in the most complacent of methodical clinicians a new spirit of inquiry —*British Medical Journal*

London H K LEWIS & Co Ltd, 136 Gower Street, W C 1

To the expert motorist, the improvement effected by fitting a new set of Lodge plugs is common knowledge to the beginner it comes as a revelation



Fit a new set of

LODGE

THE BEST PLUG IN THE WORLD

WORLD'S LAND SPEED RECORD

Capt Eyston used Lodge plugs in the Rolls Royce engines of "Thunderbolt"

Lodge plugs are obtainable from all motor accessory dealers from 3/ each and are made completely in England by Lodge Plugs Ltd Rugby

BOOKS ON THE EYE

DISEASES OF THE EYE
By SIR JOHN PARSONS C.B.E. D.Sc. F.R.C.S. F.R.S. New (5th) Edition 1
Plate 20 in Colour and 160 Text figures 1

RECENT ADVANCES IN OPHTHALMOLOGY
By SIR STEWART DUKE-ELDER M.D. F.R.C.S. 3rd Edition 5 Plates (2 Coloured) and 150 Text figures 15

THE PRACTICE OF REFRACTION
By SIR STEWART DUKE-ELDER M.D. F.R.C.S. New (3rd) Edition 183 Illustrations 1

REFRACTION OF THE EYE including Elementary Physiological Optics
By CHAS GOULDEN O.B.E. M.D. F.R.C.S. New (2nd) Edition 181 Illustrations 1

AN ATLAS OF EXTERNAL DISEASES OF THE EYE
By HUMPHREY NEAME F.R.C.S. 5 Coloured Illustration 15

J & A CHURCHILL LTD
104 Gloucester Place London W1

OSTEOLOGY

ANATOMICAL MODELS

DIAGRAMS & CHARTS

FOR LECTURES

H K LEWIS & Co Ltd
136 GOWER ST, LONDON, W C.1
EUSton 4282 (5 lines)

Should be in the possession of every medical man —*Glasgow Medical Journal*

URINARY SURGERY A HANDBOOK FOR THE GENERAL PRACTITIONER

By **W K IRWIN**, M D, F R C S,
Surgeon St Paul's Hospital for Genito Urinary Diseases

Clearly written furnishes the practitioner with information of great practical value in his everyday work —*British Medical Journal*

SECOND EDITION Revised and Enlarged Price 10s 6d (postage 6d)

BAILLIÈRE, TINDALL & COX, 7 & 8, Henrietta St, London, W C 2

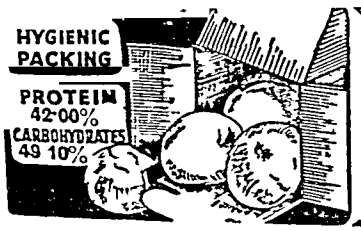
A GENTLEMAN ALWAYS LOOKS WELL DRESSED IN SAVILE ROW CLOTHES



NEW LIGHT OVERCOATS LOUNGE DRESS SPORTS SUITS etc by all eminent tailors viz. Scholte Lesley & Roberts Kilgour etc OUR PRICES 3 to 8 Gns.

Alterations on Premises

REGENT DRESS CO
2nd Floor Piccadilly Mansions 17 Shaftesbury Av Piccadilly Circus W 1 (Next Cafe Monico) GER 7110
LADIES DEPT on 1st FLOOR



— ERGO —

HEALTH BREAD, ROLLS AND CRACKNELS

Widely Used in Diets for Diabetes, Gastric Ulcer, Indigestion, Obesity

Free Sample Diet Plans and Analysis sent post free on request

POLLEY & COMPANY LTD
(Dept B) Plymouth Road London E 16

ERGO

Regd Trade Mark

HENRY KIMPTON'S PUBLICATIONS

NEW BOOK — JUST OUT

CAUSE AND PREVENTION OF DISEASE

By WILLIAM HARVEY PERKINS, M.D.

Royal Octavo, 712 pages — Cloth

Price 35s. net (Postage 1d.)

The work is important in that it brings together in one volume a large amount of information which is scattered throughout many publications, and which is required for a proper understanding of the causation, prevention and treatment of disease.

NEW BOOK — JUST READY

CANCER

With Special Reference to Cancer of the Breast

By R. J. BEHAN, M.D.

Large Octavo, 344 pages with 163 Engravings — Cloth

Price 12s. net

NEW WORK — JUST READY

PEDIATRIC SURGERY

By EDWARD C. BRENNER, M.D., F.A.C.S.

Royal Octavo, 834 pages, with 293 Illustrations — Cloth

Price 45s. net

Many of the articles included in this volume are regarded by eminent authorities as standard treatises on the subjects with which they deal. The practical character of the work is maintained by the exclusion of matter of a purely theoretical nature. The value of the book is enhanced by the incorporation of a large number of illustrations, many of which have been specially prepared for the work. The publishers believe that this volume will be found a most valuable addition to the literature of modern surgery.

NEW EDITION — NOW READY

METHODS OF TREATMENT

By LOGAN CLENDENING, M.D.

Sixth Edition, Revised. Royal Octavo, 879 pages, with 193 Illustrations — Cloth

Price 12s. net

The book is a mine of information on all the methods of treatment in general medicine and at the same time provides for which material is usually widely separated in medical literature.

The most attractive book of its kind we have seen. — The Journal of the American Medical Association.

NEW (THIRD) EDITION — JUST READY

DISEASES OF THE THYROID, PARATHYROIDS AND THYMUS

By ANDRÉ CROTTI, M.D., F.A.C.S., LL.D., R.I.C.S.

THIRD EDITION THOROUGHLY REVISED AND ENLARGED

Imp. Octavo, 1229 pages with 262 Illustrations and 39 Plates in Colour — Cloth

Price £4 10s. 0d. net.

NEW WORK — JUST OUT

PRACTICAL OTOLOGY, RHINOLOGY AND LARYNGOLOGY

By ADAM EDWARD SCHLANSER, M.D.

Royal Octavo, 315 pages with 31 Engravings — Cloth

Price 21s. net (Postage 6d.)

It is the purpose of this book to show how each of the complaints that occur in otorhinolaryngological practice may be handled exactly, directly and successfully. To this end the book has been made distinctly clinical and its instructions may be followed with certainty, confidence and ease.

NEW BOOK — JUST OUT

SYNOPSIS OF THE DIAGNOSIS OF THE ACUTE SURGICAL DISEASES OF THE ABDOMEN

By JOHN A. HARDY, M.D., F.A.C.S.

Demy Octavo, 345 pages with 92 Illustrations — Cloth.

Price 20s. net (Postage 6d.)

In this book the effort has been made to provide a concise, accurate and complete synopsis of, and a review of the methods of diagnosis of the acute surgical diseases of the abdomen, and to avoid future needless and disastrous

NEW BOOK — JUST READY

THE HEART IN PREGNANCY

By JULIUS JENSEN, Ph.D., M.R.C.S.(Eng.), L.R.C.P.(Lond.)

Large Octavo, 371 pages with 9 Illustrations — Cloth

Price 25s. net (Postage 8d.)

SECOND EDITION — JUST READY

THE MANAGEMENT OF FRACTURES, DISLOCATIONS, AND SPRAINS

By JOHN ALBERT KEY, B.S., M.D. and H. EARLE CONWELL, M.D., F.A.C.S.

Second Edition, Revised and Enlarged. Large Octavo, 1246 pages with 1222 Illustrations — Cloth

Price 52s. 6d. net

This book is complete in every detail as regards the treatment of fracture, sprain and dislocation, covering the anatomy, diagnosis, symptomatology as well as description of the operative procedure of fracture and of the newer methods of skeletal traction.

263, High Holborn — HENRY KIMPTON — London, W.C.1

In the most unexpected places



Illustrated above—Norton, a hamlet near Shrewsbury "Player's" can be purchased at this picturesque cottage which is reputed to be 300 years old Nearby are the ruins of the old Roman City Uriconium

Numerous letters from smokers tell of pleasure in finding their favourite "Player's" on sale here, there and everywhere in the most remote places The vast demand which alone makes this possible, also ensures their constant freshness and is proof supplied by smokers themselves that there is no better Cigarette at 10 for 6d

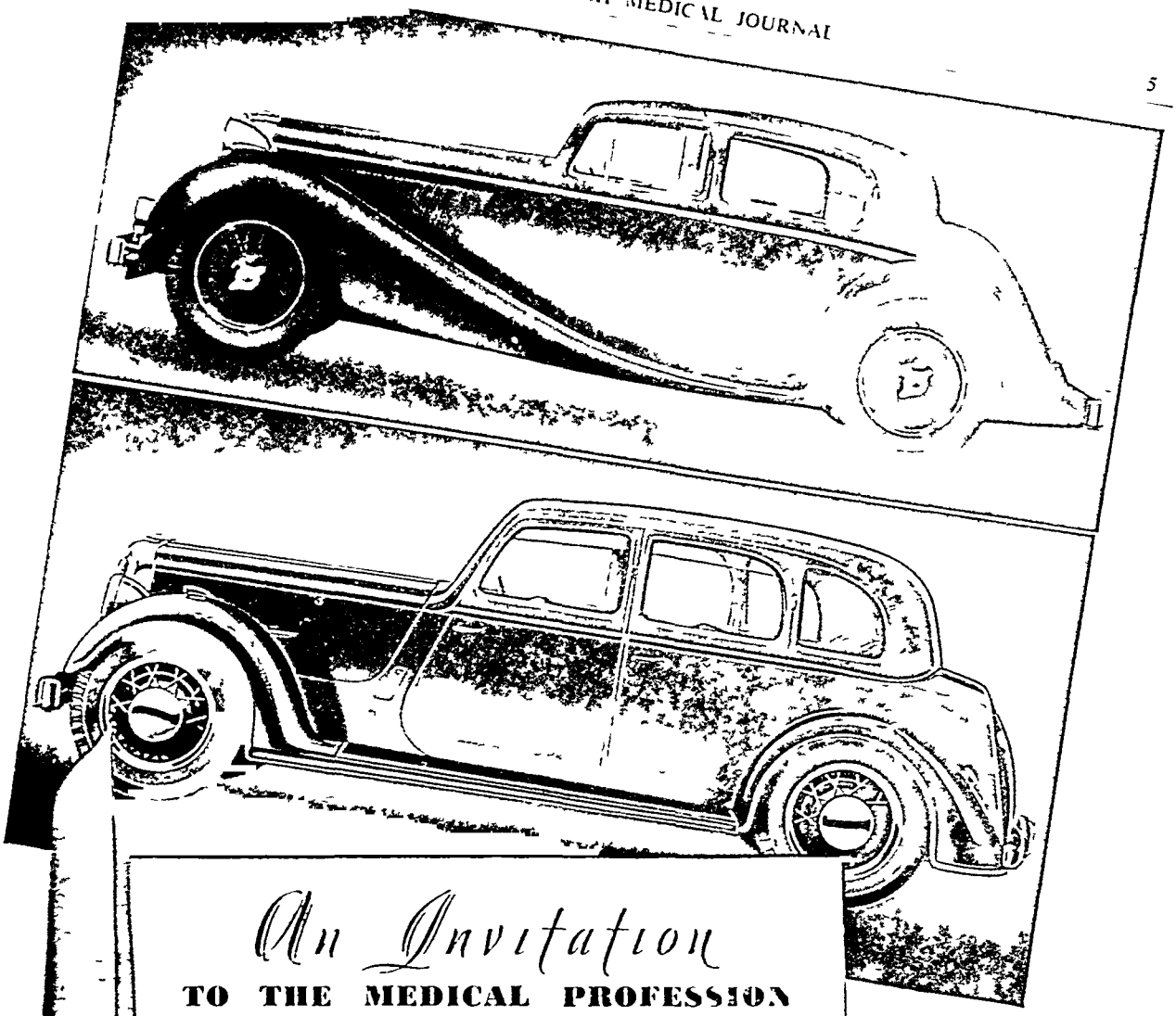
MEDIUM OR MILD — CORK-TIPPED OR PLAIN Ask for which you prefer and please yourself whatever your taste

Player's Please

MEDIUM OR MILD

PLAYER'S NAVY CUT CIGARETTES "MEDIUM" OR "MILD" CORK-TIPPED OR PLAIN 10 FOR 6D 20 FOR 11½D

N.C.C.430



An Invitation

TO THE MEDICAL PROFESSION

Henlys, England's Leading Motor Agents, invite the investigation by medical men of the many outstanding advantages to be gained by going to Henlys for new or used cars

If you prefer a new car Henlys are distributors for SS, Jaguar Rover Alvis, Austin and Studebaker and agents for other outstanding productions, including Morris Riley Daimler Humber Hillman Armstrong, etc

If your choice is a used car, Henlys offer you the largest selection in the country—7 days' free trial and a guarantee with every example £100 and over

20 EQUAL MONTHLY PAYMENTS BUY ANY NEW CAR

To the medical profession Henlys offer special car purchase terms Any make of new car can be bought from Henlys and paid for by 20 equal monthly payments—the most favourable rate obtainable anywhere

Any car will be taken in part exchange. Write phone or call now for further particulars

THE LARGEST & FINEST SELECTION OF NEW & USED CARS IN ENGLAND

HENLYS

HENLY HOUSE, 385 EUSTON ROAD NW1 PHONE EUSTON 4444.
DEVONSHIRE HOUSE, PICCADILLY W1 AND AT MANCHESTER BRISTOL AND BOURNEMOUTH

MODERN HEARING AIDS

FOR THE **deaf**

TRUE TO TONE
HIGH EFFICIENCY
VALVE INSTRUMENTS

THE NEW

Belclere REGD. TRADE MARK

Illustrated booklet will gladly be sent on request

All instruments are available for home trial

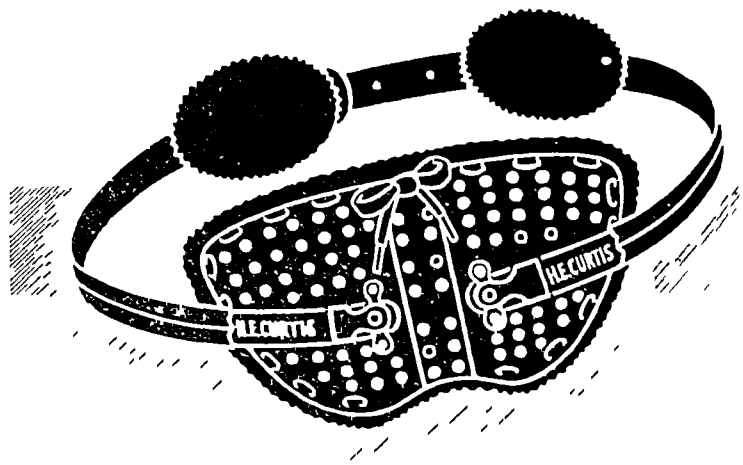
Made by

JOHN BELL & CROYDEN

WIGMORE ST, LONDON, W 1 *Acoustic Department*

Telephone Welbeck 5555 (20 lines) *Telegrams Instruments, Phone, London*

Unhesitatingly prescribed....



For 25 years, Medical Authority throughout the world has recognized the Curtis Abdominal Support No 1 as the most efficient support for all forms of Abdominal Ptosis The even anterior-posterior pressure without undue constriction of the abdomen has been found by far the most satisfactory, and with this Curtis has combined a lightness in weight and a freedom for bodily movement which is gratefully acknowledged by thousands of wearers

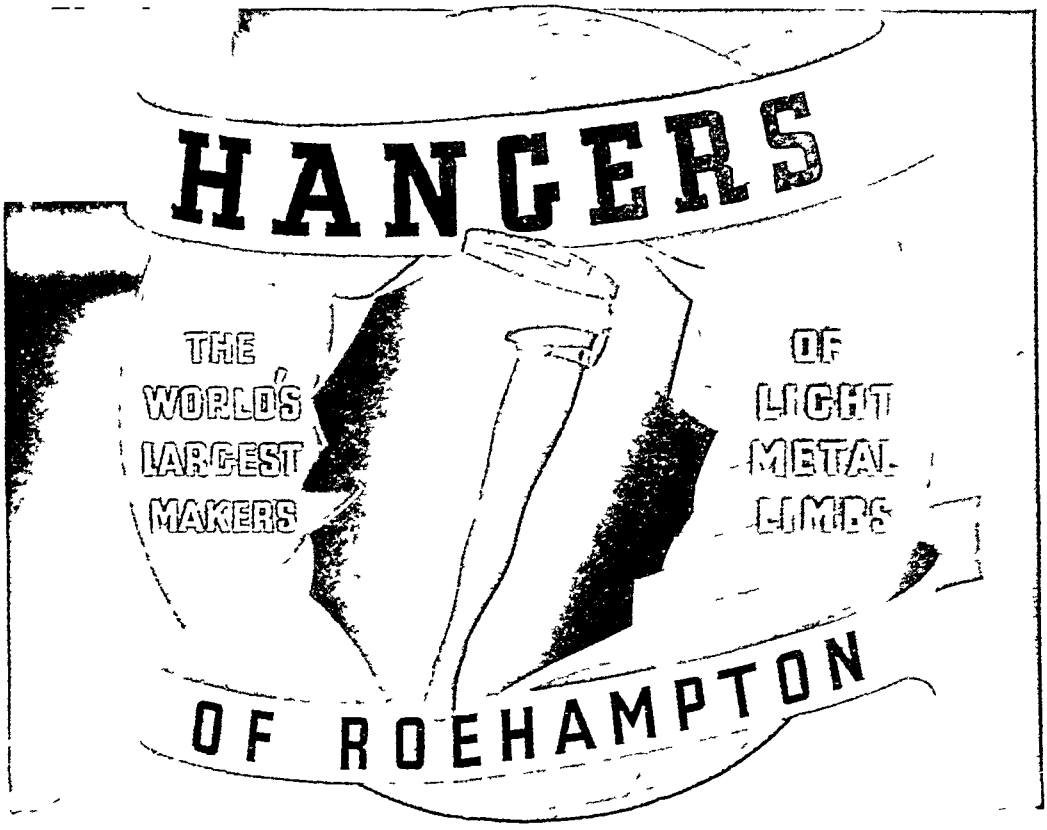
CURTIS RTM

Abdominal Support No 1

Specialists in Abdominal Appliances
Sole Makers of CURTIS APPLIANCES, ABDOMINAL BELTS, and CORSETS, ELASTIC HOSIERY, TRUSSES, COLOSTOMY APPLIANCES, ETC

H E Curtis & Son, Ltd, 7, Mandeville Place, Wigmore Street, London, W 1

Telegrams Curtis Welbeck 2921 Telephone Welbeck 2921



RECENTLY ISSUED, Post Free to the Medical Profession on Application

"Solvitur Ambulando"

72 pages, 37 Coloured Plates, deals exhaustively with the problem of providing prostheses for the lower extremities for every type of amputation and congenital deformity Many distinguished Surgeons have written to us in terms of the highest appreciation of the usefulness of this book

J. E. HANGER & CO., LTD.

Queen Mary's (Roehampton) Hospital for the Limbless,
ROEHAMPTON LONDON S W 15

Branches at —Aberdeen Belfast Birmingham Bristol Cambridge Cardiff Cosham Dublin Edinburgh Exeter Glasgow, Leeds Liverpool Manchester Newcastle-on Tyne and Nottingham

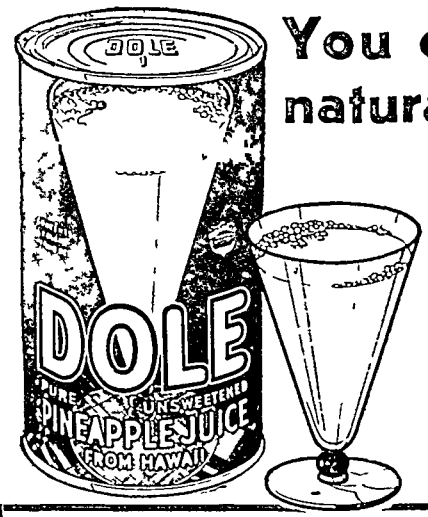
INFANTILE ECZEMA RAPIDLY ALLEVIATED *

As a medical man you will agree that one of the principal difficulties in treating cases of eczema in children is the interference by the patient provoked by the intense irritation Successful local treatment therefore calls for a soothing dressing It is this property of Sphagnol Peat Ointment which makes it so valuable The peat distillates which it contains soothe from the first application At the same time these healing antiseptic peat distillates assist in the growth of normal skin
In case you have had no personal experience of Sphagnol we shall be pleased to send you a clinical size sample for testing if you will write to Peat Products (Sphagnol) Ltd Dept B M J 12 21 Bush Lane London E.C 4

CONTAINS DISTILLATES OF PEAT

* Sphagnol

MEDICAL SOAPS OINTMENT SUPPOSITORIES, ETC

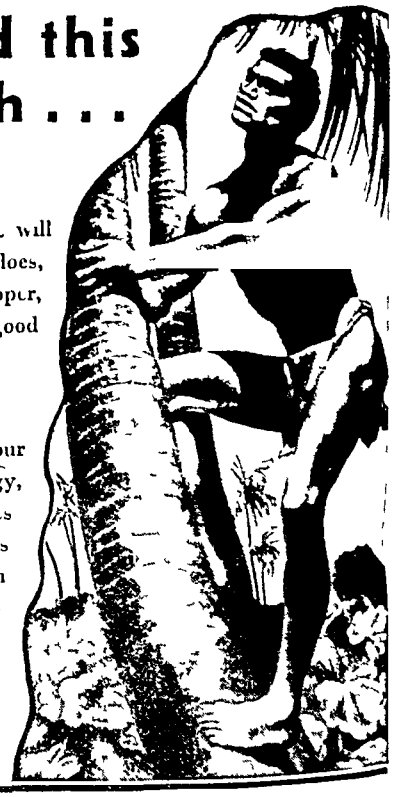


You can recommend this natural fruit juice with . . .

CONFIDENCE
that Dole Hawaiian Pineapple Juice will be of benefit, containing, as it does, Calcium Oxide, Magnesium Oxide, Copper, Manganese and Iron, and being a good source of Vitamins A, B and C

CONFIDENCE
that your patients will follow your advice to drink this invigorating, tangy, delicious juice of *sun ripened* pineapples Children especially will appreciate this choice addition to their menus when they might balk at some equally beneficial but less tasty drink

● *Write us on your letterhead and we will send a sample tin*
2000 Doctors have already availed themselves of this offer



Here is a Typical Analysis of Dole Pineapple Juice

Moisture		85 3 %
Ash		0 4 %
Fat (ether extract)	•	0 3 %
Protein (N x 6 25)	•	0 3 %
Crude fibre	•	0 02%
Titratable acidity as citric acid	•	0 9 %
Reducing sugars as invert sugar	•	12 4 %
Carbohydrates other than sugars (by difference)		0 38%

DOLE PINEAPPLE JUICE *from Hawaii*
J K HUSBAND & CO LTD 10 EASTCHEAP LONDON E C 3

Dole Pineapple Juice comes from Hawaii where the pine apples are sun ripened before the juice is extracted

SULPHAQUA BATH CHARGES

For upwards of thirty–five years largely prescribed for the local treatment of

GOUT RHEUMATISM ECZEMA SCABIES and all SKIN DISEASES

Relieve Pain and Intense Itching, Soothing and Sedative in Effect Instantly prepared No objectionable Odour

SAMPLES AND LITERATURE ON REQUEST

SULPHAQUA SOAP

Extremely effective in Disorders of the Sebaceous Glands and in Eczematous and other skin Troubles

In boxes of ½ doz and 1 doz BATH CHARGES 2 doz TOILET CHARGES and ½ doz SOAP TABLETS

THE S.P. CHARGES CO. ST HELENS LANCS

STOCKED BY ALL THE LEADING WHOLESALE HOUSES IN AFRICA CANADA. AUSTRALIA NEW ZEALAND INDIA U.S.A.

Prescribing with Confidence

The advantages of Rhinitol in the treatment of

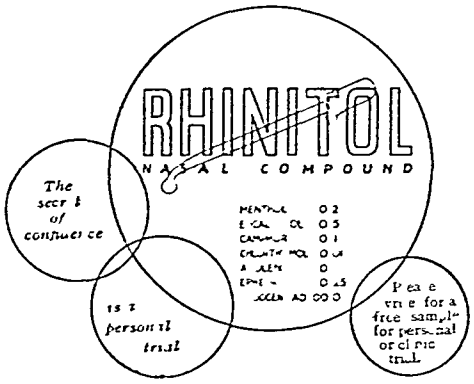
COLDS

NASAL CONGESTION and CATARRH

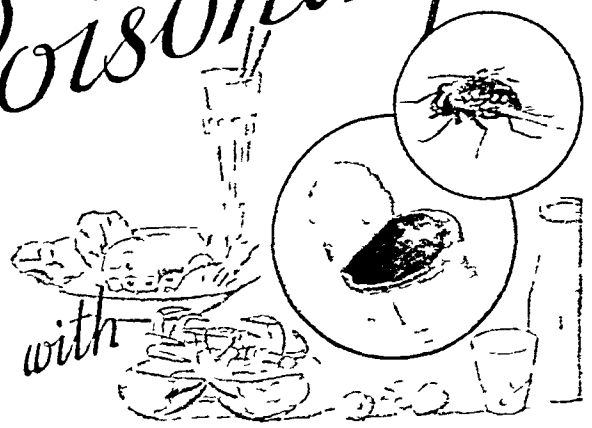
and all other affections of the upper respiratory tract are —

1 Its very low ephedrine content.
2. Its property of emulsifying with body fluid owing to the vasogen vehicle
3 Its complete freedom from irritant or toxic effects
4 Its rapid yet prolonged action

T PEARSON & CO LTD MITCHAM SURREY



COUNTERACT *Food Poisoning*



Summer heat drought flies contaminated food—and the result—Food Poisoning! Kaylene is the true antidote to Bacterial Toxins and Toxalbumins in contaminated food Its action is rapid and reliable
Kaylene brand of colloidal kaolin has been shown to adsorb the toxic principles of Shell-Fish poisoning Potato poisoning and Mushroom poisoning—*vide* B M J 1937 I, 595

Price 10 oz, 3/, 1 lbs, 12/6

Samples on request

KAYLENE

(Brand of Colloidal Kaolin)

KAYLENE, LTD, *Sole Distributors* ADSORBENTS LTD. WATERLOO ROAD, LONDON NW 2

INTESTINAL SUBINFECTION

SALVITAE is the key whereby the physician may control elimination and alkalinization thus dealing fundamentally and effectively with Intestinal Subinfection Toxæmia, Acidosis, Uricacidemia Constipation and a large number of disorders characterized by

SALVITAE

and more or less dependent upon faulty metabolism imperfect elimination and disturbances of the acid base equilibrium of the body



Professional samples and literature gladly sent on request

COATES & COOPER LTD, 94, CLERKENWELL ROAD, LONDON, E.C.1

An antiseptic with efficiency—PLUS..

..PLUS stability..

In the presence of blood, pus, mucus serum, saliva, etc, T C P Antiseptic retains full bactericidal power

..PLUS safety..

T C P is non-caustic, non-irritant, and non-haemolytic It does not injure mucous membranes or the raw surfaces of wounds

..PLUS analgesic action

T C P exerts a definite analgesic action, invaluable in painful wounds and for allaying the irritation of boils, insect stings and bites etc

T.C.P

... the PLUS antiseptic

Literature and a clinical sample of T C P will be sent to any Physician on application to —

BRITISH ALKALOIDS LTD Dashwood House London E C 2.

TRADE MARK **RUSVEN** BRAND

RUSSELL'S VIPER VENOM



NOT FOR INJECTION

RUSVEN (Russell s Viper Venom) is a powerful blood coagulant for local external application in the control of bleeding following wounds, injuries, extraction of teeth, and in epistaxis, in hæmophiliacs and others

Case Report

Epistaxis—Severe nose bleeding lasted for six hours and failed to stop when all the usual methods were employed The blood count fell to R B C 1,000 000 Hb 28% and a transfusion was considered owing to the severe anæmia immediately the nose was plugged with gauze soaked in RUSVEN, 1 10 000 the bleeding stopped

Supplied in rubber stoppered vials of 0 1 mg and 0 5 mg together with an ampoule of sterile distilled water containing 0 5% phenol for use as a solvent

0 1 mg vial with an ampoule of solvent 1/6
0 5 mg vial with an ampoule of solvent 3/

Discount to the Medical and Dental Professions

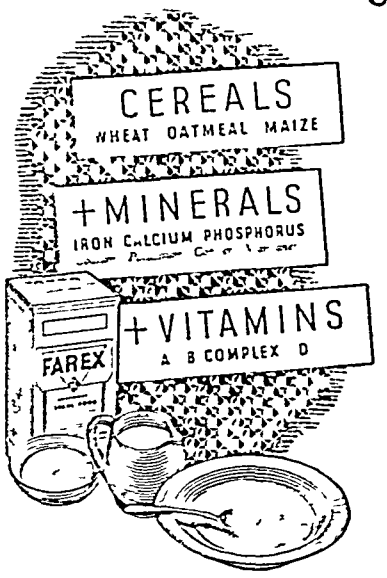
Literature sent on request

THE MEDICAL PROPAGANDA DEPARTMENT

BOOTS PURE DRUG CO, LTD

NOTTINGHAM ENGLAND

BALANCED NUTRITION



IN A 3-CEREAL FOOD

Farex is a fully cooked cereal powder blended from wheat, oatmeal and maize, and vitalised with yeast, basic phosphates, iron and the protective vitamins Its comprehensive formula makes Farex eminently suitable as a light but sustaining diet *during illness, in gastric disorders* and after *dental extraction*

For *young children and adolescents* its vitamins and minerals promote proper formation of growing tissues As the basis of a *growing diet* Farex supplies all round nutritional factors in the most easily assimilable form
Farex is appreciated by busy doctors as well as their patients Instantly ready to serve with any flavouring and fluid desired (e.g. as a *tonic breakfast*) Farex can be taken even in haste without taxing digestion, efficiently replacing a full meal when time is pressing

In cartons 1/- and 1/9 (double quantity)

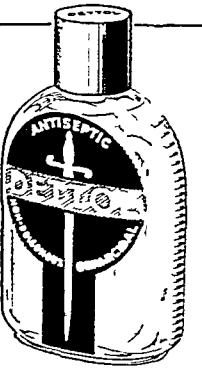
FAREX

A WELL BALANCED BLAND & SATISFYING FOOD FOR ALL NEEDS

GLAXO LABORATORIES LTD, GREENFORD, MIDDLESEX BYRon 3434

GERMICIDAL EFFICIENCY maintained in the presence of organic matter.

In the conduct of labour 'Dettol' possesses marked superiority over carbolic and cresylic antiseptics. 'Dettol' has a Rideal Walker co-efficient of 3 0, yet 'Dettol' can be used at really effective strengths — without discomfort, danger or staining 'Dettol' maintains high bactericidal efficiency in the presence of blood and other organic matter 'Dettol' is a clean, clear, non poisonous fluid — with a distinctly pleasant smell



Sold by Chemists and Medical Suppliers in bottles 1/-, 1/9 3/ 5/- and 7 6 and in larger sizes for Medical and Hospital use. These prices do not apply in Eire or Overseas Sample and full information on request

'DETTOL' TRADE MARK THE MODERN ANTISEPTIC

RECKITT AND SONS (PHARMACEUTICAL DEPARTMENT) HULL LONDON 40 BEDFORD SQUARE W C 1

DINNEFORD'S

Pure Fluid MAGNESIA

FOR ACIDOSIS

IN INFANT OR ADULT

FOR over a century DINNEFORD'S has held its reputation unassailed as a SAFE Antacid and gentle Laxative

DINNEFORD & CO LTD, CLIPSTONE STREET LONDON, W 1

CFH

"FAIRCHILD"

'PEPULE' PEPSIN

gr 1 and gr 3

A convenient and accurate method of administering pepsin.

Supplied in bottles containing 25 and 100.

Originated and Manufactured by
Fairchild Bros. & Foster (Inc N Y)
NEW YORK and 65 Holborn Viaduct London E C 1

Agents
Burroughs Wellcome & Co,
LONDON SYDNEY CAPE TOWN

The Topical Application of Sulphanilamide

STREPTOCIDE OINTMENT

Research at The Evans Biological Institute has resulted in the issue of Streptocide in solution as an ointment The solvent used is non-toxic and the ointment may be applied over extensive areas Streptocide Ointment contains 5 per cent of Streptocide There are numerous infective conditions of the skin in which its use is indicated Favourable reports have been received concerning the following —

Empyematous Sinus
Cytolysis
Post-Scarlatinal Rhinitis
Chronic Ulceration
Impetigo
Infected Wounds and Burns
Whitlow
Varicose Ulcers
Cellulitis
Erysipelas

Issued in 2-oz Collapsible Tubes 2/3 each
" " 1-lb Tins 13/- "

STREPTOCIDE CREAM

Streptocide is also issued in the form of a non-greasy cream, which is specially recommended in acute inflammatory conditions when rapid absorption of the drug is desired

Issued in 2-oz Collapsible Tubes 2/6 each

MADE BY EVANS SONS LESCHER & WEBB LTD, LIVERPOOL AND LONDON

OVALTINE

FOR THE OLD AND FEEBLE

DURING old age when the digestive powers and vitality are on the wane the problem of satisfactory feeding often becomes acute A solution to this difficulty is found in Ovaltine Its delightful flavour appeals to the jaded palate its digestive action aids the enfeebled assimilation while its high nutritive value stimulates the flagging metabolism It is a boon to the aged

In Ovaltine the nutritive constituents of fresh milk eggs and malt are transformed into crisp granules which dissolve readily in milk to form a delicious beverage A cup of Ovaltine in the morning ensures energy for the day and a cup on retiring generally relieves the sleeplessness so common a symptom of old age and gives digestive rest

Ovaltine enriches the diet in certain important factors notably calcium and vitamins A and B_2 which recent investigations have shown to promote longevity

A liberal supply for clinical trial sent free on request.

A WANDER, Ltd, 184, Queen's Gate, S W 7
Laboratories and Works KING S LANGLEY HERTS



'CYSTAZOL

A POWERFUL URINARY ANTISEPTIC



'Cystazol' is a combination of Hexamine with Sodium Benzoate its action depends on the liberation of formaldehyde from the decomposition of the hexamine that takes place in the urine which has been rendered acid by the sodium benzoate moiety

'Cystazol' is employed with advantage in cystitis, bacilluria of all types, pellagra, gonorrhœa and septic conditions of the urinary tract generally

COMPRESSED TABLETS of 'Cystazol'

Supplied in bottles of 20 40, 80 160 and 500 (10 grain) tablets at 1/6 2/6 4/6, 8/6 and 20/

EFFERVESCENT GRANULES of 'Cystazol'

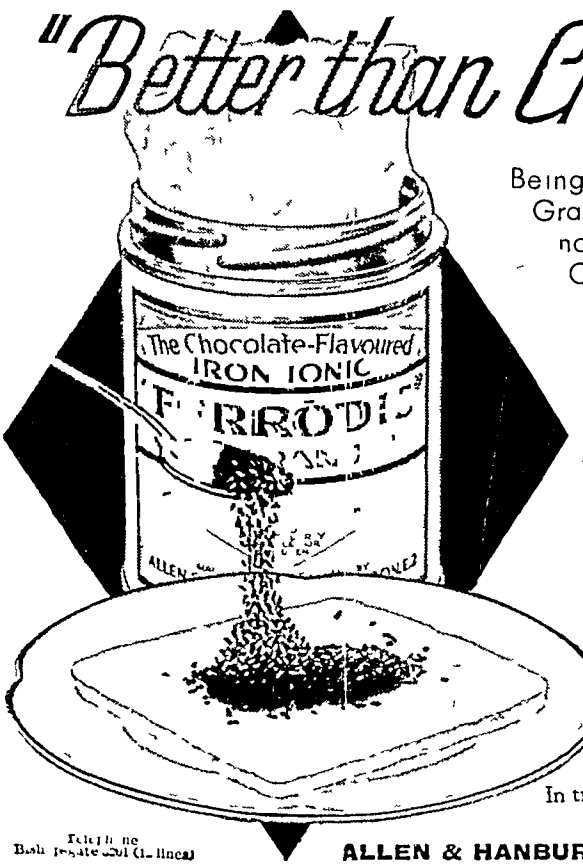
Supplied in bottles at 2/6 and 4/6

Descriptive literature and clinical trial sample will be sent post free on application

Allen & Hanburys Ltd, London, E 2

Telephone Bishopsgate 3201 (11 lines) Telegrams Grenburys Beth London

"Better than Chemical Food"



Being chocolate flavoured, FERRODIC Iron Granules appeal strongly to children who will not take ordinary iron preparations, such as Chemical Food The iron is present in the ferrous state, being preserved from oxidation by the presence of reducing sugar (glucose)

FERRODIC
TRADE MARK
IRON GRANULES

contain a large proportion of this sugar, which gives the preparation a special value in ketosis ('acidosis'), a condition found in debilitated children Sprinkled on bread and butter, the granules provide a solution to the problem of feeding children who have no appetite

In tins at 2/3 and 4/ each Descriptive literature on request

Telephone Bishopsgate 3201 (11 lines) **ALLEN & HANBURYS LTD., LONDON, E 2** Telegrams Greenburys Beth London

ENDOCRINE TREATMENT OF

DYSMENORRHŒA

with B.D.H. Sex Hormone Preparations

Cases of dysmenorrhœa which are essentially endocrine in nature are of two distinct types, one being associated with disorders of uterine structure and the other with disorders of uterine function

(1) Dysmenorrhœa associated with myohypoplasia

It is stated that the commonest finding in a case of dysmenorrhœa is persistence of an infantile type of uterus with small body and relatively long slender cervix

The power of the œstrogenic hormone to stimulate development of the uterine musculature is such that Oestroform is specific therapy in this condition

DOSAGE. Injections of Oestroform 20 000 international benzoate units or in very marked cases 50 000 international benzoate units, are administered twice weekly for the first two weeks of the intermenstruum

Such a course of treatment should be repeated regularly until the uterus appears normal on examination and the patient is able to menstruate with considerably less or no pain In the majority of cases success is obtained after three courses

(2) Dysmenorrhœa due to abnormal uterine motility

In endocrine cases in which the uterus is found to be normal on examination, the pain is usually regarded as being due to functional abnormality in the myometrium leading to spasmodic contractions of the uterus

The power of the luteal hormone to reduce the activity and contractility of the uterine musculature has indicated its use in this condition.

DOSAGE. Progestin B D H 2 international units should be administered on alternate days for the week immediately preceding the calculated onset of the menstrual flow

This course should be repeated several times in order to establish a more normal functioning of the myometrium

Literature on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

Cadburys have perfected a

SPECIAL CHOCOLATE

which is Sugar Free and therefore a suitable addition to the dietary of diabetics

This chocolate is extremely palatable, and because Cadburys have unlimited facilities for laboratory research and the subsequent manufacture and marketing of such a product it sells at a very low price. Further details and analysis with a sample of this Special Chocolate will be gladly forwarded to anyone interested. Please write to Cadburys Laboratories, Bournville.

CADBURY BROS BOURNVILLE ENGLAND

ELI LILLY AND COMPANY LIMITED

Pharmaceutical and Biological Products



'LEXTRON' BRAND

Liver-Stomach Concentrate with Iron and Vitamin B Complex

RAPID convalescence from many debilitating diseases can be brought about with 'Lextron' when secondary anaemia has assumed a conspicuous place in the clinical picture On 'Lextron' the patient receives all the materials essential for blood regeneration.

'Lextron' brand liver-stomach concentrate with iron and Vitamin B complex is supplied in bottles of 42, 84, and 500 'Pulvules' brand filled capsules

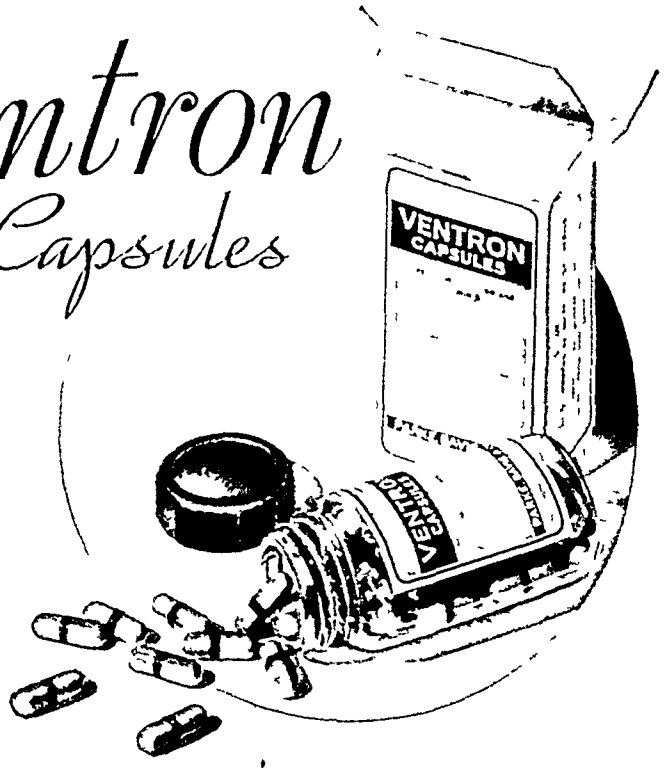
Prompt Attention Given to Professional Inquiries

2 3 AND 4, DEAN STREET LONDON W 1

Distributing Agent in Britain for

ELI LILLY AND COMPANY, INDIANAPOLIS, U S A

Ventron Capsules



Each capsule contains

Ventriculin (Concentrated) 5 grs.
(equiv. to 15 grs. of Ventriculin)

Naferon (Iron and Sodium Citrate Neutral) 2 grs.

Vitamin B_1
20 International units

Vitamin B
5 Sherman units

'VENTRON' is a combination suitable for the treatment of many forms of primary and secondary anæmia and for use as a general hæmatinic and tonic in any form of debility, especially in patients recovering from operations or severe infections. It contains desiccated gastric tissue (Ventriculin) in concentrated form, together with the vitamin B complex and iron and sodium citrate, a neutral soluble iron compound that is practically non-irritating to the gastro-intestinal tract and has a decided advantage over most other iron preparations. 'Ventron' is issued in hermetically-sealed capsules, which eliminate the odour, taste and bulk associated with other methods of exhibiting desiccated gastric tissue.

Supplied in bottles of 50 capsules

PARKE, DAVIS & CO., 50, BEAK STREET, LONDON, W.1.

Laboratories Hounslow, Middlesex Inc U.S.A., Liability Ltd.



ONE·HALF { *the dosage* / *the quantity of drug to be eliminated*

Administered orally, rectally or in emergencies intravenously Nembutal exerts an extremely rapid but brief hypnotic and a pronounced sedative action from a dosage only about one-half that required with most other powerful barbiturates This small dosage reduces the recovery period also by about one half and, by lessening the amount of the drug to be eliminated, makes Nembutal clinically one of the safest of the barbiturates ● Safety rapidity and brevity of action recommend Nembutal for use not only as a pre anæsthetic sedative in major and minor surgery but also in the treatment of insomnia hysteria sea sickness nausea from any cause eclampsia delirium tremens convulsions from strychnine or other poisoning and in obstetrics—with or without morphine and scopolamine Nembutal has also been used with much success as a supplement to morphine in controlling the pain of early cancer ● Nembutal is available through pharmacies in a wide variety of forms, the most widely employed of which are the ½-grain and 1½-grain capsule for oral use Literature and a trial sample of Nembutal 1½-grain Capsules will be sent upon request. The coupon is for your convenience

ABBOTT LABORATORIES
(ENGLAND) LIMITED
Wadsworth Road, Perivale Middlesex

Montreal Sydney Johannesburg Bombay
Shanghai New York Chicago Mexico City
Havana Rio de Janeiro Buenos Aires Manila

NEMBUTAL
PENTOBARBITAL SODIUM ABBOTT
SEDATIVE · HYPNOTIC



Send free trial sample of Nembutal 1½-grain Capsules to

NAME_____

ADDRESS_____

3 4 38

INDICATIONS FOR 'SANATOGEN' No 10

GASTRO-INTESTINAL DISORDERS

Appendicitis and Duodenal Ulcer.

"Essentially 'civilized' diseases", say Colonial Doctors

In recent numbers of the "British Medical Journal" doctors practising in Uganda, in the Falkland Islands and in British Guiana have emphasised the growing conviction that both duodenal ulcer and appendicitis are essentially diseases consequent on civilised dietaries Both in British Guiana and in Uganda very little meat is eaten by the natives A surgeon in the Uganda medical service reports that in the last ten years he has found only three cases of appendicitis in Uganda "One was chronic, and the diet was probably vegetarian One was a perforation, with general peritonitis, the diet was more mixed The third was a localised abscess, the dietary included meat" In the Falkland Islands where the inhabitants live mainly on meat, out of every hundred operations performed in 1925, 80 were performed for appendicitis, whereas in the British Guiana native population, only one operation out of one thousand in 1926 was on account of appendicitis

The moral would seem to be that we should rely mainly on our carbohydrates for our food bulk and energy fuel, and that we should use meat and fish almost entirely for their protein content and for the two vitamins which animal fat contains in concentrated form

A vegetarian diet supplemented by butter and 'SANATOGEN' would seem to be ideal when there is any suspicion of the beginning of duodenal ulceration or of appendicular inflammation

'SANATOGEN' is a carbohydrate-free product of ninety-five per cent pure milk casein with five per cent sodium glycerophosphate

GASTRITIS

"I had tried a varied dieting in a case of Gastritis, with rather disappointing results, and resolved to persuade my patient to adhere to a course of Sanatogen This was carried out strictly with very good results Pain, sickness, etc disappeared and now a modified diet can be taken with no discomfort —M B, Ch B

'I have to say that I still find your preparation, Sanatogen of great value in cases of nervous debility and as a tonic in cases of patients recovering from Gastric or Duodenal ulcers —M B, B Sc

'Sanatogen was used in a case of severe Gastritis (pre ulceration condition), and it seemed to me to be both of use as a bland non-irritating food and also of benefit as a tonic It was therefore, a useful addition to the rather severe diet The case is making very satisfactory progress —M B, B S

'SANATOGEN'

(Trade Mark)

A brand of Casein and Sodium Glycerophosphate

Sold by all chemists price 2/3 to 19/9

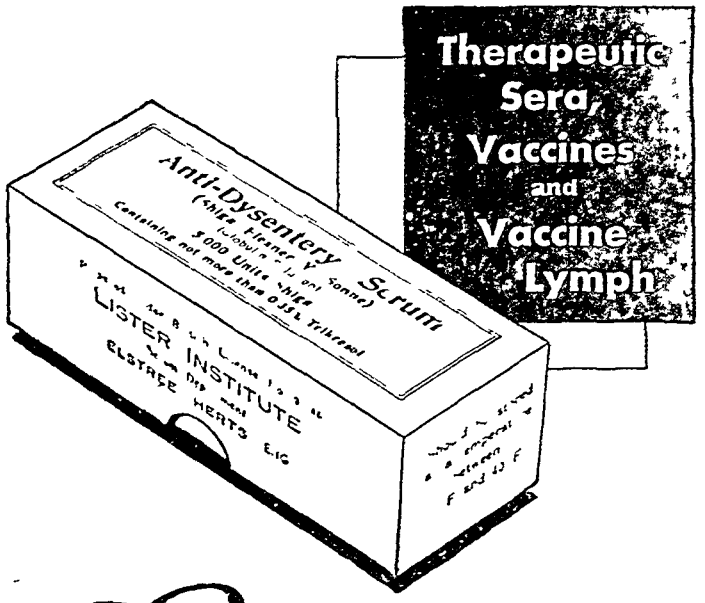
DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants ½ teaspoonful added to each bottle feed

The word SANATOGEN is the Trade Mark of Genatosan Ltd and denotes their first Brand of Casein and Sodium Glycerophosphate

All GENATOSAN products are made by GENATOSAN Ltd Loughborough Leicestershire

Clinical samples and literature available on request to

GENATOSAN LTD., LOUGHBOROUGH, LEICESTERSHIRE



The Lister Institute
OF PREVENTIVE MEDICINE

Therapeutic Substances Act, Licence No 9

Anti-Dysentery Serum

Anti-Dysentery Serum is prepared from the serum of horses that have been highly immunized against *Bacillus dysenteriæ* While much of the endemic dysentery of tropical and sub tropical lands is caused by pathogenic amœbæ, epidemic dysentery due to *Bacillus dysenteriæ* occurs all over the world, and bacilli of the dysentery group are found also in asylum or institutional dysentery in some sporadic cases of ulcerative colitis, and in certain forms of summer diarrhœa

The content of Shiga antitoxin in Anti-Dysentery Serum can be determined and, in accordance with the requirements of the Therapeutic Substances Regulations, is stated in terms of an International unit

Anti Dysentery Serum (Multivalent) Shiga (5 000 units)
Flexner, Sonne, and Y (Concentrated)
In ampoules of about 10 c cm , at 8/6 per ampoule.

Anti Dysentery Serum Shiga (10 000 units per ampoule)
at 8/6 per ampoule

Sole Distributors for the Lister Institute

Allen & Hanburys Ltd.
London, E.2

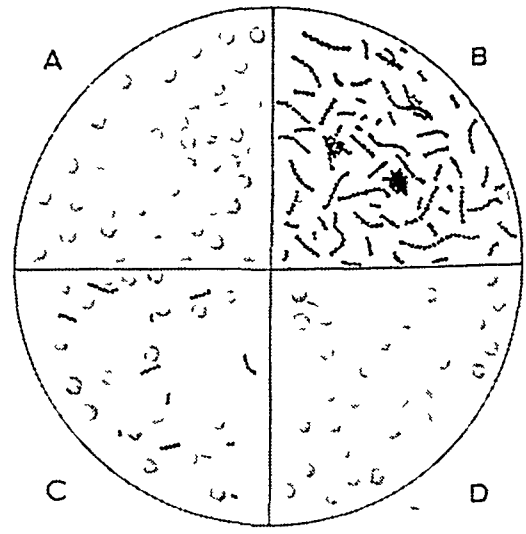
TRADE MARK 'TABLOID' BRAND

SULPHONAMIDE-P

(SULPHANILAMIDE)

Action on Hæmolytic Streptococci in the Human Blood

At the B M A Exhibition at Plymouth, July, 1938, Burroughs Wellcome & Co demonstrated the effect of 'TABLOID' SULPHONAMIDE-P on Human Blood in hæmolytic infections Coloured reproductions of actual blood-smears under high magnification were shown



A Normal blood

B Twelve-hour growth of hæmolytic streptococci in blood broth inoculated from a plate culture Note complete hæmolysis of the blood

C Streptococci from same plate culture incubated for twelve hours and showing as many streptococci as B 'Tabloid' Sulphonamide-P (Sulphanilamide) added Smear examined five hours later shows only slight hæmolysis, a few streptococci only and some in course of destruction (Gram-negative)

D Smear from same specimen twenty-four hours after addition of 'Tabloid' Sulphonamide-P shows almost complete destruction of streptococci and absence of hæmolysis

Literature and details of packings on request

BURROUGHS WELLCOME & CO., LONDON

Address for communications SNOW HILL BUILDINGS E C 1

Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W 1

Associated Houses

NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

H 3632

COPYRIGHT

BRITISH MEDICAL JOURNAL

LONDON SATURDAY AUGUST 27 1938

TOXIC AND INFECTIVE JAUNDICE*

BY

C E LAKIN, M D, F R C P

Physician to the Middlesex Hospital and the London Fever Hospital

In opening this discussion on toxic and infective jaundice I am proceeding on the assumption now pretty generally accepted that the parenchymatous cells of the liver have *nothing to do with the formation of bile pigment* that the pigment is derived from haemoglobin liberated from more or less effete red corpuscles and that the transformation of haemoglobin into what I may call pre hepatic bilirubin is attributable to the activity of cells of the so called reticulo-endothelial system In this conception the liver is regarded as playing the part of an excretory organ for bile pigment though in passing through the liver cells some subtle alteration in the physico chemical nature of the bile pigment takes place since what may be termed post hepatic bilirubin has slightly different characters from its pre hepatic precursor

The Three Types of Jaundice

Staining of the skin and tissues by bile pigment—for this is what is meant when we employ the word jaundice in clinical medicine—may arise in three different ways The first is when some gross obstruction to the escape of bile into the intestine leads to the damming up of bile in the excretory ducts with subsequent absorption of bile into the blood stream—the so called obstructive jaundice Here not only is there absorption of post hepatic bilirubin but of bile salts and cholesterol Some observers have thrown doubt on the reabsorption of these substances pointing out that when a pressure of from 200 to 300 mm of water is attained in the bile ducts the excretion of bile pigment ceases and that this is sufficient to explain the occurrence of staining of the tissues in obstructive jaundice The second way is when excessive blood destruction leads to the accumulation in the blood stream of such a large amount of pre hepatic bilirubin that the excretory function of even a healthy liver is overpowered—the so called haemolytic jaundice And the third way is when the liver itself is damaged so that it becomes unable to work at its normal level—the so called toxic or hepatogenous jaundice It is with this last type of jaundice alone that we are concerned

Among the poisons which act by damaging the liver cell are phosphorus arsenic antimony chloroform carbon tetrachloride, trichlorethane toluylenediamine aniline benzene cinchophen derivatives and certain mushroom poisons Microbic activity may be responsible as in the jaundice of pyaemia septicaemia pneumonia and typhoid or protozoal infections as in spirochaetal jaundice malaria and syphilis In other instances a virus may be the *offending agent* as in yellow fever with or without a secondary microbic infection while yet again some autogenous toxin may be responsible as in toxaemia of pregnancy some cases of acute yellow atrophy and perhaps Hanot's cirrhosis Anoxaemia probably plays an important part in the jaundice of congestive cardiac failure

Pathology of Toxic Jaundice

Whereas in obstructive jaundice the sufferer is likely to be more jaundiced than ill in toxic jaundice he is likely to be more ill than jaundiced though deep jaundice is sometimes seen Except in the most severe cases the stools remain fairly normal in colour Fever is usually an accompaniment of toxic jaundice though in some of the most serious forms such as acute yellow atrophy, the temperature may be subnormal Varying quantities of bile may be found in the urine in addition to urobilin and albumin bile stained casts and sometimes red blood corpuscles are likely to be present while the excretion of amino acids may be raised *In severe cases the blood sugar falls* and in a case known to me in which severe liver damage ended in convulsions the blood sugar fell to nearly 70 mg per 100 c cm while daily examination showed a steady fall of non protein nitrogen a condition reminiscent of Mann and Magath's experiments on dogs In spirochaetal jaundice there may be an increase in blood urea owing to coincident damage to the kidney

Pathologically the essential lesion in toxic jaundice consists in damage to the parenchymatous cells of the liver In some instances there is an associated cholangitis When the injurious agent acts upon the liver in massive doses acute necrosis of the parenchymatous cells results and the case is usually referred to clinically as one of acute *necrosis of the liver* acute toxic hepatitis or acute yellow atrophy When the injurious agent is less virulent and reaches the liver in smaller amounts over a greater length of time a much more gradual change is induced in the liver cell and a gradual replacement fibrosis results with the production of chronic hepatitis or cirrhosis of the liver *Thus according to present day conceptions acute yellow* atrophy at one end of the scale and cirrhosis of the liver at the other fall into line A great deal of variation is seen in the post mortem appearances of fatal cases of toxic jaundice Thus in cases of phosphorus poisoning when

* Read in opening a discussion in the Section of Medicine at the Annual Meeting of the British Medical Association Plymouth 1938

the person has survived long enough to have developed jaundice the liver is usually greatly increased in size, doughy in consistency, and yellow in colour When examined microscopically an excessive fatty infiltration, progressing from the periphery of the lobule towards the central zone, is the outstanding feature, and the liver cells, although undergoing autolytic and necrotic changes, are seen to retain their nuclei till a relatively late period In acute yellow atrophy, on the other hand, the liver, except in the most virulent type of case, is found to be reduced perhaps to as much as a third of its normal size, and its capsule shows a wrinkled appearance On section the normal liver pattern can be no longer distinguished, and, except in the most acute cases, red patches sharply marked off from the more general yellow groundwork are a noticeable feature The older the lesion the greater is the predominance of these red areas Microscopically the yellow portions are seen to consist of the remains of liver cells in all stages of disintegration, from parenchymatous and hydropsical swelling with bile precipitation to complete necrosis and fusion of cell remains in which no nuclei can be distinguished The red areas show widely dilated capillaries, engorged and often ruptured, together with newly formed granulation tissue and groups of such liver cells as have survived showing active hyperplasia

Catarrhal Jaundice Obstructive or Hepatic?

Following the teaching of Virchow, ordinary catarrhal jaundice, till recent years, has been regarded as a form of obstructive jaundice Its onset is frequently associated with gastro-intestinal disturbance, and it has been assumed that obstruction arises from inflammatory swelling of the mucosa at the ampulla of Vater or from infection ascending the common bile duct In some cases of catarrhal jaundice ending in death from some other cause a plug of mucus capable of producing mechanical obstruction has been found on post-mortem examination Sir Arthur Hurst has collected quite a few instances from the literature It is pointed out that, while catarrhal jaundice shows itself mostly in the form of sporadic cases, instances of a disease indistinguishable from it clinically, yet occurring in epidemic form, are not uncommon Several members of a family may be attacked, or it may break out in schools, institutions, or barracks It is held to be an infective disease in which damage to the liver cells is the essential pathological lesion, though whether infection occurs by way of the common bile duct or by the blood stream has not been determined

Perhaps I may be allowed to digress for a few moments to mention a few points worthy of consideration in connexion with the epidemic form of the disease The incubation period has generally been regarded as one of a few days, but recent observations would suggest that an incubation period of from three to five weeks is more probable In an outbreak among nurses at the London Fever Hospital in which five cases occurred, twenty-one days appeared to be its duration It is not surprising, with an incubation period as long as this, that persons exposed to a common source of infection and who eventually develop jaundice within three or four days of one another should appear to have infected each other within those few days In some epidemics nasopharyngeal catarrh has been noticed, and there is a certain amount of evidence to suggest that the infection is air-borne from case to case though the actual nature of the infecting material is unknown Cultures of blood, stools, and urine have so far failed to reveal any infecting organism Dr Alison Glover furnished an interesting account of an outbreak of epidemic catarrhal jaundice in a public school of seven houses and some 400 boys in which the evidence appears strongly to suggest that transmission was usually by naso-pharyngeal "droplet" infection and that it was favoured by intimate contact, especially in sleeping quarters That some cases in the outbreak were due to infection by swimming-bath water was possible, but he concluded that in the majority of these cases the initial pyrexia was noticed after, and attributed to, swimming (*Lancet*, 1931, **1**, 722)

But to resume As there appears to be no striking difference between catarrhal jaundice occurring sporadically and cases arising during an epidemic, it has been suggested that all cases of so called catarrhal jaundice are in reality cases of primary liver damage, that is to say, that damage to the liver cell is the fundamental lesion, though it may vary as to severity and extent within wide limits It is only on rare occasions that help in deciding this difficulty can be had from post mortem findings Schrumpf in 1932 obtained a portion of the liver at an operation on the eighth day of what was considered to be a case of catarrhal jaundice, and described the changes found as resembling 'acute yellow atrophy in miniature Gaskell in 1933 had an opportunity of examining a portion of liver from a case of catarrhal jaundice which ended in death from another cause on the third day, and found an acute hepatitis with degeneration of liver cells, and, more recently, I understand that Dr Hugh Barber of Derby has recorded his findings in another case In Gaskell's case the bile ducts showed their epithelial lining to be intact and appeared not to be involved in the inflammatory process

On the other hand, Eppinger (quoted by Hurst), although having previously come to the conclusion that catarrhal jaundice was the result of hepatic disease and was not obstructive, was disillusioned to find the mouth of the common bile duct completely obstructed as the result of inflammatory swelling of its wall in the case of a girl suffering from a typical attack of catarrhal jaundice who had died from a fractured skull On microscopical examination the liver and pancreas in this case were found to be normal Moreover, we have to recognize that even severe damage to the liver can occur without giving rise to jaundice Dr Hugh Barber has reported the post mortem findings in five cases of dioxan (diethylene dioxide) poisoning in factory workers After a fatal illness lasting from five to eight days in no case was there jaundice to indicate liver damage, though, microscopically, complete necrosis of the inner half or often two thirds of each lobule was revealed

The Possibility of Two Forms of Catarrhal Jaundice

When we come to clinical considerations evidence is not wanting of the close association of catarrhal jaundice and acute necrosis of the liver Every general physician of experience encounters from time to time cases of what appears to be ordinary catarrhal jaundice in which, after a shorter or longer period, the patient becomes profoundly ill, exhibiting restlessness and then increasing drowsiness, subsultus tendinum, and what used to be called the "typhoid state," with perhaps purpura or bleeding from the nose, stomach, or kidney Examination shows a greatly reduced area of liver dullness with albumin and casts in the urine, and perhaps leucine and tyrosine in addition In other words, the clinical picture of acute yellow atrophy or necrosis of the liver is revealed Sir William Willcox estimates that about 0·4 per cent of cases of catarrhal jaundice end in this way This being

so must every case of catarrhal jaundice be regarded as a potential case of acute yellow atrophy? Possibly the pendulum has swung too far Hurst meets the difficulty by suggesting that there are really two forms of catarrhal jaundice (1) catarrhal jaundice proper in which blocking of the common bile duct occurs secondary to an acute gastro duodenitis (2) mild forms of subacute hepatic necrosis In distinguishing between these two forms stress is laid on the mode of onset In the obstructive form the initial symptoms are those of an acute gastritis—epigastric discomfort complete anorexia nausea vomiting if the patient eats and sometimes diarrhoea He feels ill and the temperature is raised In two or three days improvement sets in and just when he thinks he has almost recovered the urine becomes dark the stools pale and the conjunctivae and skin jaundiced The temperature now falls and by the time jaundice has fully developed he feels perfectly well except that he is nauseated and vomits if he partakes of fatty food At this stage epigastric tenderness has disappeared though the liver may be slightly enlarged and tender and the gall bladder and spleen may be palpable The jaundice generally begins to fade within a week and by the end of a fortnight all symptoms and signs have disappeared Occasionally the jaundice lasts longer, and in rare instances may persist for two or three months

In the second type—mild subacute hepatic necrosis—Hurst states that no pre icteric symptoms of any kind are found in most cases but the patient notices that his urine is becoming dark and subsequently that the stools are pale and jaundice then appears The onset of jaundice is accompanied by symptoms of general toxaemia headache weakness anorexia with occasional vomiting and diarrhoea The temperature is generally slightly raised There is no epigastric tenderness though the liver may be tender and slightly enlarged and the spleen is always palpable The jaundice is generally less marked than in the first variety and some bile is always present in the stools The jaundice may last between a week and two or three months In rare cases the disease is not arrested and death results from subacute hepatic necrosis or at a much later date, from cirrhosis of the liver

Personally I find a little difficulty in agreeing to the statement that no pre icteric symptoms of any kind are found in most cases of this type I admit that my experience is of necessity limited for a physician rarely has an opportunity of seeing cases at the initial onset of the disease but in cases that I have seen of epidemic catarrhal jaundice the attack has been ushered in with fever four or five days before the jaundice appeared, while nausea, vomiting anorexia, headache and discomfort in the upper part of the abdomen have shown themselves in the pre-icteric period How these manifestations are to be distinguished from the symptoms of acute gastritis which Hurst emphasizes as preceding the other variety—the obstructive form of catarrhal gastritis—I find it hard to determine I am not convinced that the two forms of the disease do not exist but I find it difficult from a consideration of the mode of onset to get much help in distinguishing between these two types of so called catarrhal jaundice If I were pressed to try to distinguish between them I should stress the greater depth of jaundice and the paler colour of the stools as favouring a blocked duct and the enlargement of the spleen as being more constant in mild subacute hepatitis On theoretical grounds one would expect in the early stages of a blocked duct a prompt direct van den Bergh reaction and a biphasic reaction in the case of the mild subacute hepatitis but I doubt if the test is reliable enough to be trusted to cut the Gordian knot Perhaps more may be claimed for the laevulose tolerance test more especially the new test as described by Stewart Scarborough and Davidson in the April (1938) number of the *Quarterly Journal of Medicine* (p 229) but only four cases out of eight of catarrhal jaundice investigated gave abnormal curves and it is interesting that in the case giving the highest icteric index—164—normal curves were obtained for both laevulose and total sugar

Speculations concerning a Progressive Lesion

Before concluding there is one other point I should like to touch upon Addis in his studies of Bright's disease has clearly shown the existence of long latent periods following an initial damage to the kidney (as by acute nephritis) when for years the affected person apparently remains in perfect health In spite of this careful tests of renal function have demonstrated the presence of a relentlessly progressive lesion which finally terminates in renal insufficiency and uraemia Bloomfield in the April number of the *American Journal of Medical Sciences* (p 429) raises the interesting speculation whether something of the same sort may not hold in cases of hepatitis supporting his contention by the fact that many people who have suffered from an attack of catarrhal jaundice show evidence of impaired hepatic function in the form of a high bilirubin content Certainly one comes across cases of relapsing subacute hepatitis in which after perhaps three or four attacks of jaundice spread over a couple of years the final attack is attended by signs of portal congestion ascites developing as in cases of multilobular cirrhosis before the final exitus The speculation raised by Bloomfield makes one wonder whether a progressive though silent change of this sort may possibly explain the varying effect that alcohol exerts on different people While some can partake of large quantities without apparent harmful effect others gradually show indications of liver damage It is a subject worthy of investigation

Finally may I say what a real contribution to clinical medicine would be made by anyone who would place on record the details of even a few cases of catarrhal jaundice followed from its onset to its termination

I have only had time to put before you general conceptions of jaundice and to consider in any detail one form, and that the most common of toxic jaundice but many other aspects and varieties of toxic jaundice will be dealt with by succeeding speakers

---

The Executive Committee and the Council of the International Union against Tuberculosis whose secretary general is Professor Fernand Bezancon President of the Academy of Medicine met in Paris at the headquarters of the Union 66 Boulevard Saint Michel last month under the chairmanship of Professor Lopo de Carvalho (Portugal) Delegates from sixteen countries attended this meeting The administrative meeting of the Council was devoted to the preparation of the programme of the conference to be held in Berlin in September 1939 The agenda of this conference is now definitely settled and will include the following three subjects the problem of the virulence of the tubercle bacillus the value of systematic examinations for the diagnosis of pulmonary tuberculosis in subjects over 15 years of age and the rehabilitation of the tuberculous At the scientific meeting of the Council Professor Frolich (Norway) occupied the chair Drs Maingot Cottenot and Etienne Bernard submitted a report on radiological sections of the thorax and their value in the diagnosis of pulmonary tuberculosis with diagram and radiographs illustrating this subject Before these sessions a meeting of the After Care Committee of the International Union against Tuberculosis (secretary Dr Bachmann Switzerland) had been held under the chairmanship of Sir Pendrill Varrier-Jones.

METHODS OF TESTING FOR COLOUR VISION AND THEORETICAL DEDUCTIONS FROM OBSERVATIONS ON COLOUR VISION*

BY

H. E. ROAF, M.D., D.Sc

George Holt Professor of Physiology, University of Liverpool

Colour Discrimination

As the result of the work of many observers it has been established that in the spectrum there are two main maxima of colour discrimination, corresponding to the sensations of yellow and of blue-green. There may be some doubt as to the existence of one or more additional minor maxima (Corbett, 1936; Wright and Pitt, 1934). The method by which these conclusions have been established is by exposing two identical regions of the spectrum alongside each other and altering the wave-length of one until the two do not appear to match even after adjustment of the intensities has removed any difference in brightness.

At the two main maxima of discrimination the two lights can be recognized to be of the same colour in spite of differences in brightness, while at other wave-lengths a difference in brightness will cause a difference in colour even if the wave-lengths are the same (Roaf, 1927, 1932a, Corbett, 1936). These two spectral regions have been studied to find out whether the sharpness of discrimination is related to any special recognition of these colours when there is no fixed wave-length with which to compare the colour.

Yellow Sensation

The subjects were asked to set a spectroscope so that the field of view appeared to them to be yellow. They were asked to alter the wave-length until the light seemed to be slightly tinged with orange, then to alter back until the light appeared to be slightly tinged with green. The wave-length difference between these two extremes measures the "range" of the "yellow" part of the spectrum, and the mid-point between the two wave-lengths can be called 'mid-yellow'—that is, the centre between the two points where yellow just begins to be tinged with the next colour in the spectrum should be the purest 'yellow' in the spectrum.

As the result of the examination of 100 individuals it was found that eighty-seven normal persons showed an average "range" of 67 ± 29A° and the "mid-yellow" was at 5853 ± 38A°, while thirteen of the subjects had defective colour vision and possessed an average 'range' of 314 ± 168A° with a 'mid-yellow' at 5547 ± 237A° (Hailwood and Roaf, 1937–8). The narrower the "range" of wave-lengths over which the colour is seen the greater is the power of discrimination. These figures confirm the conclusion, arrived at as the result of measurements of discrimination, that those with defective colour vision do not show a maximum of discrimination in the "yellow" region of the spectrum.

Blue-green Sensation

Comparable observations were made in which the subjects were asked to mark out the "blue-green" region by making the field first distinctly bluish and then distinctly greenish. The average "range" of the 'blue-green' was 61.7 ± 34.4A°, and the 'mid-blue-green' was situated at 4926 ± 51A° for 100 cases. Of these cases nine had defective colour vision as shown by the Ishihara test. These nine persons gave an average "range" of 81 ± 54A° with a 'mid-blue-green' of 4965 ± 67A°. These figures confirm the conclusion that those with defective colour vision have no difficulty in distinguishing colours produced by this region of the spectrum (unpublished experiments by Mrs. J. C. Hay).

We cannot say that there are not individuals who have defective colour vision for this region of the spectrum, as ten cases showed a range of more than 100A° (one actually 207A°), but only one of these was classified as having defective colour vision. The reason may be that the Ishihara test is designed to detect the usual type of red-green confusion, hence it might not detect a failure to discriminate in the 'blue-green' region of the spectrum. The mere width of the 'range' does suggest a lower degree of discrimination by these subjects in this region of the spectrum, provided they have realized that the first clearly recognized difference in colour should be noted. The recorded figures are the medians from five separate readings for each limit of "range".

Tests for Defective Colour Vision

The importance of colour recognition for railway, marine, and aeroplane signalling has led to the use of many methods of testing. Of these the fundamental method is some form of lantern, as the recognition of coloured lights is necessary in all the above services (Edridge-Green, 1920). Owing to the low visibility of 'blue' light and the deficiency in 'blue' rays of many sources of illumination not much attention has been paid to the distinction between blue and green. ('Signal green" is really a 'blue-green' allowing all the spectrum except the 'red" to pass through.) The distinction is between red, yellow, and green. (White is not distinguished from yellow because many sources of light—for example, a paraffin lamp—are really yellow.)

Distinction between different degrees of defective colour vision may be made by using diaphragms of different areas, by altering the intensities of the light, and by changing the duration of the exposure of the light (Guttman, 1907, 1908). The duration of the exposure requires further study, and a preliminary examination of this factor has been made by Corbett and Roaf (1937). The new lantern devised for testing colour vision in the Navy makes use of the variations in area and intensity but does not change the duration of exposure.

By means of the spectroscope we can measure the extent of difference in wave-length necessary to produce a recognizable difference in colour in the 'yellow" region. "Ranges' greater than 100A° suggest defective colour vision, but all subjects with these 'ranges" do not make mistakes with the lantern or other tests.

The Nagel anomaloscope based on Rayleigh's observations (1881) enables us to test the match between a fixed "red"+a fixed 'green" with a fixed "yellow'. In the examination of 100 subjects all those (thirteen in number) who made abnormal readings could be classified as possessing defective colour vision, and all those who made the match within the normal range had normal colour vision. It is difficult to reconcile these results with the statement made that those with dichromatic vision will agree with the normal match but will also agree with an abnormal match. Perhaps there is some systematic defect in the anomaloscope method, otherwise some of the

* Paper read in the Section of Physiology and Biochemistry at the Annual Meeting of the British Medical Association, Plymouth, 1938.

subjects should have made settings in the normal region Perhaps these subjects with defective colour vision were not dichromatic cases but in that event defective colour vision does not correspond to dichromatism On the other hand Pitt (1935) gives matching curves with two colours by subjects with dichromatic vision There seems to be some need for an explanation of the fact that persons with defective colour vision are not always satisfied with the match made by a normal person

Pseudo isochromatic Plates

The introduction of coloured plates on which a normal person could see a design which was not visible to the individual with defective colour vision was due to Stilling Ishihara's plates are probably the best to use Dr Collins found that in an examination of 379 persons no normal persons made a mistake with No 2 3 7 8 or 9 and that no individual with defective colour vision could see the number read by the normal person in No 6 or 11 The degree to which the other plates were reliable in distinguishing normal from abnormal subjects is given (Collins 1937)

Ishihara's plates are formed of small disks which vary in area and in purity of colour so that when they are made into a design this can be recognized only by the colour Any recognition of the design by differences in intensity is rendered impossible because the same colour may be present in different degrees of purity—that is, with more or less white in it—so that the disks appear paler or darker In addition, the variation in area of the disks tends to confuse anyone who does not recognize the difference in wave length composition of the reflected light

The whole test is based on the outstanding psychological value of red for the normal person while the individual with defective colour vision cannot distinguish red from green As those with defective colour vision can distinguish blue from green blue is introduced to make designs which are not noticed by the normal person because of the outstanding effect of red on him

The reason why a person with defective colour vision sees a different design from that seen by a normal subject is that he classifies the colours differently, as shown in the following table

	Colours classed together	but distinguish d from
Normal person	Yellow red or vermilion and blue red or carmine	Yello w-green and blue-green
Person with defec tive colour vision	Vermilion and yello w-green	Carmine and blue-green

The only exceptions are plates 12 and 13 which are said to distinguish red blindness from green blindness" Two red figures are seen on each of these plates by the normal person If red as such is not distinguished neither number will be seen as can be proved by looking at them through a blue green light filter One figure in each case is vermilion and lighter in shade than the other which is a dark carmine or mauve The blue in this latter makes it look to the normal person more like the blue grey of the background spots The vermilion number is said to be seen by the green blind while the mauve number is said to be seen by the red blind

This difference may be due to a decrease in sensitivity to the red end of the spectrum in scoterythrous (protanope) cases

The vermilion disks reflect mainly red" light the mauve disks reflect 'red and blue light, hence a decrease in sensitivity to red will cause a greater relative decrease in brightness of the vermilion disks The number formed by the vermilion disks may thus fade into the background The mauve disks reflecting blue light may not be so much decreased in brightness because of the blue light reflected hence the number formed by the mauve disks becomes visible The number seen by the green blind actually reflects less blue than that seen by the red blind

Up to the present no evidence has been brought forward to explain why different numbers are seen in plates 12 and 13 by different individuals with defective colour vision

Binocular Colour Fusion

Each eye can give rise to an independent judgment of intensity colour and shape When both eyes are used combination of the results may occur in a similar manner to that in the spinal cord With low intensities summation is possible as shown by Lythgoe and Phillips (1937–8) At higher intensities occlusion may be present, hence a landscape may appear darker with both eyes than with one eye If a neutral glass is placed in front of one eye that eye being obstructed by an opaque screen it is found that when the opaque screen is removed the landscape appears darker whereas it ought to appear brighter because the impulses from the unobstructed eye are reinforced by further impulses from the eye which has just been exposed by removal of the screen This effect is observed over a certain range of illumination If the neutral glass is too opaque or too transparent the difference in darkness is not observed This experiment suggests some sort of compensation between the impulses coming from the two eyes which of course, is analogous to occlusion

By presenting different colours to each eye it is possible to obtain an addition of the sensations very similar to the result of simultaneous stimulation of one eye by the two colours Thus if the intensities of the two colours are properly adjusted a red screen in front of one eye and a green screen in front of the other produce a yellow sensation (McDougall 1901) This shows that the sensation of yellow is due to fusion behind the optic chiasma and that Hering's hypothesis cannot be true of retinal processes although it may apply to cerebral interpretation of nerve impulses

By such types of experiment it is hoped to be able to distinguish between the effect of different stimuli on common receptors in the eye and the effect of impulses from different receptors on a common interpreting mechanism (Roat 1928 1932b) A practical application of binocular colour fusion might be to train individuals with defective colour vision to recognize colours by the use of a tinted colour filter in front of one eye

Conclusion

In this paper an attempt has been made to point out the difference between normal and defective colour vision, to describe the means of detecting defects in colour vision and the possibility of compensating for defects in colour vision by binocular fusion of colours The usual type of defective colour vision is a failure to distinguish red yellow and green—that is red-green confusion There is no failure to distinguish blue from green We can say that the normal person and the hypochromat distinguish blue from not-blue The normal person distinguishes red from not-red That which is neither red nor blue is called green The hypochromat does not distinguish red from not red, and anything which

is not blue he tends to call yellow, as that is the brightest part in the not-blue region of the spectrum

BIBLIOGRAPHY

Board of Trade (1912) Report of the Departmental Committee on Sight Tests Cd 6256 H M Stationery Office, London
Collins, M (1937) Brit Ass Rep, p 207 (Table II)
Corbett, H V (1936) *J Physiol* 88 176
—— and Ronf H E (1937) *Brit J Ophthal* 31 592
Edridge Green F W (1920) *The Physiology of Vision* G Bell and Sons London
Gothlin G Fr (1923) *J Physiol* 57 181
Guttman A (1907) *Z Psychol Physiol Sinnesorg* 42, 24, 250
—— (1908) Ibid 43 146 199 255
Hailwood J G and Ronf H E (1937-8) *J Physiol* 91, 36
Lythgoe, R J and Phillips, L R (1937-8) Ibid, 91 427
McDougall, W (1901) *Mind* N S, 52, 222
Med Res Cncl (1933) Spec Rep Ser No 185, London
Pitt F G H (1935) Med Res Cncl Spec Rep Ser, No 200 London
Rayleigh J S (1881) *Nature London* 25 64
Ronf H E (1927) *Quart J exp Physiol* 16, 379
—— (1928) Ibid 18, 243
—— (1932a) Report of a Joint Discussion on Vision (Physical Soc) p 313 London
—— (1932b) *Proc roy Soc* B 110, 448
Wright W D and Pitt F G H (1934) *Proc phys Soc* London, 46 450
—— —— (1935) Ibid, 47, 205

SOME CARDIOLOGICAL FALLACIES

BY

J. W LINNELL, M D, M R C.P.

Physician Metropolitan Hospital Consultant to the L C C Hospital Service

AND

W A. R THOMSON, M D

First Assistant Medical Unit St Thomas's Hospital Late Paterson Research Scholar and Chief Assistant Cardiac Department London Hospital

Even to-day unfounded beliefs regarding cardiovascular disease appear to be so widespread in the profession that we think it worth while to discuss some of the commonest of them in a short paper

Fatty Heart

For a number of reasons, into which it would take too much time to enter, all obese people tend to become short of breath on exertion On this account alone a diagnosis of "fatty heart' is often made In post-mortem examinations of the obese—and not only of the obese—it is not unusual to find fat stored in and around the heart, but during life its presence can so rarely be proved to give rise to cardiac insufficiency that it is never wise to make the diagnosis When definite symptoms of cardiac insufficiency are present in an obese patient another cause for them should be sought The commonest by far is hyperpiesis, but there are, of course, others

Physical Strain

The belief that a healthy heart can be injured by physical strain still unfortunately persists, in spite of the immense amount of work that has been done on the subject during the last thirty years The truth of the matter has never been better put than by Lewis (1937) when he says It is reasonable to conclude that the burdens imposed by physiological acts upon the normal heart however heavy these burdens may be, never injure the heart and fibres never produce injurious dilatation, and never exhaust the heart's reserve' That the heart tends to be a little larger and rounder than the average in persons who habitually do hard physical work is not denied, but it is a normal and healthy reaction of the muscle to exercise and no more to be accounted pathological than the hypertrophy of, say, their biceps

There is a corollary to this Every now and then one sees a patient in consultation whose heart, according to his medical attendant, has recently dilated enormously within the space of a few minutes or, at most, a few hours, usually, though not always, as a result of effort, and has returned to its normal size, either with rest or through his treatment, just as rapidly Such acute dilatation of the heart, in our experience, never occurs In this connexion it is interesting to observe that in a prolonged attack of paroxysmal tachycardia," in which the heart beats continuously at a rate of over 200 a minute, appreciable enlargement—when it develops—is a matter of several days

Screening the Heart

Even in a patient neither emphysematous nor obese it is impossible to estimate the transverse diameter of a heart with any accuracy by percussion—one has only to screen a normal chest in the lateral or oblique position to be persuaded of this And, supposing it were, no one has ever suggested that the depth of a heart—a very important matter in cases of mitral stenosis, congenital morbus cordis, etc—can be estimated by this means Yet not only can both of these points be elucidated by screening, but a reasonably accurate estimation of the size of each individual chamber of the heart—surely a consummation earnestly to be desired—is as a rule easily made by this means

Displacement of the apex beat to the left, where this cannot be attributed to pulmonary causes, though very suggestive of an enlarged heart, is not absolutely diagnostic Scoliosis, even of so slight a degree as to be only recognizable by radiography, is a fruitful cause of such displacement Again, a high diaphragm—the constant accompaniment of obesity—by causing the lie of the heart to become more transverse, tends to produce it Through ignorance of these facts on the part of medical men, multitudes of healthy people are accounted victims of heart disease who, were their hearts screened by anyone conversant with the technique, could be safely assured as to the integrity of that organ

Enlargement and Dilatation

The heart is generally believed to increase in size with age, as a normal process There is no evidence for this It may even diminish in size When it is found to be enlarged in old age another cause should be looked for—for example, hyperpiesis, bundle branch block, etc

It is almost an article of faith in the profession that in all toxaemic states of any severity there is necessarily some dilatation of the heart through flabbiness of its musculature It is forgotten that in cases of very advanced phthisis where there has been the severest degree of toxaemia for months or years the heart in life usually appears smaller than normal under the screen, and at necropsy is found to be wasted, perhaps, but not dilated Again, in a recent radiological study of 119 hearts in pneumonia by Davies, Hodgson, and Whitby (1935) definite enlargement was witnessed in no more than three

It is, we believe, practically only when auricular fibrillation, auricular flutter, or heart block develops in the course of toxaemia that the heart dilates Circulatory failure, when it occurs in toxaemia, is in our opinion almost always due to loss of contractility of the muscular coat of the peripheral arterioles and not to myocardial weakness

Contrary to common belief in cases of congestive failure the size of the heart does not materially decrease as the signs of failure diminish and disappear A generation ago Mackenzie estimating the size of the heart by clinical methods, came to this conclusion Latterly Palmer (1937) has established the truth of it by radiological methods

Oedema which is not accompanied by enlargement of the heart is practically never cardiac in origin It must be borne in mind however that such enlargement may not be obvious clinically and that radiological examination of the heart may be required before it can be detected—for example in emphysema and obesity

Heart Sounds and Extrasystoles

A heart is often unjustly condemned because in the opinion of the examiner the sounds are weak toneless of poor quality or the like The *character* of heart sounds whether first or second is on occasions of great help in the diagnosis of cardiac conditions but the idea that one can gauge the functional efficiency of a heart by the *loudness* of the sounds is altogether fallacious Dulling of heart sounds is far more often due to obesity or emphysema, or to both than to a feeble myocardium In addition chests possess very different acoustic properties and listeners differ greatly not only in the acuity of their hearing but also in their standards of normality

Even at the present time many practitioners regard extrasystoles as an indication of organic disease of the heart—to the great hurt of their patients As Mackenzie (1918) pointed out extrasystoles are in themselves of no clinical significance and seldom if ever are they harbingers of auricular fibrillation or any other grave cardiac condition After middle age they may be considered almost a normal phenomenon When present in a case of organic disease of the heart—as they often are—they may be safely ignored in assessing the seriousness of the condition and in considering the prognosis

Rheumatism

It is well known that acute rheumatism is comparatively rare in adult life It is not so well known that a first attack which develops after the age of 20 seldom causes permanent damage to the heart and that below this age the nearer a patient is to it the less likely is his heart to be affected

One is often asked during or at the end of a first attack of acute rheumatism whether the heart of the patient is affected or not It is frankly impossible to answer this question The presence of a systolic bruit at the apex is of little help A transient systolic bruit is a commonplace in any severe toxaemia, and a systolic bruit in a first attack of acute rheumatism may be no more than this moreover a patient in whom at the end of the attack no bruit of any kind whatever is audible may a year or two later exhibit definite signs of valvular disease

The scarring of the valves which follows their inflammation and to which mitral stenosis aortic regurgitation and aortic stenosis are due, is a slow process and it is almost certainly six months at least and generally much longer before it has advanced sufficiently to produce recognizable signs of these conditions When during the course of a supposedly first attack of acute rheumatism definite signs of valvular disease are discovered it can be laid down with certainty that the patient has had a previous attack even if it has gone unnoticed

Systolic Murmurs

Mitral regurgitation unaccompanied by mitral stenosis seldom if ever occurs as a result of rheumatic endocarditis Contrary to current teaching a *systolic* murmur at the mitral area is the commonest murmur in mitral stenosis not a presystolic This fact has been firmly established in recent years by radiological examination of the heart although Graham Steell drew attention to it as long ago as 1906 It is the long blowing apical systolic murmur in a patient who gives a history of previous acute rheumatism which is especially suspect

Functional apical systolic murmurs are typically short and non blowing in character In no branch of cardiology is fluoroscopy more useful than in determining the significance of systolic murmurs

Dizziness, Faintness, and Syncope

Dizziness faintness and syncope are not *cardinal* symptoms of heart disease That they can occasionally result from it is not denied—unconsciousness for example occurs in some though by no means all cases of high-grade heart block and more rarely at the onset of an attack of auricular fibrillation auricular flutter or coronary thrombosis—but far more often they are symptomatic of a vasomotor disturbance of psychoneurotic origin Neither is exhaustion or a feeling of tiredness a cardinal symptom of heart disease

It cannot be laid down too strongly that the cardinal symptoms of heart disease are two and two only (i) shortness of breath on exertion and (ii) pain, usually retrosternal though sometimes in such situations as we describe elsewhere in this paper

Pain

The pain of angina pectoris is typically retrosternal, not precordial as is commonly believed It tends to radiate across the front of the chest often to the left shoulder and axilla in many cases down the left arm as far as the elbow or even the fingers, sometimes down both arms or down the right arm only and upwards to the neck on one or both sides It may involve the jaw, it may spread to the back it may have other situations and distributions yet hardly ever is it situated below the left breast Wherever it is or whatever its spread, it cannot be laid down too strongly that it is almost invariably brought on by exercise and relieved by rest

The pain in an attack of angina pectoris may vary in different patients or in the same patient at different times from a dull ache to an agonizing feeling of constriction involving the whole thorax It is never "stabbing" in nature

Left submammary pain is very rarely due to heart disease even though it may sometimes extend to the left scapula and, by way of the left supramammary region and left shoulder to the left arm Such pain is persistent aching in character and not induced though it may be increased by exercise It is usually associated with a group of symptoms indicative of physical and nervous exhaustion which have no organic basis (Baker 1930) Such symptoms do of course also occur in patients with cardiovascular disease—for example mitral stenosis or aortic incompetence—for it is only natural that such patients should tend to develop anxiety states

Coronary Thrombosis

One has often found a practitioner doubtful if a coronary thrombosis has occurred in a patient who has

experienced all the typical symptoms, because, on clinical examination of the heart, he can find no changes of any kind whatever It may be interesting for such a one to know that, though a coronary thrombosis can give rise to any of the known arrhythmias, in the majority of cases the rhythm remains regular, no bruits are produced, and no increase in the size of the heart can be demonstrated even by radiological methods

It is commonly believed that an electrocardiogram taken after a coronary thrombosis *invariably* shows characteristic abnormalities This is not so Very occasionally it is normal in every particular Again, a reversed T wave in Leads I and II is not *invariably* a sign of coronary disease It occurs sometimes in severe grades of aortic stenosis and hyperpiesis

Coronary thrombosis very seldom occurs as a result of syphilitic aortitis, in spite of the fact that in this latter condition narrowing of the orifices of the coronary arteries is almost the rule

Some Further Points

That a patient's systolic blood pressure reckoned in millimetres of mercury should equal 100 plus his age in years is still an article of faith in many quarters Mass statistics now available prove that this is not the case The blood pressure should normally rise only slightly with increasing age This is evidenced by the fact that in normal people the increase between the ages of 20 and 60 is no more than 15 mm

Atheroma is never a cause of high blood pressure, though there is little doubt but that the latter ultimately tends to lead to atheromatous degeneration of the arteries

Syphilis never causes a *general* arteriosclerosis The arterial involvement in syphilis is invariably focal

It should always be borne in mind that aneurysm of the thoracic aorta scarcely ever causes dysphagia with regurgitation of food, although it may occasionally be accompanied by some discomfort in swallowing

Auricular fibrillation is, curiously, very rarely associated with subacute bacterial endocarditis or syphilitic disease of the heart

We would acknowledge our indebtedness for many of the points we have stressed to the late Sir James Mackenzie with whom one of us was associated for a considerable time and to Dr John Parkinson with whom both of us have been closely associated in recent years in the cardiac department of the London Hospital

REFERENCES

Baker Doris M (1930) *Lancet* 1 1280
Davies D T, Hodgson, H G and Whitby, L E H (1935) Ibid, 1, 919
Lewis, Thomas (1937) *Diseases of the Heart* 2nd ed, p 154, London
Mackenzie, J (1918) *Principles of Diagnosis and Treatment in Heart Affections* London
Palmer, J H (1937) Med Res Cncl Spec Rep Ser No 222, p 46 London
Steell Graham (1906) *Text Book of Diseases of the Heart* Manchester

As a result of this year's collection the Metropolitan Hospital Sunday Fund has a sum of £51,000 to distribute The money will be allocated to hospitals, convalescent homes, dispensaries, and nursing associations in the London area At a meeting of the council of the Fund the report of the Distribution Committee was adopted The larger allocations include £3,400 to the London Hospital, £2,[illegible] The St Thomas's £1,950 to the Royal Free, £1,85[illegible] thaiddlesex, £1,800 to University College Hospital [illegible] ysic Guy's, £1,400 to St George's, £1,360 to St Mary's [illegible] to Charing Cross, and £1,190 to King's College Hospital

THE "RESTROPIC" ACTIVITY OF BLOOD

BY

C. WETZLER-LIGETI

AND

B P. WIESNER, Ph D., D.Sc.

In previous publications (Wetzler-Ligeti and Wiesner, 1937, 1938a, 1938b) we have described the effects of various pituitary extracts upon the reticulo endothelial system (RES) of the rabbit Congo-red solution was injected intravenously and the rate at which the dye disappeared from the circulation was determined, this rate has been taken, in accordance with the view of previous authors (Adler and Reimann, 1925, Moncorps and Gunther, 1933, Dieryck, 1929, Stern and Willheim, 1935), as an index of the functional activity of the RES It was found that certain anterior lobe extracts raised the Congo red index by a considerable amount The active substance—termed the positive RES tropic (restropic) factor—is not identical with either gonadotropic or thyrotropic hormone In addition to positive restropic extracts, the anterior lobe yields a substance that rapidly, though only temporarily, lowers the index and thus presumably inhibits the function of the RES This negative restropic factor is closely associated, or identical, with the thyrotropic hormone

These experiments suggested that the RES was subject to endocrine control Since other hormones, such as the oestrogenic and gonadotropic substances, can be demonstrated in the circulation, the experiments have been extended to the examination of blood Some of the results are presented here, in extension of preliminary notes on the subject published elsewhere (Wetzler Ligeti and Wiesner, 1938c, Czato, Wetzler-Ligeti, and Wiesner, 1938)

Method of Extraction

Fresh blood—obtained from the veins of rabbits or human subjects, or from the heart of the horse—was defibrinated by shaking it with beads An equal volume of a 20 per cent aqueous solution of sulphosalicylic acid was added to the defibrinated blood and the mixture was shaken vigorously The precipitate was collected in a centrifuge and taken up in 50 ml of 6 per cent aqueous ammonia The mixture was allowed to stand for twelve hours at a temperature of 37° C It was then centrifuged and the precipitate was discarded. The supernatant liquid was adjusted to *p*H 5 by means of acetic acid, and an equal volume of 90 per cent alcohol was added The resulting precipitate was discarded An equal volume of 95 per cent alcohol was added to the supernatant liquid The precipitate was made up with distilled water to a volume the same as the initial volume of blood The precipitate did not wholly dissolve, and the solution was clarified by centrifuging The whole process was carried to completion within twenty-four hours of collecting the blood sample The extracts were stored at 4° C, as the activity is lost at room temperature

The general properties (solubility, stability, etc) of the active fraction agree with those of the pituitary extracts obtained by similar methods

Determination of Congo-red Index

Stern and Willheim's modification (1935) of the Congo red method (Adler and Reimann, 1925) was again used Virgin rabbits obtained from a commercial breeder were employed in these experiments Uniformity of stock and age is desirable, for although the Congo red index tends only to vary slightly in untreated rabbits (± 5 per cent),

individual differences in the basic level may be pronounced Thus the index in one untreated rabbit may be about 50 while in another individual it may be 30 Generally the basic index is within the range 30 to 50 A fall produced by experimental procedure will be more manifest if the basic index is high than if it is low conversely a rise is more impressive if the basic index is low Animals uniform with respect to origin weight and age must be used in order as far as possible to eliminate these individual differences

The index was determined in each experimental rabbit The first injection of the extract to be tested was then administered subcutaneously During the following days one injection daily was given a total of three to five daily injections being administered In most cases the number of injections was four with a few exceptions (made in the first experiments) 1 ml was administered on each occasion The determination of the index was repeated on the day after the first injection and subsequently as shown in the graphs—that is twenty four hours after the last injection and again after a further interval (eight to ten days)

Results

1 *Rabbit's Blood*—The blood of virgin rabbits contains a considerable quantity of positive restropic substance The response evoked in an immature rabbit by the extract from 10 c.cm of blood of another rabbit of the same age is shown in Fig 1 It will be seen that the index rises

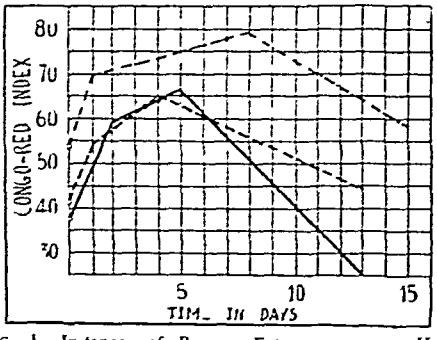


FIG 1—Instances of Positive Extracts ——— Healthy female - - - Bronchopneumonia —— Normal female rabbit (o = first injection ● = last injection Points of inflexion indicate days on which the index was determined)

rapidly but tends to return to the original level after the injection is stopped No general effects were noted

2 *Horse's Blood*—The blood of a slaughtered horse (age unknown) contained small quantities of positive restropic substance The concentration was well below that found in the rabbit The blood of a pregnant mare (seventy first day of pregnancy) was also tested The method of extraction was similar to that used for obtaining positive restropin from the anterior lobe The resulting blood extract was rich in gonadotropic hormone, but did not affect the Congo red index.

3 *Human Blood*—Samples of human blood were collected from forty five subjects This number does not include some cases used in experiments in which the technique was varied or in which the clinical diagnosis was doubtful Of these forty five cases eight were healthy fifteen exhibited various clinical conditions other than malignant disease in twenty two cases malignant disease was established Samples of 5 to 10 ml each were employed hence one rabbit only was used in each experiment In four cases of malignant disease the animals died soon after the first injection, so that no curve can be given

Three types of response were noted and may be described separately

(*a*) *Positive Response*—Two examples of this type are shown in Fig 1 (see also table) It will be seen for instance

Blood Restropin Table

No	Clinical Diagnosis	Before First Injection	After One Injection	After Four Injections	Eight Days after Last Injection
1	Healthy	4.5	55 5	54 0	44 0
2	"	43 0	6 0	55 0	+6 0
3		27 9	42 3	57 1	+5 0
4		37 0	53 3	67 3	25 0
5		55 0	+	0 0	36 0
6	Glaucoma	+6 3	66 6	+6 5	41 7
7	Tb. pulmonis	3 2	59 0		42 4
8	Oedema ex alimentat	+0 0	63 7	65 2	+6 3
9	Sciatica	+0 4	57 2	54 3	+6 3
10	Cholelithiasis	33.2	+0 0	39.2	
11	Carcinoma vulvae	4+0	0 0	20 0	49 0
12	" cervicis	+6 0	33 0	23 0	53 0
13	" mammae	45 0	+0 0	23 0	+9 0
14	" uteri	+4 3	33 0	+	
15	" parotidis	+5 4	4.2	+4	

Convalescence after surgical treatment
† No determination made on second day
Animal died

that the index rose rapidly in a rabbit that had received injections of the extract prepared from the blood of a normal subject. Before treatment 37 per cent only of the dye was eliminated from the circulation during a period of fifty six minutes Twenty four hours later the rate had risen to 58 8 per cent and it continued to rise to a maximum of 67 3 per cent After stopping the injections the index fell again to a level somewhat below the original The animal bore the injections well. Similar activity was established in other samples of normal blood examined Further examples are shown in the table Positive restropic activity is not restricted to the blood of healthy subjects it was also found in the majority of clinical conditions excluding cases of malignancy Examples are shown in Fig 1 and in the table The response to positive restropic extracts manifests itself rapidly and a raised index is usually found twenty four hours after the first injection But the effect requires several days for its full development

(*b*) *Inactive Extracts*—In eight cases the extracts did not significantly affect the Congo red index the variations being within the normal range Examples are shown in Fig. 3 and in the table It will be noted that the curve resulting from plotting the successive indices against time is nearly straight and horizontal No general effects were noted in the animals.

(*c*) *Negative Restropic Extracts*—In eighteen cases strongly negative effects were observed The index fell rapidly in some cases to less than half its initial measure Examples are shown in Fig 2 and in the table Stopping the injections was followed by a return of the index to *about* its initial level The extracts affected the general condition of the animals More or less pronounced emaciation resulted in some instances the animals succumbed in a cachectic condition after one to four injections Extracts of this type have been obtained from cases of malignant disease only

The type of extract (positive, negative and indifferent, respectively) obtained from blood seems to be related to the subject's condition Positive extracts were procured from eighteen of the twenty three cases who were either healthy subjects or exhibited some clinical syndrome

other than that of malignant disease Negative extracts were obtained from nineteen of the twenty-two cases of malignant disease, when the animals survived to yield definite data Inactive extracts were got from eight cases, including three of malignant disease These findings may be expressed differently by stating that in most cases of malignant disease negative extracts are obtained, whereas in

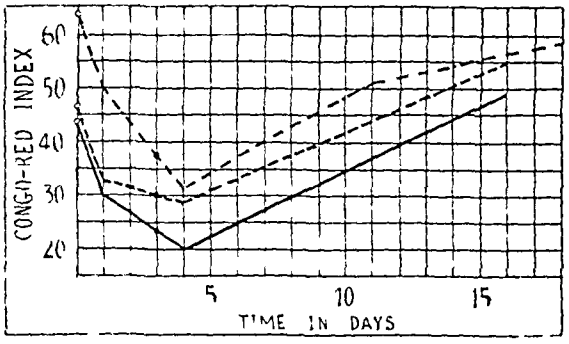


FIG 2—Instances of Negative Curves ——— Carcinoma vulvae -- Carcinoma cervicis — — Carcinoma cervicis (o = first injection ● = last injection Points of inflexion indicate days on which the index was determined)

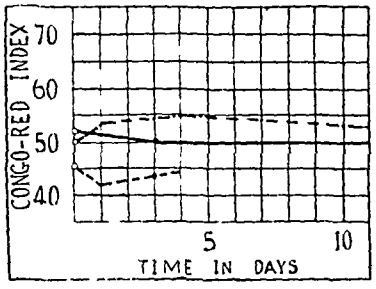


FIG 3—Instances of Inactive Extracts ———, Healthy female — —, Head injuries, - - Carcinoma parotidis (o = first injection, ● = last injection Points of inflexion indicate days on which the index was determined)

the absence of malignant tumours positive extracts result as a rule Inactive extracts may be found in either group, but as yet no case of untreated malignant disease has yielded a positive extract, whereas negative extracts were not found in any case in which the clinical diagnosis excluded the presence of a malignant tumour

Discussion

The rise in the Congo-red index following upon the injection of extracts prepared from 'normal' blood, whether human or animal, is pronounced hence it must be concluded that the blood of healthy subjects contains a positive restropic factor The origin of this substance is obscure although we have not yet detected any chemical or biological difference between the positive restropic factors of human blood and of cattle pituitary, the identity of the two substances and the pituitary origin of restropin in blood are by no means proved Further experiments are required to elucidate this question in their planning it will be necessary to consider the possibility that the restropin of blood is derived from the centres of the RES

The data also show that disease in general, with the exception of malignant disease, does not fundamentally alter the restropic activity of blood As a rule a positive factor is present even in severe non-malignant conditions There are some indications that the concentration of restropin may even be higher in some diseases than in health but a much larger amount of material is required to confirm this observation On the other hand, both in normal subjects and in various clinical conditions the concentration of positive restropin may fall so low that with amounts of extract similar to those used in the present experiments there may be no effect on the RES of the test animal

It is also clear from the data so far obtained that the normal restropic activity of blood tends to be reversed in malignant disease Although some interest attaches to this finding, it must be remembered that we have examined up to the present moment but few types of malignant tumours Hence no general statement can be made as to the kind of malignant disease in which positive activity is lost and negative activity develops, nor is it known at which stage of neoplastic development restropic activity changes

The origin of negative restropin is even more obscure than that of the positive factor In experiments with pituitary extracts negative activity was found to be associated with the thyrotropic factors, in the present experiments no obvious thyrotropic activity was noted to attach to the negative extracts Moreover, these extracts were toxic in many instances—a property not observed in corresponding doses of thyrotropic extracts

The biological significance of the findings under discussion is open to several purely provisional interpretations It could be considered that the RES is involved in the maintenance of immunity and resistance the presence of positive restropin possibly reflects, or conditions, the active state of the system Conversely, the development of negative restropic activity in the blood might tentatively be regarded as a manifestation of a severe disturbance of the function of the RES The fact that negative restropic activity has been demonstrated up to the present time only in cases of malignant disease is possibly significant, for it has long been assumed that the systemic changes that develop in malignant disease extend to the RES, and a voluminous literature concerning this relationship has accumulated Roffo's observations (1929, 1933) are of considerable interest in connexion with our findings He showed that the blood of cases of malignancy could cause increased weight of the spleen in the mouse Roffo concluded that in cases of malignancy changes took place in the lipoid metabolism, resulting in secondary structural and functional changes in the RES Although we have not examined the corresponding effects of their extracts, it should be mentioned that in our experiments the lipoid fraction of blood was almost completely eliminated

It is, however, hardly possible at the present moment to discuss these questions profitably, or to analyse further the problems that suggest themselves, such as the part played by the pituitary, which has been shown to yield both negative and positive restropic extracts There is not even evidence to show whether the lack, or reversal, of positive restropic activity is correlated with the actual presence of a malignant tumour or whether it indicates a systemic change that may either precede or follow, condition or be conditioned by, neoplastic development

Summary

1 The blood of rabbits, of the horse, and of healthy human subjects has been found to contain a factor that stimulates the activity of the reticulo endothelial system (positive restropic factor)

2 Positive restropic activity seems to persist in disease, except in malignant disease, when, as a rule, the normal activity is reversed, a negative restropic factor being found in the blood

We are greatly indebted to Dr P O Ellison pathologist to the Royal Northern Hospital, the staff of the Royal

Cancer Hospital (Free) Dr J Patterson pathologist to Charing Cross Hospital and Dr Rouillard Waterloo Hospital for samples of blood and for clinical diagnoses

REFERENCES

Adler H and Reimann F (1925) *Z exper Med* 47 617
Cato I Wetzler Liguti C and Wiesner B P (1938) *Chem and Ind Proc biochem Soc* 57 600
Dieryck J (1929) *Rev belge Sci méd* 1 605
Montorp C and Gunther O (1935) *Klin Wschr* 12 979
Roffo A H (1929) *Z Krebsforsch* 30 180
—— (1933) *Bol Inst Med exp Cancer Buenos Aires* 10 651 745
Stein K and Willhelm R (1935) *Z exper Med* 97 384
Wetzler Liguti C and Wiesner B P (1937) *Nature* 140 502
—— —— (1938a) *Endocrinology* 22 693
—— —— (1938b) *Chem and Ind Proc biochem Soc* 57 85
—— —— (1938c) *Nature* 141 1100

TREATMENT OF CARCINOMA IN THE PHARYNX AND LARYNX BY IRRADIATION*

BY

C HAMBLEN-THOMAS, F R C S

Surgeon Ear Nose and Throat Department West London Hospital

In this brief survey I would like to emphasize a few points They are (1) operation should be done where possible (2) all patients undergoing irradiation treatment should be treated as in patients (3) radium has its particular uses and so has x ray treatment

Apart from growths which are better treated by irradiation because of their histology or their position I will say with all emphasis that where (with due consideration of anatomical and histological limitations) an operation can be adequately performed that is the treatment of choice Of course irradiation can be used as an aid to operation but this I will discuss later Speaking generally the results of operation are more satisfactory than those of irradiation alone—partly no doubt because the cases for operation are carefully selected and are not so advanced

The suitability of a growth for irradiation depends on its histological character and its situation If the cells are young and undifferentiated and the growth is rapid and large it is better treated by irradiation because such a growth is radiosensitive and at the same time the results of operation alone are so unsatisfactory On the other hand if an epithelioma is of the more mature type with a good deal of fibrous tissue or has been treated previously by irradiation or operation so that there is an increase in scar tissue it has little radiation sensitivity and is better operated on

Now let us consider the subject with regard to the position of the carcinoma We know that carcinomata arising in certain sites only slightly removed from others are especially sensitive to irradiation treatment and the results are good The tonsil if the growth has not become adherent to the more solid structures is particularly suitable for interstitial irradiation My cases were all rather advanced and all had glands but excluding one patient who is alive and well after seven and a half years the average life is eleven and a half months for all

Intrinsic carcinoma of the larynx if it has not spread posteriorly to the arytenoids or anteriorly to the epiglottis is particularly susceptible to irradiation—so also is epithelioma of the soft palate—and there is no resulting deformity or alteration of voice Firm fixation of the growth and involvement of muscle and cartilaginous or bony tissues are indications that irradiation alone will not be successful Here are Coutard's figures for 1937

Epithelioma of palate tonsil and pillar region	66 cases	32 5 year survival
pharynx	26 "	11% " "
larynx	16 "	—" " "

In comparing results five years is a useful period to take but at this point I would like to mention that our President in 1934 had a case of carcinoma of the larynx which had recurred twenty four years after operation It was successfully treated by irradiation

If there are glands present the results of irradiation are not so good Glands are more resistant than the primary growth five of my series of eighteen cases of extrinsic carcinoma of the larynx which have lost the primary growth still have glands that can be felt Unfortunately nearly all the cases we see have glandular enlargement except of course the intrinsic carcinomata

Though metastases are associated with irradiation treatment I am aware of no grounds for saying nor has it been proved that metastases are *encouraged* by irradiation The survival period of the patient is increased by irradiation which also is so often employed as a forlorn hope for extensive and inoperable cases All it can do in such cases is to heal an ulcer stop haemorrhage and pain and otherwise ease local discomfort.

Comparative Results

In comparing results we must also remember that operation cases are of necessity hospitalized whereas many of those treated by irradiation attend as out patients and are ill clad under fed have dirty mouths and have to travel home after each treatment in all weathers There is no doubt that very much better results would be obtained with irradiation if the patients could be taken into hospital The statistics of private patients bear out the above facts

Irradiation has its uses in combination with operation It destroys the young and active cells of the growth and renders an adherent growth more movable Coutard advises operation before the twenty fifth day after irradiation—that is before the reappearance of any new cells and any skin reaction Hautant also advocates irradiation before operation Although some believe they have had better results from their operations by using irradiation afterwards Coutard is not much in favour of it it is the scar tissue that limits the usefulness of the radiation in these cases

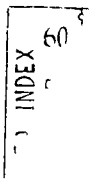
Methods of Irradiation

With reference to the different modes of irradiation I limit my treatment to the use of radium needles or radon seeds and those requiring external irradiation I refer to Mr Carter Brain or Mr White Phillips On the whole I think I get better results with radium needles than I do with radon seeds The dosage of the latter I feel is initially uncertain and radium needles give just as big a dose at the end of the week of insertion when it is wanted most

Care is required in the spacing of the needles if they are to be completely effective also the results are better if there is a previous wide external application of radiation Interstitial irradiation with needles is more effective than external irradiation in the treatment of the older cell type of growth Needles are indicated particularly in carcinoma of the tonsil soft palate and intrinsic carcinoma of the larynx using the fenestration method Harmer has had a 75 per cent five year survival result One of my patients is alive and well after eight years

* Read in the Section of Oto Rhino Laryngology at the Annual Meeting of the British Medical Association Plymouth 1938

other than that of malignant disease Negative extracts were obtained from nineteen of the twenty-two cases of malignant disease when the animals survived definite data Inactive extracts w including three of malig be expressed malignant dis



concen

facility in passing through narrow and Eckman (1935) proved exp to 50 per cent less pressure was required helium-oxygen mixtures Eversole (1937), using in ure clinically in seventy-two patients with respir obstruction, claimed nearly 90 per cent of successful results It has also been used in the treatment of bronchial asthma and in respiratory paralysis due to spinal anaesthesia

The British Oxygen Company very generously presented one of us (W S S) with a ten cubic foot cylinder of helium, which until recently was unobtainable except in the United States The company can now supply it This was tried in half a dozen cases during cyclopropane anaesthesia, but as the patients had no respiratory obstruction and were already breathing with the remarkable calmness and quiet typical of cyclopropane it had no apparent effect

Personal Experiments

As no patients with respiratory difficulties were available personal experiments were carried out with artificial obstructions

A Foregger-Waters soda lime canister and rebreathing bag were used The face piece was replaced by an intratracheal adapter, to which was fitted a rubber mouth piece which carried a screw clamp This clamp was tightened until considerable constriction was caused Actually a Magill tube of 5 mm internal diameter was compressed until the lumen was about ½ mm wide and 8 mm long The subject then breathed in and out of the bag through the soda lime and through the constriction A quarter of a litre of oxygen per minute was allowed to enter the bag through a flowmeter, while the expired carbon dioxide was of course removed by the soda lime

In one series of experiments air only was used, in the other a helium-oxygen mixture of approximately similar percentage. In every case the subject breathed through the constriction until dyspnoea became intolerable The times were taken by stop-watch

In each experiment with helium the bag was emptied and refilled after the first half dozen breaths in order to get rid of some of the residual nitrogen from the lungs By refilling the bag several times it might be possible to improve upon our figures

As we were using ourselves as subjects we disregarded Home Office regulations about killing the experimental animals at the close of the session This led us into a trap which invalidated our first series of results We tried to obtain many readings in one evening, and very soon found that the fatigue caused by semi strangulation produced increasingly rapid intolerance to a repetition of the process

The times given below were all taken after allowing a sufficient interval complete recovery The constriction caused by screw clamp remained constant throughout

Tim	*F*	*on Point*
		smoker
N		oxygen,
		43 sec.
		sec.
		sec.

HELIUM IN ANAESTHESIA

BY

W STANLEY SYKES, M B , D.A.

Anaesthetist to the General Infirmary the Hospital for Women and St James Hospital Leeds and to the Dewsbury Infirmary

AND

REGINALD C LAWRENCE, M B , Ch B

Resident Anaesthetic Officer the General Infirmary at Leeds

Helium, like nitrogen, is a physiologically inert gas But it is very much lighter An artificial atmosphere of normal oxygen content (21 per cent), but with 79 per cent of helium replacing the normal nitrogen, is only one third as heavy as ordinary air It should require only one-third the amount of force to move it (force = mass × acceleration) and it should pass through narrow apertures twice as easily (the rate of diffusion of gases is inversely proportional to the square root of their densities)

Helium–oxygen mixtures have been suggested for deep-sea divers and caisson workers because of their rapid diffusibility (and low coefficient of solubility), which allows of quicker passage from the blood to the alveoli and consequently quicker decompression Sayers and Yant (1926) found that small animals subjected to pressures of 10 atmospheres for one to five hours could be decompressed from helium–oxygen in one third to one quarter the time required for nitrogen–oxygen

Lemmer and Rovenstine (1935) proposed putting this low solubility to practical use in anaesthesia Their experiments on different gases (with the object of preventing post operative atelectasis) showed that its actual absorption from the alveoli into the blood was the slowest of nine different gases tested But it has another potential

No 2 subject R C L Aged 27 non smoker

Nitrogen-oxygen	Helium-oxygen
5 min 2 sec	9 min 30 sec
4 min 40 sec	9 min 10 sec
4 min 10 sec	10 min 21 sec
4 min 36 sec	8 min 54 sec
3 min 58 sec	8 min 20 sec
Average 4 min 33 sec	Average 9 min 15 sec

Probably the slightly better times obtained by subject No 2 are accounted for by difference in age and smoking habits His fifth experiment which was easily his worst was done shortly after exercise The results are on the whole very consistent

Conclusion

An artificial atmosphere of helium and oxygen is theoretically and practically about twice as easy to breathe as ordinary air and the mixture should be of great value in cases of respiratory obstruction or in cases in which it is essential to economize muscular effort When obstruction is present its value is immediately apparent and can be measured by simple timing experiments Even if there is no obstruction in which case it has no visible effect it might still be of value in reducing the amount of work done by the patient and in preventing post operative collapse of the lung because of its low solubility

BIBLIOGRAPHY

Barach A L (1936) *J clin Invest* 15 47
—— and Eckman Morris (1935) *Anesth & Analges* 14 210
Eversole Urban H (1937) Mimeographed copy of minutes of meeting of the American Society of Anesthetists May 20 p 7
Lemmer K E and Rovenstine E A (1935) *Arch Surg* 30 625
Sklad M (1936) *Amer J Surg* 34 519
Sayers R R and Yant W P (1926) *Anesth & Analges* 5 127

CARDIAZOL THERAPY IN STUPOR

BY

J S HARRIS, M D, M R C P, D P M

Deputy Medical Superintendent West Park Hospital Epsom Psychiatric Consultant St Stephen's Hospital and Westminster Institution London

AND

C R BIRNIE, M D, M R C P, D P M

First Assistant Medical Officer West Park Hospital Honorary Psychotherapist and Honorary Psychotherapist to Speech Department West End Hospital for Nervous Diseases London

The treatment of schizophrenia by cardiazol has been practised on the Continent to an increasing extent in recent years and the view is current that a favourable response is often met with in cases of stupor In the present series eighteen cases of stupor were treated and in their selection no special criteria were employed Each case however was carefully examined to exclude organic disease The stupor although it varied in depth was the outstanding clinical feature in each case

Technique of Injection

The technique employed was that recommended by Meduna A 10 per cent solution of cardiazol buffered to *p*H 8 with 0 1 per cent disodium hydrogen phosphate to prevent decomposition on sterilization was injected intravenously beginning with 0 5 gramme in the case of men and as a rule 0 4 gramme in the case of women Three injections were given weekly and the dose was increased by 0 1 gramme whenever it was found that a larger amount was required to produce a convulsion It was never necessary to employ a higher dosage than 1 gramme It was decided to produce in each case thirty convulsions unless some complication supervened It is well known that thrombosis is one of the difficulties to be contended with and therefore if only one or two veins be available (and this is not uncommon in women) treatment may have to be abandoned at an early stage With a view to preventing this occurrence the solution of cardiazol employed was buffered and in addition all traces of the drug were removed from the needle by rinsing in normal saline before insertion into the vein Further after the injection had been given any extravasation of blood into the tissues was prevented by firm pressure by means of a swab at the site of puncture and this was maintained throughout the convulsion As soon as the latter was over a dry dressing was firmly applied No attempt was made to thread the needle up the vein as this appeared likely to increase the possibility of thrombosis

Results

The total number of patients treated was eighteen of whom eleven were males and seven females In eleven cases thirty convulsions were produced and this was held to constitute a full course of treatment In the remaining seven cases for one reason or another (see below) it was found necessary to discontinue treatment after the production of from three to nineteen convulsions In the table below are set out particulars of the cases It will be noted that Cases 1 to 11 received the full course of treatment while in Cases 12 to 18 treatment was incomplete for the reasons assigned

Table giving Particulars of Eighteen Cases of Stupor Treated by Cardiazol

Case No	Sex	Age	Duration of Illness	Duration of Stupor	Type of Stupor	Dose in grammes	No of Convulsions	Result	Remarks
1	M	20	3 years	1 12	Non resistive	0 5 0 7	30	Complete remission	
2	M	28	1 "	1	Resistive	0 5 1	30		
3	F	23	1 3/12	1/12		0 4- 0 7	30		
4	M	23	4/	1/12	Non resistive	0 5 0 8	30	Partial remission	
5	F	23	5	3/12	Resistive	0 4- 1	30	"	
6	F	22	6	2 3/12		0 5- 0 8	30		
7	F	47	10	10	Non resistive	0 3- 0 8	30	"	
8	M	44	4	3/12		0 5- 0 8	30	No change	
9	M	28	5	3		0 5- 1	30		
10	M	30	3	3	"	0 5- 1	30		
11	M	32	7	2	Resistive	0 4- 0 7	30		
12	M	36	1 1/2	1 3/12		0 5 1	19	Partial remission	Marked hostility
13	F	47	13	4	"	0 5 0 7	7		Treatment being carried out
14	F	31	3 1/2	3		0 5 0 6	4		Thrombosis of veins
15	M	28	2	2	Non resistive	0 5 0 7	9	No change	Activation of pulmonary tuberculosis
16	M	27	3	3		0 5- 0 8	8		Thrombosis of veins
17	F	30	3	4/	Resistive	0 4- 0 6	4	"	"
18	M	35	1/2	4/	Non resistive	0 5- 0 6	3	"	Numerous after convulsions

Reference to the table will show that of the eleven cases which received a full course of treatment three made a complete recovery four showed some improvement and the remaining four did not benefit As is to be

expected, and as others have stated, there is a definite correlation between the duration of the mental disorder and response to treatment, those cases with the shorter duration improving to a greater extent than those in which symptoms have been present for a longer time In the three cases which recovered the average duration of illness was under two years, in those in which only a partial remission or a complete failure to respond was obtained the average duration of symptoms was over five years

It is noteworthy that, of the cases which recovered, Case 1 was considered to be one of depressive stupor, whereas Cases 2 and 3 were undoubtedly examples of schizophrenic stupor In all three the stupor was profound, and in Cases 2 and 3 it came on abruptly It seems that it is in these cases, where a deep stupor has appeared suddenly and has not been preceded by a phase involving schizophrenic deterioration, that the best results may be anticipated The fact that in Case 1 there was a relatively long duration of illness before the onset of stupor does not contradict this suggestion, since in that instance the illness was considered to be essentially depressive in type and therefore no deterioration was to be expected

In order to discover whether such deterioration is present in any given case of stupor before treatment is begun, a colleague, Dr W P Berrington, has suggested the employment of sodium amytal This drug in many cases causes the patient to emerge from his stupor for a short time, during which it is possible by questioning and observation to detect the presence of any deterioration It is also possible that sodium amytal may be useful in another way, since it seems likely that unless it produces the above effect treatment with cardiazol will not lead to good results

In those cases where stupor was deepest a few injections only were necessary to produce dramatic results, particularly in relation to mutism and refusal of food As an example of this Cases 13 and 14 can be quoted In the former the patient had been stuporous for four years and mute and refusing food for two years Three injections were enough to make the patient sit up, converse, and feed herself In Case 14 the patient had been stuporous, mute, and refusing food for three years Again three injections led to the patient sitting up, speaking, and feeding herself

Complications Observed

1 THROMBOSIS

In spite of the precautions (see above under heading of technique) which were taken thrombosis of the veins did occur in a number of cases, and in three of these to such an extent that it was impossible to continue treatment In these cases the number of injections given was very small —namely, four, four, and eight respectively It is noteworthy, however, that in some of them it was possible to give as many as fifteen injections into the same vein without any apparent thrombosis occurring, and this would appear to suggest that a personal factor is involved Occasionally, after thrombosis had occurred in a vein, if an interval were allowed to elapse it was found that the vein could again be used successfully

2 DISLOCATIONS

(*a*) *Forward Dislocation of the Jaw*—This occurred in two patients, and took place at the beginning of the fit when the muscles of the jaw, along with others, were in tonic spasm The reduction of the deformity was easily carried out immediately after the fit had ceased, during the stage of relaxation It was found possible to avoid a recurrence of the dislocation in subsequent seizures by instructing the nurse to prevent the lower jaw opening too wide by pressing upwards with one hand placed under the chin while exerting counter-pressure with the other on the vertex This pressure may be discontinued as soon as the tonic spasm is over, and the gag or tampon is then quickly placed between the teeth

(*b*) *Subcoracoid Dislocation of the Shoulder*—This happened twice during the tonic stage of the fit in a patient who gave no history of any previous dislocation at this joint Reduction presented no difficulty

3 ATYPICAL FITS

(*a*) *Delayed Fits*—In the majority of cases the convulsion occurs about fifteen seconds after the injection of cardiazol into the vein In a few cases it is found that this interval is constantly exceeded, and a period as long as two or three minutes may elapse So far as could be ascertained, in those cases all the cardiazol went into the vein In one case it was known that the greater part of the cardiazol went into the surrounding tissues, and in this instance a seizure occurred, but not until fifteen to twenty minutes had elapsed The longer interval is presumably accounted for by the slower absorption, which prevented the cardiazol from quickly reaching the concentration in the blood necessary for the production of the seizure

(*b*) *Weak Seizure followed by a Strong*—In one case on almost every occasion the injection of cardiazol was followed by a slight fit, and then, after an interval of up to a minute, the major convulsion occurred

(*c*) *Strong Seizure followed by a Weak*—In two cases immediately after the patient had had a strong seizure and was in a state of relaxation a second much weaker fit followed

(*d*) *After-convulsions*

(i) Convulsive Twitchings—In one case where the veins were partially thrombosed an injection of 0·7 gramme into an arm was followed by a ballooning of the vein, and as no fit occurred a similar injection was given into the other arm, with the same result Finally, a patent vein was chosen, and when another 0·7 gramme was injected a strong fit occurred, but throughout the next twenty-four hours this patient continued to have generalized convulsive twitchings accompanied by periodic vomiting The cardiazol which was injected into the first two partially thrombosed veins was possibly absorbed so slowly that the concentration in the blood failed to reach that necessary to produce a major convulsion, but was sufficient to give rise to generalized twitchings

(ii) Numerous Severe Seizures—Case 18 (see table) is of great interest Following the first injection of 0·5 gramme of cardiazol a strong seizure occurred and was followed after an interval of three minutes by another not quite so strong Three days later a second injection of the same amount produced no reaction On the third occasion 0·5 gramme again produced no reaction, so the dose was immediately repeated, with the result that a strong seizure occurred, followed almost at once by three more strong seizures Later in the day the temperature rose to 101° and the patient appeared ill On the next occasion, since 0·5 gramme had previously failed to produce a fit, 0·6 gramme was given without result As before, this was immediately repeated, and was followed by the occurrence of seven fits at intervals during the next twenty-four hours It was decided, in view of this, to discontinue further treatment

ACTIVATION OF PULMONARY TUBERCULOSIS

Case 15 in which there were no clinical symptoms or signs of a pulmonary lesion before treatment was begun showed after the ninth injection an evening rise of temperature with clinical evidence of a right apical lesion which has subsequently progressed rapidly It is possible in this case that had a skiagram of the chest been taken before treatment the presence of a quiescent focus would have been discovered contra indicating treatment Such an occurrence suggests the advisability of screening the chest in every case before treatment is undertaken

The results of treatment described above must not be considered to be final as relapse may yet occur in some of the cases Indeed in one (Case 5) which had received a full course of injections and had had thirty convulsions resulting in a partial remission there are already signs of relapse and this in spite of a further short course of injections

Conclusions

From the results it would appear advisable to treat every case of stupor whether of long or short duration with cardiazol Complete recovery or improvement may be expected in those cases in which the illness has lasted a relatively short time and in which the stupor has been almost the earliest symptom Even when underlying deterioration is masked by stupor the latter will disappear with cardiazol therapy but the former will become evident Apart altogether from the question of remission refusal of food and consequent tube feeding in cases of stupor should be almost completely eliminated by cardiazol therapy

We would like to thank Dr N Roberts medical superintendent of West Park Hospital for permission to publish the details of the cases

Clinical Memoranda

Suicide after Treatment as Voluntary Patients

During the last fifteen months four women between the ages of 30 and 38 who had been married for from eleven to eighteen years, have entered this hospital as voluntary patients left in a month and committed suicide within a few days of leaving—three by coal gas and one by drowning Their cases bear such strong resemblances to each other as to necessitate being recorded as a group

DESCRIPTION OF CASES

In three cases there was no suspicion of mental illness in the family in the other the mother and one brother (out of five siblings) had each been in a mental hospital for a period There was nothing of interest in their early histories except a tendency to obsessional traits All had carried out the duties of a housewife with conscientiousness for many years They were all non-smokers and only one took a little stout occasionally as a tonic They were or had been regular church goers and all had strong religious feelings One had no children two had one each and the other had four

In two cases the illness was the first attack Of the others one had had mild symptoms six years before and one had experienced during the last fifteen years six attacks of apathy and depression lasting a few weeks Menstruation in each case lasted five to six days and was regular and rather full Their symptoms were generally worse during these periods Their sexual appetite had been stronger than those of most women but in three cases certainly there had developed either a marked apathy towards or a strong distaste for the husband who had proved too dull or unimaginative or uninterested to hold their affections Along with this the children of the marriage became a great trial

When the patients were first seen at an out patient clinic the acute symptoms had in each case remained unchanged for at least two months but the total period of development of the illness had generally been much longer All the four failed to respond to weekly out patient psychotherapy and were admitted to mental hospital as voluntary patients

They appeared quiet and depressed with a tremendous apathy which so impaired their energy concentration and initiative that their household duties had become intolerable But on examination they quickly became emotional and spoke freely of their difficulties and of the utter hopelessness of their future The general intellectual level was good and the ordinary faculties well preserved Insight was complete and they were entirely without delusions or hallucinations There was no retardation They were friendly helpful and co operative and could laugh and be amused Insomnia was prominent Self pity was exaggerated and two of them said they had toyed with the idea of suicide but this was not considered to be a great danger at that time

Three of them complained of chronic bronchitis Signs of autonomic instability (flush pallor coldness and numbness of extremities dilated or variable pupils sweating frequency and urgency without apparent physical cause) were rather more noticeable than usual and the tendon reflexes were exaggerated But otherwise physical examination and laboratory investigation revealed no abnormalities

One patient was treated by prolonged narcosis the others by rest in bed mild sedatives and simple encouragement and interest They all appeared to improve a little but they were anxious to leave and discharged themselves Within a few days of leaving (in two cases within twenty four hours) they had committed suicide

We regard these patients as women of the obsessional type with very rigid ideas of right and wrong. It seems that dissatisfaction was followed by antipathy towards the husband complicated in one instance by a violent attraction to another man Inflexible moral standards learnt in childhood retained their full force and the patients were unable to deal with the conflict aroused

DISCUSSION

This group of cases is described as a contribution to the study of the prognosis in depressive states The difficulties of treatment in such cases and the danger of failure are apparent but there is a further complication of the problem

Such cases represent only one group of many different kinds of non certifiable mental illness which are coming in increasing numbers to psychiatric out-patient clinics The last resort in treatment for them can only be the mental hospitals where the facilities are often grossly inadequate overcrowding is almost the rule, and proper segregation of patients is sometimes impossible If this is a serious difficulty in the treatment of psychoses it may be tragic when the voluntary decision to seek help in a mental hospital is made with such mental stress and effort as can only be compensated for by complete cure and is accompanied by apprehension which proves to be justified

S A MACKEITH MRCS LRCP DPM
Deputy Medical Superintendent.
D N PARFITT MD MRCP DPM
Medical Superintendent
Warwickshire and Coventry Mental Hospital Hatton

Reviews

VIRUS AND VIRUS DISEASES

Virus und Viruskrankheiten bei Menschen Tieren und Pflanzen By Dr Med Gustav Seiffert Wissenschaftliche Forschungsberichte Naturwissenschaftliche Reihe Volume 46 (Pp 221, 7 figures RM 16, bound, RM 17) Dresden and Leipzig Theodor Steinkopff 1938

To the growing number of books devoted entirely to the subject of viruses has now been added yet another, *Virus und Viruskrankheiten* by Dr Gustav Seiffert This book is divided into three main parts general, special, and technical The general section opens with a brief historical introduction and a definition of the term "virus" in its modern usage, and following this the author considers the various characteristics of viruses, such as size, filterability, morphology, chemical composition, and cultural requirements The bearing of this knowledge on the nature of viruses is discussed The last three chapters of this general part of the book are concerned with the question of immunity to virus infections and the epidemiology and specific prophylaxis of virus diseases

In the second or special part of the book, which is the largest of the three, the different viruses are described in detail, and although the author envisages here all viruses, including those causing disease in plants and insects, it is only the animal viruses which receive adequate treatment Included in this section are diseases of doubtful virus aetiology, such as acute rheumatism and post-vaccinal encephalitis, and diseases like whooping-cough and scarlet fever, which a few still consider to have a virus as their prime cause Perhaps it would have been better had a subsection been made for these doubtful viruses Throughout, however, this section is accurate and up to date and the presentation adequately critical where necessary Following the special section are two short ones devoted to the virus-like micro organisms (bovine pleuro-pneumonia and agalactia, rickettsia, bartonella, and grahamella) and the filterable forms of bacteria The author expresses doubt as to the existence of the latter, and a conviction, with which practically all virus workers will agree, that viruses are certainly not filterable forms of bacteria

The technical section with which this book closes is a short one It contains much useful information, but under staining methods one would have liked to see Castaneda's method included, and the three lines on complement fixation are surely inadequate Though, of course, it is true that this reaction as applied to viruses is, in principle, the same as in the case of bacteria, the beginner would find himself somewhat at sea if he were not told of the necessity for an adequate concentration of the antigen and the advantage of prolonged fixation

DISEASES OF INFANCY

Säuglingskrankheiten By Professor Dr H Finkelstein Fourth thoroughly revised, edition (Pp 899, 204 figures, including some in colour No price given) Amsterdam Elsevier, N V 1938

The fourth edition of Professor H Finkelstein's well-known work on diseases of infants has been completely revised and now appears under the auspices of a publishing firm in Amsterdam Some fourteen years have passed since the third edition, and in his revision not only has Professor Finkelstein introduced comments upon advances achieved during that period but he sums up as it were for the last time his long experience in paediatrics, especially as the subject concerns the period immediately after birth and the first year of life It is a tribute to his great reputation that his name appears upon the title page without any indication of any of his appointments, although the preface is labelled as from Berlin, where the last years of his active professional life were spent The present edition is beautifully produced with numerous illustrations, many in colour, and there is an excellent index

To the English reader the criticism must occur that in the many references to the literature there is only scant notice given to those advances made in the English speaking countries Dr Helen Mackay's work on anaemia is quoted and a certain amount of American literature is mentioned, but otherwise the conclusion must be reached that either our country has contributed nothing of importance in the last ten years or so to the study of the newborn or that what has been written is not considered of importance The work of the Edinburgh school, for example, in regard to various disorders of the newborn would appear worthy of mention, such as has been reported by Craig in the *Archives of Disease in Childhood* during the past few years, and the use of hypertonic rectal saline for the cerebral conditions of the newborn baby is another advance which has been widely accepted in this country and America but not apparently in Germany However, Professor Finkelstein has set out his own most valuable views, and all interested in the early months of life must be grateful for this present record of his great work and that of his many distinguished pupils on this subject

INJURIES TO ATHLETES

Athletic Injuries Prevention Diagnosis and Treatment By Augustus Thorndike, jun, M D (Pp 208, 104 figures. 14s net) London Henry Kimpton 1938

The author is a surgeon in the Department of Hygiene of Harvard University and therefore comes into intimate contact with injuries sustained by freshmen and sophomores in their various sports, particularly American football He gives an interesting quotation from the *Handbook of Harvard Athletics*, 1852–1922, which shows what an exaggerated position football had secured for itself in the University life It is worth quoting in full

"On the score of physical preparation the methods were equally absurd It was no uncommon thing for players to report at two o'clock in the afternoon and continue to play until it was actually dark Practice in those days consisted of hard scrimmage with hardly a minute for breathing space from beginning to end This was the routine from Monday to Friday unless there was a mid-week game to break the monotony There was also a spring and summer practice in addition to the entire fall preliminary season and only the severely injured were excused from daily work It is no wonder that men were burnt out physically and mentally long before the season closed

Dr Thorndike gives a detailed picture of the development of the 'medical room" in connexion with games in the university In 1927 a dietitian 'was put in absolute charge of all training tables in Cambridge and in New London" She appears to have been so effective that

at the end of the year it was noted that there had not been a single case of gastro intestinal upset during the football season while in previous years there had been as many as thirty eight men at a time unable to participate in athletics because of this condition Among other interesting points discovered by the dietetian was that a man taking part in

football or crew required almost twice the number of calories daily that he did while taking part in basketball track or hockey

Dr Thorndike has so cut down his chapter on the physiological basis of physical fitness that it is often difficult to follow his argument His interesting chart on page 31 of physical fitness as measured by lactic acid increase and carbonic acid capacity decrease requires fuller elucidation to make it really convincing His chapters on physical training and physical fatigue deal simply with the more important basic principles such as diet sleep graduated muscular effort and absence of drugs These chapters have many references to work carried out on the physiology of exercise and fatigue One particularly good feature of these references eighty eight in all is that they are not confined to American authors but cover Scandinavian and English authors especially A V Hill's pioneer contributions to the subject

The author states specifically that special exercises devised by Rayerott and Croker increase the strength of joint ligaments if done before strenuous games but he leaves the whole of this important matter without convincing proof as to why he supports their work The diagrams of joint injuries and the tearing of ligaments as well as the tables that accompany them suggest that the author is able to diagnose by digital examination exactly which ligament is injured and the extent of damage—a big claim The book has a number of statistical tables of his experience since 1932 in relation to various injuries and though these are interesting as the experience at one university they have little value for practitioners in England who really want to know the methods of diagnosis and treatment and the disability period of the injuries encountered in America not the mere numbers

Part III has been composed primarily for use as a book of reference It is not designed to be read through consecutively In this section the illustrations of strapping are clear and good and it is obvious that the author puts great reliance on this as a means of early return to the sport which has occasioned the injury The short chapter on physiotherapy in injuries does not enter into any detail recommending only Grayer and Ostrom's textbooks Massage preferably by a graduate of some recognized school of massage and of sufficient experience so that he will not aggravate and traumatize acute and recent injuries is recommended As a book of personal experience with interesting statistical tables and a careful bibliography this is a contribution to the subject of athletic injuries

ENCYCLOPAEDIA BRITANNICA YEARBOOK

Encyclopaedia Britannica Book of the Year 1938 Edited by M D Law (Pp 742 45s) Encyclopaedia Britannica Co Ltd London

It was an ambitious undertaking of the publishers of the *Encyclopaedia Britannica* to produce a book of the year which is described as a survey of the principal persons events and developments in various spheres of knowledge and affairs during the year 1937 Including the index to the volume there are 742 pages, and this presumably is a measure of the rate at which developments occur in these expansive modern times But if a book of such formidable dimensions is to be produced each year then the systematic purchaser will have to look to his shelf-room It would seem as though the editor has tried to combine an account of what happened in 1937 and of the events that have taken place since the last edition of the *Encyclopaedia Britannica* She has combined a yearbook with a supplementary volume As there was a gap in time to be filled it might perhaps have been better to produce a supplementary volume and so to entitle it

The reader who buys the yearbook as a supplementary volume will be well rewarded for all the features that have gone to make the *Encyclopaedia Britannica* a household word in the world of learning are here happily preserved Accuracy thoroughness scholarship are combined with modernity and the editor has been nobly supported by the usual first class team of contributors Medicine is well served and we are pleased to notice names familiar to readers of this *Journal* Sir Henry Brackenbury on hospitals Sir Robert Johnstone on gynaecology and obstetrics Professor R M F Picken on epidemiology and infectious diseases Dr C W Buckley on rheumatism Dr J Blomfield on anaesthetics Professor L P Garrod on immunization Sir Robert McCarrison on nutrition and vitamins—to mention a few There are a number of American contributors to the volume and in places the editor has evidently had difficulty in co ordinating the material supplied to her from the U S A with what was ready to hand Britannica has undergone an extension of meaning but not necessarily without profit though with some lack of cohesion between its geographical elements At the beginning of the volume there is a diary of events the first of which (January 1 1937) is headed Spanish Civil War and the last of which (December 31 1937) refers to Sir Robert Vansittart's appointment to the post that was newly created for him

IRIS PATTERN AND ITS GROUPINGS

Structural Variations of the Human Iris and their Heredity With Special Reference to the Frontal Boundary Layer By Viggo Eskelund M D (Pp 244 16 figures 28 plates 9 tables 21s net) Copenhagen Arnold Busch London H K Lewis and Co 1938

Here we have an account of a very thorough investigation carried out at the University of Copenhagen under the auspices of the P Carl Petersen Foundation it is published in English with a summary in four languages Dr Eskelund's material for study was microphotographs of the living iris in 134 persons his purpose was to frame a method of classification of iris pattern in man and to work out the inheritance of the several types mainly with a view to assessing their value as evidence of paternity His thesis is that certain distinctive features can be recognized in the iris of every human eye—number of contraction furrows amount of atrophy of anterior layer position of lesser circle amount and distribution of mesodermal pigment—and from them a formula constructed which will give at a glance the type of iris His terminology makes it rather difficult for English readers to follow the exposition and argument, and the use of a higher magnification when examining the eye might have helped to clarify the description

Painstaking as Dr Eskelund's work has been in this limited field the impression remains that detailed study of a much larger number of individuals including people of many different races should be undertaken before it is safe to generalize on the heredity of iris pattern While no two persons show an identical pattern a broad classification into types is possible—as in the case of finger-prints How far such characters are genetically valid remains to be shown but Dr Eskelund has laid the foundation for a classification of iris pattern based on minute structural differences and this should prove more precise than the older groupings that depend on colour and macroscopic appearance

SIMPLE INSTRUCTION ON SEX

Sex in Everyday Life By Edward F Griffith M R C S, L R C P With an Introduction by Sir Walter Langdon-Brown and a Foreword by the Rev A Herbert Gray, D D (Pp 379 10s 6d net) London George Allen and Unwin 1938

Nowadays there is an insistent demand for improvement in sex instruction both for the adolescent and for those about to marry, and many books have been written advocating various methods of imparting this Dr Griffith has written one more of these books and it is better than most The first part of the book is concerned with the anatomy and physiology of sex and the general subject of family limitation A historical survey of methods in vogue through the ages is followed by chapters on modern views on scientific contraception and the medical indications for the prevention of pregnancy The second part is concerned with the question of happy marriage and the relationship of good physical adjustment with the spiritual and emotional satisfaction of the individuals concerned The very real difficulties are frankly faced and solutions suggested, and the objects and methods of sex education at the various age periods are dealt with The third part consists of a series of appendices elaborating with statistical and other information various points raised in the main part of the book

The subject is clearly dealt with in non-technical language and in a sober and unemotional strain, and this book should be of great value to the physician, the teacher, and parent, and to the intelligent youngster himself It is an eloquent plea for the use of properly controlled and planned contraception on the grounds of eugenics, morality, and the greater happiness of the community

Notes on Books

The book of Andreas Laurentius on the *Preservation of the Sight, of Melancholike Diseases of Rheumes and of Old Age* has rather fallen into the background of late years, for he is now thought of more as an anatomist than as an oculist Mr SANFORD V LARKEY therefore, has done him a service by issuing in facsimile the English translation published in 1599 by Richard Surphlet, who was himself a coucher of cataracts The book was well known to Richard Burton, who quotes him some sixty times in the *Anatomy of Melancholy*, printed twenty years later Mr Larkey writes an interesting introduction telling all that is known about Andre du Laurens and Surphlet, and explaining why rheums and old age were dealt with in addition to eye troubles The book is issued as No 15 of the Shakespeare Association facsimiles, and published by Humphrey Milford at 21s

Lord HORDER'S admirable essays entitled *Health and a Day*, which we reviewed on September 18, 1937 (p 590), have now been reprinted as the second volume in the Aldine Library (J M Dent and Sons, 4s 6d) The substance of the book is unchanged, not, as Lord Horder points out in an introduction, because he has said the last word on any of the subjects, but because the essays express a philosophy which has guided his judgment over a long period

The Medico-Legal Society of Victoria has issued a volume of its *Proceedings* during the years 1933–6 This is the second volume published since the society was founded in 1931, and has been edited by Mr JOHN V BARRY barrister-at-law, and Dr A E COATES The addresses contained in it show the variety of subjects which members have discussed and the thoroughness with which they have been studied Among a first class collection of essays there stand out that on science and judicial proceedings, by the Hon Owen Dixon, a Justice of the High Court of Australia, the lawyer in science, by Professor W H Osborne, and some aspects of magic, witchcraft, and sorcery, by Mr Barry The *Proceedings* are a fine contribution to the study of medico legal science The society intends for the future to publish a volume every two years, and the next will contain addresses given during 1937 and 1938, with discussions

Preparations and Appliances

COMBINED BLOOD TRANSFUSION SYRINGES AND NEEDLES

Dr H C LUCEY, Pathologist to the Metropolitan Hospital, London, E, writes

As an alternative to French's or other wide bore needle, which, attached direct to rubber tubing, is used for withdrawing blood from a donor, the combined blood donor's syringe and needle (Fig 1) offers certain advantages

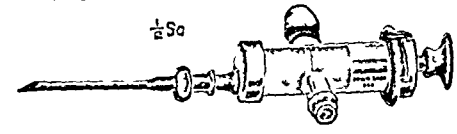


FIG 1

This small glass syringe has a metal eccentric nozzle with a hypodermic cone The bore of the nozzle is the same as the terminal opening of French's needle, 1·8 mm in diameter There is no bend of the lumen at its junction with the barrel of the syringe, so that a wire for cleaning can be passed straight through it The 14 standard wire gauge stainless steel needle, to fit, has the same size bore as the nozzle of the syringe and a tube length of 1¼ inches Projecting from the barrel of the syringe are two side branches According to which arm of the donor is selected for venepuncture, so one or other side branch is used To this is fixed a length of rubber tubing for conveying the blood to a flask containing citrate solution The side branch directed away from the donor's body is obviously the one chosen the other is closed with a sterile rubber cap The metal piston can be withdrawn only far enough to open the side branch for the free flow of blood By this means 800 c cm of blood can be taken without fear of clotting, provided a satisfactory rate of flow is maintained

For transfusing citrated blood to the recipient a useful syringe to interpose between needle and tubing is shown in Fig 2 Originally designed for saline transfusion, it should,

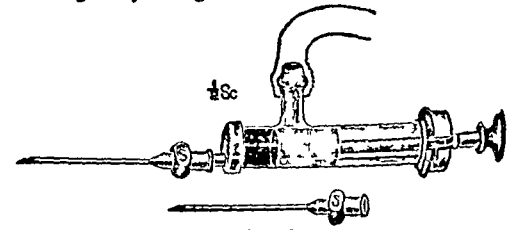


FIG 2

when employed for giving citrated blood, be provided with a straight throughway from barrel to nozzle The most serviceable needle is 18 s w g with a tube length of 1¼ to 1½ inches For children a smaller needle, 20 s w g, may be necessary

The advantages of interposing a syringe between needle and tubing, both when taking and giving blood, are (1) It acts as a handle for manipulating the needle This and the eccentrically placed nozzle facilitate venepuncture (2) It makes it easy to tell, by a slight withdrawal of the piston if the vein has been entered (3) Spilling of any blood is avoided (4) The piston by opening or shutting off the flow of blood renders a clamp unnecessary

Both syringes and needles are supplied by Down Bros, 21, St Thomas's Street, London, S E 1

Nova et Vetera

THOMAS JOHN MACLAGAN, 1838 1903

Amidst a continuous deluge of centenaries the names of men who have helped to relieve the burden of mankind's pain will always find an echo in its heart It is as a humanitarian of the medical profession that Thomas John Maclagan is gratefully remembered in the centenary year of his birth After taking the M D at Edinburgh in 1869 and studying in Paris Munich and Vienna Maclagan practised in Dundee until 1879 when he moved to London Here he rapidly acquired a large and fashionable practice numbering among his patients his countryman Thomas Carlyle He was also physician in ordinary to the Prince and Princess Christian of Schleswig Holstein Though he lacked the necessary facilities for research through not being on the staff of one of the larger teaching hospitals his keen critical mind and his accurate powers of observation served him well in the investigations which he undertook in private practice

Salicin for Rheumatic Fever

As the result of two years study appeared his paper The Treatment of Acute Rheumatism by Salicin (*Lancet* 1876 1 342 383) which at once attracted professional attention revolutionized the treatment of the disease and is to day one of the classics in medical literature It was later expanded and published in book form under the title *Rheumatism Its Nature Its Pathology and Its Successful Treatment* (London and New York 1886 second London edition, 1896) Rejecting the neurotic and the lactic acid theories of rheumatism the author suggests in their place the miasmatic theory according to which the rheumatic poison enters the system from without rheumatism is due to the life process of a parasite having its special nidus in muscles and in the fibrous tissues of the joints and the heart. Noting the analogy between rheumatic fever and malaria Maclagan is impressed by the fact that cinchona trees grow most readily in malarial districts and arguing that Nature would similarly provide a remedy for rheumatism in regions which favour its occurrence he turned his attention to the willow employing salicin with success particularly in the acute and subacute forms of the disease. To give the drug in routine fashion of ten grains three times a day or four hourly he taught was to bring it into disrepute and to court failure He insisted on giving large doses of twenty or thirty grains every hour for six doses on two succeeding days until pain subsided and temperature became normal

Before the publication of his paper salicin was kept by chemists merely as a curiosity which was sold at two shillings an ounce. The price speedily rose to as high as twelve shillings and at one time as the demand exceeded the supply the drug ceased to be quoted in the druggists monthly lists Before the introduction of salicylates rheumatic fever with its agonizing pain restless nights and drenching sweats was the despair of physicians In the therapeutic armamentarium of modern medicine the salicylates have taken their place as efficient analgesics and antipyretics, Their specific action on the rheumatic poison is now doubted and the belief that they can prevent heart disease and shorten the course of the illness is slowly dying out

A kindly honest unselfish character Maclagan was exuberantly self reliant A keen sportsman he yearly spent his autumn holiday on the moors of Scotland He died at the age of 65 after a gastro enterostomy for cancer of the stomach It scarcely detracts from his fame to mention that a decoction of willow tops had long before him been a popular remedy for rheumatic fever among the Boers and Hottentots

W R B

THE FOUNDER OF THE SURGEON GENERAL'S LIBRARY

The April number of the *Bulletin of the Johns Hopkins Hospital* contains a series of papers to commemorate the centenary of the birth of John Shaw Billings who was characterized by Professor Welch as the "wisest man I ever met" Billings was known to the medical profession throughout the world as the virtual founder of the Surgeon General's Library at Washington and as the inventor of the Index Catalogue The outbreak of the Civil War found him a demonstrator of anatomy at the Ohio Medical College just beginning to think about entering a general practice He volunteered for medical service with the Confederate Army, passed first in the examination for a commission and was attached to the Potomac Army Here he saw service at the battles of Chancellorsville and Gettysburg in 1863 and wrote lively accounts of them to his wife He was then sent to New York with the troops employed in quelling the riots which had broken out in the city and having proved his worth was relieved of duty in the field and was assigned to the Washington branch of the Medical Director Soon afterwards he went to the Surgeon General's Office in the War Department Here he was employed in the problems of military sanitation and did much to improve the conditions under which the Army lived in the barracks and hospitals He acted for a time as Curator of the Army Medical Museum but always a lover of books he found his real *metier* in building up and cataloguing the Library of the Surgeon-General Of those early days I must be one of the last English survivors who actually saw him at work on the Index Catalogue He spent a week end with us when the Sydenham Society was publishing Mayne's *Lexicon of Medical Terms* His first request of my mother was that he might have a washing basket and a large pair of scissors put in the drawing room She consented and during the whole evening he occupied himself in cutting out articles from a trunkful of journals which he had brought with him talking all the time and saying that he would sort them out on the voyage home

J S Billings in Other Roles

The Library did not exhaust his energies He did much to improve the standard of medical education in the United States and took an active part in the building of the Johns Hopkins Hospital where he served as professor of hygiene and of the history of medicine He outlined the scheme of study for the medical students and was in advance of his time when he recommended that comparative medicine should be taught Being thus experienced in building and in libraries his services were wisely utilized when it was decided that the Astor and Lenox libraries should be consolidated as the New York Public Library The amalgamation was carried out and Billings was appointed director early in 1896

Billings led a full useful and happy life It was said of him that he was one whose judgment you sought on any difficult subject, and you pinned your faith to him *more than to any man of your acquaintance* He was wise because he was under no illusions He got at the heart and essence of things He was eminently a sane man who knew what it was best to do under the circumstances and what it was practicable to do This quality was associated with wide vision and high ideals

The various contributions are illustrated with a series of well reproduced photographs showing Billings from youth to age The papers are written by Lieutenant-Colonel E. E Hume Dr Alan M Chesney Mr Sanford V Larkey and Mr H M Lydenberg

D A P

[1] See *British Medical Journal* April 9 1938 p 796

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY AUGUST 27 1938

NATIONAL INSURANCE IN NEW ZEALAND

The position with regard to national health insurance is not the same in New Zealand as in Australia, but it is at least equally important and urgent The Government of the Dominion has now introduced in the House of Representatives a Social Security Bill which embodies its proposals both for superannuation allowances and pensions and for health insurance Considerably more than a year ago the Government announced that it had a "plan" for these purposes, that its Bill would be immediately introduced into Parliament, and that the scheme would become operative on April 1, 1938 Whatever may have been the case with reference to superannuation, inquiry soon showed, however, that no such plan relating to national health insurance was in existence, that what was in the mind of the Government should more properly have been described as an "idea", but that, nevertheless, the project of precipitate action was still adhered to and proclaimed Governmental study of the actuarial and the medical aspects of what was evidently intended to be a far-reaching and complicated scheme of a kind of which the proposers had little knowledge and no experience had been quite perfunctory, and its effects upon existing medical practice and upon non-Government hospitals had not been taken into account So far as any information could be extracted from members of the New Zealand Government it became evident that its suggestions were to be based upon ideological principles rather than on practical requirements, and a little later, when the reports of not very authoritative committees on the subject came forward, it was found that their major recommendations suffered from the same fundamental defect, even though many suggested details sensibly following those of the English system In these circumstances the efforts of the New Zealand Branch of the British Medical Association were mainly directed towards securing a postponement of action in order to afford what it was hoped would be adequate opportunity for further inquiry and consultation as to the extent of any such scheme needed to meet the requirements of the Dominion, and as to its effect upon medical practice and hospital interests

In their immediate object these efforts were successful Mr Fraser, the Minister of Health, was not unsympathetic and became convinced that there was room for further inquiries, and that representatives of a number of affected interests ought to have an opportunity of securing consideration of their opinions and suggestions To a limited extent such opportunities have been afforded, but they have not been as full or prolonged as was really necessary, since it became clear that, whatever might be the evidence produced, the Government as a whole was not going to be moved from its fanciful project for a health insurance scheme that should include the whole population of the Dominion As the basis of discussion with the New Zealand Branch of the Association the Government had accepted the memorandum presented to it by the Branch, which was published as an addendum to the report by Sir Henry Brackenbury of his visit to New Zealand in our *Supplement* of February 12, 1938 (p 85) In this memorandum the Branch made it clear that, though it was not convinced that the ground had been sufficiently prepared, it was willing to accept and to co operate in a system which offered a complete medical service to those members of the community who were not in a position to secure it for themselves This was an offer of very great value and importance, far removed from any selfish or obstructive motives Instead, the Government has preferred—apparently from an erroneous belief that this is necessitated by some abstract socialistic ideal or principle—to present to Parliament a scheme for an incomplete medical service for the whole population whether they can provide it for themselves or no The medical profession of the Dominion in its negotiations has secured for the hospitals which are under private or church management a less unfavourable position than had been originally proposed, and no doubt all, or nearly all, the differences on less important matters mentioned in the memorandum could, with further discussion and good will, have been satisfactorily adjusted, but on this major proposal of a universal clientele for the scheme there was an irreconcilable divergence, and the Branch was driven to tell the Government that further discussions were useless No doubt certain members of the Government had made up their minds to create this situation from the beginning

This is really a proposal to socialize the medical profession in advance of the rest of the community No doubt if in a democratic country the people had definitely and deliberately determined to establish a completely socialistic state of society the medical profession would have to submit to this along with all other professions trades and occupations No doubt also the particular form of socialization proposed—through universal compulsory contributory insurance—is less objectionable than other methods that can be conceived The people of New Zealand have however, not so decided, and there seems no reason why the medical profession alone should be chosen for this experiment The profession in New Zealand is convinced that such action is not needed by reason of the condition of the country that the proposed system would be unfair to the doctors and not nearly so conducive to the general health as the alternative they themselves suggest The profession is at least as anxious as any other section of the community to promote public health and welfare and its experience in this matter makes its opinion even more valuable than that of any other section Though the cost of the proposals is not specifically a medical matter, medical practitioners cannot be indifferent to it The estimated cost of the whole measure, including pensions, is for the first year £15 000 000 gradually rising in later years to £25 000 000, this to be borne by a population totalling less than a million and a half Mr Nash the Minister of Finance, says that this can easily be met, but the truth of his statement is not obvious No doubt Parliament will pass the Bill if the Government persists There will however, be a General Election before the date at which the Act comes into operation, and there may be opportunity for modification In any event the attitude of the New Zealand Branch of the Association is clear and determined A poll has been taken and more than 95 per cent of the members have declared themselves in opposition to the scheme Such help as is required from the central office of the Association will be willingly forthcoming It will be remembered that the Central Council has accepted the report of Sir Henry Brackenbury already referred to In it he forecast the development of the present situation and recommended that in that contingency the fullest possible support financial and other should be given to the profession in New Zealand With such support and if the profession in the Dominions maintains its united front it is not unreasonable to expect a successful issue *Perhaps it is not even now too late* for the Government of New Zealand to take some action to avoid what would be a very unfortunate and undesirable struggle

THE NEW U S A FOOD AND DRUG ACT

The Federal Food Drug and Cosmetic Act was approved by the President of the United States on June 25 and after a year's interval will replace the Food and Drugs Act of 1906 An outstanding provision of the new measure is one which declares it an offence to make false claims of curative effects on the labels of patent medicines irrespective of whether the claims are made with fraudulent intent This is an important advance because previous legislation had checked the advertising of false claims in the U S A but had not interfered with statements made on the labels, and full advantage was taken of this loophole No one can foretell how laws will work in practice but the general intention of the 1938 Act is to make it a dangerous business to promote the sale to the public of medicines by means of false claims of curative properties This legislation may have repercussions in our country, because many American "patent' medicine vendors will presumably have to look for new markets for their wares and Great Britain is the only large English speaking community in which the law does nothing to protect the public against fraud in this field

The new Act covers a very wide ground and its scope is explained in a recent editorial in the *Journal of the American Medical Association*[1] One valuable provision is that no new drug may be sold to the public unless its safety is generally recognized by experts The object here is to prevent any repetition of such tragedies as the wholesale poisoning lately caused by the sale of sulphanilamide dissolved in diethylene glycol Restrictions of this nature are an obvious necessity There is practically no limit to the number of new compounds which the organic chemist can make and the pharmacological actions of only a tithe of those produced are known It is ridiculous to allow the testing of the safety of a new compound by means of its distribution to the public The new Act requires any drug that is not designated by a pharmacopoeial name to be labelled to show its common or usual name This provision applies also to preparations containing several active ingredients It thus abolishes secret remedies and furthermore will check a form of semi secrecy that is becoming more and more popular—namely the sale of a medicine under a fancy proprietary name accompanied by a 'disclosure of its nature by a statement of its chemical formula in some unfamiliar form The Act also prescribes special warnings of the presence in medicines of various powerful or habit forming drugs The sale of most of the drugs mentioned is restricted in this

[1] July 23 1938 p 324

country by means of the Poisons Acts or the Dangerous Drugs Acts, but the U S A Act includes bromides in this list, which is an important safeguard to the public The sale of foods represented as having value for special dietary purposes is increasing very rapidly, and the new Act enables the Government to require the labels on these preparations to give such information concerning their vitamin, mineral, and other dietary properties as is deemed necessary to inform the purchasers fully regarding their value The control of cosmetics instituted by the Act is a new departure, and the regulations are somewhat tentative One noteworthy provision is that which forbids the inclusion of ingredients when it can be shown that they may render the cosmetic injurious to the users This should suffice to check the sale of face creams containing sex hormones, a practice for which a demand has been created in the United States

The points mentioned above suffice to show that the new legislation represents a serious effort to protect the public of the United States from fraud in relation to the sale of medicines, and also against accidental poisoning due to rash experiments with compounds whose properties are unknown The *Journal of the American Medical Association* points out that the effectiveness of the new law depends upon the manner in which it is administered, and this in turn depends on whether Congress allots enough money to provide adequate staff and machinery As regards this country, we are forced to admit that the previous legislative control in America has been in advance of our own, and the new Act will make the difference still more striking and discreditable to our rulers

VITAMIN C IN MILK

Cows' milk is far from being an abundant source of ascorbic acid (vitamin C) nevertheless it is desirable to retain as much as possible of this labile substance The work of Kon and his colleagues at Reading has shown that in the cow's udder ascorbic acid is present in the reduced condition, but that as the result of subsequent exposure of the milk to light it is oxidized and later rendered biologically inactive Exposure of a bottle of milk to sunlight on the doorstep of a house for half an hour may lower its ascorbic acid content by 50 per cent Heating as in pasteurization, accelerates the inactivation of the oxidized form, but has apparently no effect on the reduced form In other words milk that is protected from light can be pasteurized without destruction of the ascorbic acid Since both ascorbic acid and oxygen are colourless it is a little difficult to understand why the short waves of visible light which are known to be active in the photochemical oxidation of ascorbic acid, are absorbed by these substances Recent observations by Hand, Guthrie, and Sharp[1] in the United States of America suggest that lactoflavin (vitamin B_2), which absorbs blue light plays a considerable part in this reaction If lactoflavin is removed from the milk by adsorption ascorbic acid is no longer oxidized by exposure to light Prolonged exposure of milk to sunlight destroys both lactoflavin and ascorbic acid If fresh ascorbic acid is now added no further destruction occurs in the presence of light, but if lactoflavin is added as well ascorbic acid is rapidly oxidized In mares' milk, which contains little or no lactoflavin, ascorbic acid is relatively more stable than in cows' milk It thus appears that for the photochemical oxidation of ascorbic acid both dissolved oxygen and lactoflavin are required If the vitamin C content of milk is to be preserved it is obviously important to protect the milk from light as far as possible This is not always easy, particularly when the milk has to be distributed on the rounds in bottles The American workers show that very satisfactory results can be obtained by freeing the milk from dissolved oxygen The milk is subjected to an evacuation process in which the oxygen is swept out by the water vapour The method can be applied before or after pasteurization Provided the milk is cooled and bottled in such a way as to prevent access of oxygen it can withstand exposure to light without suffering any decrease in its content of ascorbic acid Pasteurized milk treated in this way was found to contain 20 mg of ascorbic acid per litre after being kept at 1° to 3° C for seven days, while untreated raw milk had its initial content of 20 mg per litre reduced in this time to 2 mg The evacuation process is also of value in removing off-flavours due to oxidation changes in the fat Whether this method will prove suitable for adoption on a commercial scale is not discussed, but from an academic point of view the results are of undoubted interest

SUICIDE BY TUBERCLE BACILLI

We are rarely given the opportunity to record observations in man in which the conditions are comparable to those in experimental animals A case reported by A Lemierre and P Ameuille[2] is noteworthy not only for the circumstances leading to the illness of the patient but also for the light which the clinical and pathological observations throw upon certain points in the aetiology of tuberculosis A medical man aged 29 with a "history of tuberculosis in the family" who had probably suffered from pulmonary tuberculosis himself a few years earlier and who at all events had shown a positive Pirquet test a short time before the onset of his illness, gave himself in an attempt at suicide, an intravenous injection of virulent tubercle bacilli Two days later a pyrexia began which persisted until his death three months from then A radiograph nine days after the inoculation showed normal lung fields but in one taken thirty two days after the inoculation the typical appearance of miliary tuberculosis was seen, twelve days before death there was confluence of these shadows Enlargement of the spleen was observed within the first few days of

[1] *Science* 1938 87 439
[2] *Bull Mem Soc med Hop Paris* 1938 54, 286

the illness but there were no cough sputum or dyspnoea and no physical signs in the lungs until shortly before the man died—from meningitis Repeated examination of the blood showed at first a relative mononucleosis with only 53 per cent neutrophils and then a gradual increase of the latter to 90 per cent eosinophils were absent throughout It is of great interest that ten days after the inoculation no tubercle bacilli were isolated from the blood by Loewenstein's technique or by animal inoculation showing that the organisms had already by that time established themselves in the tissues Though it is almost certain that bacilli reached other organs in the body clinically lesions were found only in the lungs and meninges Finally the case appears to show conclusively that in certain circumstances at all events exogenous reinfection may overcome immunity acquired by previous tuberculous infection

METHYL CELLOSOLVE AS AN INDUSTRIAL POISON

Much has been written on the toxicological properties of ethylene glycol and the solvents derived from it The use of ethylene glycol as a substitute for glycerol in certain foodstuffs has been opposed on the grounds of its oxidation in the body to oxalic acid Diethylene glycol has recently led to fatalities from its use as a medium for certain medicinal agents Some interesting and important reports[1] have now appeared on the toxic properties of the valuable cellulose acetate solvent methyl cellosolve (ethylene glycol mono methyl ether) for which no toxic effects on man have hitherto been recorded Not the least instructive features in these reports are the description of the detailed way in which the investigation of the affected workers was carried out and the clear cut demonstration of the nature of the symptoms The workers were employed in a shirt factory where solvents were used for stiffening the collars of the shirts The collars were dipped in a solution consisting of methyl cellosolve and ethyl alcohol denatured with methyl alcohol ethyl acetate and petroleum naphtha After dipping the collars were dried and pressed The workers wore rubber gloves during these operations The clinical picture of the poisoning is summarized thus (1) Severe smarting burning and watering of the eyes with conjunctival irritation (2) Toxic encephalopathy indicated by personality change frequent dizzy and faint spells sleepiness loss of interest in normal amusements and activities general hypertonicity exaggeration of all reflexes dilatation of pupils ankle clonus moderate ataxia and positive Romberg sign (3) Anaemia of moderate severity associated with granulopenia and a marked increase in the proportion of immature neutrophils the anaemia was of the macrocytic type with a high colour index (4) Additional symptoms were gastro intestinal disturbance vomiting ketosis nocturia In two cases with marked symptoms removal from exposure to the solvent combined with appropriate treatment for the anaemia led to complete clinical recovery As a result of these findings on two cases the New York State Department of Labour (Division of Industrial Hygiene) undertook a comprehensive study of employees in a shirt factory where methyl cellosolve was used in conjunction with denatured alcohol All the young men examined (nineteen) had abnormal blood pictures but clinically they fell into three groups negative clinical picture abnormal neurological physical signs but no symptoms abnormal neurological physical signs and symptoms of fatigue and drowsiness The outstanding abnormality of the blood was the high proportion of immature neutrophil granulocytes in every case There was also noticeable lowering of the platelet count. The blood picture was summarized as that of a macrocytic anaemia There was also evidence of individual susceptibility It is cautiously suggested by the authors that methyl cellosolve was the responsible agent and that it is desirable to keep the concentrations of this substance in the air below 25 parts per million Since then workers have been exposed to fumes of methyl alcohol and other denaturants and control observations made on workers exposed to acetone and methanol in a plant engaged in a process like the one previously considered but in which methyl cellosolve was not used The concentrations of methyl alcohol and acetone at the breathing levels of the workers were 25 p p m and 45 p p m respectively At the plant where the methyl cellosolve was used the concentrations in the air when the windows were wide open were methyl cellosolve 25 p p m ethyl alcohol 70 p p m methyl alcohol 5 p p m ethyl acetate 2 p p m petroleum naphtha 0 3 p p m All these concentrations were very greatly increased if the windows were closed Since the methyl cellosolve mixture was used in open trays and shallow pans increases in local temperature and deficient ventilation or on the pressing machines clogging of the exhaust apparatus must rapidly have raised the concentration of methyl cellosolve in the air The practical outcome of these observations is the clear indication to users of methyl cellosolve that stringent precautions must be applied to prevent absorption of the vapour

[1] *J industr Hyg* 1938 20 134

EXPERIMENTS ON ANIMALS IN 1937

The recently issued Home Office return[1] relating to experiments on living animals records an increase in the number of experiments performed The total figure for 1937 was 918 960 including 40 319 experiments carried out with anaesthetics and 878 641 experiments comprising inoculations hypodermic injections feeding experiments, and other proceedings performed without anaesthetics The return states that in no case was a certificate dispensing entirely with the use of anaesthetics allowed for any operation more severe than subcutaneous venesection Serious operations are always required to be performed under an anaesthetic A condition attached to all licences was that if an animal was found to be suffering from severe pain which was likely to endure it should be painlessly killed Except in certain experiments dealing with the efficiency of antiseptics the regulations demand the use of full antiseptic precautions in order that wounds may heal as painlessly as possible During the year thirty seven

[1] *Experiments on Living Animals* 1937 H M Stationery Office 1s

licensees performed 35,008 experiments in the course of cancer investigation, 3,290 of these were operations requiring anaesthetics, the remainder were almost entirely inoculations into mice or exposure of animals to radiations Three hundred and twenty-two licensees performed over 179,000 experiments for Government Departments and other public bodies In addition, more than 346,000 experiments were carried out in the course of the preparation and testing of antitoxic sera and vaccines and for the testing and standardizing of drugs The inspectors made 901 visits to registered places during the year, in most cases without previous notice, and witnessed a number of experiments Only seven cases of irregularity were reported, none of them serious, the offenders were admonished The advisory committee appointed to assist the Home Secretary with advice in the administration of the Act consisted of Lord Atkin (chairman), Dr H Morley Fletcher, Sir Farquhar Buzzard, Mr W Sampson Handley, Sir D'Arcy Power, Mr Wilfred Trotter, and Sir John Herbert Parsons

SENSITIVITY TO SUNLIGHT

This is the time of year when many patients have discovered for themselves the existence of erythema solare, for the occurrence of which the explanation is comparatively simple Those disorders of the skin associated with an abnormal degree of sensitivity to light, however, are not so easily explained The most familiar is the form known as "hydroa aestivale," in which blisters followed by scarring occur on the skin of those who suffer from a congenital abnormality of haemoglobin metabolism in which great excess of porphyrin appears in the urine J T Brugsch and L A Brunsting[1] in reporting on a study of porphyrin excretion in various skin disorders point out that haematoporphyrin, which was supposed to be excreted in the urine in the congenital or primary cases of this metabolic disorder, does not in fact exist in normal human metabolism and is a laboratory product of a special form of blood decomposition The most significant end-product of normal porphyrin metabolism appears to be coproporphyrin which is excreted in bile, urine, and faeces The largest excretion of porphyrin occurred in cases of exfoliative dermatitis, following a reaction of sensitivity to neoarsphenamine, and whenever there was evidence of severe derangement of the general metabolism Ordinary sensitivity to light does not appear to affect the excretion of porphyrin Another skin disorder produced by some inborn sensitivity to sunlight is xeroderma pigmentosum, and in reporting two brothers suffering from this malady A G Silberstein[2] records that there was absence of any evidence of abnormal excretion of coproporphyrin The special point of interest in these additional cases was the simultaneous occurrence of the effectualities of the speech and gait and marked milk that incidency It is suggested that there may be without dissociated degeneration of the nervous system ascorbic a to the degenerative lesions of the skin little difficult ey is seen in those cases of polyneuritis visible light, photochemical by these subs

[1] Brunsting L A (1938) *Proc Mayo* (1938) *Amer J Dis Child* 55, 784

associated with so called haematoporphyrinuria These cases of xeroderma and those of primary porphyrinuria already mentioned represent a congenital hypersensitivity to sunlight acquired forms due to certain toxic drugs are well recognized Sulphonal poisoning is perhaps the best known, and in recent times the risk of exposing to sunlight patients under intensive treatment with the sulphanilamide compounds has been recognized Light sensitization in animals following the ingestion of certain poisonous plants has been recorded by F P Mathews[3] in a fascinating study of lechuguilla poisoning Serious losses among goats and sheep and to a limited extent among cattle in the south western districts of the United States of America have long been traced to the eating of the leaves of the *Agave lechuguilla* a plant of Mexican origin and of the same genus as the decorative American aloe which occurs in Europe Experiment has shown that this plant produces a hypersensitivity to light less than six hours after its administration Erythema, pruritus, lacrimation, and oedematous swelling of the face and ears are some of the symptoms described Nervous disturbances were also observed in the experimental animals, they are of interest in view of the suggested nervous affection in porphyrinuria and in xeroderma pigmentosum The photodynamic agent in lechuguilla poisoning has not been identified, but it differs from the toxic saponin causing changes in the liver and kidneys and responsible for the animal mortality The stupid self-induction of erythema solare by devotees of the modern sun bathing cult may perhaps be paralleled by the suicidal tendencies of the Texas livestock!

[3] Mathews, F P (1938) *Arch Path* 25 661

THE EDUCATIONAL NUMBER, 1938

The *British Medical Journal* dated September 3, 1938, will be the annual Educational Number Its contents, as in previous years, will include a full account of the requirements of the General Medical Council and of the universities and other licensing bodies in Great Britain and Ireland, as well as information about the opportunities offered by the various medical schools and other teaching institutions and the fees charged by each The details given have been revised and brought up to date by the authorities concerned These sections, the object of which is to furnish a handy guide to intending students of medicine, are supplemented by articles for newly qualified practitioners on such matters as post graduation study (with special reference to the British Postgraduate School at Hammersmith), the public medical services at home and abroad, tropical medicine, psychological medicine, and the various special diplomas The opening article for our forthcoming Educational Number, written by Sir Walter Langdon Brown, is entitled "The Medical Curriculum and Present day Needs"

The Prime Minister, Mr Neville Chamberlain, will open the new King's College Medical School of the University of Durham at Newcastle on Tyne on October 8

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

DISLOCATIONS AND FRACTURES OF THUMB AND FINGERS

BY

DAVID TREVOR, M.S., F.R.C.S.

Every injury to the hand especially the fingers is very common on account of the widespread use of complicated machinery which has increased the number of fractures of the finger and thumb. If these injuries are treated inefficiently much permanent disability may result even with efficient modern treatment there is occasionally an incapacitating degree of disability. Hence the study of the treatment of fractures and dislocations of the hand digits has an important economic aspect—the reduction of the amount of resulting disability and prevention of excessive loss in wage earning capacity. A working knowledge of the method of production and the resultant deformity of any fracture or dislocation is essential for rational treatment and this aspect will be surveyed briefly.

Type of Anaesthesia

What type of anaesthesia should be used in dealing with finger fractures? A local anaesthetic such as 2 per cent novocain is suitable. It should be kept in a rubber capped bottle the cap being cleansed with ether immediately previous to withdrawing some of the solution the novocain must be sterilized immediately before use on each occasion. If local anaesthesia is employed the site of the fracture and surrounding parts must be cleansed with soap and water ether and then 2 per cent iodine solution. About 3 to 5 c.cm. of 2 per cent novocain is injected in the region of the fracture into the blood extravasation. Gentle kneading is then done and about five to ten minutes is allowed for the anaesthetic to take effect. Local anaesthesia is to be preferred if there is a shortage of assistance. It should not however be used for (1) any fracture which is more than about five days old (2) children or nervous women (3) open fractures.

In place of a local anaesthetic nitrous oxide can be employed. It is however much better to use gas and oxygen with a minimum of ether as with gas alone in the case of a fracture such as Bennett's it will be difficult to accomplish reduction and fixation before the patient is round.

Bennett's Fracture

Most of the movements of the thumb especially extension abduction and opposition occur at the saddle shaped carpo metacarpal joint any mechanical derangement of which will cause interference with the full function of the thumb. Bennett's fracture is a fracture dislocation of this joint the dislocation being of equal importance to the fracture. It is produced by indirect force applied to the thumb in an adducted position. The line of fracture runs obliquely so that a small fragment of bone with practically no displacement sustains the greater part of the articular surface of the base of the first metacarpal bone while the remaining portion of the metacarpal bone bears a small portion of the articular surface and is displaced outwards and upwards.

It should be stressed that it is most important to have an x ray examination in both antero posterior and lateral planes whenever there is the least suspicion of a fracture occasionally an oblique view is required in addition to exclude a fracture such as that of the scaphoid bone of the wrist joint.

TREATMENT

Local anaesthesia is ideal for a Bennett's fracture. The skin around the fracture site is thoroughly prepared with ether and 2 per cent solution of iodine. About 3 to 5 c.cm. of 2 per cent novocain is injected into the fracture and about 1 c.cm. into the pad of the thumb for the insertion of a stirrup. When the anaesthetic has had time to take effect the stirrup is inserted transversely through the soft tissues of the pad of the thumb passing on the palmar aspect of the terminal phalanx but not through the bone. Traction is applied by an assistant in the long axis of the thumb to correct upward displacement while countertraction is produced by passing round the arm with the elbow flexed at a right angle a strong flannel bandage which is fixed to a wall or to a radiator. traction and countertraction are maintained throughout the reduction. Very strong pressure is then applied to the base of the thumb in order to reduce the outward displacement.

When the deformity has been reduced satisfactorily an unpadded plaster of Paris slab is applied to the dorsal aspect of the forearm from just below the elbow down to the knuckles a plaster bandage is then bound round the forearm and base of the thumb up to its interphalangeal joint as in Fig. 1. The plaster must be firmly moulded

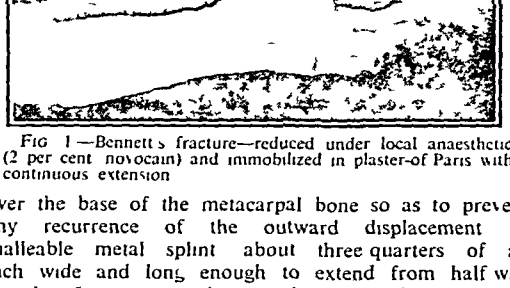


FIG. 1.—Bennett's fracture—reduced under local anaesthetic (2 per cent novocain) and immobilized in plaster-of-Paris with continuous extension.

over the base of the metacarpal bone so as to prevent any recurrence of the outward displacement. A malleable metal splint about three quarters of an inch wide and long enough to extend from half way up the forearm to three inches beyond the tip of the thumb is then incorporated in the plaster. the end of the metal splint should have been bent at a right angle for about half an inch and should have a central hole to take a hook for traction purposes. This hook is placed through the hole and its end engaged with the stirrup a screw is next wound on to the hook beyond the splint and gradually tightened until the thumb is firmly extended. The plaster is allowed to set and a radiograph is then taken. If the traction force is insufficient it can be increased by tightening the screw. By this method accurate reduction can be easily obtained.

The fixation is maintained until some evidence of union in the nature of callus can be detected on *x* ray examination this is usually a matter of three to five weeks. During that time the patient is instructed to use his fingers actively there being no plaster in the palm of the hand to prevent full flexion of the fingers. After the plaster has been

removed a certain amount of stiffness of the thumb will result, but with active use this stiffness will gradually disappear and full function will be restored in about eight weeks or so from the onset of treatment

Fractures of the Metacarpal Bones

The metacarpal bones may be fractured either by direct or by indirect force with the former, as often happens when a hand is caught in machinery, usually more than one bone is fractured and there is much associated injury to the surrounding soft structures—for example, to the tendons and to the skin—causing at times an open fracture When indirect violence is responsible for the metacarpal fracture there may be some displacement with backward angulation, due chiefly to the pull of the interossei muscles but undoubtedly influenced to some extent by the normal palmar concavity of the metacarpals When the metacarpal bone of the thumb is affected the fracture is generally situated towards the proximal end of the shaft, is transverse, and the distal longer fragment is adducted relatively to the smaller proximal fragment

TREATMENT

Treatment of fracture of the thumb metacarpal consists essentially in the correction of this adduction deformity of the distal fragment by very powerful abduction of the extended thumb, which is then, together with the wrist-joint immobilized in plaster of-Paris, the thumb being held in abduction and fixed up to but not including the interphalangeal joint all the fingers are kept free for full active movements Fixation is maintained for three to four

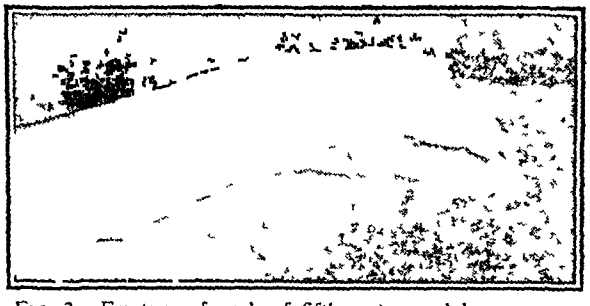


FIG 2—Fracture of neck of fifth metacarpal bone, causing angulation of metacarpal head—a fairly common type of fracture Under local anaesthetic (2 per cent novocain) the displacement was reduced then immobilized in plaster of Paris, the little finger being fixed to a finger splint, bent as shown in the illustration

weeks, when union is as a rule well advanced If the fingers have been freely used the residual stiffness of the wrist-joint and thumb quickly disappears

In fracture of the base of any of the finger metacarpal bones there is practically no displacement, on account of strong ligamentous attachment The fracture should be immobilized by an unpadded plaster-of Paris slab from just below the elbow to just distal to the knuckles, with a circular plaster bandage fixing the slab to the forearm and wrist Adhesive strapping attaches the lower end of the slab to the hand around the knuckles in such a way that full range of movement of the fingers is possible A fracture of the shaft or of the head of a metacarpal bone *without displacement* is treated in similar fashion

Any displacement of a shaft or head metacarpal fracture is reduced by long-axis traction through the finger of the affected metacarpal bone, while countertraction is applied to the forearm strong local pressure will then correct any angulation With traction maintained, a plaster-of Paris cast is applied as described for basal fractures with the exception that the slab is carried further beyond the knuckles and is well moulded in over the dorsum of the injured metacarpal or metacarpals so as to prevent a recurrence of backward angulation A malleable metal splint half an inch wide is then incorporated in the plaster on the anterior aspect of the forearm and hand and the finger of the affected metacarpal bone is fixed to this splint in a flexed position by means of either adhesive plaster or plaster-of Paris (Fig 2) If one or two metacarpal bones have been fractured, with resulting displacement, each finger is treated with a separate finger splint, but with involvement of three or more metacarpal bones it is advisable to immobilize the hand by bandaging the fingers over a roller bandage placed in the palm This latter method has the disadvantage that active movements of the unaffected fingers cannot be performed while the fracture is being immobilized, but when three fingers at least are immobilized it is obvious that active movements will be in abeyance—hence the disadvantage disappears

A metacarpal fracture should be immobilized in plaster on an average for four to six weeks, stress being placed on active movements of the un-immobilized fingers during this period The stiffness of the immobilized fingers will gradually disappear with active use over a period of generally three to four weeks, especially so if the un immobilized fingers have been freely used, there is no need for any massage or passive movements to be prescribed for the residual stiffness of immobilized fingers —in fact, such treatment may be harmful and cause more stiffness and pain

(To be concluded)

MEDICAL UNEMPLOYMENT IN INDIA

The *Calcutta Medical Journal* for July has an interesting editorial on unemployment in the medical profession in India It makes an appeal to the senior members of the profession to take stock of the situation and to do their utmost to change the plight of their young colleagues It asks them to save the prestige and fair name of the profession

It must be admitted that, in spite of the large size of India and the relatively few practitioners to the total population, many graduates of Indian universities are suffering great hardship It is not overstating the case to say that a number of them are dependent on the charity of their relatives

An Overcrowded Profession

The medical profession of India—and under this head I include only those trained in scientific medicine—is overcrowded In 1937, when Aden came under the Colonial Office, the Aden Government advertised for eleven sub assistant surgeons Aden is a desolate spot and to an Indian it represents service over-seas and wide separation from friends and family The advertisement offered a salary equivalent to £170 per annum, rising in six years to a maximum of £256 per annum and an agreement in the first place for three years They received no fewer than 1,465 applications Of these 1,465 applicants 14 held British qualifications, and 26 others held higher qualifications obtained in England—4 M R C P, 2 F R C S and 8 D P H, 12 other diplomas That there were 1,465 registered practitioners competing for a post in a subordinate position at a salary of £170 per annum outside their own country is sufficient proof of the very poor return a medical graduate obtains for his six or seven years education and hard work

The facts are that unless a graduate can obtain a Government appointment he cannot make a living in private practice outside the towns It was hoped at one time that economic pressure would force the

graduates to settle down and practise in the rural areas I have heard senior medical officers with a wide knowledge of India say that this was the only solution to the provision of medical relief in the rural areas For this reason it would be to the benefit of India to see the profession reduced to its present condition In making this statement they overlooked the fact that a rural area of reasonable size is unable to support a practitioner The peasantry of India have no income to spare for medical treatment To some extent they could pay in kind but they certainly have no funds with which to pay an adequate fee in cash Moreover communications are poor and in many provinces the inhabitants are scattered and live on their own homesteads separated by the fields they till

The Hold of Indigenous Medicine

It is only among the highly educated classes that there is any real belief in scientific medicine From time immemorial the peasant has been accustomed to go to his Ayurvedic or Yunnani physician for medical treatment The indigenous practitioner's position in the village is supported by all the weight of tradition and religion His family have practised for generations in the village and the practice is handed on from father to son The practitioner of scientific medicine has very little chance in competition with the indigenous practitioner in rural areas Even in the towns a large proportion of the educated classes still believe in their indigenous systems of medicine These systems of medicine are comparable with Western medicine in the days of Chaucer Their theories and practice are much the same nevertheless the people have the same faith in them as our peasantry and educated classes had in their physicians in Chaucer's time Surgery perhaps has made greater progress in the minds of the people largely because of the tangible results which are seen in cataract and hydrocele operations The private practitioner in the small villages however is not concerned with surgery but rather with the medical relief of the ordinary ills to which the villagers are subject On the standard of living of an Indian peasant not only is his advice expensive but so also are his remedies The result is that his services are practically not utilized and even the best of practitioners find it difficult to make a living in the rural areas Graduates born and bred in rural areas who have had a college career in Presidency towns learn to appreciate the amenities of life in towns and can no longer settle down to the quiet and primitive conditions of their local village even if a living were available The result is that almost all graduates start practice in the towns

Scientific Medicine at a Discount

There are comparatively few large towns in India as the population is mainly an agricultural one Industries have centred round Calcutta Bombay Cawnpore and Ahmedabad Even in these towns a large proportion of the population still adhere to the indigenous system of medicine and will do so for many generations The result is that the supply has outrun the demand for scientific medicine and the Indian universities are still turning out graduates for whom there is no employment

No medical graduate starts his career with higher ideals and a stricter code of ethics than the Indian He has received a good medical education and, given an opportunity would maintain his professional standards and ethics at a high level The severe pressure of economic facts however gradually wears him down and the necessity for making a living somehow leads to a lowering of both his professional standards and his ethics Scientific medicine is having a hard fight to maintain itself in the face of fierce competition and it can only win through in the long run by its better results and its high professional standards It is therefore the concern of everybody interested in the spread of medicine in India to try to remedy the present deplorable state of affairs Not only has the university graduate to compete with indigenous systems of medicine but he has also to compete with a large number of practitioners who are trained to lower standards and are of an inferior status

Three Competing Grades of Practitioners

In India three grades of practitioners are practising Western medicine The first is the university graduate fully trained and up to standards which the General Medical Council is able to recognize as equivalent to British standards The second is the sub assistant surgeon who has a shorter course of training He is turned out in larger numbers and starts with an inferior education The third is the compounder who has a short training in a dispensary His real function is as his name implies a pharmacist However he frequently sets up in practice and competes with the two senior grades Over and above this the graduate has to face competition from practitioners of homoeopathy osteopathy and others who have obtained either by correspondence or by payment diplomas from foreign schools and colleges The populace as a whole are not able to judge the merits of these varying qualifications and regard all who hold them as practitioners of scientific medicine

Possible Remedies

It is difficult to suggest a remedy for this state of affairs There are some measures which can be taken We have seen that restriction of output has become a feature of many industries It would seem that some similar restriction should be placed on the output of practitioners in India and that the supply should be adjusted to the demand To ensure the spread of scientific medicine in India it is essential that all its practitioners should be of the very highest standard More harm has been done to the spread of scientific medicine by the poor standards of practice than by any other single factor

The first step heretofore would appear to be the abolition of the sub assistant surgeon's qualifications This class starts with an inferior education and has a four-years course In some provinces this has now been raised to a five years course but the general provision for adequate training is still very inferior He is eligible for admission on the Provincial Register He is generally of a lower social status and lower preliminary education than the university graduate He is turned out in much larger numbers than the graduate and is a very severe competitor for practice

The universities themselves should restrict their admissions to meet the demand This is done to some extent at present the admissions being considerably less than the number of applications but even now selection needs to be more strictly applied With the abolition of the sub assistant surgeons the Government could assist by requiring that in future all Government and local authority dispensaries should be staffed by university graduates

In most towns hospital abuse is general and many of those attending hospitals belong to the educated classes who could afford to employ a private practitioner More efforts might be made to restrict this without causing any hardship to the individuals In industrial areas the introduction of sick insurance for industrial workers would afford employment to a large number of practitioners and leave the patients free to choose their doctor

It is reasonable to suggest that the Indian universities themselves should take some action in this matter and in association with the Government appoint a committee to inquire into the general conditions of medical practice in India to make suggestions for the spread of scientific medicine and propose measures for the relief of unemployment among medical graduates

A. H Proctor

FRACTURE OF THE NECK OF THE FEMUR

A PERSONAL EXPERIENCE

BY

JOHN C NICHOLSON, B M , F.R.C.S

Late Surgical Registrar Royal National Orthopaedic Hospital

It is often stated that doctors suffer from those diseases in which they are specially interested, and besides the classical examples of John Hunter, Robert Liston, and others, we must all have known contemporary consultants who have contracted the disease in the treatment of which they specialized It seems only fitting, since I aspire to become an orthopaedic surgeon and look after a small fracture clinic, that I should myself sustain an unusual and severe type of fracture of the neck of the femur at (for this fracture) the early age of 34 I think it may be of value to put forward my recent experience of the various methods of treatment of this fracture from the patient's rather than from the surgeon's point of view As it happens I have had a taste of all the methods at present in vogue with the exception of primary osteotomy—namely, sandbags, extension by adhesive plaster, extension by Kirschner wire, Whitman plaster, and the modern edition of the Smith Petersen operation

Ollerenshaw (1938) states 'It is probably safe to say that at the present time 95 per cent of fractures of the neck of the femur are being treated by one or other modification of the Smith-Petersen nailing operation" However true this may be in Manchester, it is certainly not the case in London When I was advised to have my own fracture nailed, I was told by one of the leading London orthopaedic surgeons that neither he nor any of the other surgeons doing ordinary consulting work in London had any great experience of this operation at present (a statement with which I am in agreement, from my own observation), and that the only men in London who had operated on many of these cases were to be found on the full-time staff of the L C C hospitals It was therefore arranged that I should be moved to one of these hospitals, where every care was taken of me and the operation was most expertly carried out Even there, however, I was told that not nearly as many as 90 per cent of the cases of fracture of the neck of the femur admitted to the hospital were "pinned"

This lack of opportunity to practise a new and expeditious method of treatment in the voluntary hospitals is due to the short-sighted policy of these hospitals in the past in refusing to admit cases which will "block a bed for three months' Now such cases are nearly all sent direct to the L C C hospitals, and since most surgeons are unwilling to experiment with a new and difficult method on their private patients, I believe that the Whitman plaster or some form of extension may be regarded as the standard method of treatment practised in London—apart from the L C C hospitals—at the present time The history of my own case is as follows

Case Report

February 4—I slipped down in the passage at my home and struck the right thigh against a step The sensation was absolutely characteristic, and I knew at once what I had done With the aid of a broom, which I used as a crutch, I was able to get upstairs to the telephone to summon assistance I was removed by ambulance to hospital, where the leg was laid between sandbags for the night

February 5—Radiographs showed a comminuted fracture of the neck and lower part of the head of the femur, with coxa vara and external rotation Thomas's splint and adhesive plaster extension with 14 lb weight were applied

February 11—Under a general anaesthetic two separate attempts at reduction by the Whitman method controlled by x rays were made A Bohler type of Whitman plaster was then applied, extending from the axillae to the toes An accidental injury to my right axillary nerve during the operation caused paralysis of the deltoid, which did not recover for some weeks Because of this, my experience of plaster was perhaps less agreeable than it might otherwise have been as I was rendered completely helpless except for the ability to use my tongue and my left arm Further x ray examination revealed incomplete reduction and persistent external rotation, then the plaster broke

February 17—A new plaster was applied, on this occasion without the use of anaesthesia Owing to an accident with the x ray plant the fracture was further displaced The plaster set well, but the position, as shown by subsequent x-rays, was too bad to be left As I had had enough of plaster by this time, and as my advisers were doubtful if union would take place by continuing on these lines, it was thought advisable to have the femur "pinned" in spite of the badly comminuted nature of the fracture and the difficulty in obtaining proper reduction

February 24—On this date I was transferred to an L C C hospital

February 25—The plaster was removed, radiographs were taken, and the position of the fracture was found to be unsatisfactory A Kirschner wire was inserted through the tuberosity of the tibia and 16 lb weight extension applied

February 28—Further x-ray examination showed the position to be still unsatisfactory, the weight extension was increased to 24 lb

March 4—Operation was undertaken under general anaesthesia *X*-ray examination revealed that the coxa vara was reduced, but the lateral views showed that the marked external rotation persisted unchanged, this could not be corrected by manipulation in spite of several attempts It was decided to insert the pin with the position as it was, a course with which I would have been in entire agreement The pin was therefore inserted by a modification of the method described by Hey Groves

March 13—The stitches were removed, and a haematoma which had formed under the scar was evacuated, the wound healed in a few days

March 23—I got up in a chair

March 25—On this day, exactly three weeks after the operation, I started walking with crutches

April 1—I was discharged from the hospital and went home I could bear weight on the leg though this was painful, a full range of movement was present at the knee and practically a full range at the hip, although the whole musculature of the limb was very wasted owing to the previous extension and immobilization in plaster

Pridie (1938) suggests that the present is not the best time for discussing the relative merits of this operation as compared with other methods of treatment, but in the meantime those of us who have to treat fractures are still obliged to make up our minds as to which is the best method to adopt This being so I think that a few observations on the various alternatives "from the patient's point of view" might be of value

Sandbags

Sandbags are generally used as a temporary measure only, the fracture is in no way immobilized, and any movement—especially those necessary in the nursing of the patient—is most painful I think in all cases some form of extension, however simple, should be instituted as soon as the patient is in bed I am convinced that pain and shock are minimized by doing this The old idea of leaving things alone for twenty-four hours or so has nothing whatever to recommend it from the patient, or any other, point of view

Weight Extension

As soon as adequate weight extension has been applied practically all pain at the site of the fracture is abolished—in really most dramatic fashion Provided the weight is kept on moving about in bed is not painful so long as the fracture is kept distracted Adhesive plaster extension if the plaster extends high enough is not unduly uncomfortable, but it has the disadvantage of immobilizing the knee and also the extension has to be carefully adjusted to prevent discomfort round the ankle Pulling the plaster off completely depilates a hairy leg and leaves the skin sore for quite a long time Extension by Kirschner wire through the tuberosity of the tibia on the whole is less uncomfortable It allows some movement of the knee although a heavy weight—24 lb—begins to stretch the knee joint unduly and render it stiff and painful and subsequently weak

I found that the insertion of the wire under local anaesthesia was extremely painful particularly while the point of the wire was boring through the bone which is not reached by the local anaesthetic If the wire is not in the true transverse axis to the line of pull it tends to slip and the necessary pulling it back again is also painful In practice I have found that a Steinmann's pin is far less uncomfortable for the patient than a wire and for this reason I prefer it Another point is that a pin inserted above the knee is preferable and no more liable to give rise to trouble than one below the knee provided proper care be taken and the extension is not left on for too long a period In my experience it is best to manipulate the leg into position and put in a Steinmann's pin under a short N O anaesthesia in bed The two ends of the pin are tied by cords attached to Whitehurch Howell's screw collars to the end of the splint through which traction is applied to the whole limb

Plaster-of Paris

Although one constantly puts patients into plaster and most of us show very little sympathy with their complaints a surgeon unless he has tried it cannot possibly know what the patient has to put up with when a large part of his body has been immobilized in this way I had practically unpadded Whitman plasters with the leg in the fullest abduction possible the plaster extending from the toes and enclosing the whole chest up to the axillae an opening being left over the abdomen for respiratory purposes Such a plaster renders one absolutely helpless except for the arms It allows of no degree of spinal flexion and practically everything has to be done for one by nurses which entails constant attention if life is to remain at all endurable Of course one has to remain in the same position on the back continually, to sleep or lie awake After the plaster has been applied only the patient realizes that it takes about three days to dry during which time it is very cold, in spite of hot water bottles etc Owing to this and the enforced immobilization the limb becomes quite cold and numb which must have a very bad effect on old and bronchitic patients Any irregularities on the inner surface of the plaster especially round the foot, become a constant source of irritation and annoyance Such minor lapses in technique as filling the patient's umbilicus with plaster or leaving his cold and rather sensitive toes embedded in plaster are all very real discomforts which become far more intolerable in time than even a moderate degree of straightforward pain

So far as I was concerned the prospect of being left in plaster for anything from three to six months or possibly even longer, was almost unbearable I suppose one becomes used to it but I have found that most of my patients take the same view and having once tried it would submit to almost anything rather than the discomfort of a big hip plaster There are also of course important economic considerations A patient in such a plaster is very nearly helpless and requires assistance even with his bodily functions to say nothing of keeping his body clean he can do very little for himself whether his position is horizontal or vertical—the only two alternatives—and few of these patients are out of plaster in less than six months Several of my cases which have done well have not been entirely free from plaster for ten to twelve months Another grave disadvantage of immobilization in plaster is that all the other joints which are immobilized become very stiff Even after the short period I spent in plaster recovery of mobility in the ankle and knee was slow and painful After prolonged immobilization it may be months before recovery takes place and in most of the older patients a full range of movement particularly at the knee is never restored at all The muscles waste rapidly at the same time and recovery (again even in my own case) is quite a lengthy proceeding while the skin gets into very bad condition under the plaster and is liable to persistent irritation The prevention of sores at the edges of the plaster is also a very real difficulty All these discomforts and disadvantages are done away with by the employment of operative fixation

Radiologically Controlled Nailing

In my case a good deal of manipulation was necessary the operation was moderately severe and prolonged and I lost those advantages gained by operating within a few days of sustaining the injury Except for a certain amount of soreness at the site of incision and some pain in the hip for the first few days I was very comfortable After a day or two I could move the hip and knee and in about ten days had managed to regain full movement of the knee which had been quite stiff to start with I found resting the leg on a Braun's splint was uncomfortable and therefore discarded the splint in favour of a pillow under the knee after the first day At first the most comfortable position in which to sleep was on the back with the knees drawn up at an angle of 45 degrees it was four weeks before I could sleep on one side or the other

Four weeks after the operation when I went home I could walk well on crutches reach any part of my body bath and dress myself without help lace my own shoes sit in any chair with comfort and drive my own car Eleven weeks after the accident and seven weeks since the insertion of the pin I was doing my surgical work which includes attending out patient clinics going round the wards and performing operations Twelve weeks from the operation I climbed the North Cape (900 feet) while on holiday in Norway and four months from the operation I am quite normal and can walk as far as I could before although I cannot run yet I have a full range of movement and no pain and recent skiagrams show the pin to be unchanged in position and good bony union to be taking place

Most of the arguments for and against the operative treatment of fracture of the neck of the femur centre round the question of ultimate union The argument most commonly advanced in favour of operation is that union is more likely to occur in a fracture in which it is notoriously difficult to obtain union Exponents of the more conservative methods cite those cases in which the fracture has been nailed and has gone wrong complications such as aseptic necrosis of the head leading to non union or cutting out loosening or working out of the pin arising soon or as late as three years after the operation I have seen examples of all these complications although I have yet to see a pin break as 8 per cent of Mr Eric Lloyd's (1938) appear to do I should have thought that no properly made pin of good quality steel should break I believe some of these complications are due to faulty operative technique but I have also had a number of patients treated by conservative methods—Whitman plaster or extension—in whom non-union and other complications have occurred It is not my purpose however to argue as to which method is most likely to

result in union, for nobody can say that for certain at present, but I wish to put in a strong plea in favour of operation on account of the greatly increased comfort and well-being of the patient, the fact that other joints are not immobilized more or less permanently, and the great saving of time in "getting the patient about" So anxious am I to dispense with prolonged immobilization in plaster that, in the last two cases in which I have carried out arthrodesis of the hip, after intra-articular excision of the joint, I have fixed it at once by driving a long tri-flanged nail into the acetabulum This procedure has been most successful the operation is much quicker and less severe than the standard method, and the patients are up and free from plaster in two or three weeks instead of three or four months

Some Comments

My personal experience of operative methods has been limited to a few cases, and the results have been encouraging, but until now my routine method of treatment, in patients fit to stand it, has been the Whitman plaster From what I have heard and seen of other people's results, added to my own experience, I am convinced that the results obtained by the radiologically controlled operation, provided it is carried out properly and the pin is correctly placed, are at least as good as, if not better than, those obtained by the older methods Admittedly, the operation and especially the all-important radiological part of it are difficult until the "team" has attained the necessary proficiency, but to my mind the enormous advantages from the patient's point of view outweigh the possible disadvantages I regard this as one of the greatest advances of modern surgery, and in old patients I believe it to be a life-saving operation in many cases As to the chances that the presence of a metal pin in the bone may lead to delayed union, I think this factor is more than counterbalanced by the adequate fixation of the fragments obtained, for even an unpadded Whitman plaster does not procure complete immobilization, as I easily proved for myself When the pin has done its work and the fracture is soundly united I believe that it should be removed —a trivial operation which should be a routine in all cases

To minimize difficulties and risks only tends to discredit any method of treatment, however good, and such statements as the operation can be completed in fifteen minutes, or " one antero-posterior x-ray will suffice," are either untrue or mean that the operation has not been carried out properly, and that the unnecessary risk of a badly placed pin has been taken Even in the hands of a team of experts the whole procedure with the necessary radiological control is unlikely to take much under the hour, and I find on inquiry at Sven Johansson's clinic in Gothenburg that their experience is the same in this respect

With regard to primary osteotomy, as advocated by McMurray (1938), I cannot see the object of virtually assuming that non-union is likely to occur until at least some attempt has been made to obtain union by the ordinary methods The Lorenz operation and intertrochanteric osteotomy give very good results in ununited fractures of the femoral neck, but why should it be necessary to do an operation of this type, which will give a poorer hip-joint functionally before attempting to obtain union by direct fixation of the fragments? It seems to me to be a counsel of despair Another point is that McMurray's operation entails prolonged immobilization in plaster with all its disadvantages, whereas the insertion With the Smith Petersen pin does not If the nailing operable to get then it is time to consider an osteotomy and I was remov plaster
laid between sa

Conclusion

February 5—Radio of the neck and lower part sessions' experiences have firmly cova ara and external rotation Thetically controlled Smithplaster extension with 14 lb weight wechoice If my femoral head aseptically necroses, or the fracture has failed to unite, or the pin drops out, I should still think that th result might have been as bad if I had remained in plaster, and only then should I consider the advisability of osteotomy I respectfully disagree with Mr Eric Lloyd (1938), and believe that all fractures which can possibly be nailed—even "lateral fractures"—should be, provided the surgeon is competent to do it properly Personally I have now had the opportunity of receiving instruction from masters in the method, and having with me the most convincing argument of all—my own hip joint—I shall not put another patient with a fracture of the neck of the femur into a Whitman plaster, valuable though the method has proved in the past, unless I am forced to do so I believe that any patient who is fit to stand treatment by plaster is also fit to undergo this operation

I should like to take this opportunity of expressing my great appreciation of all the care, kindness and skill with which I have been treated by each of the three surgeons, two of them old 'chiefs' of mine, who undertook my case I am afraid I was a very troublesome patient, but the experience has taught me a lot This article was written at their suggestion, and nothing I have said in it is intended to be in any way a criticism of their skill or judgment, for which I have the highest possible regard

REFERENCES

Lloyd, E I (1938) *British Medical Journal*, 1, 871
McMurray, T P (1938) Ibid, 1 330
Ollerenshaw R G W (1938) Ibid, 1, 569
Pridie, K H (1938) Ibid, 1, 542

THE BRITISH ASSOCIATION AT CAMBRIDGE

The main aim of the British Association for the Advancement of Science, which has just held its annual meeting at Cambridge, was described by Mr H G WELLS as the consideration of science in a changing world Lord RAYLEIGH in his presidential address on vision in nature and vision aided by science, showed how the newly devised aids to vision had revealed new aspects of the material world which to the unaided senses appeared almost paradoxical, although such modern scientific doctrine appeared to have an elusive and even meta physical character, it had revealed tangible facts by methods akin to direct scrutiny, and it remained true in a rather extended sense that seeing was still believing More than on other previous similar occasions the relations of scientific activities to the everyday facts of life in the world were indicated Lord Rayleigh took occasion to dissent from the older view that advances in science were aetiologically concerned with increasing animosities in mankind, and in the Geography Section its president, Professor GRIFFITH TAYLOR suggested that racial prejudice might well be considered to be only another term for ethnographical ignorance

In the Psychology Section Dr WILLIAM BROWN dealt strikingly with problems of the mature personality, a new departure for some of his audience, again illustrating the benevolent contributions of science to a far from stable world In the same section Mr J G W DAVIES defined the satisfactory state of vocational adjustment as being one in which a person could find in his occupation a sufficient outlet for his abilities, interests, and disposition characteristics, feeling at the same time that he was comparing adequately with his competitors in efficiency, and knowing that within the terms of his expectations he was holding his own as an economic unit

Some Physical Problems

In a symposium on nuclear physics Professor NEILS BOHR of Copenhagen, who had formerly collaborated with the late Lord Rutherford, brought out the fundamental differences between the conceptions which had evolved

from the quantum theory of the atomic nucleus and those which were derivable on the basis of classical mechanics there was a great facility of energy exchange between the nuclear particles and a new particle the yukon so named from its discoverer Yukowa was intermediate in mass between the proton and electron Later in the symposium two transmutations were discussed—namely that of carbon to radio active nitrogen and also of fluorine to neon Current teaching about the chemistry of gold was criticized by Professor CHARLES GIBSON who also demonstrated chemical methods of making gold films for industrial and decorative purposes Dr C G DARWIN'S presidential address in the Section of Mathematical and Physical Sciences dealt with logic and probability in physics He maintained that the old formal logic was designed for a world which was supposed to have hard outlines whereas the new mechanics had shown that the outlines were not hard, and that the method of reasoning must be altered accordingly The subject of probability ought to play a much greater part in the education of the physicist as well as of the ordinary layman For instance the monthly variations in the Transport Ministry's monthly reports on road accidents were probably more natural fluctuations due to chance

Visual Perception

In the Section of Psychology Dr R H THOULESS delivered a presidential address on the eye and brain as factors in visual projection pointing out that visual perception was not only a sensory affair and that the phenomenal regression towards reality differed in different persons and at different ages, the same scene such as gaps in road traffic being seen in various ways Those persons who had been taught to trust the evidence of their own senses became cross when challenged by others A person of high phenomenal regression could drive a motor car more easily through traffic than could one with low regression seeing a gap in traffic at something near to its actual size before he reached it Alcohol decreased phenomenal regression while caffeine increased it The common persistent tendency to drive on the crown of the road characterized persons of low phenomenal regression but an understanding by the driver of the cause of his fault would help him to correct it SIR ARTHUR KEITH contributed to a symposium on the Swanscombe find in the Section of Anthropology Mr JOHN SARGENT expressed the belief that the minimum size of any local government unit should be an area with a population of 250 000, this was followed by a two day discussion of education for a changing society in which great differences of opinion as to policy and procedure were expressed

Social Relations of Science

The general committee of the British Association discussed a proposal to create a new division to deal with the social and international relations of science A committee appointed annually would furnish material for the information of the public, would act in a consultative manner and establish relations with organizations and persons engaged in practical administration would set up subcommittees for executive purposes or for research, inquiry or co ordination and would maintain close relations with the sections of the Association inviting their advice and receiving from them suggestions of subjects for discussion This committee would meet regularly through the year at intervals determined by itself

Since 1913 the number of doctors in Belgium has risen from 4 426 (one doctor to every 1 726 inhabitants) to 6 311 in 1935 (one doctor to 1 315 inhabitants) In the province of Brabant in 1913 there was one doctor to every 1 107 inhabitants and in 1935 when Brabant had a population of one and three quarter million inhabitants one to every 938

Local News

INDIA

Countess of Dufferin's Fund

It is announced in the annual report for 1937 of the National Association for Supplying Medical Aid by Women to the Women of India (Countess of Dufferin's Fund including the Women's Medical Service) that in that year there was a definite expansion of the work of the association two new branches of the Fund having been initiated, one in the new Province of Orissa and the other in the Province of Sind In both these Provinces medical aid to women is still in a backward state but it is hoped that the two new branches will supply the much needed stimulus The United Kingdom branch of the Fund has been closed in view of the great reduction in its work during recent years Accommodation has been found in London in the office of the High Commissioner at India House for arrangements for the education in the United Kingdom of undergraduate medical women and for the recruitment of English women graduates for service in India as well as for the reception and assistance of members of the Women's Medical Service and of Dufferin scholars in the United Kingdom In April, 1937 the Government of India undertook the full financial responsibility for the maternity and child welfare section of the India Institute of Hygiene and Public Health, Calcutta The rebuilding of the Dufferin Hospital Calcutta proceeded as rapidly as could be expected during the year under review massive foundations having to be laid on the marshy soil of Calcutta and steel having to be procured the work in the old building has been handicapped meanwhile two wards having necessarily to be closed to patients while the theatre was put out of action for operative work The number of new admissions consequently fell but there was an increase to 1 121 in the number of maternity cases delivered as well as in the number of out-patients The new dental department has been opened A preliminary training school for nurses was held three times in 1937 for periods of two months and proved to be most popular and valuable Investigations were continued into the anaemia of pregnancy of which there seems to be an increasing number of admissions each year the patients being almost *in extremis* and often with many complications There is still no money available for equipping the new building and a new nurses home is urgently needed At present one third of the hospital's expenditure is met by payments from patients and it is hoped that with further accommodation including additional private rooms, the income from this source will grow proportionately The hospital will eventually be a first class medical and surgical treatment centre for women and children a *modern training school for nurses a post*-graduate training centre for medical women and a research centre The new hospitals of the Fund at Shillong and Khamgaon are progressing excellently and are proving most valuable in their respective districts It is insisted in the report of the Fund that the great need in India to day is for a better educated and better trained nursing service this can only evolve when more suitable conditions for training will attract to the nursing profession Indian girls of better class who will enter it with a vocation for nursing and with ideals of service The executive committee of the Dufferin Fund has consequently earmarked the unspent balance of the Silver Jubilee Fund, amounting to over 71 000 rupees for grants for rebuilding and improving nurses quarters for increasing teaching equipment in training schools for nurses and for providing teaching allowances for sister tutors and salaries for additional staff nurses It is also proposed to award scholarships to trained nurses to enable them to take courses in administration in large hospitals so as to fit them for administrative posts Regret is expressed at the

poor financial support given to women's hospitals in India by the local authorities and it is noted that while the number of women and children availing themselves of treatment increases steadily the financial support of the public is diminishing In most of the hospitals there is serious overcrowding which is yearly becoming more acute and the continuance of the work is threatened An inquiry into maternal mortality and morbidity in childbirth is proceeding in Calcutta under the Women's Medical Service and the Indian Research Fund Association The Lady Hardinge Medical College New Delhi, receives an annual grant from the Government of India smaller grants from Provincial Governments and some Indian States as well as fees from students and some patients

Plague in Bombay

An abnormally low mortality from plague was an outstanding feature of the health of Bombay in 1936, and in the seventy third annual report of the Director of Public Health for the Government of Bombay Lieutenant-Colonel A Y Dabholkar, I M S quotes the annual statistics since 1914 to support his contention that, although there are occasional epidemic waves there has been a progressive decline in incidence The peaks reached by epidemics during recent years are low compared with those in earlier ones and it is suggested that the anti-plague measures including calcium cyanide fumigation, which are being organized by the Government and by local authorities in the epidemic centres have materially influenced the trend of these epidemics It is even hoped that the application of more systematic and sustained measures will result in the complete eradication of this disease Ratting operations involving the use of fumigation were undertaken in various areas, including Bombay City but the warning is given that the decline in the incidence of plague must not be taken as an excuse for not continuing and intensifying this work until the rat population has been reduced to a minimum, in spite of the natural tendency to increase of this pest The mere use of traps and baits is inadequate to this end and demonstration cyanogas operations have been conducted in several districts under Government control, additional subordinate medical officers and staffs being appointed for this purpose There was a regrettable decline in the number of inoculations, but the vaccine used in the Presidency proved very satisfactory In one district which had 677 plague patients only seventy-one had been inoculated the case percentage mortality being 43, while among the 606 uninoculated cases the death rate was 57 per cent No special medical officers were required for plague inoculation duty Colonel Dabholkar is satisfied that the employment of hydrogen cyanide in one or other of its various forms can now be recommended for use with complete confidence and can well replace the other less efficient methods of disinfestation In 1936 the plague mortality in the Presidency was the lowest ever recorded since 1896 the year in which plague first appeared there Of the 4320 deaths from small-pox 1,176 involved infants under the age of 12 months and 71 per cent of the deaths occurred in children These figures emphasize the need for a more thorough application of vaccination among the population in this susceptible age period Thus in Bombay two of the most fatal diseases in India appear to be capable of control Various sanitary associations are pushing on energetically with the work of health propaganda lantern lectures demonstrations, and local exhibitions being very popular and facilitating the introduction of sanitary measures for villages The position is less happy in respect of diseases of the respiratory system Deaths from pulmonary tuberculosis have been steadily increasing in recent years and Colonel Dabholkar marks that the importance of early diagnosis and notification which are the first line of attack has not yet been fully realized nor has the pressure of public opinion been brought to bear on the local authorities to make them pay sufficient attention to this menace, which is obviously increasing

NEW ZEALAND

[FROM OUR CORRESPONDENT IN WELLINGTON]

The Cost of Social Services

The payment of old age pensions began in New Zealand in 1899 In the succeeding thirty-eight years the population doubled, but the number of pensions has been multiplied by nine If plans now in view are adopted the cost of pensions will double again It has grown from £157,000 to over seven and three-quarter million pounds The causes of this huge increase are many Immigration and the birth rate have declined, the cost of living has progressively increased, qualification for pensions has been eased, war pensions have been necessary, and there is an ever-widening demand for pensions It is not surprising therefore, that taxation has increased during the last three years by about 50 per cent There is a distinct tendency to encourage dependence on the State, and thrift, effort and enterprise must be taxed to support such people as are unprofitable New Zealand is now at a peak of prosperity and may be able to afford the cost of social security as it is called, but if the value of exports decreases unproductive expenditure may be the first to be curtailed

National Health Scheme

An outline of the Government's proposed national health service has been supplied by the parliamentary chairman of the National Health Insurance Committee and may be accepted as a correct summary of the National Health Insurance Bill to be introduced shortly The scheme will not be put into practice before April 1, 1939, and in the meantime a General Election will be held the Opposition may succeed at the election, and this may lead to an amendment of the legislation Mr Nordmeyer, chairman of the committee, said that the real wealth of the community lay in its men and women, boys and girls, anything which tended to increase their health and well-being tended to increase the community's wealth Many countries had discovered the value of health insurance by means of which medical costs could be spread more or less equitably throughout the community and more or less equally throughout the individual's life Medical costs fell so heavily and so uncertainly that they could not be met by the average individual The middle class suffered most severely, the poor, of necessity, were usually treated free but those who were regarded as able to pay were expected to pay, often at the cost of real hardship over a number of years When the British health insurance scheme was instituted the doctors almost unanimously opposed it, announcing that they would not co-operate, Mr Lloyd George, however, went on with his scheme, and it was now a huge success, and the doctors themselves were asking for its extension Mr Nordmeyer went on to deal specifically with the social security proposals, of which, he said, health insurance was an important part

It was proposed, he continued, to institute a general practitioner service free to all The names of the doctors willing to work under the scheme would be published, and people would be free to choose their own doctor and to change him at the end of three months if they wished The Government realized that the doctors must be adequately paid for their services and £1,200 000 had been set aside for that purpose, that sum was greater than the sum doctors were at present receiving in the aggregate There was also to be a free hospital service Hospital boards were to be paid 6s a day for each patient The average amount at present collected daily for each bed was 2s 8d only a small fraction of the actual cost Hospital boards would thus save £400,000 a year, they would also save £40 000 on confinement cases, for which a special payment was to be made, £100,000 on charitable aid as the result of new and increased pensions, and £10,000 on administration expenses The whole saving of £550,000 would reduce local body levies by £275,000

nd hospital rates by about one third This saving would be largely cancelled out by increased building but the building would have to be gone on with in any case

After outlining other proposals Mr Nordmeyer referred to the cost Some say that we can t find the money but if there were a war to morrow we would have no trouble in finding the money Of the total cost £7 575,000 would come from the tax of 1s in the £ on wages and income and the 5s quarterly levy and £7 092 000 was already being contributed from the Consolidated Fund that left £3 120 000 to be found

It would appear that Mr Nordmeyer is basing his estimate of cost on the original proposals These however have been expanded and the cost of the full plan will be much more, in the opinion of the actuary sent out from Great Britain to advise on questions of finance

July 30 1938

ENGLAND AND WALES

Nursing Inquiry Views of London Hospitals

The Voluntary Hospitals Committee for the County of London which functions as the London Regional Committee of the British Hospitals Association, has prepared a statement of evidence for submission to the Interdepartmental Committee on Nursing The statement is based on observations forthcoming from the London voluntary hospitals With regard to one of the principal difficulties in recruitment—namely the fact that nurses cannot begin their training until the age of 18 or 19, whereas they have left the secondary schools at 16—the committee holds that any lowering of the age is undesirable but suggests that hospitals should register candidates on leaving school with the object of keeping in touch with and advising them as to appropriate occupations in the interval Such registration might be made at one general office for all hospitals in a region and extended to include the registration of all applicants to individual hospitals so that those not accepted by the hospital to which they originally applied might be taken by another Such a bureau might further be available for inquiries as to qualifications and facilities for the establishment of effective regular contact between hospitals and education authorities, and to act as a public relations department in respect of nursing in voluntary hospitals Other suggestions are that the General Nursing Council should encourage affiliation of special with general hospitals for the purposes of nursing training and that the syllabus should be rearranged so that candidates may take Part I of the Preliminary State Examination before joining the hospital and proceed to the hospital wards equipped for their practical clinical training The hospitals are fairly unanimous in favour of the retention of hospital examinations which serve a useful purpose in grading the nurses, and the view is that they cause no hardship if taken just before the Final State Examination

Turning to conditions of service the statement of evidence declares that accommodation for nurses in London is generally good So far as restrictions are concerned—a real or fancied deterrent to recruiting—it is considered by the committee tendering evidence that there is need for close and detailed comparisons of hospitals in this respect with a view to the general adoption by all of them of the maximum measure of freedom which *experience at one hospital has shown can be safely* granted Experiments in living out should be encouraged in appropriate cases—for example in the case of probationers whose homes are within easy distance of the hospital The recommendations of the College of Nursing for a 96 hour fortnight and specified rates of pay are generally regarded by the voluntary hospitals of London as the ideal towards which each hospital should approximate as nearly as its resources permit In one hospital (South London Hospital for Women) the 96 hour fortnight has been established not by increasing the nursing staff but by the employment of non resident female ward orderlies who relieve the nurses of domestic tasks If the recommendations of the College of Nursing were carried out in London the increased maintenance cost would amount to about £150 000 per annum and the Voluntary Hospitals Committee does not see how expenditure of that order could be incurred without some form of assistance from the State If the standards proposed by the College are adopted it is considered essential that the hospitals should be provided with grants of comparable size and that such grants would be least likely to interfere with voluntary support generally if they were given in recognition of the services rendered by the hospitals in the training of nurses

Other bodies which have prepared evidence for the Interdepartmental Committee include the General Nursing Council the British Medical Association (see Supplementary Report of Council *Supplement* June 18) the London County Council the Women s Employment Bureau and the Student Nurses Association

Red Cross Rheumatism Clinic

The eighth annual report of the British Red Cross Society s Clinic for Rheumatism covering the year 1937 stresses the urgent need for more accommodation So heavy was the demand for treatment that during two periods of the year no new women patients could be admitted In the general department attendances numbered 90 884, and treatments 134 184 in the private patients department the respective figures were 7 949 and 11 408 The report points out the importance of early treatment in cases of rheumatism For this reason four evening clinics are held each week, and sufferers from early manifestations of rheumatism are thus able to attend for consultations and treatment without absenting themselves from their daily work It is stated that these evening clinics are extremely popular and well attended Innovations during the year include the provision of plaster splints which the patients can slip on and off themselves as required and the weekly attendance of a chiropodist With regard to footwear it is stated that too short stockings and socks appear to be an even more fruitful cause of foot trouble than incorrect shoes Often the patient is found to be wearing stockings several sizes too small This is especially the case among poorer patients for in the cheaper types of stocking the thread is overstretched so that wetting produces much shrinkage The report records a considerably increased financial deficit and states that larger resources are required if the work is to be carried on on the present scale

Port Hygiene at Liverpool

The annual report for 1937 of the Port Health Authority Liverpool, describes the outbreak of paratyphoid fever, with a concurrent smaller outbreak of Sonne dysentery which affected a closed community, the boys in a Mersey training ship, during the months of September October and November The first case of illness was a new boy shown to be a urinary carrier of *B paratyphoid* B Out of a total complement of 128 eleven boys were definitely paratyphoid while four more were doubtful In addition five cases of dysentery were admitted to hospital Routine examination of faeces revealed a Sonne dysentery carrier as a possible cause of origin One of the cases of dysentery was *discharged from hospital on September 28 to be re*admitted five days later with paratyphoid fever It would appear that while suffering from the former he had been incubating the latter disease During the year under review 161 cases of infectious sickness were landed from ships A cruising vessel which arrived at Liverpool in September reported that four passengers and one officer were suffering from dysentery Several members of the crew fell ill during the next four days besides one passenger who was staying at a local hotel All

the patients were removed to hospital, where, with the exception of one passenger who died they made a satisfactory recovery The vessel had taken on board fruit, vegetables and live crayfish at Casa Blanca fruit, vegetables and a hundred tons of water at Madeira This water was mixed with the water originally taken in at Liverpool and although no organisms of the dysentery group were discovered the bacterial count proved unusually high It seemed probable therefore, that this water was connected with the outbreak The tanks were cement washed and no further cases occurred during the vessel's subsequent voyage With regard to the hygiene of crews spaces the Medical Officer of Health deplores the large number of quarters infested by bugs and the apathetic attitude too often adopted concerning this problem Strong disciplinary measures and constant propaganda on the necessity for personal cleanliness are advocated in addition to more thorough methods of disinfestation It is less difficult to keep bugs out of crews quarters than to kill the insects once introduced '

The Ross Institute

Mr A Chester Beatty chairman of the Consolidated African Selection Trust has accepted the vice-chairmanship of the Ross Institute of Tropical Hygiene, London School of Hygiene and Tropical Medicine in succession to the late Sir Harcourt Butler Dr A J R O Brien has accepted membership of the Ross Institute Standing Committee in succession to the late Sir Thomas Stanton Dr G Macdonald at present medical officer in charge of the Ross Institute Branch in Ceylon which is administered by a committee of the Ceylon Estates Proprietary Association has been appointed assistant director of the Ross Institute and will return to London from Ceylon at the end of the year to assist Sir Malcolm Watson Dr Robert Svensson who has recently toured East and West Africa on behalf of the Institute has been appointed assistant director, and will take up the appointment of medical officer of the Ceylon Branch in succession to Dr Macdonald Dr J W Foster has been appointed assistant director, and will take charge of a new branch in the Gold Coast at the end of the year The Branch is being financed by a group of mining companies Before taking up their appointments Dr Svensson and Dr Foster are making a tour of the East, during which they will see the malaria control work and the health organizations in the planting and mining districts

London County Council Hospital Services

The London County Council has decided to provide a portable x-ray unit at seven of its acute infectious diseases hospitals A full-time position of radiographer is to be added to the fixed establishment of staff for allocation for one session a week to each of the hospitals One infectious diseases hospital is already served to the extent of one visit a week by a full-time radiologist This arrangement will be continued but at each of the remaining hospitals it is considered that fortnightly visits will suffice The services of a consulting radiologist will therefore be needed for a total of four sessions a week The rate of remuneration will be £350 a year or if he is already employed as a part time consultant or specialist in the hospitals service £300 a year, with additional payment of two and a half guineas for each emergency visit in excess of the number of routine visits A new children's block, comprising wards for thirty children and an out-patient department will shortly be ready for occupation at Mitcham Hospital The opening of the wards for the reception of in patients will be deferred for a time, but the out-patient department will be brought into use as soon as the accommodation for it is ready As an experiment whole time dental surgeons have been employed in recent months at two L C C general hospitals, and, the success of the scheme justifying the experiment it is proposed to extend it to two other general hospitals Provision is also to be made for an increase in the number of dental sessions at two special hospitals, and for two sessions a week to be provided at another special hospital where hitherto there has been no such provision at all Of the tuberculous patients who received institutional treatment under the council's tuberculosis scheme, and were discharged in 1932, the number traceable being 3,374, it has been ascertained that after five years 42 1 per cent of patients with the pulmonary form of the disease and 74 6 per cent of patients with the non pulmonary (surgical) form are still alive

IRELAND

Medical Members of the Senate and the Dail

The poll for the Eire Senate election closed in Dublin on August 17, and the complete results of the election are now available Mr H L Barniville, M Ch, senior surgeon to the Mater Misericordiae Hospital, was elected for the National University of Ireland constituency, and Dr Patrick J Doyle of Offaly was elected on the cultural and educational panel of the Senate The only other medical man elected is Dr R J Rowlette, professor of materia medica in Trinity College, who was returned unopposed as one of the three senators for the Dublin University constituency But in addition to the forty nine elected members the Prime Minister, Mr De Valera, nominates eleven others to make up the poll to sixty For the previous Senate, which was elected six months ago, he nominated Dr Robert Farnan, professor of obstetrics and gynaecology in University College, Dublin, and it is thought that he is likely to do so again on this occasion In the Dail Eireann, whose full membership is 138, there are the following members of the medical profession Dr James Ryan (Minister for Agriculture), Dr Francis C Ward (Parliamentary Secretary to the Minister for Local Government and Public Health) Dr Joseph Hannigan, Dr Francis Humphreys, Dr Thomas F O Higgins, and Dr Sean Tubridy

The Rotunda Report

The report (1936–7) of the Rotunda Hospital, Dublin, records considerable progress in the reconstruction programme, despite the adverse effects of a six-months strike Among the improvements noted by the Master, Dr A H Davidson, are the enlargement of the main labour ward permitting increased space for a gallery for students and graduates, and the provision of a room for newly born infants with eight special electrically heated cots Attendances in the out-patient department reached the large figure of 26,372 , in the pre-natal clinic 10,057, an increase of over 2,000 on the previous year The report stresses the importance of the V D clinic owing to the reluctance of this type of patient to attend the venereal centres in the city Thirty-three of the 224 Wassermann tests were positive, and thirty of the patients attended for anti syphilitic treatment during pregnancy As a result fifteen living infants were born, and these were treated with bismuth until 6 months old There were 2,301 calls on the hospital district, and 1,944 women were delivered Among this number were three maternal deaths and seventy stillbirths, twenty-six of the latter occurring in premature cases In 265 cases the baby was born before the arrival of the students There were two sets of triplets Admissions to the maternity department totalled 3,212, deliveries 2,851 Of these deliveries 2,585 were normal vertex presentations, three transverse, and one brow , fifty persistent occipito-posterior presentations, and sixty cases of twin pregnancy , nineteen cases of prolapse of the cord nineteen of placenta praevia, and ten of post partum haemorrhage three cases of rupture of the uterus and fourteen of eclampsia Hospital deliveries showed a morbidity rate of 3 68 per cent The mortality rate was 0 45 per cent in the hospital, while the total mortality rate, including external maternity, was 0 33 per cent

Correspondence

Maternal Mortality Rates

SIR,—How misleading as to the true state of affairs isolated statistics can be is shown in the list of towns showing their respective maternal mortality rates for the year 1937 and mentioned by Dr A Massey in your issue of August 13 (p 337)

In the town in which I am particularly interested the total births per annum are very much under one thousand so that the figure given of 1·56 per 1 000 for maternal deaths from sepsis really means that one death happened to have occurred in that year This was a case of an unmarried mentally defective woman in a generally most unsatisfactory condition The rate in 1936 was *nil*

In so small a number of births the total maternal mortality rate in any one year is also misleading for one death makes such a difference in the figures As a matter of fact if the maternal mortality rate had been given over a number of years for this town it would have been about half the figure quoted Had the year 1935 alone been taken the total maternal mortality rate would have had to be quoted as *Nil* —also misleading as to the real mortality—I am etc,

W G WILLOUGHBY
Eastbourne August 22 Medical Officer of Health County Borough of Eastbourne

Hormone Therapy in Mastitis and Breast Cancer

SIR,—We have received numerous inquiries concerning certain statements which have been made in a letter by Dr Alfred A Loeser in your issue of August 6 (p 319) One of these statements is as follows

> So far as cancer of the breast is concerned it is advisable to treat patients who have already undergone a radical operation prophylactically with high doses of male hormone every year In my opinion this is a better method of avoiding a secondary deposition than irradiation especially in families in whom cancer is hereditary I have done this in two cases of breast cancer

This opinion appears to be based on only two cases of breast cancer and it is not stated how long they have been kept under observation As it was only in 1936 that Miescher, Wettstein and Tschopp first prepared testosterone propionate and it is only comparatively recently that the substance has been available the follow up of these patients cannot have been for more than two years there is no proof that a recurrence of the disease would have taken place within this period without any prophylactic treatment It should not be necessary to draw attention to the elementary rule in clinical research that before a certain treatment can be said to prevent the recurrence of carcinoma it should be employed in a reasonable number of patients with an adequate number of controls receiving either no treatment at all or some other form of treatment such as irradiation with which the therapy under trial is being compared and that both groups be followed up for some years

It is dogmatic statements such as the one cited above founded on evidence that is extremely meagre or even non-existent that will tend to bring British clinical endocrinology into disrepute—We are etc,

A W SPENCE
London August 18 GEOFFREY KEYNES

The Prontosil Group in Brucella abortus Infections

SIR,—I have read with great interest the article in your issue of August 13 (p 342) by Dr C Z Neumann on The Treatment of Undulant Fever with Prontosil The twenty cases which he there analyses appear to be all cases of *Brucella melitensis* infection and it may therefore be of interest to your readers to know the results which have been obtained with prontosil and closely related substances in my series of *Brucella abortus* infections in England and Wales

Such treatment has only recently become fashionable and consequently there are only thirty five cases so treated in my series Prontosil itself was used alone in fifteen cases in two of which it was reported to have had a good effect in one case it gave doubtful benefit in seven cases it gave no benefit and in the remaining five cases the effect is not known Prontosil soluble was used by itself in only one case, and in this case benefit was obtained Sulphanilamide was used in seventeen cases—in ten with good effect in three cases with doubtful effect in one case no benefit was obtained and in the remaining three cases the effect is not known In one of these cases treated with sulphanilamide diarrhoea and vomiting followed the administration of the drug, and in another case intense cyanosis was reported Prontosil soluble was used in conjunction with sulphanilamide in two cases once with good effect and on the other occasion with none

These results though relating to a small number of cases justify in my opinion the continued trial of substances of the prontosil group in the treatment of undulant fever—I am, etc,

W DALRYMPLE CHAMPNEYS
Ministry of Health Whitehall S W 1 August 15

Blood Groups and Legislation

SIR,—Dr A G Newell, in his letter in the *Journal* of August 13 (p 376) raises a number of important queries in connexion with blood groups and legislation, and suggests that the British Medical Association should make an authoritative statement on this question There is no doubt that in due course they will be officially asked to do so but in the interim some comment upon the present position is pertinent

First Dr Newell asks whether the time has come for legislation As a race we are notoriously apt to sit on the fence and watch the world pass by a mode of life conducive to profiting by other people's mistakes but with the concomitant disadvantage of being eternally behind in general progress Used first in 1923 statistically proven in 1926 amplified in 1929 and proven over and over again since then the blood grouping test in disputed paternity passed England by until May of this year The answer to Dr Newell's first question is that the time has, in fact almost passed It is unnecessary to detail the various societies and bodies both legal and medical which have been approached and which are in accord as to the desirability of introducing legislation Suffice it that the general consensus of authoritative opinion is that the time has come With this knowledge the Association of Clinical Pathologists was approached and set up a special committee which sat earlier this year to inquire into the technique of the test as it should be applied in medico legal cases The resolutions of that committee were placed before Lord Merthyr who has incorporated them in the draft of the Bill which he is to introduce into the House of Lords next session and which makes the performance of a test a necessary condition of the further hearing of a

case if it is asked for by either party or by the court itself The remainder of Dr Newell's first question is best answered from the findings of this committee and from the draft of the Bill

He asks pertinently what system of grouping is to be recognized There are, allowing for the subdivisions of the four main groups eighteen possible blood groups which might be used and which in fact are used in the Scandinavian countries The technique of the tests employed in differentiating the A_1 and A subgroups is extremely specialized and can only be fairly used in a laboratory with a full-time serological staff to which *all* the blood tests are sent (such as is the case in Copenhagen) This appears impracticable in England and it is proposed to limit the test to the four main blood groups—O A B and AB—together with their threefold subtypes—M N and MN—for the present Moreover the cell agglutinogens alone will be tested thus obviating the difficulties which arise with possibly weak or immature agglutinins

The rest of Dr Newell's second question consists essentially of practically every red herring known to the study of blood groups and although dogmatic statements are always undesirable the herrings can only reasonably be caught with such hooks Matta of Cairo proposed a new theory of blood-group inheritance (which was not accepted at the International Congress of Microbiology in 1936) to explain an AB father with an O child this occurring in a relatively minute series of some ninety odd families The statistics of familial groupings are littered with AB fathers and O children which having regard to the axiomatic *pater semper incertus* of Roman law, have very properly been relegated to illegitimacy One cannot accept father–child combinations as proof of any theory of heredity in man, it is only the mother–child combination which provides proof and of all the thousands of AB mothers we have examined only one has ever had an O child (the Haselhorst case which is susceptible of explanations other than that the theory of blood group heredity is at fault) while no O woman has ever been found with an AB child The same considerations apply to Bauer's theory of heredity

The remainder of these red herrings may be dealt with more tersely The implied criticism of the theory of heredity in the sentence 'Several parents of A_1 group were found who had given birth to O children' is symptomatic of complete misunderstanding rather than intelligent criticism There is no reason why an A_1 parent should not have an O child and this is the first time so far as I am aware that such a suggestion has ever been made In fact the statistical odds are that such a parent *will* have an O child For the rest the fact that the so-called A agglutinin agglutinates O cells is well known but is in no way relevant to the performance of a blood-grouping test the fact that the M and N agglutinogens are separate from the A and B substances both serologically and genetically far from negativing their value gives them their strength and lastly the normal constituents of the red cells the agglutinogens *cannot* be present or absent according to the state of health or disease of a person but are present or absent only according to the state of the germ cells of the parents who begat him Moreover these agglutinogens are present not only in the red cells but in all the body tissues fluids and secretions as well the term blood group deriving from their method of discovery thirty eight years ago

Thirdly Dr Newell inquires after statistics stating that these are not generally agreed upon Not generally known would be more correct for the chances of exclusion of an innocent man vary only with the distribution of the groups among the relevant population ranging in England from 1 in 12 in Group AMN to 2 in 3 in Group ABN, with an average of 1 in 3 It is unnecessary to quote the complete exclusion tables, for they are legion among the literature of blood groups

The most important points of Dr Newell's letter he in his last three questions First what sera should be used? It is admitted, and is indeed obvious, that the crux of the test rests on the sera that are used, which must be at the same time entirely group-specific and yet potent enough to detect the weakest of agglutinogens Moreover the preparation of M and N antisera is notoriously difficult To overcome this the present suggestion is to establish a central source of supply *every* blood test in paternity cases being obligatorily made with serum from this source the serum being supplied on the day of the test, and having been titrated checked, and certified the day before Given these sera the person making the test will simply read the results, having followed a standardized technique and fill in a standard form of report, which will state that the test was made with a particular batch of serum certified by the central source

The pathologists making the test would be recognized by the Lord Chancellor and placed upon a panel of approved persons In this connexion the committee of the Association of Clinical Pathologists was emphatic in the view that only registered medical practitioners should be approved persons and that the test should not be delegated to laboratory assistants So far as the giving of evidence is concerned, it is of course, essential that the report should be acceptable as evidence without the attendance of the pathologist at court by which means the cost of the test is reduced and valuable time is saved Attendance at court would only be necessary if it was specifically asked for by either of the parties The proposed Bill makes the requisite provision for this, the precedent being found in the acceptability of a certificate of the analysis of milk under the Food and Drugs (Adulteration) Act—I am, etc,

London W 1 August 19 JOHN C THOMAS

Rheumatoid Arthritis and Jaundice

SIR—I have just read the very interesting paper by Dr P S Hench in the *Journal* of August 20 (p 394) on the effect of natural jaundice in alleviating symptoms of rheumatoid arthritis May I, very humbly as befits one of the rank and file, suggest that the important factor may not be the presence of bile in the blood stream but rather its absence from the intestine, with all that this implies as to its cultural, chemical, and solvent activities? This view would appear to be a useful line of research for a combination of surgeon, bacteriologist, and biochemist—I am etc

Stoke Poges, August 21 W L PEACOCK M B B Ch, D O M S

Antagonistic Diseases

SIR—Dr Philip S Hench's article, Effect of Spontaneous Jaundice on Rheumatoid Arthritis almost makes one believe that the cessation of symptoms which he describes may be yet another sign of a new era in therapeutics

I myself was particularly interested since you were good enough on February 27, 1932 to publish a letter of

mine entitled Antagonistic Diseases in which I pointed out that the recovery of some chronic invalids when they contracted an additional complaint was not always necessarily a matter of coincidence and that if only sufficient data could be obtained it would be found that there were far more of these accidental cures than one would have thought possible

My letter was suggested by a questionary that had been circularized about the incidence of cancer In it I believe, we were asked to give fairly full details of the medical histories of our cancer patients I hazarded that with regard to treatment and prevention much more practical results would be obtained from statistics stating what cancer patients had *not* suffered from, rather than the associated complaints

Supposing for instance it were found that very few cancer patients had ever had diabetes, say, and that the converse was equally true how pertinent that would be —what a pointer to additional research! Or, leaving cancer out of it, one might find that in the realm of diseases there were many likely combatants Chicken-pox might be found to be antagonistic to poliomyelitis—who knows?—hyperthyroidism to disseminated sclerosis, and so on

Of course I am not suggesting that we should necessarily infect the patient with a suitable antagonistic disease because in some instances the cure would be worse than the complaint But Nature is not so prodigal with her therapeutic clues that we can afford to despise any of them, however fantastic or unreliable—I am etc,

Southsea August 21 E GRANGER

Small-pox and Vaccination

SIR—Regarding Dr C Killick Millard's letter in the *Journal* of July 16 (p 151) in which he supposes that Dr A L Craddock is entirely out of touch with the questions of aetiology and prophylaxis of small pox I should like to mention the following case

In 1925 while acting as Staff Surgeon Calcutta I visited families under my care to ascertain the extent of protection from small pox by vaccination in view of an outbreak of the disease In one case the mother and three children were all unvaccinated The mother stated that she did not believe in vaccination On pointing out that she was of age and could judge for herself but that the children should not be unduly exposed she reasonably agreed to their being vaccinated About two months later the poor woman suffered from a very severe attack of small pox which nearly proved fatal She had been a pretty woman but after the attack she was very deeply pitted and all her beauty was lost The children did not contract the disease

Anyone who has experience of medical problems in India will have no doubt on the subject of adequate protection from small pox by vaccination I wonder if Dr Killick Millard has read Dr Victor Heiser's autobiography, in which he refers to small pox in the Philippines? (I quote from memory) Dr Heiser was in charge of public health arrangements before self government was given to the islands and compulsory vaccination was in force When the Filipinos assumed government compulsory vaccination was abolished Small pox became rife, and Dr Heiser was recalled to deal with the situation He reintroduced compulsory vaccination, and he states that when he left there were no anti vaccinators alive they were all dead from small pox

In 1925 when on a voyage from Bombay to Marseilles on the P and O liner *Narkunda* I was called in consultation by the ship's surgeon to see a wireless officer who had fever and a suspicious rash This proved to be a typical case of small pox The ship had been three days at Bombay and the patient was the only officer of the ship's staff who was unvaccinated The incident caused the P and O Company much trouble as all passengers were held up for some five hours at Marseilles I understand that the company now insist on all wireless officers being vaccinated as they do for their own staff—I am etc

A D STIRLING
Blackheath August 18 Colonel

SIR—I hasten to assure Dr Fred H Judd (*Journal* August 20 p 426) that he has entirely misunderstood the purpose of my letter in the *Journal* of July 16 in which I took exception to a statement by Dr A L Craddock that there can be little reasonable doubt that the remarkable position [freedom of this country from fatal small pox] is due largely to compulsory vaccination

I am just as convinced as Dr Judd himself is of the efficacy of (recent) vaccination in protecting the individual against small pox and I gave proof of this nearly forty years ago when I took my wife and two young children all recently vaccinated, into our Leicester small pox hospital during an outbreak of variola major and photographed them by the bedside of a confluent case of the disease Nothing which I have experienced in fighting small pox since that time has ever shaken my faith in vaccination which is just as strong to day as it was then And had I to deal with small pox in China as Dr Judd has done I have no doubt I should make use of vaccination just as he does and be just as thankful for it

But all this does not in the least affect my position that it is not compulsory vaccination which deserves the credit for the virtual disappearance of major small pox from this country *If anyone still believes that I would* beg of him to re examine the whole question impartially and *de novo* and I feel sure that he will have to modify his opinion Nor do I wish to stress the word compulsory , I believe that general vaccination of the infant population irrespective of compulsion, has had very little if anything to do with it at any rate in this country

Finally, to soothe Dr Judd's feelings may I say that I would always urge anyone going out to the Far East or to any part of the world where variola major was endemic, to get vaccinated beforehand and this whether he had been vaccinated in infancy or not—I am etc,

C KILLICK MILLARD
Leicester August 21 Ex M O H for Leicester

Undescended Testicle

SIR—I had hoped that someone who knows more about hormones than I do would have answered Dr P M F Bishop's letter (*Journal* August 13 p 374) and expressed doubts which I believe to be fairly widely held about the complete harmlessness of pregnyl After all as it is used to procure a permanent result in the descent of the testicle the argument that it is quite safe because all hormone effects are transient does not entirely reassure me My medical friends tell me that neither insulin nor thyroid extract is entirely harmless in fact that rash use of the latter may disorganize for a long time the entire chemistry that has been stimulated The closest analogy of all seems to me to be with the growth hormones supposing they were used in a developing

child to promote skeletal overgrowth of the degree of the genital hypertrophy often seen after pregnyl, would one be entirely confident that no harm had been done?

As to Mr R C Brock's letter (August 20, p 423), it seems a trifle hard to be accused of 'flogging a point to excess' (see H W Fowler on Metaphors) when all I have done is to say to a succession of critics that I wish they would read my paper carefully before attacking it. Had Mr Brock followed this apparently uncommon course he would have seen that we are in complete agreement on the subject of the superficial inguinal ectopic testis. Like him I mentioned that it was "well recognized by certain workers", like him I referred to the work of a respected senior in regard to it. The rest of my paper was about something quite different, which is possibly original: the superficial inguinal pouch, the excursions of normal and abnormal testicles into it, and the differing prognosis of the different positions.

I cannot quite see why he should say that my suggestion that some (not, as he says, most) examiners do not recognize the superficial inguinal ectopia is grossly unfair, when in his next sentence he admits the same thing. And surely it is unkind to suggest that they expect from unfortunate examinees a piece of information that is not in the textbooks they write or recommend.

As a final contribution to this correspondence, which has both amused and instructed me, I would like to say that if anyone can prove to me upon an actual case that any of my statements are wrong I shall willingly admit it in these columns.—I am, etc,

London W 1 August 22 DENIS BROWNE

Sulphonamide Chemotherapy in Gonorrhoea

SIR,—I hope you will allow me to congratulate Dr G L M McElligott and Mr A J Cokkinis on their paper in the *Lancet* of August 13. I, with all who have on them the constant harassment of gonorrhoea cases, feel much in their debt for the long patient care, clinical acumen, and obviously unremitting labour they have given to observing the effects of sulphonamide drugs in gonococcal infections. Their analysis supports their confidence in that drug, and for my part, should I again use sulphanilamide for gonococcal infections, I shall follow their technique. Indeed, they have persuaded me of its superiority to that I had used once upon a time (*Brit J Vener Dis* **14**, 1, 1938).

I am sorry to read (*British Medical Journal*, August 20, p 424) they feel that my letter to you of August 6 may give an erroneous impression of both the efficacy and toxicity of uleron. As to toxicity, it actually ought not to—not to the critical reader. For my letter did state doses and spacing of doses, given to 212 cases of gonorrhoea in the male over a continuous period of seven months. As to efficacy they find it unfortunate that my claim for uleron's being more effective in gonococcal infections than sulphanilamide was not supported by figures. Of course in my brief letter to you I gave no analysis of figures. I did state, however the number of cases treated with uleron and the number I had treated with sulphanilamide. Yet am I heartened to note that in their paper referred to above, Dr McElligott and Mr Cokkinis did not support their definitely unfavourable opinion of uleron by figures except like myself, to give a number of cases—over 150 cases. Furthermore (let us be accurate as well as critical!) I also wrote in my hands. I am sure I may count on most readers understanding that in my hands meant also in this clinic, with this sort of men—seamen, firemen, stewards, stevedores, and dockers. They are a hearty, intelligent, independent-minded, and matey lot, not backward in discussing and commenting on their treatment and its effects.

I am sorry I must decline to follow the red herring trail of 'final cures" so temptingly laid by my friends Dr McElligott and Mr Cokkinis. I agree with them that most of my patients are 'seamen," and that these seamen *may* have developed their neuritis after their return to sea. I wonder if Dr McElligott and Mr Cokkinis will agree with me that these seamen may *not* have developed any neuritis after their return to sea? In fact, Sir, the majority of them sail from and return to this port at regular intervals of time. They are matey, and do, many of them, blow in again after two to four months' voyage—to report relapse or no relapse, or even "neuritis' or *no* neuritis!—I am, etc,

Albert Dock Hospital, E 16 H M HANSCHELL

B welchii Infection after Abortion

SIR,—In the *Journal* of August 6 (p 279) three cases of *Cl welchii* infection following abortion were described by Drs R Y Dawbarn and Bryan Williams. It may be of interest to record a case of *B welchii* infection which came under my care some years ago and was reported elsewhere at the time.

A woman aged 26 intended to procure abortion herself by making an injection, with the result that a large haemorrhage occurred two days later, causing abdominal pain and rigor. On admission to hospital the patient had no peritonitic symptoms at all. Her temperature was normal, the pulse slightly raised. After packing the uterus with gauze soaked in iodine-glycerin, the foetus of a four months pregnancy was expelled spontaneously, the placenta, which was necrotic, had to be removed manually. When the uterus was emptied the patient felt absolutely all right. Ten hours after admission, however, an embolic attack occurred from which she recovered under morphine. Twenty six hours after admission another embolic attack set in, followed by death.

No doubt an infected thrombosis existed (as had to be assumed from the rigor which the patient admitted) but no general septicaemia. This case, from the clinical point of view, would not have been of special interest had not the post-mortem examination shown a most remarkable picture.

Twenty four hours after death the body of the patient was unrecognizable, and had the appearance as if she had been drowned, with widespread oedema, emphysema, and haematomata. The abdomen had swollen to twice its size, the skin on chest and abdomen was covered with discoloured blisters which discharged a gas with an obvious smell of sulphuretted hydrogen. The skin everywhere especially over the chest, gave a peculiar crackling sensation. Gas escaped also from the abdominal cavity. The spleen was about twice the normal size; the uterus which felt like a snowball showed no mechanical injury nor did the vagina.

The cultures made from the spleen, endometrium and heart valves anaerobically showed a growth of *B welchii* after ninety minutes and distinct gas formation. In the vessels and lymph spaces of the uterus, at the site of the placenta, in the liver and spleen there were great numbers of Gram positive bacilli which could be recognized as *B welchii*. The embolus of the arteria pulmonalis showed an immense number of gas bacilli and a small number of diplococci and streptococci.

What makes this case so remarkable is that during life no gas gangrene sepsis existed. There was no fever, no peritonitis, and no local gas production such as

crepitation of the uterus The clinical picture of a typical gas gangrene sepsis—jaundice cyanosis and scanty dark brown urine as a result of an extensive haemolysis—was absent The gas gangrene sepsis can only have arisen after the second embolic attack Lack of oxygen in the blood after the second embolism made it possible for the *B welchii* to spread in the dying body—I am etc

London N W 6 August 22 ERNST FRIEDMANN

Snake Venom for Oral Haemorrhage

SIR—A patient came to me for extraction of the second and third upper molars on the right side and second upper right premolar all of which were septic with alveolar abscesses She had however a very large cavernous angioma of the right cheek extending over the upper gum in the area of the septic teeth When she was excited or nervous the gum and the whole side of the face pulsated I removed the teeth in hospital under a general anaesthetic and the sockets bled profusely Ordinary pressure would not stop the haemorrhage Packing with adrenaline tape and heavy pressure reduced the haemorrhage but did not stop it, so snake venom in the form of stypven was applied This however did not completely stop it The treatment was applied to the molar sockets The premolar socket which was the worst bleeding area was plugged with stypven soaked in adrenaline tape, and the haemorrhage stopped immediately when this was applied to the molar sockets they also stopped bleeding

A year ago I was called to a haemophiliac after multiple extraction under gas and found the same thing Stypven on ordinary gauze tape or cotton wool was not so efficacious as the venom plus adrenaline—I am etc

R F KAYE WEBSTER L R C S, L D S

Berwick on Tweed August 12

"Psychosomatic Illness"

SIR—May I be allowed, before this correspondence closes, to refer back to the original contention of Dr James L Halliday (*Journal* July 2 p 11) that psychogenic illness judged by screen symptoms is on the increase and is a result of noxious psychological factors in the environment that can be rectified There is considerable reason for a psychiatrist to doubt the interpretation put on the psychological diagnosis the more so as Dr Halliday previously pointed out, that he approached it as physician (fortified by statistics) with no special claim to a psychiatric technique

Dr Halliday's cases of gastritis rheumatism and debility may well be on the increase, but so is the recognition of psychological facts by practitioners He should have recognized that every individual if the surface be scratched will be found to have fairly marked anxiety obsessional, or regression systems in his psyche He may be mistaking a discovered substrate along with a somatic disturbance for a neurosis proper I have reason to believe that this is the case from a recent independent and detailed examination (by psychiatric interview) of over a hundred workless and an equal number of employed men (to be published elsewhere), and it was not difficult to determine what Dr Halliday would have called hysteria anxiety and depressive states in over 50 per cent but the control series showed these to be largely systems and less than a quarter showed actual neurotic illness This is not to deny that organic conversions do occur but the discovery of anxiety etc in rheumatism or dyspepsia does not make for a psychosomatic illness *sui generis*—I am etc

The University St Andrews August 16 P LIONEL GOITEIN

Holiday Colonies for Fitness

SIR—No one realizes more fully than the general practitioner the lack of physical fitness and the prevalence of unnecessary invalidism produced by improper physical and mental hygiene Better housing conditions and improved sanitation have vastly improved the general health of the community but the knowledge of how most satisfactorily to live under these improved conditions is still very deficient How to bring up healthy families how to deal with physical development after school age and how to keep in health in advancing years are matters which lack guidance The habits of improper living are quickly formed and difficult to alter ignorant fears difficult to eradicate

The physical trainer important as he is should not attempt to take the whole burden of physical improvement on himself without the aid of the medical profession He is not capable of doing this nor will the general public or at least the more timid section of it trust him to do so How best to get fit and how to keep fit what and when to eat and drink, how best to obtain mental relaxation from daily work are all things which can only be readily learnt by the practical experience of a definite routine To this end permanent and self supporting holiday colonies should be created available both for families and for individuals Their attractions and value for money should be made so outstanding that the educational side which ought to be compulsory would be accepted even by the obstinate supporters of freedom of action Compulsory medical examination should be one of the first hardships enforced before any programme of physical exertion was laid down I am certain that if the means could be forthcoming to encourage an experiment of this kind good and permanent results would immediately follow—I am etc

Banbury August 10 C J L WELLS B M Ch B

Medical Evidence at Inquests

SIR—Though very ignorant of the habits of coroners I cannot but think and hope that the following action on the part of one is unusual I was summoned last week to a brook where a little boy was said to be drowned I found a police officer and a member of the Fire Brigade already on the spot They were doing artificial respiration and giving oxygen and CO_2 Though I was told the child had been drained I found the mouth full of foam and food and on raising the body a very considerable quantity of food and water poured out Another (local) medical man arrived and gave coramine etc but after another hour we had to pronounce the case hopeless Neither his nor my evidence which might well have been informative was called at the subsequent inquest A medical man from some distance away was employed for this purpose and I am told that this is the local custom Surely this cannot make for the whole truth ?

I wrote to the coroner concerned asking to be informed why my evidence had not been called but so far have not had a reply—I am etc

Earlswood Surrey August 18 J L BARFORD

London Emergency Bed Service

SIR,—I would like to express my appreciation of the London Voluntary Hospitals Emergency Bed Service I understand that it has not yet received the full measure of support it so richly deserves The staff are always refreshingly courteous and do their best to assist one in every possible way

I recently had a patient with an acute generalized eczema for which institutional treatment was essential As this type of case is difficult, if not impossible, to get into the average teaching hospital, I applied to the Emergency Bed Service After three-quarters of an hour's telephoning they got him a bed at last They rang up, in all about ten hospitals Anyone who has tried to do this himself during a busy morning will realize the extreme value of such a service

The scheme is unique and brilliantly simple, its success should be assured by every doctor giving it his support—I am, etc,

London N4 August 20 E M G GALTON

Obituary

H R JEREMY, F R C S

Ophthalmic Surgeon and Lecturer on Ophthalmic Surgery, the London Hospital

Mr Harold Rowe Jeremy, who died on August 16 after a long illness was well known as an ophthalmologist in London A native of Merthyr Tydfil he studied medicine at University College, London, the London Hospital, and St Bartholomew's, and qualified as M R C S, L R C P in 1901 He early decided to take up the study of diseases of the eye, and his first post was that of ophthalmic house-surgeon at the London Hospital, after which he became chief clinical assistant at Moorfields, surgeon to the Western Ophthalmic Hospital, and ophthalmic surgeon to the Queen's Hospital for Children and Eastern Dispensary Mr Jeremy returned to the London Hospital as assistant ophthalmic surgeon and lecturer in ophthalmology in the Medical College He had taken his F R C S in 1911 He was also consulting ophthalmic surgeon to St Peter's Hospital, to the Claybury Mental Hospital, and to the Walthamstow, Wanstead, and Leyton Hospital His writings included papers on perithelioma of the orbit, birth injuries of the fundus oculi, cataract in mongolism, and retinal detachment, read to the Ophthalmological Section of the Royal Society of Medicine and published in the *Proceedings* and on cataract following thyroidectomy, published in the *British Journal of Ophthalmology* Mr Jeremy joined the British Medical Association in 1911

Dr JOHN CUTHBERT GEORGE DICKINSON who died in a nursing home at Torquay on August 14, had practised for the past twelve years in partnership at Braunton, North Devon The second son of the late William George Dickinson of Roos East Yorks, he studied medicine at Guy's Hospital and took the English Conjoint diplomas in 1924 followed by the M B, B S Lond degrees in 1926 after two years as house-surgeon to the Taunton and Somerset Hospital and to the North Devon Infirmary Dr Dickinson became honorary physician to the Barnstaple and North Devon Dispensary and medical officer to the Braunton Child Welfare and Maternity Centre, he was also divisional surgeon to the St John Ambulance Brigade and took a prominent part in its activities He took a warm interest in the local affairs of Braunton and for some time had a seat on the Parish Council He joined the British Medical Association in 1929 and was an active member of the North Devon (Barnstaple) Division, serving as its representative on the Branch Council for the last four or five years, and as chairman of the Division in 1933–4

The following well known foreign medical men have recently died Dr A CESARIS DEMEL emeritus professor of morbid anatomy at Pisa, aged 72, Dr A GIANELLI an eminent psychiatrist of Rome, aged 73, Professor A BONANNE a prominent pharmacologist of Rome, aged 68 Dr WALTER JACOBI director of the clinic for psychiatry and nervous diseases at Greifswald, aged 48, and Dr MARTIN HERMAN honorary professor at Brussels University, honorary director of the Hainaut Institute of Hygiene and Bacteriology, and member of the editorial staff of *Le Scalpel*

Medico-Legal

THE LIMITS OF A GUARANTEE

A case of some importance to hospital almoners[1] was decided in the Ilford County Court on March 28 by Judge Davies, K C A young man was admitted to a hospital for acute jaundice and his father signed a guarantee that he would pay the patient's fees The form stated that the guarantee was for payment in accordance with rules printed on the back of the form These laid down that the duration of a patient's stay was usually limited to eight weeks, and that the days of admission and discharge were counted as one day and spoke of the responsibility of the medical officer for the patient's treatment during his stay ' at the hospital The patient left after about five weeks, and there was nothing in the evidence to show that he was expected to return He attended out patients A fortnight later the physician in charge told the father that the son should go back into hospital to have some fluid removed, and so he was readmitted He was never discharged again, and died of his original complaint four months later The accounts for this second stay were rendered to the father who paid some of them but left a balance unpaid The hospital sued him for the balance, but lost the action

By the Statute of Frauds a guarantee must be in writing and so the hospital in order to succeed, had to prove that the guarantee signed in respect of the first visit applied also to the expenses of the second His Honour explained that each guarantee has to be construed not necessarily literally but in the light of the surrounding circumstances The wording of the document did not specifically state a period but it pointed he thought, to an intention by the parties that the guarantee should be limited to the expenses incurred from the admission of the patient until he should leave hospital, unless his departure was intended to be merely temporary, which it was not The document contemplated a single stay at the hospital, and the father intended to guarantee this stay only If the guarantee applied also to any subsequent stay he considered it would expose the guarantor to a possible liability which it was most unlikely that the hospital would seek to impose or the guarantor to accept The patient might get better and leave the hospital for a time, and then get worse and return again and again for many years If the guarantor were held liable for all these visits his liability might extend to hundreds of pounds and last the greater part of his life The language of the document did not indicate such a conclusion but rather pointed the other way The written guarantee therefore did not extend to the second visit and no verbal or implied guarantee could be valid

Counsel for the hospital tried to establish that on the second visit the father had requested the hospital to accommodate his

[1] King George Hospital v Meech L J Newsp, C C R, 1938 5, 208 (July)

son and had undertaken responsibility for the cost The learned judge however found that no such undertaking could be implied although the mother had agreed to the charge and the father had paid some of the total As the son had been admitted on the first occasion on a guarantee and the regulations of the hospital required a guarantee and nothing had been said to suggest that he was now being admitted on different terms the father's liability remained as it had been on the first occasion He did not think that either party supposed that the first guarantee was applicable to the second visit though the hospital authorities may have thought that the father's conduct amounted to a new and this time an implied contract of guarantee—which of course cannot be enforced at law

A finding of a county court judge in law does not bind any court The decision however points the moral that an almoner should insist on a fresh guarantee every time a patient is readmitted

The Services

MILITARY OPERATIONS IN WAZIRISTAN

The King has approved the following awards in recognition of valuable services rendered in the field in connexion with the operations in Waziristan during the period September 16 to December 15 1937

C B E (Military Division)

Colonel RICHARD ERNEST UPTON NEWMAN O B E M C M B Ch B R A M C (now retired pay)

M B E (Military Division)

Captain VICTOR MANSFIELD ALBUQUERQUE F R C S I M S

D S O

Lieutenant Colonel STANLEY ARNOTT M D R A M C

I M S

Assistant Surgeon 3rd Class (now Lieutenant) MICHAEL CLARENCE ST JOHN CONDILLAC M R C S L R C P Auxiliary Force Medical Corps India

Mentioned in Dispatches

The names of Colonel R E U Newman C B E M C M B Ch B late R A M C (now retired pay) Lieutenant Colonel S Arnott D S O M D R A M C Captain Richard Ernest Waterson M B Ch B R A M C and Jemadar Gurbachan Singh Sethi and Jemadar Sant Singh Indian Medical Department have been brought to notice by His Excellency the Commander in Chief in India for distinguished services rendered in connexion with the operations in Waziristan during the period September 16 to December 15 1937

DEATHS IN THE SERVICES

Dr WILLIAM DELANO WALKER serving with the R A F Medical Branch lost his life when an aeroplane piloted by Lieutenant E J Boyle of the King's Own Scottish Borderers crashed near Richmond Yorkshire on August 16 both officers being killed Dr W D Walker was an Australian the son of a surgeon and had served in the Australian Army Medical Corps He graduated at Adelaide University as B Sc with honours in 1923 and as M B B S in 1925 After working as house surgeon and physician at the Adelaide General Hospital and Children's Hospital he came to England where he filled the post of resident at the Great Northern Hospital Holloway before joining the Royal Air Force as a civilian medical officer He was a Fellow of the Zoological Geographical and Photographic Societies and a member of the British Medical Association which he joined at the beginning of 1926

A correspondent writes Dr Walker was a man of great ability and exceptional versatility A promising academic career was interrupted during the war and he enlisted in the Australian Army Medical Corps when a second year medical student He next came to England in 1929 and since then had spent much of his time in fitting himself for what he had hoped to make his life work—service with the Australian Aerial Medical Service then only in its infancy but he knew it would develop into an essential feature of national life In London he held resident posts in twelve different hospitals and did extensive postgraduate study in many specialized centres At the invitation of Professor Jameson dean of the London School of Hygiene and Tropical Medicine he gave the first public lecture on The Flying Doctor in Australia with Air Vice Marshal Sir David Munro in the chair Acting on Sir David's advice he sought to gain experience of the medical aspect of aviation while attached as a civilian medical officer in the R A F and had spent nearly four years in this capacity He was a keen pilot and also spent some time in visiting aircraft factories and interesting the experts in the possibilities of the flying hospitals which he envisaged for the future

Lieutenant Colonel ROBERT LENDON ARGLES R A M C (ret) died at Hythe on August 2 aged 65 He was born on August 24 1872 was educated at St Mary's Hospital and took the L S A in 1899 After acting as resident casualty officer at St Mary's Hospital he entered the Royal Army Medical Corps as lieutenant on April 25 1900 attained the rank of lieutenant colonel on December 26 1917 and retired on June 28 1922 He served throughout the South African War 1899 to 1902 when he was employed in operations in Cape Colony and in the Orange River Colony and received the Queen's and King's medals with two clasps each He also served in the war of 1914–18 After retirement he was employed at Hythe He had been a member of the British Medical Association for seventeen years

Universities and Colleges

SOCIETY OF APOTHECARIES OF LONDON

The following candidates have passed in the subjects indicated

SURGERY—J F Cooper T L B Iredale J R F E Jenkins K R P Kent I J Mathias C R Morgan T I Palmer E F G Stewart J Whitehead

MEDICINE—J F Cooper E K Gardner J C Gregory B M Hulse N A Jevons J A V Shone A B Taylor

FORENSIC MEDICINE—J F Cooper E K Gardner J C Gregory B M Hulse N A Jevons J A V Shone A B Taylor

MIDWIFERY—J V Braithwaite J F Cooper E K Gardner G R Green J A L Leeming J Lieber N W R Lucas A C Rogers T I Thomas J W Weston

The diploma of the Society has been granted to J F Cooper J C Gregory B M Hulse I J Mathias and E F G Stewart

Medical News

The annual congress of the Chartered Society of Massage and Medical Gymnastics will be held at the London School of Economics Houghton Street W C from September 19 to 23 The opening address on the morning of September 19 will be by Professor Henry Cohen on The Treatment of Disease in the afternoon of the same day Mr R Ollerenshaw will lecture on Pes Cavus Lectures on subsequent days will be given by Mr P J Verrall Dr W Brockbank Mr T T Stamm Dr N B Capon and Mr C Lambrinudi The Founders Lecture will be given this year by Professor D M Blair on The Anatomy of Movement Further details may be obtained from the Secretary of the Chartered Society Tavistock House (North) Tavistock Square London W C 1

The next Dutch Belgian Congress of Neurology and Psychiatry will be held in Ghent from September 23 to 25 Further information can be obtained from Dr A Lero 18 Rue Beekman Liege

A course in electrocardiography and other graphic methods of examination will be held in the Balneological University Institute at Bad Nauheim from September 19 to 22

The fourth annual meeting of German neurologists and psychiatrists will be held at Cologne from September 24 to 28 Further information can be obtained from Dr Brügelmann Hohenzollernring 75, Cologne

A general meeting of the International Therapeutical Union founded in 1934 will be held in Paris on October 12 under the presidency of Professor Loeper Further information can be obtained from Dr G Leven Rue de Teheran 24 Paris 8e

The acre of flat roof on the new building of Messrs Derry and Toms in Kensington High Street is covered with the beautiful Derry Gardens They have been thrown open since completion for the benefit of hospitals and nurses institutions in London and over £4 000 has already been received During the week Monday September 5 to Saturday September 10 they are to be seen by visitors from 9 a m to 6 p m on behalf of St Bartholomew's Hospital There is no charge for admission but a contribution of one shilling and upward may be given to the nurses in attendance

A sanitary code regulation prohibiting the importation breeding and sale of birds of the parrot family went into effect in New York State on June 1 and a similar regulation in New York City on July 1

In 1937 11 806 cases of small pox were notified in the United States as compared with 7 044 in 1936 The thinly populated North Western States were most affected The character of the attack was generally mild

An institute for instruction in nutrition has been founded in Berlin under the direction of Professor S Bommer

The office of the Faculty of Medicine of the University of Birmingham has now been transferred from the University Edmund Street to the Medical School Hospitals Centre, Edgbaston Birmingham 15 Telephone No Selly Oak 1162

EPIDEMIOLOGICAL NOTES

Poliomyelitis

The incidence of acute poliomyelitis continues to rise, 81 cases having been notified in England and Wales compared with 61 in the previous week the figure for the corresponding week last year was 25 In London the number notified was 3 the same as last week, while in Scotland notifications rose from 9 to 15 Of the 81 cases in England and Wales more than 2 were reported during the week in Braintree (rural) 5, Braintree (urban) 6, Brownhills (Staffs) 3 Birmingham 3 Dunmow 5, Grimsby 4 Kingston-upon-Hull 4 London 3, Reading 3, Swansea 8, Worthing 3 Last week (ending August 20) reports came to hand of 19 cases in which the diagnosis is confirmed Braintree 6, Gainsborough 3 2 each in Hale (Cheshire), Nottingham Colchester, Portsmouth and 1 each in Whitwell (Derbyshire) and Halstead (Essex), in the same week 1 death was reported in each of the following towns Braintree, Cowley (Oxford) Farnham, Grimsby, Hadleigh, Halstead, Portsmouth, South Shields

Typhoid Fever

The Farnworth (Lancs) outbreak of typhoid fever appears to be at an end, no cases having been notified since August 17 At August 23, 41 persons had been affected, of whom 5 have died A peculiar feature of the outbreak has been that the cases with one exception, were restricted to about half a dozen avenues on the New Bury Housing Estate So far the manner in which they were infected has not been ascertained

Diphtheria and Scarlet Fever*

Notifications of diphtheria in England and Wales during the week under review rose from 825 to 892 the chief centres in which increases were recorded are Birmingham 25 (14) Cardiff 8 (4) Easington 12 (6) Kingston upon-Hull 11 (9) Lambeth 11 (8) Newcastle 9 (7) Salford 13 (10) South Shields 16 (12) A high incidence of diphtheria which shows no signs of diminishing has been encountered in South Shields since the beginning of the year 250 cases have been notified with 45 deaths compared with 128 cases and 19 deaths during the whole of last year In the week under review 16 cases were reported, compared with 12 in the previous week while the occurrence of 3 deaths in the week indicates that the infection is of a severe type In London there was an increase from 113 to 115 in the week under review—Battersea 5 (1) Bermondsey 4 (0), Hampstead 2 (0) Lambeth 11 (8), Paddington 7 (2), Poplar 9 (3), Shoreditch 7 (5) There was a drop in the notifications for Scotland—113 as against 126—but in Eire a slight increase was recorded—43 compared with 39 in the previous week, in Northern Ireland on the other hand a considerable decrease was reported 13 cases being notified compared with 20 in the previous week Deaths from diphtheria in the 126 Great Towns of England and Wales rose from 16 to 21 and in London from *nil* to 1 of the 21 deaths recorded in the 126 Great Towns 2 each occurred in South Shields (2) Leicester (1) and Wolverhampton (0) In the 16 principal towns of Scotland there were 2 deaths from diphtheria—1 each in Edinburgh and Dundee There was an appreciable drop in the notifications of scarlet fever in England and Wales during the week—1 129 compared with 1 248—and in London also—107 as against 112 these figures were well below the median values for the last nine years

Primary and Influenzal Pneumonia

There was a slight increase in the notifications of primary and influenzal pneumonia in England and Wales during the week—429, compared with 423 in the previous week—while in London the incidence continues to drop—33, compared with 40 recorded in the previous week Both these figures are below the median values for the last nine years

Measles and Whooping-cough

There was only 1 death (in Kingston upon Hull) from measles in the 126 Great Towns of England and Wales during the week compared with 3 in the previous week The average daily admissions to the L C C fever hospitals were 7 (6) in the metropolitan boroughs in which measles is notifiable notifications of measles dropped in five, remained the same in two, and rose in four—Bermondsey 3 (0), Greenwich 4 (2) Hampstead 1 (0), and St Pancras 13 (8) In Scotland notifications fell from 66 to 49 in the week under review of the 49 cases 14 (24) occurred in Kirkcaldy, 12 (22) in Dunfermline and 5 each in Edinburgh (10) and Greenock (2) There was 1 death (in Dunfermline) from measles in the 16 principal towns of Scotland In the 126 Great Towns of England and Wales there was 1 death (in Lincoln) from whooping cough during the week compared with 5 recorded in the previous week In Scotland 52 (27) cases of whooping cough were notified—41 (21) in Glasgow—and 5 (3) deaths (all in Glasgow)

Cholera

During the week ended August 13 1 066 cases of cholera and 314 deaths from this disease were reported in Shanghai and in Hong Kong 39 cases with 17 deaths During the four week period ended August 13, 2 957 cases were recorded in the International Settlement and French Concession at Shanghai compared with 2 176 in the previous four week period (June 19 to July 16) In the same period there was a decline in the incidence of cholera in the ports of South China (Swatow, Canton Hong Kong and Macao) In British India 5 342 cases with 2,306 deaths were reported in the Central Provinces 620 cases with 192 deaths in Bombay (Presidency) 741 cases with 299 deaths in the United Provinces The epidemic in the Central Provinces which appeared earlier than usual this year does not yet seem to have reached its peak The number of cases increased considerably during the four weeks ended August 13 reaching 20 029 cases corresponding to a morbidity rate of 1 679 per 100 000 population (annual basis) During these four weeks the incidence of the disease declined in the Punjab and the United Provinces (Upper Valley of the Ganges) and in Madras (Presidency)

* Except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

No 32.

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended August 13 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths at 1 of Deaths recorded under each infectious disease are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 13 principal towns in Eire (e) The 10 principal towns (9 in 1937) in Northern Ireland

A dash — denotes no cases, a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929-37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	14	3	12	1	—	19	1	5		2		
Deaths		1	1				2	2				
Diphtheria	892	115	115	+3	13	903	91	158	+2	22	798	116
Deaths	21	1	2	2	—	22	—	4	2	—		
Dysentery	21	7	36		—	25	2	14		—		
Deaths				—	—				—	—		
Encephalitis lethargica, acute	3	—	1		—	1	—	1	1	—		
Deaths		1					2					
Enteric (typhoid and paratyphoid) fever	24	1	17	4	2	65	1	5	4	1	63	
Deaths	—	—	—	—	—	1	—	—	—	—		
Erysipelas			53	5	2			53	3	6		
Deaths		—					—					
Infective enteritis or diarrhoea under 2 years												
Deaths	59	18	13	6	4	41	14	17	9	8		
Measles			+9		2			23		—		
Deaths	1	—	1	2	—	3	—	—	1	—		
Ophthalmia neonatorum												
Deaths	95	12	14		—	104	13	45		—		
Pneumonia influenzal ‡	+29	33	—		2	+65	36	4	1	4	452	35
Deaths (from Influenza)	12	3	2	—	1	14	1	—	—	—		
Pneumonia primary			5	9				86	7			
Deaths		7		14	2		8		10	6		
Polio-encephalitis acute	6	—				2	—					
Deaths		—					—					
Poliomyelitis acute	81	3	15	3	—	25	3	—		1		
Deaths		—					—					
Puerperal fever	3*	3	8	4	—	35	1	17	2	—		
Deaths		—					1†					
Puerperal pyrexia	192	19	14		11	152	22	15		—		
Deaths												
Relapsing fever	1	—			—	—	—	—		—		
Deaths												
Scarlet fever	1 129	107	253	50	60	1 171	101	310	58	69	1 314	217
Deaths	—	—	1	—	—	3	—	—	1	—		
Small pox	—	—	—		—	—	—	—		—		
Deaths	—	—		—	—	—	—		—	—		
Typhus fever	—	—	—	—	—	—	—	—	—	—		
Deaths				—	—				—	—		
Whooping-cough			52		18			50		7		
Deaths	1	—	5	1	1	13	3	4	1	1		
Deaths (0-1 year)	248	36	66	22	10	295	46	75	37	23		
Infant mortality rate (per 1,000 live births)	41	29				+3	38					
Deaths (excluding stillbirths)	3 735	687	539	148	103	3 627	711	536	174	128		
Annual death rate (per 1 000 persons living)	9 2	8·7	11 0	10 0	9 1	9 0	9 0	11 0	11 9	12.3		
Live births	6 813	1 311	828	411	226	7 006	1 235	933	372	234		
Annual rate per 1 000 persons living	16 7	16 7	16 9	27 8	20 0	17 3	15 6	19 1	25 4	22 4		
Stillbirths	278	30				241	42					
Rate per 1 000 total births (including stillborn)	39	22				33	33				-	

* After October 1 1937 puerperal fever was made notifiable only in the administrative county of London.

† Death from puerperal sepsis.

‡ Includes primary form in figures for England and Wales, London (administrative county) and Northern Ireland.

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone, unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary B M A House, Tavistock Square W C 1, on receipt of proofs Authors overseas should indicate on MSS if reprints are required as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary B M A House, Tavistock Square W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are

EDITOR OF THE *BRITISH MEDICAL JOURNAL* *Attiology Westcent London*

SECRETARY *Medisecra Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Cumann Doctuiri na h Éireann (I M A and B M A) 18 Kildare Street, Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Cleaning Slides for Blood Films

'J S M would be grateful for a really efficient method of cleaning slides for blood films to prevent the mosaic appearance consequent on grease

A Strict Vegetarian Diet

'W H S writes The great interest of the note by Sir Leonard Hill in your issue of August 20 (p 417) prompts me to inquire on the following points (*a*) Do the boy's parents also subsist on the diet enumerated? (*b*) Does the family live an entirely sylvan existence or does bread-winning in a town or city play a part in, say the father's life? Having regard to the experience in the late war when a meat dietary is said to have assisted in resisting the ill effects of the noise etc of bombardment it is interesting to speculate how the diet enumerated in the article would enable an individual to support a working life in a large city

LETTERS, NOTES, ETC

Adrenaline for Wasp Sting

Dr F O TAYLOR (Coldingham) writes A young woman came to consult me on August 18 she was almost unrecognizable—flushed swollen about the face and very embarrassed although she pluckily kept control A wasp had stung her on the second finger of the right hand about three quarters of an hour before while she was picking up some goods in a baker's shop The pulse was rapid and thready and headache was rapidly becoming severe I gave her ½ c.cm of 1 in 1000 adrenaline chloride (P D and Co) and made a little further examination The stung finger was twice the normal size the neighbouring first finger was almost as big and a red swollen ring was spreading over the back and palm of the hand Normal sensation had almost left the worst part but the patient said that she had a peculiar sensation of burning and swelling all over There were groups of acute circular weals on the arm and probably here and there all over the body Vision was only slightly affected though the eyes were bloodshot and I imagine that sight would have been disturbed if the treatment had not taken almost immediate effect She improved so rapidly that I thought all her troubles would soon be over the weals were almost flat and the swelling sensation was passing off I allowed her to go home and apart from a diffuse rash or blush with more itching which was soothed by bathing in a cool bath made up with a lotion the general symptoms had entirely disappeared the next morning The sting was obviously very much more poisonous locally than usual there was a patch about four inches round it which reminded me more of the results of the attack of a "cleg" (horsefly)

Abortion and the Law

Dr A J BROCK (North Queensferry) in the course of a letter on this subject, writes Surely it is up to the medical profession to consider the wider sociological bearings of this problem Obviously the law is now going to make it easier for doctors to practise abortion, they may do it if they consider that the prospective mother's health would otherwise be seriously jeopardized, and this clearly will afford our profession a much wider field for the operation and will relieve them (as well as their clients) of many immediate anxieties An urgent social symptom is thus relieved and tension temporarily relaxed May I now suggest the wider sociological implications? History surely shows that the increasing practice of abortion and birth prevention has always accompanied disintegration of society Indeed infanticide itself is another almost inevitable aspect of the same process I think it is time that the medical profession should wake up to the broad issues at stake

Medical Aid in Spain

The honorary secretary of the Spanish Medical Aid Committee writes Recent reports from Spain tell us of the magnificent way in which a modern hospital system is being evolved out of the emergency and improvised medical services of the earlier war days We are very proud of England's share in this, for the Spanish people acknowledge with deepest gratitude and appreciation our nurses and doctors, our instruments and equipment, our ambulances and supplies Unfortunately, we can never send enough The need grows with each air raid, with every offensive An x ray apparatus is very badly needed for the blood transfusion service in Barcelona They have now 14 000 donors on their lists, and all day and every day they have at least 200 contributing blood These donors give their blood once a month But by reason of malnutrition a large number of people in Barcelona and Eastern Spain are tuberculous It is essential to make sure that blood is not taken from these people In order to avoid this an x ray apparatus for screening chests is an immediate necessity This will cost £320 and we cannot supply it as we have not the money May we appeal for contributions? It would be a splendid gesture if this x ray apparatus could go out from the medical profession here to assist their colleagues in Spain Cheques should be sent to the Treasurers Spanish Medical Aid Committee, 24 New Oxford Street W C 1

New Treatment for Coryza

At the East Sussex Quarter Sessions this week counsel for the prosecution is reported to have said that people should realize that it was as easy to get rid of blackmail as of a cold in the head They had only to go to the police

Medical Golf

The ninth autumn meeting of the Sussex Medical and Dental Golfing Society will be held on the Brighton and Hove Golf Club's links on Sunday, September 18 In the morning singles against bogey will be played for the captain's prize and in the afternoon there will be two ball foursomes against bogey Full details may be obtained from Mr Harold Downer 40, Wilbury Road, Hove 3

Corrigendum

In the brief medico-legal report headed A Nurse is a Workman' in our issue of August 20 (p 429) it was stated that a nurse was injured by the explosion of a tin of antiphlogistine We are asked by the manufacturers of antiphlogistine to state that their preparation contains nothing of an explosive or dangerous nature, and that it is impossible for it to explode if used according to the directions

Vaccine with Sulphanilamide for Gonorrhoea

Mr A J COKKINIS and Dr G L M MCELLIGOTT write We note that our article on Sulphanilamide in Gonorrhoea published in the *Lancet* on August 13 has been quoted in a circular emanating from the medical propaganda section of a firm of manufacturing chemists, referring to the combined use of vaccine with sulphanilamide We wish to point out that all stock vaccines used in our clinic are prepared in the Inoculation Department of St Mary's Hospital

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Bulletin of the Johns Hopkins Hospital

Baltimore vol 62 May 1938

Coarctation of Aorta with Lateral Blood Pressure in Arms Case Report—R G Hiss.
Cevitamic Acid Content of Foetal Blood—C P Manahan and N J Eastman.
Studies concerning Hypertension in Childhood I Development of Essential Hypertension under Observation II Occurrence of Hypertension in Acute Rheumatic Fever in Childhood—H T Essig and M Hecht
Researches on Tetanus VII (1) Time required for Fixation of Fatal Quantity of Tetanus Toxin (2) Return Passage of Toxin by Way of Lymphatic Capillaries to Cardiovascular System (3) Return Passage as Basis of Method for Approximate Determination of Volume of Lymph in Closed Lymphatic System—J J Abel B Hamel A F Jonas and W Chalkley

Deutsche Medizinische Wochenschrift

Berlin vol 64 June 17 1938

Results of Retention of Remains of Placenta in Uterus after Birth—J Gratzow and F Langhoff
Heart Neurosis and Organic Disease of Circulatory System—L Demuth
Constitutional Factor in Tuberculous Processes (*concluded*)—K Klare
Complications of Radiotherapy their Prevention and Treatment—K Bangert
Atypical Schizophrenia and Schizophrenia like Diseases in Relation to Heredity—A Bostroem
Clinical Conceptions of Addisonism—M Nicolai
The apeutic Results of Treatment with the Patient's Own Blood subjected to Ultra violet Rays.—Grossekettler and Luhdemann
Injurious Action of Acetic Acid Clay in Treatment of Wounds—K G Stauf
Dilatation of Cervix by Metranoikter—H Dietel

Retained Placenta—This study comes from a maternity hospital under the direction of Professor Fuchs in Danzig and stresses the sinister significance of retention of the placenta. Statistics from this and other hospitals are quoted and the comparative merits of different measures are discussed

Journal of the American Medical Association

Chicago vol 110 June 18 1938

Aims of the Medical Profession as they Relate to the Public—I Abell
Importance of Restoration of Blood Supply in Fractures of Neck of Femur—F H Albee.
Psychosis and Central Nervous System—H D Singer
Severe Reactions following Transfusion in Hemolytic Jaundice—J C Sharpe and H H. Davis
Multiple Primary Malignant Tumours—J S Eisenstaedt
Thrombosis of Axillary Vein—T Kaplan
Nicotinic Acid in Prevention of Pellagra—H Schmidt and V Sydenstricker
Vitamin A—O A Bessey and S B Wolfbach

Klinische Wochenschrift

Berlin vol 17 June 18 1938

Accelerated Pace of *Development of Present-day Youth*—C Bennholdt Thomsen
Cocaine and Blood Sugar—H A Oelkers
Treatment of Hyperthyroidism with Vitamin A and Vitamin B_1—J Jacobi and H Pomp
Infection of Central Nervous System in Lymphogranuloma Inguinale—B Koschucharoff
Indications for Vitamin C Therapy—G Gachtgens
Symptomatology and Course of Hypervitaminosis in Rats following Administration of Concentrated Vitamin A by Mouth through Skin and Subcutaneously II—W Weslaw B Wronski A Wroblewski and B Wroblewski
Pathogenesis of Acute Myeloblastic Leukaemia—K Voit and G Landes
Sugar Content of Cerebrospinal Fluid during Insulin Coma in Schizophrenia—M Fischer
Injurious Effect of Atophan Preparations on Liver—G Kohne
Cholinesterase Activity of Certain Muscles in Rats after Destruction of Cerebellum—E Maruta and C Torda
Chronic Enteritis—G Hetenyi

Vitamins A and B_1 in Hyperthyroidism—Neither vitamin A nor the combination of vitamin A and vitamin B_1 had any beneficial effect on hyperthyroidism

Atophan—This is a description of a case of subacute yellow atrophy of the liver resulting from the administration of atophan over a considerable length of time

Lancet

London vol 1 June 18 1938

Control of Infection in Children's Wards—R H Dobbs and R Kempthorne
Secondary Carcinoma of Bone—F Roberts
Blood Changes in Anxiety States—D Hill and S Taylor
Acute Scurvy associated with Vitamin B Deficiency—J B Youn
Blood Transfusion with Heparin—H Knoll and O Schurch
Biological Effects of Synthetic Oestrogenic Substance 4 4-dihydroxy α β diethylstilbene—E C Dodds and R L Noble
Massive Pneumonia Type III with Massive Collapse treated with 4-paramino benzenesulphonamidopyridine—M Tetlow and W A Oliver

Chemotherapy of Pneumonia—The patient with massive collapse of the lungs made a good recovery In three cases of pneumonia in which Types III XI and I pneumococci were concerned the bacteriological findings as modified after the chemotherapeutic administration are described They included rapid disappearance of pneumococci and their decapsulation and a consequent loss of type specificity

Medizinische Klinik

Berlin vol 34 June 17 1938

Suppuration of Pyramidal Air Cells of Temporal Bone—A Tobeck.
Typhoid Epidemics and Carriers of Typhoid Bacilli—T Wohlfeil
Treatment of Bang's Disease with Blood Transfusions—K Blumberger
Case of Meningococcal Sepsis followed by Meningitis simulating Erythema Exudativum Multiforme—H E Buttner
Do Salyrgan Injections Raise Carbohydrate Tolerance in Diabetics?—H. Buhwald
Traumatic Hepatoses—F v Hodenberg
Helminthiasis—W Kaufmann
Tumours of Inguinal Region Round Ligament Tumours—G Neubauer
Pseudo-nephrolithiasis as Result of Appendicitis—H Kunz.
New Publications on Physiology and Pathology of Digestive Organs—L. Morpoth

Medizinische Welt

Berlin vol 12 June 18 1938

Anatomy of Poliomyelitis 1937 to 1938—G Peters
Dietetic Problems in Infectious Diseases (*concluded*)—H Lotze.
Prostatectomy—W Heckenbach
Electrophoresis with Vitamins and Hormones and its Use in Practice—W Ruge
Tuberculous Meningitis following Trauma to Skull—H Stadler
Strophanthin in General Practice—C Weyrich

Münchener Medizinische Wochenschrift

Munich vol 85 June 17 1938

Asepsis of Drugs administered Parenterally—F Konrich
Gudzent's Allergy Tests in Rheumatism and Gout.—E Tancré
Observations on Series of Patients with Epidemic Encephalitis—H Weil
Artificial Respiration by Laymen—H Hoske
Treatment of Mastitis—W Luttge
Is Small pox Vaccination Still Necessary?—H Krauss
Radiographs showing Changes resembling Tumours in Tabetic Arthropathies—W Schröder
Phaeochromocytoma of Adrenals—F Brenner H Konzett and F Nagl
Treatment of Abscess of Lung with Short wave Diathermy—K Schindling.
Principles and Limitations of and Tolerance to Endobronchial Iodine Oil Therapy—G Anton

Nature

London vol. 141 June 18 1938

Molecular Rejuvenation of Muscle Tissue—G Hevesy and O Pebbe.
Restrophe Activity of Blood—C Wetzler Liebe and B P Wiesner
Cytochrome Oxidase—D C Harrison

New England Journal of Medicine

Boston vol 218 June 16 1938

Observations of a Rural Health Worker —A Stampar
*Localization of Intracranial Lesions by Electro encephalography —D Williams and F A Gibbs
Observations on Convulsant Treatment of Schizophrenia with Metrazol —L H Cohen
Spontaneous Thyroid Storm associated with Diabetic Acidosis and Paralytic Ileus —E Deutsch
Incidence of Tuberculous Infection in Surgically Removed Tonsils —L Alpert

Electro encephalography —Williams and Gibbs report encouraging results in the localization of intracranial lesions by the method described by Walter Pads moistened with salt solution are placed on the scalp and from these are led off and multiplied the minute changes in potential—of the order of 1/50,000 of a volt—which are produced by the brain With three pairs of electrodes connected to three separate amplifying and recording units it is possible to determine which electrode is over the area of abnormal discharge Williams and Gibbs studied eighty cases In fifty a focus of abnormal activity was found In thirty seven of these the position of an organic lesion was established In every case verified by operation or necropsy the position of the lesion coincided with the area of electrically abnormal cortex

Nordisk Medicinsk Tidskrift

Stockholm vol 15 June 18 1938

*Certain Objectives and Experiences of Surgical Hospital in Lund with Prostatectomies and Hypertrophy of Prostate —G Petrén
Studies of Frequency of Gastric Ulcer II Frequency and Significance of Manifest Haemorrhage Increasing Incidence of Haemorrhage —G Alsted
Gastro jejuno-colic Fistula after Gastro enterostomy —M Dahle
Experimental Study of the Reticulo endothelial Element of Bone Marrow —N G Nordenson
Spina Bifida Occulta and Certain Related Conditions —O Ask

Prostatectomy —The basis of this study is supplied by 409 transvesical prostatectomies performed in the period 1922 to 1937 There were forty eight post operative deaths—that is a mortality of 11 7 per cent The mortality during the last five years was reduced to 10 3 per cent

Presse Medicale

Paris vol 46 June 15 1938

Some Considerations on Parasitic Epilepsy —Ph Pagniez and A Plichet
*Role of Sympathetic System in Physiology and Pathology of Pain —A Salmon
*Transmission of Nervous Impulses in Central Nervous System —D Nachmansohn

Parasitic Epilepsy —The authors examined a number of cases of epilepsy alleged to be due to external or internal parasites both in animals and in man and conclude that parasitic epilepsy in man must be extremely rare if it occurs at all

Sympathetic System and Pain —Salmon describes the characteristic features of sympathetic as contrasted with central (including thalamic and cortical) pain and concludes that the sympathetic system exercises a dominating influence over the physiology and pathology of pain for there would appear to be a sympathetic element in most kinds of pain

Transmission of Nervous Impulses —The chief objection to the chemical theory particularly with regard to those nerves which supply the striated muscles and the sympathetic ganglia, is the extraordinary rapidity of the chemical processes involved (something of the order of 2/1 000 of a second) the author shows however that in view of the relatively enormous concentration of cholinesterase at the neuro muscular junctions and the synapses this ultra rapid hydrolysis of acetylcholine is quite feasible

480 a

Paris vol 46 June 18 1938

Tuberculosis and Civil Servants —G Poix
*Intradermal Injections of Blood for Rheumatic Pain —J Le Calvé
*Do Dangerous Universal Donors Exist?—P Mouriau E Balgairies and L Christiaens
*The Gonococcus and Chemotherapeutic Superabortive Treatment —P Barbellion and A Garibaldi

Autohaemotherapy in Rheumatism —J Le Calve discusses the rationale of the analgesic effect of intradermal injections and gives his reasons for adopting autohaemotherapy for this purpose Forty five cases of rheumatic or rheumatoid pain were treated including sacro iliac rheumatism, arthritis of the hip peri-arthritis of the shoulder sciatica, chronic arthritis deformans and chronic rheumatism In most of these cases the author also used injections of an oil containing organic sulphur

Dangerous Universal Donors —The authors discuss the significance of the so called dangerous universal donor both from the clinical and the haematological standpoint, and come to the conclusion that the fault lies not with the donor but with the recipient, and is probably related to some form of allergy or hypersensitiveness In any case it would seem to have no connexion with the highly specific phenomenon of iso agglutination

Sulphamides and Gonorrhoea —The authors have investigated the action of sulphamides (chiefly "1162F") in more than 200 cases of gonorrhoea at various stages They are of the opinion that the classical permanganate treatment remains the treatment of choice with two exceptions (1) *in recent* subacute anterior gonococcal urethritis, in which the authors superabortive treatment is indicated (this is a combination of silver vitellinate sulphamide, and anti gonococcal vaccine) (2) chronic gonorrhoea in which chemotherapy may be combined with local treatment

Schweizerische Medizinische Wochenschrift

Basle vol 68 June 18 1938

Rheumatism and the Sympathetic —H Iselin
Qualitative and Quantitative Test for Potency of Anti anaemic Liver Extracts *in vitro* —G A Overbeck P J Gaillard and S E de Jongh
Movement of Heart and Great Vessels as Observed Directly by Screening —E Attinger
Cerebral and Pulmonary Embolus following Hysterosalpingography —G Hemmeler

Science

New York vol 87 June 17 1938

Alleged Birth of Triplets in the Rhesus Monkey —C G Hartman
Perfusion of Whole Organs in Lindbergh Apparatus with Fluids containing Haemocyanin as Respiratory Pigment —R Bing
Estimation of Fibre Fat Cells and Connective Tissue in Muscle —H Baker
Photodynamical Bio electrical Potential —T Cunliffe Barnes and H L Golubock
Specificity of Pepsin Action —J S Fruton and M Bergmann

South African Medical Journal

Capetown vol 12 June 11 1938

Pre operative and Post operative Treatment —P R Michael
Electrical Aids for Hearing —C G Cawston
Transplantation of Ureters in Gynaecological Practice —P Connan
Interesting Neurosurgical Case —G D Reitz and N M Dott

Ugeskrift for Laeger

Copenhagen vol 100 June 16 1938

Jaw Fractures —H Kjaerholm
Action of Mecodrin (β phenyl iso-propylamine Sulphate) on Reaction Rate and Steadiness of Hand —P Bahnsen and H Thesleff
*Mecodrin in Depression and Neuroses —C Ortmann
Extensive Subacute Benign Lymphogranulomatosis in Lupus Follicularis Disseminatus —P Bonnevie
Employment of Bone Meal in Medicine —H C Olsen

Mecodrin —The action of this drug was tested on 110 patients in a Danish hospital for mental disease The long st

observation period being only three months no opinion could be expressed as to the reaction to mecodrin in the long run but it would seem to be most suitable for transitory or periodical emotional states such as those associated with menstruation

Copenhagen vol 100 June 3 1938

Comparative Investigations of Methods for Determining Capillary Resistance —T Jersild and V Lumby
Case of Trichlorethylene Poisoning —H Jensenius
King Gustav V's Jubilee Hospital —C I Bajerup

Wiener Klinische Wochenschrift

Vienna vol 51 June 17 1938

Modern Principles in Treatment of Epilepsy —O Petzl
Treatment of Complications following Inflammations of Lungs —E Rusk
Congenital Narrowing of Larynx —W Haarer
Observations on Balneotherapy and Diabetes Mellitus —E Stransky
Relief of Pain during Parturition with Mirault's Apparatus —H Hause
Insufficient Administration of Quinine Recidives in Relapses following Therapeutic Malarial Inoculations —S Brucke and R Lonauer
Hormone Therapy in Gynaecology —F Bernhart

Balneotherapy and Diabetes Mellitus—Stransky of Carlsbad claims that spa treatment with certain mineral waters especially those containing Glauber's salt is valuable in diabetic therapy It cannot replace diet or insulin It is an adjuvant in its action on the blood sugar and in increasing glycogen deposition removing toxins from the liver increasing sugar metabolism in the tissues by activating the necessary ferments and also by reason of its alkalizing antiketogenic, and oxidizing qualities

Wiener Medizinische Wochenschrift

Vienna vol 88 June 18 1938

Therapia Radii Dentis Unicrialis —A von Dobrzyniecki
Therapy of Drunkards —E Gabriel
Diabetes and the Eyes —K Safar

Vienna vol 88 June 24 1938

Liver Cirrhosis —E Lauda
Mens Vent culi From Viewpoint of Totality of Human Being —A Jelinek
Herpes Zoster and Chicken pox —P Kansky Farkas
Constitutional Therapy in Eczema —Ehrenberg Benther

Herpes Zoster and Chicken pox—Chicken pox was observed in a 7 year old girl twelve days after herpes zoster auriculae The short interval seems to exclude a common virus for both conditions

SPECIAL JOURNALS

American Journal of Ophthalmology

St Louis Missouri vol 21 May 1938

Cysts of Margin of Eyelid —A. Hagenbeorn
Transfusion in Ophthalmology —W G Frey
Genesis of Cystine Membrane —H D Lamb
Divergence Insufficiency —A D Prangen and F L P Koe
*X Rays of Naso-lacrimal Duct —E W Spackman
Thermophore Treatment of Detached Retina —H M Landon
Infectivity of Trachoma VIII —L A Julianelle and R W Harrison
Tenon's Capsule Transplants —C Berens
Portable Gonioscopic Unit —I Hart borne
Thermophore Therapy of Keratitis —T H Odeneal

Naso lacrimal Duct—Radiographs taken immediately after the injection of lipiodol and at intervals of five and fifteen minutes give valuable information about congenital deformities infections of the orbital wall or lacrimal bone atresia of the duct abnormal conditions of the duct fistulae pressure or distortion due to adjacent masses malignancy, and deformities due to scar tissue Radiographs are also taken at intervals of one or two hours in cases of obstruction and occasionally stereoscopic films are of value ½ to 1 c.cm of equal parts of lipiodol and sterile olive oil is injected into the lower punctum without undue pressure An obstruction at the lower end of the sac is shown by the retention in the sac of the mixture for more than fifteen minutes

American Journal of Roentgenology and Radium Therapy

Springfield Illinois vol 39 June 1938

Relation of Presenting Symptoms to Selection of Method of Treatment in Uterine Myoma —H Schmitz
Irradiation in Treatment of Carcinoma of Uterus with Special Reference to Corpus Carcinoma —L E Phaneuf
Correlation of Calculated Tumour Doses and Five year Survivals in Radiation Therapy of Cancer of Cervix —E L Frazell
Palliation of Cancer in Gynaecology —F R Smith
Intestinal Injuries after Radium and Roentgen Treatment of Carcinoma of Cervix —J A Corscaden H H Kasabach and M Lenz
Ulceration of Small Intestine following Irradiation of Pelvis —I A B Cathie
*Roentgenological Study of Pineal Orientation III Comparison of Methods Used in Pineal Orientation —W W Fray
Incidence of Enlarged Thymus following Prenatal Use of Iodized Salt —S W Donaldson and H A Towsley
*Roentgenological Studies of Large Bowel in Infections by *Entamoeba histolytica* Before During and After Treatment —J C Bell
Roentgenological Diagnosis of Volvulus of Sigmoid Megacolon —M R Hall
Roentgen Diagnosis of Hepato-diaphragmatic Interposition of Large Intestine —K J Kolju
Roentgenological Aspects of Spina Bifida Occulta —R J Dittrich
Traumatic Axial Rotation by Gear Movement of Carpal Scaphoid and Trapezium and Subluxation and Foreshortening of First Metacarpal —A A Achmier and M S Burman
Simple and Inexpensive Tomographic Method —G H Alexander
Construction of an Inexpensive Roentgen Kymograph —C McNeill
Observations on Lateral Views of Hips —E N Cleaves
Suggestions for Simplifying Technique in Diagnostic Roentgenology —W C Hubler
Million volt Roentgen-ray Protection —R Dresser and B J Cosman

Pineal—The proportional method described compared with the original Vastine and Kinney method has reduced the error in normal cases approximately 50 per cent for measurements along the antero posterior diameter and 33 per cent for measurements along the vertical diameter A cranio angle method, useful in skulls of unusual shape is also described

Amoebic Dysentery—Definite radiographic changes have been found in the large bowel in all cases of acute and chronic amoebic dysentery Deformity of the caecum has been the most common and most characteristic change noted

American Journal of Surgery

New York vol 40 June 1938

Intestinal Obstruction Analysis of 400 Cases —J K Donald on
Acute Adrenal Cortex Exhaustion and its Relationship to Shock —T R Reed
Treatment of Suppurative Cutaneous Wounds and Ulcerations with Cod liver Oil and Allantoin —H A Salzmann and L Z Goldstein
Benign Tumours of Ileo-caecal Region —M F Wiener and S H Pollayes
Problem of Bleeding Peptic Ulcer Clinical Aspects and Surgical Indications —L Goldman
Cholecystectomy (Subserous) with Cystic Duct Drainage and Cholangiography —W O Sweek T A Hartgraves and H G Williams
Foreign Bodies in Bladder —Paul H Nitschke
Gynaecological Patient with Urinary Symptoms —S Hochman
Non-specific Salpingitis —R Marx
Modified Sturmdorf Tracheoplasty —L Drosin
Reconstruction of Deformed Chin in its Relationship to Rhinoplasty Dermal Graft Procedure of Choice —J W Mahaniac
Causes of Surgical Failure in Cleft palate Operations —I W Voorhees
Operative Management of Traumatic Intracranial Haemorrhage —E. S Gurdjian
Fractures of Spinal Column Simple Method of Transportation —I E Siris
Management of Hernial Sac —R Wolfe
Reconstruction of Internal Ring with Flaps of Aponeurotic Fascia in Indirect Inguinal Hernia.—M Benmoschc.
The Square Knot a One handed Thumb-rol Manœuvre —E Goldberger
Simplification of Data on Seriously Sick Surgical Patient —Carl Baumeister and C W Hargens
Monoethanolamine New Chemical for Obliteration of Varicose Veins —N E. Meyer
Perirenal Tumours causing Renal Distortion Report of Case of Perirenal Fibroma —J A. Lazarus
Subphrenic Abscess with Bronchial Fistula —F Christopher

Chorion Epithelioma —J H Caldwell
Secondary Resection of Intestine for Recurrent Carcinoma —J Gottesman
Mesenteric Cysts causing Intestinal Obstruction —J W Gale and J L Keeley
Non recurrent Dislocation of Patella —I Balensweig
Pellegrini Stieda's Disease —M O Cantor and E C Baumgarten
Acute Intestinal Obstruction complicating Thyrotoxicosis —A E McEvers

Adrenal Cortex Exhaustion and Shock —The literature dealing with this subject is summarized Cases are quoted in which adrenal cortex extracts have been employed with success to restore the blood pressure and blood chloride values in gravely ill patients Following success with the use of this treatment in cases of gas gangrene and general peritonitis, it has been used as a pre operative measure in fifty cases It is claimed to have reduced the degree of operative reaction and shock

American Review of Tuberculosis

Baltimore vol 37 June 1938

*Studies in Avian Tuberculosis I Avian Tubercle Bacilli in Generalized Disease in Swine II Comparative Virulence of Avian and Bovine Tubercle Bacilli for Rabbits and Guinea pigs III Sensitization Method of Differentiating Avian from Bovine Infection in Guinea pigs and Rabbits IV Possible Role of Avian Tubercle Bacillus in Infection in Man —A B Crawford
Effect of Human Tissue Juices on Tubercle Bacilli —Nell Hirschberg and Ll Arnold
Tuberculosis Control —R E Plunkett
Tuberculous Infection in Kingston Jamaica —C W Wells and H H Smith
*Fluoroscopy during Pneumothorax Treatment —L Cohen and J V Bhdy
Effect of Age on Total Pulmonary Capacity and its Subdivisions —N L Kaltreider W W Tray and H van Z Hyde
*Non caseating Tuberculosis —M Pinner

Avian Tuberculosis —The most important findings of Crawford given in four papers are as follows In typing the lesions of thirty six swine condemned for tuberculosis in five of the North Central States twenty one of the specimens were found to be affected with the avian type and fifteen with the bovine type of tubercle bacilli The bovine bacillus was shown to be decidedly more virulent for the rabbit than the avian type The sensitization method of differentiating avian from bovine infection in swine tuberculosis was shown to be specific dual infection with both bacilli may thus be detected by this method In the light of present evidence it does not seem that the avian type of tuberculosis presents more than a remote possibility of danger to man

Fluoroscopy during Pneumothorax —The most glaring error in the present method of pneumothorax study is the fact that screening is usually carried out in the erect posture while the refills are administered in the lateral posture The authors show that in these two postures the position of the lung may be different By making use of the lateral posture in screening, the cause of difficulty encountered in administering refills can be found and often easily remedied In certain cases it is of great advantage to administer the refill under actual fluoroscopic guidance The phenomenon of 'selective collapse' is discussed in relation to the above considerations [The paper is amply illustrated with case reports and clear diagrams]

Non caseating Tuberculosis —The available literature is analysed in an attempt to show that Boeck's sarcoid and related lesions such as uveoparotid fever certain cases of Mikulicz syndrome etc are manifestations of non caseating tuberculosis The characteristics of this form of tuberculosis are fully described and discussed

Annales d'Anatomie Pathologique

Paris vol 15 May 1938

End[illegible] —V Lamarlet and J Francillon
D[illegible] Pleura Endothoracic Aspect (Anatomical and Medico-surgical Study) —Cordier and Devos
C[illegible] of Fourth Ventricle (Anatomo-clinical Study) —P L Lambert and J D[illegible]
[illegible] Lesions in Rheumatic Myocarditis —J Gadrat
[illegible] Fistula Complicated by Bronchopneumonia —R H[illegible] and S Lipeaux
[illegible] Hernia in Natives of French Equatorial Africa and Togo —L [illegible] and H Schr[illegible]

[illegible] D

Annales de Dermatologie et de Syphiligraphie

Paris vol 9 June 1938

Researches on Cholesterolaemia in Psoriasis —J Gate G Chanial A Va[illegible] and P Humbert
Attempts at Producing Argyria in Animals —J Lenartowicz and B Jalowy
Traumatic Marginal Alopecia —Hugo Ribeiro

Archives of Dermatology and Syphilology

Chicago vol 37 April 1938

*Studies on Porphyria II Case of Porphyria accompanied by Epidermolysis Bullosa Hypertrichosis and Melanosis —W J Turner and M E Obermayer
Treatment of Angioma based on Ten Years Experience at Vanderbilt Clinic —G C Andrews
*Eczematous Eruptions produced by Leaves of Trees and Bushes —V Genner and P Bonnevie
Leucoplakia Buccalis —F J Eichenlaub
Acquired Specific Hypersensitivity to Simple Chemicals II Cheilitis with Special Reference to Sensitivity to Lipstick —M B Sulzberger and J Goodman with Technical Assistance of L A Byrne and E D Mallozzi
Further Studies of Relation of *Pityrosporum ovale* to Seborrheic Eczema LXXX —R L Kile and M F Engman
Relapse in Lupus Erythematosus after Treatment with Sodium Gold Thiosulphate —J L Callaway and J H Stokes
Cutaneous Hazards in Citrus Fruit Industry Brief History of Citrus Fruit in Florida and in California —L Schwartz
Stigmatization —J V Klauder

Studies on Porphyria —The authors indicate that an abnormal excretion of porphyrin occurs in association with ileus and peripheral neuritis as a toxic manifestation and in cutaneous conditions as a pre natal error of porphyrin metabolism in which megaloblasts are destroyed and a secondary anaemia results The association of trauma, compensatory pigmentation and hypertrichosis to protect from light epidermolysis bullosa, and hydroa aestivale is discussed Only protection from light and treatment of the anaemia, possibly with liver are recommended

Eczematous Eruptions —V Genner and P Bonnevie report a case of recurrent eczema originally thought to be due to the sun later found to be due to elm leaves They also report other cases due to magnolia leaves

Archives of Surgery

Chicago vol 36 June 1938

*Tumours of Spine with a Consideration of Ewing's Sarcoma —R R Ri[illegible] and C F Geschickter
Rib Regeneration from Standpoint of Thoracic Surgery —W F Bowers
Appendicitis at Jameson Memorial Hospital —W E Flannery
Modified Double Enterostomy in Radical Surgical Treatment of Intussusception in Children —B Woodhall
Total Bile Acid-Cholesterol Ratio in Human and in Canine Bile —H Doub[illegible] and R Colp
Review of Urologic Surgery

Tumours of the Spine —291 cases of tumours involving the bones of the spinal column have been collected from the material of the Johns Hopkins Hospital The typical radiographic and histological appearances of the various types are illustrated and the material is discussed with special reference to differential diagnosis of the various tumours and optimum methods of treatment

British Journal of Dermatology and Syphilis

London vol 50 May 1938

*Studies in Nail Growth —W E Le Gros Clark and L H D Burton
Pemphigus Review of Seven Cases —J Kinnear
Another Acarine Disease —J H T Davies

Nail Growth —This is a study of nail growth in normal healthy individuals A transverse scratch was made across the nail 2 mm from the lunula, this distance was then accurately measured and the measurements repeated after one month The displacement of this mark was usually 3 mm in a month the rate was almost the same in all fingers being a little faster in summer than in winter and also in nail biters The rate of growth was fairly constant between the ages of 10 and 2[illegible]

British Journal of Experimental Pathology

London vol 19 June 1938

Immunological Behaviour of Serum Globulin—J Marrack and D A Duff
Transmission of Influenza Virus "WS" to Chinese Mink and Dawson's Squirrel—I F Fan
Enzymic Activity of Vaccinal Elementary Bodies—M C Mitchell and M H Salaman
Further Studies on Combination of Vaccinia with Antivaccinal Serum Action *in vitro* of Neutralising Antibody on Elementary Bodies—M H Salaman
Artificial Observation of Bacteria Part III—J Gordon and W R Wilkinson
Production of Staphylococcal α Haemolysin in a Chemically Defined Medium—G P Gladstone
Influence of Transmitted Leukaemia on Metabolism of Unirradiated Lymphoid Tissue—J Vetter and J S Potter

Enzymic Activity of Vaccinal Elementary Bodies—Suspensions of scrapings from extensive vaccinia lesions on rabbits' skin differentially and repeatedly centrifuged can be made to yield a concentrated suspension of vaccinia elementary bodies containing little other material. Such suspensions were tested for the presence of enzymes and found constantly to contain phosphatase and catalase but no dehydrogenase. It is considered that the enzymic activity demonstrated is a property of the virus itself. These observations are hence in conflict with the commonly accepted idea that viruses are incapable of independent metabolic activity.

Staphylococcal α Haemolysin—Empirical trials with various complex culture media containing chemically ill-defined ingredients such as meat extract have defined optimum conditions for producing staphylococcus toxin but without relating these to the presence of any pure constituent other than gases. Were it possible to produce toxin in a medium the composition of which is fully known the substances necessary to its formation might be identified and its own isolation in a pure state might be possible. The first of these aims has been achieved; good yields of α haemolysin having been obtained in a medium the entire chemical composition of which was known. The chief essential constituents identified were certain amino-acids; the effect on toxin production of such other constituents as sugars and salts and of the gaseous environment, were also studied.

British Journal of Radiology

London vol 11 July 1938

Historadiography—P Lamarque
Kymography as an Aid in Differential Diagnosis of Mediastinal Tumours—A Meyer
Two Radiographic Teaching Models—W E Boyd
Construction of Superficial Applicators for Radium Therapy—R. Paterson and W MacVicar
Geometrical Factors in Measurement of Radiation in Roentgens—H J Gough and W A Wood
Theory of Action of Radiations on Biological Materials Capable of Recovery Part I—D E Lea
Physical Measurements in High-voltage *X* Ray Therapy—R Phillips and G S Innes

Historadiography—The paper deals with the method of microradiography or the radiography of microscopical slides which opens a new field of research. It can be used as a means of delicate analysis of tissues enabling one to classify them according to their degree of density.

Canadian Public Health Journal

Toronto vol 29 May 1938

Some Fundamentals in Tuberculosis Prevention—R G Ferguson
Survey of Incidence of Venereal Diseases in Ottawa Canada—November 1937—J T Clarke
Notes on Early History and Evolution of Department of Health of Montreal—Eugene Gagnon
Experimental Infection with *H pertussis* and Protection Tests in Mice—Nelles Silverthorne
Brucellosis in and around Vancouver—C E Dolman and Vivienne G Hudson

Tuberculosis Prevention—The various mass methods for prevention of tuberculosis are discussed. England stresses increase of non-specific general resistance and features better living slum clearance etc. France features development of specific resistance by vaccination while Canada and the United States have a tendency to lay stress upon elimination of the germ by eradication of bovine tuberculosis by segregating human cases in institutions for treatment and by closing open lesions whenever possible. A plea is entered for developing tuberculosis consciousness by education as a means of control for a disease that will not burn itself out by developing specific resistance.

Pertussis Infection and Protection—Of unvaccinated mice inoculated with fresh strains of *H pertussis* suspended in mucin 80 per cent. died but various pertussis vaccines and antigens gave 90 to 100 per cent. protection. The methods described are offered as a means of assessing the protective value of the vaccines etc.

Endocrinology

Wisconsin vol 23 July 1938

Inhibition of Uterine Bleeding with Oestradiol and Progesterone and Associated Endometrial Modifications—F L Hisaw and R O Greep
Nutritional Requirements of Pregnant and Lactating Rats Studied by Self-selection Method—C P Richter and B Barelare jun
Six-hour Assay for Quantitative Determination of Oestrogen—E B Atwood
Menopause—H Wiesbader and R Kurzrok
Studies Relating to Time of Human Ovulation—P M Lass J Smelser and R Kurzrok
Relative Effectiveness of Testosterone Propionate and Dihydrotestosterone Benzoate in Chicks as Indicated by Comb Growth—W R Breneman
Precocious Masculine Behaviour following Administration of Synthetic Male Hormone Substance—J B Hamilton
Naso-genital Relationship—M C Shelesnyak and S Rosen
Study of Ratio of Amount of Theelin producing Uterine and Vaginal Oestrus—A J Szarka and G Kurtz
Skin Tests for Pregnancy—P M Lass E S Enderle and R Kurzrok
Effect of Anterior pituitary-like Hormone on Spermatogenesis in Human—H S Rubinstein.
Studies on Motility of Human Uterus *in vivo*—L Wilson and R Kurzrok
Studies on Pituitary Weight of Rats Inoculated with a Transmissible Tumour—J M Twort and M Lanitzki
Clinical Hormonal and Histological Conditions in Case of Hermaphroditism (Fem Ext)—J Charvat E Kodicek and O Schubert
Technique for Hypophysectomy of Mouse—F Thomas
Does Oestrone Raise Metabolic Rate?—J M McClendon
Care and Handling of European Bitterlings as Experimental Animals in Endocrine Research—A I Weisman and C M Rothburd

Journal of Bacteriology

Baltimore vol 35 June 1938

Bacillus para pertussis Group of Cultures Resembling both *Bacillus pertussis* and *Bacillus bronchisepticus* but Identical with Neither—G Eldering and P Kendrick
Cell Inclusions and Life Cycle of Rhizobia—I M Lewis
Quantitative Method of Determining Lethal Effect of Ultraviolet Light on Bacteria Suspended in Air—D G Sharp
Respiratory Enzyme Systems in Symbiotic Nitrogen Fixation I Resting Cell Technique as Method for Study of Bacterial Metabolism—P W Wilson
Effect of Salts on Germicidal Action of Phenol and Secamylmetresol—H W Lundy

Journal of Experimental Medicine

Baltimore vol 67 May 1 1938

Hydrogen-ion Concentration in Exudates of Pneumococcus Infection—W H Kelley E N Seadron and B M Shinners
Effects of Acidity upon Growth of Pneumococcus in Culture Media containing Proteins—W H Kelley
Blood Plasma Protein Regeneration as Influenced by Fasting Infection and Diet Factors Variable Reserve Stores of Plasma Protein Building Material in Dog—S C Madden W E George G S Waraich and G H Whipple
Uterine Adenomata in Rabbit I Clinical History Pathology and Preliminary Transplantation Experiments—H S N Greene and J A. Saxton jun
Cross-reaction of Immune Sera to Azo-proteins II Antigens with Azo-components containing Two Determinant Groups—K Landsteiner and J van der Scheer
*Statistical Studies of Nature of Infectious Unit of Vaccine Virus—R. F Parker
Serological Evidence for Occurrence of Infection with Human Influenza Virus in Swine—R E. Shope
Excretion of Cyanol Azo-fuchsin I and Water by Kidneys of Rabbits—W E Ehrich, G M Bartol and R E. Wolf.

Acute Experimental Glomerular Nephritis in Rabbits Correlation of Morphological and Functional Changes—W E Ehrich R E Wolf and G M Bartol
Effect of a Tissue Enzyme on Pneumococci—R J Dubos and C M MacLeod
Immunization of Experimental Animals with Soluble Antigen Extracted from Pneumococci—R J Dubos
*Studies on Experimental Hypertension VII Production of Malignant Phase of Hypertension—H Goldblatt

Vaccine Virus—Experiments with two strains of vaccinia virus indicate that infection in the rabbit can be produced by a single virus particle

Human Influenza in Swine—Antibodies neutralizing human strains of influenza virus have been found in the blood of some but not all, pigs born before the influenza epidemic of 1936-7 and not in that of younger animals This suggests that human influenza occurs naturally in swine, and supports the belief that true swine influenza took its origin in the human pandemic of 1918

Malignant Phase of Hypertension—Goldblatt has previously reported the production in dogs of prolonged arterial hypertension by constriction of the renal arteries By similar methods which have the effect of greatly reducing the blood supply to the kidneys he now claims to have produced the equivalent of malignant ' hypertension, with severe degenerative changes in arterioles, haemorrhages, and uraemia

Journal of Hygiene

London vol 38 May 1938

Commercial and Molecular Distillates of Mineral Oils in Relation to their Carcinogenicity—R Lyth and C C Twort
Importance of Receptor Analysis for Study of Physico chemical Properties of Typhoid Bacilli—R T Scholtens
Antigenic Activity of Extracts of Pneumococci—A W Downie
Anti pneumococcal Species Immunity—A W Downie
Leucopenia and the Toxic Substances of *B typhosus*—R C Robertson and H Yu
New Salmonella Type *Salmonella kentucky*—P R Edwards
Comparison of Two Methods of assessing Number of Different Types of Coliform Organisms in Water—D A Bardsley
Horse serum Skin Tests—H M Davis
Ice cream Food Poisoning Outbreak due to *B dysenteriae* (Sonne)—W Savage
Observations on Bacterial Flora of Hen's Egg with Description of New Species of *Proteus* and *Pseudomonas* causing Rots in Eggs—R B Haines
*Effects of Lifelong Subsistence on Diets providing Suboptimal Amounts of Vitamin B Complex—J C Drummond and Others
*Excretion of *Streptococcus pyogenes* in Milk of Naturally Infected Cows—H C Bendixen and F C Minett
Milk Epidemic of Angina originating from Cow with Mastitis and due to *Streptococcus pyogenes*—E J Henningsen and J Ernst
Action of Carcinogenic Tar on Lymph Glands—A Lasnitzki

Vitamin B Deficiency—In order to determine the effect of partial vitamin B deficiency such as may result from poorer diets in this country, a large group of rats was kept on a diet deficient in the B complex (mainly in B_1) throughout life a control group being given a supplement of wheat germ The duration of life was shortened and reproduction interfered with mainly in the sense of failure to rear young Gastro-intestinal lesions were more common but the frequency of lung lesions was no greater and there was no evidence of any increased liability to tumour formation

Streptococci in Milk—Two epidemics of milk borne streptococcal angina are described occurring in Doncaster and Denmark in which the cow responsible for infecting the milk was identified and studied The streptococci in each case were of Group A and possible human sources of the infection in the cow were discovered The mastitis caused was not easily recognizable in the early stages and the secretion of infected milk continued in one cow for six weeks in the other for thirteen months

Journal of Immunology

Baltimore vol 34 May 1938

Studies on *Hæmophilus influenzæ* III Failure of Complement of Some Animal Species notably Guinea pig to Activate Bactericidal Function of Sera of Certain Other Species—J H Dingle L D Fothergill and C A Girard

*Action of Diphtheritic Toxin on Embryonic Chicks—J Action of Toxin—F L Evans
Group specific Agglutinins in Rabbit Serums for Human Cells III Cell Agglutinins—K M Wheeler

Diphtheria Toxin—Diphtheria toxin injected into eggs causes specific lesions and death of the embryo the MLD is considerably smaller than for the guinea pig Antitoxin neutralizes the effect and heated toxin in the dosage used is harmless It is suggested that eggs might be used instead of guinea pigs for antitoxin titration

Journal of Laboratory and Clinical Medicine

St Louis vol 23 May 1938

Intravenous Autohæmotherapy with Hæmolysed Blood Technique and Leucopoietic Response—S R Dean and H C Solomon
Changes in Erythrocyte Fragility due to Physical Exercise and Variation of Body Temperature—J E Davis
*Excretion of Sulphanilamide in Perspiration—W J Highman
Degenerative Leucocytic Transformations associated with Ageing—L A Erf
Leucocytic Variability and its Relation to Meteorologic Alterations—M B Register
Formation of Abnormal Blood Pigment as Complication of Sulphanilamide Therapy—I Posner N W Guthrie and M R Mattice
Hyperindicanaemia in Renal Insufficiency and Significance of Diazo-reaction—S R Townsend
Transient Electrocardiographic Changes noted during Attacks of Angina Pectoris Case Report—H H Shapiro and L A Smyth
Partition of Nitrogen in Canine Gastric Juice—S A Komarov
Still's Disease with Hyperglobulinæmia—A E Taussig
Influence of Calcium Salts on Digitalis Action—R A McGuigan and J A Higgins
Microdetermination of Calcium in Water—E L Breazeale and R A Greene
Standardization of Folin Malmros Micro blood sugar Method for Capillary and Venous Blood and its Adaptation to Photo-electric Photometer—L F Jourdonais
Method for Staining Rickettsia in Sections—S Ochi
Body Temperature Regulating Apparatus and Improved Axograph for Animal Experiments—M L Tainter
Simplified Method of Correcting Sedimentation Rate for Effect of Cell Volume—A Hambleton and R A Christianson
Direct Reading Null Point Amplifier for Measuring Hydrogen ion Concentrations and Oxidation reduction Potentials—F L Wynd and P L Varney
Method for Utilizing Illuminating Gas in Brown Fildes and McIntosh or Other Anaerobe Jars of Laidlaw Principle—J H Brewer and J H Brown
Weight Curve Complicated by Deaths—R D Templeton and M C Patras

Sulphanilamide in Perspiration—Tests made on extracts of clothing from patients given sulphanilamide in hot weather showed the drug to have been present in their sweat Sweating may thus possibly reduce the concentration desired in the urine

Journal of Laryngology and Otology

London vol 53 July 1938

*Progressive Facial Palsy produced by Intratemporal Epidermoids—G Jefferis and A A Smalley
*Thyroxine Therapy in Otosclerosis—M A Goldstein
Case of Post auricular Sinus—R L Flett

Intratemporal Epidermoids—Such tumours are usually called primary cholesteatomata and have been looked upon as extremely rare The authors have collected six cases and believe that most epidermoids in the temporal bone are of embryonal origin, particularly when there is no evidence that chronic middle ear disease preceded the formation of the epidermoid The patients suffered from a progressive facial palsy due to the slow destruction by the 'tumour of the facial nerve trunk In the light of the authors observations the older views on cholesteatoma formation must be revised

Thyroxine Therapy—The late Dr A A Gray first suggested the treatment of otosclerosis by an agent which produces an active congestion of some duration The active principle of the thyroid gland was chosen and 1/64 grain of thyroxine dissolved in four drops of sterile distilled water was injected into the middle ear after puncturing the tympanic membrane with a small hypodermic syringe The author treated forty two cases of otosclerosis by this method controlling the results by careful audiometric tests of the hearing before and after the injection There was no improvement in nine cases,

very slight improvement in ten and definite improvement of the hearing in twenty three cases ranging from 5 to 50 decibels in several tone frequencies the improvement being maintained for at least six months

Journal of Nutrition

Philadelphia vol 15 June 10 1938

Anti-rachitic Activity of Various Forms of Vitamin D in Chicks—D G Remp and I H Marshall
Effect of Enhanced Iodine Intake on Growth and on Thyroid Glands of Normal and Goitrous Rats—R E Remington and J W Remington
Role of Vitamin D in Control of Dental Caries in Children—E C McBeath and T F Zucker
Specific Dynamic Effects of Proteins when Added in Different Amounts to a Maintenance Ration—M Kriss
Effect of Forced Air Currents and Clothing on Radiation and Convection—J D Hardy A T Milhorat and E F Du Bois
Skin and Body Temperatures of Normal Individuals under Cold Conditions—H Freeman and R F Newton
Influence of Diet and Energy Intake on Acute Vitamin B Deficiency in Rats—G A Schrader and C O Prickett
Quantitative Requirement of Growing Chicks for Manganese—W M Insko jun M Lyon and J H Martin
Proceedings of Fifth Annual Meeting of American Institute of Nutrition

Journal of Pharmacology and Experimental Therapeutics

Baltimore vol 63 June 1938

Theobald-contaminated Water and their Physiological Action—V G Heller and L Puretl
Comparative Study of Effects of Barbiturates Ether and Bulbocapnine on Micturition—L C Kolb and O R Langworthy
Comparative Study of Various Agents in Chemotherapy of Rat Trichomoniasis—P M Nelson and A L Tatum
Initial Depression of Heart Rate in Response to Epinephrin in Human Subjects—R T Fuchs
Experimental Carbon Tetrachloride Poisoning in Cats I Influence of Calcium Administration—A Cantarow H L Stewart and D R Morgan
Study of Fibrin Factor in Relation to Subacute Endocarditis—M Friedman
Hypnotic Properties of Some Derivatives of Trichloroethanol Alcohol—R R Buttner and G Lehmann
Cardiac Arrhythmia Characteristic Effect of Thiobarbiturates (Pentothal Thiopentobarbital and Thioethamyl) as Influenced by Changes in Arterial Blood Pressure—C M Gruber V G Haury and C M Gruber jun

Journal of Tropical Medicine and Hygiene

London vol 11 June 1 1938

Maurizio Asdrubali's Treatment in Practice of a Malaria Control Station—Alessandro Migliarini
Molluscs which Serve as Hosts for Schistosomiasis in Mozambique—F Gordon Cawston
Consideration of Classification of Trypanosomes with Special Reference to Classification of Jacono—J Clyde Swartzwelder
Diseases of Skin in Negroes—Leonard J Wolfenthal

London vol 11 June 15 1938

Role of Viscerotomy in Diagnosis and Control of Yellow Fever—Bolivar J Lloyd
Trypanosomiasis Gambiensis Some Observations in Uganda and their Bearing on Prophylaxis—Arthur A Forbes Brown

Public Health Reports of the U S A

Washington vol 53 May 27 1938

Studies on Blood Coagulation I General Considerations—L. Dedrick
*Age of Delinquents in Relationship to Rorschach Test Scores—M J Pescor
Mental Defectives and Epileptics in Institutions in United States 1936
Statistical Matter Weekly List of Deaths Claims from Insurance Companies Prevalence of Certain Communicable Diseases in United States and Abroad

Blood Coagulation—A brief critical review is given of the current theories of the mechanism of blood clotting and their shortcomings Numerous experiments are described with diagrams and charts showing the influence of various factors in producing instantaneous speedy normal or delayed coagulation or failure to coagulate Evidence is adduced to show that the clotting factor acts quantitatively and an explanation is given of why the clot in a blood vessel does not pass the next bifurcation of that vessel

Rorschach Tests—A series of cards with symmetrical ink blots, some coloured are shown in succession to the subject and the time and nature of the response to the question What can it be? is noted Observational details of the responses are classified and deductions made therefrom It was found that age (17 to 77 years in 500 persons) is of no statistical significance but certain tendencies exist such as that older men choose original responses and the younger common or vulgar replies Abstract answers were rare in all groups and the time relation varied but little

Washington vol 53 June 3 1938

Lighting for Low-cost Housing—J E Ives
Sanitation of Isolated Dwellings—H A Whittaker
Further Study of Purification and Tannic Acid Precipitation of Scarlet Fever Toxin—M V Veldee
Number and Length of Nursing Visits as Indices of Nursing Service—H Bean
Deaths during week ended May 14 1938 (a) In Group of Large Cities in United States (b) Death Claims reported by Insurance Companies
Prevalence of Disease in United States
Current Weekly State Reports for weeks ended May 21 1938 and May 22 1937
Summary of Monthly Reports from States
Tularæmia Infection in Fleas from Ground squirrels in Baker County Oregon
Weekly Reports from Cities for week ended May 14 1938
Foreign and Insular
Bermuda Vital statistics Year 1937
Canada—Provinces—Communicable Diseases two weeks ended April 23 1938
Cuba Havana Communicable Diseases four weeks ended May 7 1938
Provinces Notifiable Diseases four weeks ended April 30 1938
Czechoslovakia Communicable Diseases February 1938
Finland Communicable Diseases March 1938
Yugoslavia Communicable Diseases four weeks ended April 24 1938 Year 1937
China Plague Smallpox Typhus Fever and Yellow Fever

Purification and Precipitation of Scarlet Fever Toxin—The chemical structure of this body (erythrogenic toxin) is unknown but certain characteristic properties and reactions are described The method of precipitation by tannic acid is described in detail Skin test doses administered three or four times at fortnightly intervals are well tolerated by young children

Washington vol 53 June 10 1938

Prevalence of Communicable Disease in the United States April 24 to May 31 1938
Effect of Moisture and Age on Stability of Neoarsphenamine—T F Probey
Effect of the Age of Neoarsphenamine on Reaction Expectancy—C S Stephenson T F Probey and W T Harrison
Flea Infestation of Domestic Rats in San Francisco Calif—C R Eskey
Statistical Matter Weekly List of Deaths Claims from Insurance Companies Prevalence of Certain Communicable Diseases in United States and Abroad

Neoarsphenamine—The stability of this product is affected by age and moisture retained in the powder and instability increases as one or both increase When the powder contains not more than 1·5 per cent of volatile material as determined by the method described it may be expected to remain stable for three years when stored at a temperature of less than 20° C An analysis of over half a million administrations in the course of five years in the U S Navy shows 426 reactions classified as 270 mild 140 severe and 16 deaths Material not over three years in average age gave a reaction expectancy of 1 to 1312 doses while older material gave 1 to 870—an increase of 65 per cent The average reaction expectancy was 1 to 1270 doses which corresponds with a previous report of 1 to 1272

Washington vol 53 June 17 1938

Prevention and Control of Cancer Plan for Nation wide Organization—J W Schereschewsky
Effects of Intramuscular Injections of Vitamin B1 on Acute Leprous Neuritis and of Oral Administration on General Disease—L F Badger and D W Patrick
Studies on Oxyuris XVI Number of Eggs produced by Pinworm *Enterobius vermicularis* and its Bearing on Infection—Lucy Reardon
Rocky Mountain Spotted Fever Geographical and Seasonal Prevalence Case Fatality and Preventive Measures—C Hampton and H G Eubank
*Typhoid Fever Cases in Indiana and Other States traced to Contaminated Water Supply at Angola Ind
Statistical Matter Weekly List of Deaths Claims from Insurance Companies Prevalence of Certain Communicable Diseases in United States and Abroad

Vitamin B_1 in Leprosy—This is a preliminary communication on a small series of cases of acute leprous neuritis treated

by intramuscular injections of vitamin B_1 with spectacular results It is suggested that there may also be a beneficial effect on the general toxicity of the disease

Typhoid in Indiana—An outbreak of typhoid fever in Indiana and several other States was traced to passengers on a bus route drinking water from an infected well at a stopping-place Official inspection of water supplies at all restaurants etc is advocated, and especially on inter State bus routes

Revue de Chirurgie

Paris vol 57 April 1938

*Clinical Signs and Pathogenesis of Ludwig's Angina—M B Fabricant
Osteomyelitis caused by Pneumobacillus of Friedlander—Talbot and Parlange
Glycæmic Curves and Surgical Operations—L Bugnard F H Colombies and A Costes
Division of Splanchnic Nerves in Some Painful and Chronic Abdominal Conditions—R Leriche and R Fontaine
Spina Ventosa Treated and Cured by Grimberg's Colloidal Bacillary Extract—R Bloch
Venous Spasm of Arm following Intra arterial Injection Result of Infiltration of Stellate Ganglion Phlebographic Control before and after Injection—M C Dos Santos

Ludwig's Angina—A comprehensive survey is given of this comparatively rare anaerobic disease which affects, most commonly the base of the oral cavity and penetrates into the parapharyngeal space The symptoms and associated complications of the lesion are fully described and details are given of the necessary operative treatment Several cases are reported and the procedure adopted in each case is described

Revue Française de Gynecologie et d'Obstetrique

Paris vol 33 June 1938

Part Played by Operative Surgeons and Gynaecologists in Progress of Gynaecology—G Cotte
Difficulties in Histological Diagnosis of Benign and Malignant Changes in Mucosa of Body of Uterus—S Aschheim

Surgery

St Louis vol 3 June 1938

Symposium on Biliary Disease
Effect of Recent Advances in Biliary Physiology on Mortality following Operation for Common Duct Obstruction—I S Ravdin J E Rhoads W D Frazier and A W Ulin
Applied Physiology of Liver—L A Crandall and A C Ivy
Non-calculous Cholecystitis—W H Cole
Roentgen Diagnosis of Surgical Diseases of Liver and Biliary Tract—E P Pendergrass and G W Chamberlin
Anatomy of Gall bladder Incision—O V Batson
Pre operative and Post operative Treatment in Cases of Obstructive Jaundice—C G Johnston
*Personal Experiences in Treatment of Benign Obstructing Lesions of Biliary Tract—W Walters
Ligation and Refrigeration of Intestine—F M Allen
Experimental Attempts to Prevent or Abolish Hypertension Associated with Renal Ischaemia—S E Levy and A Blalock
Pathogenesis of Seminoma of Testis—J R McDonald C F Schlotthauer and J L Bollman

Benign Biliary Tract Obstruction—In this article the causes of obstruction of the common duct are discussed and also the recent investigations which have taken place on biliary pressure associated with biliary colic and duodenal motility and its effect on the common bile duct

Surgery, Gynaecology and Obstetrics

Chicago vol 66 June 1938

Indurated Spreading Peritonitis Complicating Acute Perforative Appendicitis—J O Bower J C Burns and H V Menzie
Acute Appendicitis in Children—J M Deaver and A G Martin
Intravenous Calcium Chloride and its Use for Relief of Visceral Colic Clinical and Experimental Study—R S Lampson and F V Simeone
Relation of Spasm of Second Portion of Duodenum to Biliary Colic—J M M Cowan P V Knepper Waltman Walters and V M Snell
Nature of Respiration like Movements of Human Foetus—W F Windle C V Drastedt D E Murray and R R Greene

(Vol 66)

Effect of Light on Benzpyrene Cancer in Mice—J Taussig Z K Cowen and M G Seelig
Concentration of Serum Sulphate and Blood Urea in Prostatic Hypertrophy Associated with Urinary Obstruction—H C Habein G I Thompson and E G Wakefield
Management of Bladder Tumours—T J Kirwin
*Surgical Fusion of Wrist joint—F L Liebolt
Macrocheilia due to Hyperplasia of Labial Salivary Glands Operative Correction—H Conway
Treatment of Low Back Pain due to Functional Decompensation—E D W Hauser
Correction of Cystocele and Rectocele in Progress of Supravaginal Hysterectomy—L Drosin
Cholangiographic Demonstration of Remaining Common Duct Stone and its Non operative Management—R R Best
Retraction Ring Dystocia Cause and Correction—W T Pride
Ambulatory Operative Treatment of Ano-rectal Pathological Conditions 134 Consecutive Operations Performed under Local Anaesthesia of Prolonged Duration—C V Burt and J G Rennie

Acute Appendicitis in Children—A study is given of 319 consecutive cases of acute appendicitis in children 14 years of age and under The details of pre operative preparation operative procedure, and post operative care are discussed and the mortality rate given It is contended that, although acute appendicitis is a common disease and its treatment is standardized to some extent, the mortality from this illness is still too high particularly at the extremes of life Methods by which the mortality can be reduced are discussed

Fusion of Wrist-joint—Forty-four cases of surgical fusion of the wrist-joint are presented These include cases of tuberculosis, rheumatoid arthritis poliomyelitis and other infective lesions The operative and plaster techniques are discussed and operative and non-operative treatments for tuberculosis of the wrist joint are compared End results after an average follow up period of over four years are given in detail

Zeitschrift fur Tuberkulose

Leipzig vol 80 June 1938 Heft 2

Constitutional Factor in Tuberculous Persons (Schematic Representation) K Klare
*Collective Radiography Management and Apparatus—M de Abreu
Bronchiectasis following Primary Tuberculosis with Secondary Haematogen Ulcerative Bronchial Spread and Tubercle Bacilli in the Sputum—G Slotty
Colour Photography of Larynx—H Effenberger
Sixth Congress of Italian National Fascist Association against Tuberculosis at Tripoli December 17 to 20 1937—J E Kayser Petersen

Collective Radiography—A large number of persons can be viewed in series on a film 2·4 cm wide The individual picture 2·4 by 3·6 cm is sharp enough to be examined with a magnifying lens, and can be enlarged if necessary The method is invaluable for mass investigations owing to its speed and cheapness [This method may go a long way towards solving the difficulties associated with mass investigations for the presence of pulmonary tuberculosis]

Leipzig vol 80 June 1938 Heft 3

*Fate of Cases of Phrenic Evulsion—L Graff
Tuberculosis in Pupils of High Schools—N B Ockonomopoulo
Contribution to Tomography of Lungs Critical Observation based on a Necropsy—H Bottner
Comparative Investigation of Two Diagnostic Tuberculin Ointments Diaphtise (Kuster and Pockels) and Moro's Diagnostic Skin Tuberculin Ointment—A Rehling
Proceedings of the Rheinisch Westfalisch Tuberculosis Association (Facility at meeting held in Düsseldorf on December 11 1937)—D Lochtkemper

Phrenic Evulsion—This is a follow up study based on 239 cases operated on between 1927 and 1929 89·5 per cent of the patients were traced, 50·4 per cent are dead, 10 per cent can be considered as cured The paper also gives details of the gastro intestinal symptoms that follow the operation

Tomography and Necropsy Findings—This case is of great interest because the necropsy findings did not correspond to the appearances seen in the tomograms Whereas the latter showed a whole system of cavities (according to the usual criteria of interpretation) at necropsy *only* a single cavity could be demonstrated

HARMLESS TO THE DIGESTION



—but do not imagine that The Doctor's China Tea is treated by some secret process There is no secret about it It is simply a blend of the choicest China teas, which happen to contain comparatively little tannin It is therefore *naturally free* from excess tannin And for that very good reason it is entirely harmless to the most delicate digestion For that reason, too, the medical profession approve and recommend it—and of course their patients enjoy its fine, delicate flavour A generous free sample will be sent to any doctor who would like an opportunity of trying the tea

THE DOCTOR'S CHINA TEA



Priced at 3/-, 3/6, 4/2, and a super quality at 4/8 per lb Harden Bros & Lindsay, Ltd (Dept 19), 30-34, Mincing Lane, London, E C 3

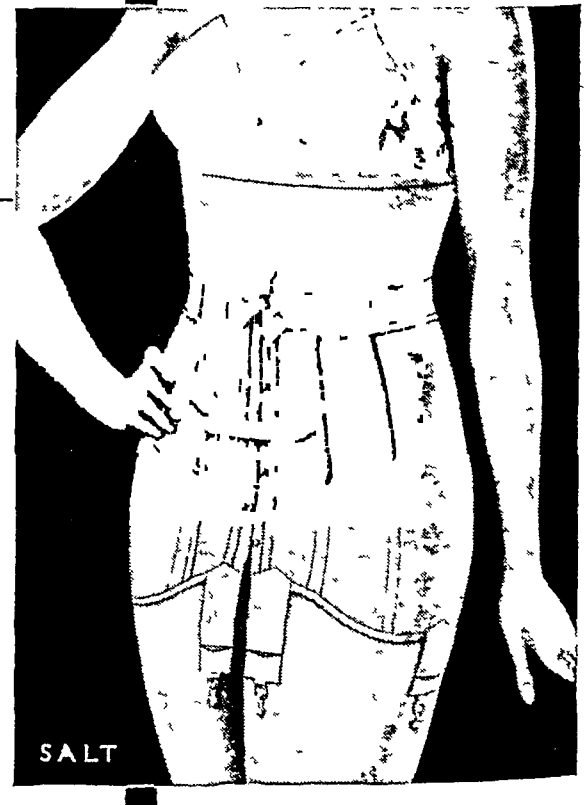
SALTAIR SURGICAL SERVICE

Guarantee

"We guarantee to alter exchange or accept the return of any appliance without cost ordered by the Medical Profession if not found Suitable within fourteen days from date of supply"

Salt and Son Ltd.

The obvious alternative—



SALT'S PATENT KIDNEY CORSET

This Corset was designed to meet the needs of those patients who, requiring support for Nephroptosis prefer a corset to a belt for this purpose Salt s patent Kidney Corset provides efficient comfortable support, definitely retaining the kidney in its proper position and obviating symptoms due to dragging on the renal ligaments The corset can be made to almost any style desired by the patient Four different qualities to choose from priced to suit different classes of patient

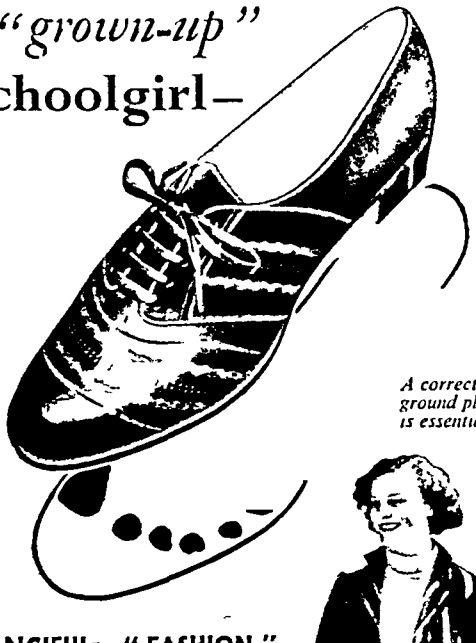
SALT'S CORSET & BELT BOOK
sent post free to any Doctor upon request

London Consulting Rooms
' OAKLEY HOUSE,"
14-18, Bloomsbury St , W C 1
Female Fitters in attendance Monday to Friday
Orthopaedic M chanician Wednesdays only
By Appointment

SURGICAL SERVICE SALTAIR

SALT & SON LTD BIRMINGHAM 2

Shoes for the *"grown-up"* schoolgirl—



A correct ground plan is essential



FANCIFUL "FASHION" OR 'GOOD SENSE' STYLE?

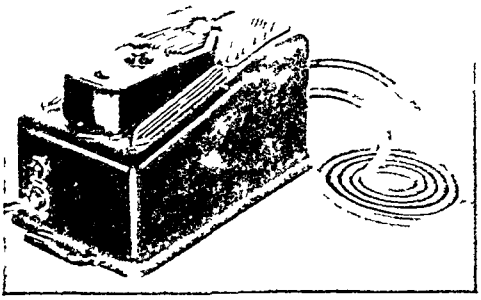
Most shoemen realise the folly of fitting women's fashion shoes to feet that are not yet fully grown But Miss Seventeen can rarely be persuaded to continue to wear the low heel natural form shoes of her earlier school days and so often at this important stage feet are spoiled by being squeezed into shoes entirely unsuitable for growing feet with high heels and no allowance for normal natural development Clarks make a range of models especially designed for girls in their 'teens Good sensible shoes that are sufficiently smart to appeal to the eye yet carefully planned to safeguard the feet through the final stages of rapid growth

Clarks

SHOES AND SANDALS

safe for growing feet!

Illustrated leaflet B5 and name of local agent gladly supplied on request CLARKS STREET SOMERSET



THERE IS ONLY ONE INDUCTOTHERM

It is easy to recognise its appearance is distinctive nothing ornate hides its sturdy construction There are no gadgets to complicate its operation It has strength of character it sets out to do certain important things and does them consistently well

It was designed to make short wave diathermy circuit utilising *electromagnetic induction* available for the heating of the deep tissues of the body That it does When you buy an Inductotherm you acquire a superior means of producing heat for medical purposes for treatment of localised disorders or for the creation of therapeutic artificial fever

These are the unvarnished facts

The basic principle of the Inductotherm has been proved best for the purpose The apparatus from electrical and mechanical standpoints is a superior product You would use it often and with confidence as do the several thousands throughout the world that already own Inductotherms Because in your practice it would seldom be idle it would be profitably producing gratifying clinical results

Make this convincing test

Inspect an Inductotherm operate it apply it to yourself Assure yourself that it is well worth considering as an addition to your therapeutic equipment that it is the sturdy useful type of apparatus that you would benefit from greatly Simply read sign clip and post the handy coupon

WITHOUT OBLIGATION

VICTOR X-RAY CORPORATION, LTD

15-19 Cavendish Place, London, W 1

Please arrange with me for a convenient time to demonstrate the value of the Victor Inductotherm

Name

Address

Town

W3

ST. ANDREW'S HOSPITAL

FOR MENTAL DISORDERS

NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

President THE MOST HON THE MARQUESS OF EXETER C M G A D C

Medical Superintendent THOMAS TENNENT M D M R C P D P H D P M

This Registered Hospital is situated in 120 acres of park and pleasure grounds Voluntary patients who are suffering from incipient mental disorders or wish to prevent recurrent attacks of mental trouble temporary patients and certified patients of both sexes are received for treatment Careful clinical biochemical bacteriological and pathological examinations Private rooms with special nurses male or female in the Hospital or in one of the numerous villas in the grounds of the various branches can be provided

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders It contains special departments for hydrotherapy by various methods including Turkish and Russian baths the prolonged immersion bath Vichy Douche Scotch Douche Electrical bath Plombières treatment etc There is an Operating Theatre a Dental Surgery an X ray room an Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment It also contains Laboratories for biochemical bacteriological and pathological research

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres Milk meat fruit and vegetables are supplied to the Hospital from the farm gardens and orchards of Moulton Park Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves in farming gardening and fruit growing

BRYN-Y-NEUADD HALL

The seaside house of St Andrew's Hospital is beautifully situated in a park of 330 acres Llanfairfechan amidst the finest scenery in North Wales On the North West side of the Estate a mile of sea coast forms the boundary Patients may visit this Branch for a short seaside change or for longer periods The Hospital has its own private bathing house on the seashore There is trout fishing in the park

At all the branches of the Hospital there are cricket grounds football and hockey grounds lawn tennis courts (grass and hard courts) croquet grounds golf courses and bowling greens Ladies and gentlemen have their own gardens and facilities are provided for handicrafts such as carpentry etc

For terms and further particulars apply to the Medical Superintendent (Telephone No 2356 and 2357 Northampton) who can be seen in London by appointment

NORTHUMBERLAND HOUSE,

GREEN LANES, FINSBURY PARK, N 4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses Conveniently situated and easy of access from all parts Six acres of ground, highly situated facing Finsbury Park Voluntary and Temporary Patients received without certification Occupational Therapy Psychotherapy and other modern forms of treatment

Telephone STAMFORD HILL 2688 Telegrams SUBSIDIARY LONDON

Convalescent Home KEARSNEY COURT DOVER For further particulars apply to the Medical Sup

COURT HALL, KENTON, near EXETER,

for the treatment of eight Ladies, voluntary, temporary, or certified patients Large gardens and own dairy

CLIFFDEN TEIGNMOUTH for early and convalescent cases A well appointed house with spacious balconies and extensive views of the South Devon coast Sub tropical gardens own dairy in 25 acres Private road to beach

		Telephones
Resident Physicians	BERTHA M MULES M D B S	Starcross 59
	ANNE S MULES, M R C S, L R C P	Teignmouth 289

THE COPPICE, NOTTINGHAM

HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted Occupational Therapy Voluntary and Temporary Patients received

Tel 64117 *For terms etc apply to the Medical Superintendent*

HAYDOCK LODGE

NEWTON-LE-WILLOWS, LANCASHIRE

Telegrams Street Ashton-in-Makerfield *Phone* Ashton in Makerfield 7311

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntary temporarily or [illegible] certificate Patients are classified in separate buildings according to their mental condition Situated in park and grounds of 300 acres Self supported by its own farm and gardens in which patients are encouraged to occupy themselves Every facility for indoor and outdoor recreation For terms etc apply MEDICAL SUPERINTENDENT

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded grounds For Ladies and Gentlemen suffering from Nervous or Mental Illness Voluntary Patients Temporary Patients, and Patients under Certificate are admitted for treatment Fees from 4 guineas a week upwards according to requirements A few vacancies exist for Ladies and Gentlemen at reduced fees on the recommendation of the Patient's own Physician Apply to Dr J A SMALL Telephone 80 Norwich. Telegrams Small 80 Norwich.

TYKEFORD ABBEY,

NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest, standing in 15 acres of garden and grounds, and is situated 14 miles from Northampton and 12 miles from Bedford on the main London to Northampton Road fifty miles from London. Both sexes are accommodated Psycho-therapeutic Treatment is used extensively in suitable cases Radiant Heat X ray and Ultra Violet Light Diathermy and Foam Baths Billiards, Tennis etc

Apply Dr D E M DOUGLAS-MORRIS Telephone Newport Pagnell 171

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS (20 miles from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on modern lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital Convalescent or mild cases can be treated in a delightful country mansion with extensive grounds known as

HIGHFIELD HALL,

situate about a mile away from the Hospital FEES TWO TO THREE GUINEAS PER WEEK

For further particulars apply to the Medical Supt W J T KIMBER L R C P D P M

ST ALBANS, HERTS

CHISWICK HOUSE, PINNER, MIDDLESEX

Telephone PINNER 231

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes

A modern country house, 12 miles from Marble Arch, in beautiful secluded grounds.

Fees from 10 guineas per week inclusive Cases under Certificate Voluntary and Temporary patients received for treatment.

Douglas Macaulay, M D, D P M

STRETTON HOUSE,

Church Stretton, Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provisions of the Mental Treatment Act 1930 Bracing hill country (*See Medical Directory* p 2328—Apply to the Medical Superintendent Phone 10 P O Church Stretton.

FENSTANTON,

CHRISTCHURCH ROAD, Streatham Hill, S W 2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders Certified Voluntary and Temporary Patients received Large Mansion with 12 acres of grounds (*See Medical Directory* p 2312) Apply Resident Physician *Telephone* Tulse Hill 7181

BAILBROOK HOUSE, BATH

For sufferers from Nervous and Mental Disorders with or without certificates

The house is gloriously situated in about 20 grounds of 20 acres with magnificent views of the City and the Avon Valley (*See Medical Directory* page 2322)

For terms apply A GUIRDHAM M A D M B Ch D P M Resident Physician

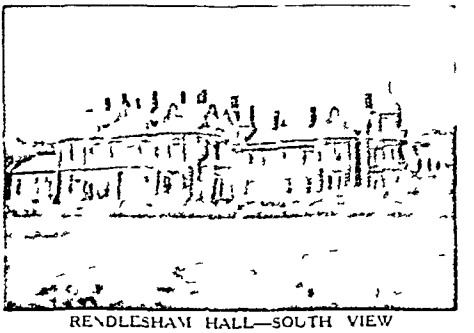
Telephone Bath Aston 8159

THE RESIDENTIAL TREATMENT OF ALCOHOLIC & DRUG ADDICTION

RENDLESHAM HALL

(Postal Address) — **WOODBRIDGE, SUFFOLK**

Rendlesham Hall, which is open to receive patients, is essentially a *Sanatorium* Its daily life and routine are that of an ordinary comfortable holiday or health resort, or of a large country house Each patient has all the privileges of a guest consistent with the prescribed medical treatment



RENDLESHAM HALL—SOUTH VIEW

Rendlesham Hall has 45 bedrooms and about 450 acres of gardens and park It has also a private nine-hole golf course, tennis and croquet lawns, and bowling green

Illustrated booklet giving particulars as to terms etc can be had on application to the

RESIDENT MEDICAL SUPERINTENDENT

Telegrams and Telephone WICKHAM MARKET 216 (Toll Call from London)

Proprietors The Norwood Sanatorium Limited

RUTHIN CASTLE, NORTH WALES

A Private Hospital or Clinic for the diagnosis and treatment of Internal Diseases (except Mental or Infectious Diseases) The Clinic is provided with a full staff of doctors bacteriologists chemists radiologists dietists nurses masseurs and masseuses

The surroundings are beautiful The climate is mild There is central heating throughout. The annual rainfall is 30·5 inches that is less than the average for England

The inclusive weekly fees are from 15 guineas a week according to the room occupied rooms with bathroom are from 21 guineas The charges include all chemical bacteriological X ray or other examination advised by the doctors and all the usual forms of treatment in addition to board and lodging. There are no extra charges except for alcohol (when ordered) and laundry An examination and consultation fee of 15 guineas is charged on the first visit

Address THE SECRETARY Ruthin Castle North Wales *Telegrams* Castle Ruthin *Telephone* Ruthin 66

BOWDEN HOUSE,

HARROW ON-THE HILL,

For the residential treatment of Functional Nervous Disorders

No case under certificate nor under the M T A

This home which was founded in 1911 is designed to provide for psychoneurotics a curative environment associated with modern psychological treatment modified to suit each individual patient. The treatment is in the hands of three experienced psychotherapists and most patients receive three hours of analytical treatment per week Occupational therapy of many varieties is available but not obligatory Recreations include tennis badminton billiards etc

On admission patients are examined by the diagnostic physician who advises on all physical treatment. As far as possible all necessary pathological examinations are carried out by the pathologist in the laboratory on the premises

STAFF

H CRICHTON MILLER M A M D M R C P (*Senior Physician*) GRACE H NICOLLE M A M B (*Resident Physician*)
ALFRED TORRIE M A M B Ch B D P M (*Medical Superintendent*) MARY HALL, M B B Ch (*Pathologist*)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds Detached Villas Chapel Garden and dairy produce from own farm Terms very moderate

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds with tennis courts etc and a Voluntary Temporary or Certified Patients may visit by arrangement for long or short periods

Illustrated Brochure on application to the Medical Superintendent The Old Manor, Salisbury 'Phone Salisbury 2251

CALDECOTE HALL

NUNEATON

WARWICKSHIRE

(Phone Nuneaton 241)

Residential treatment of

FUNCTIONAL NERVOUS DISORDERS

Including Alcoholism and other Addictions

(Certifiable Cases are not received)

This beautiful mansion situated in the heart of the country (less than two hours from London by L M S R) and surrounded by charming pleasure grounds in which games and outdoor occupational therapy are available is devoted to the treatment of Functional Nervous Disorders by psychotherapeutic and ancillary methods

Illustrated brochure and particulars obtainable from T E CARVER M D D P M *Resident Medical Superintendent*

CAMBERWELL HOUSE, 33, Peckham Road, London, S.E.5.

Telegrams PSYCHOLIA LONDON

FOR THE TREATMENT OF MENTAL DISORDERS

Telephone RODNEY 4 47 (2 lines)

Also completely detached villas for mild cases with private suites if desired Voluntary patients received Twenty acres of grounds Hard and Grass Tennis Courts, Putting Greens Bowls, Croquet, Squash Rackets, Recreation Hall with Badminton Court and all indoor amusements, including Wireless and other Concerts Occupational Therapy, Callisthenics and Dancing Classes, X ray and Actino therapy Prolonged Immersion Baths, Operating Theatre Pathological Laboratory, Dental Surgery and Ophthalmic Dept Chapel Senior Physician Dr HUBERT JAMES NORMAN assisted by three Medical Officers, also resident, and visiting Consultants An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary

The Convalescent Branch is HOVE VILLA, BRIGHTON and is 200 feet above sea level

PECKHAM HOUSE, 112, Peckham Road, London, S.E.15.

Telegrams "Alleviated, London" **Telephone Rodney 2641-2642**

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders Certified voluntary and temporary patients are received Separate houses for treatment and accommodation of special cases adjoin the Institution Occupational therapy, physical drill, and other forms of modern treatment There is a seaside branch, Kearsney Court near Dover to which patients may be sent for treatment or on holiday Motor drives are arranged when required Tennis courts Entertainments, dances, and indoor amusements held throughout the year Terms from £3 3s per week Illustrated prospectus and further particulars can be obtained from the **Medical Superintendent**

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date Lovely house and grounds (18 acres) Certified and uncertified cases taken Facilities for going to the seaside

ESTABLISHED OVER 200 YEARS

Apply to Med Supt for illustrated brochure Tel SALISBURY 761?

CHEADLE ROYAL HOSPITAL

CHEADLE, CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay N Wales is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES

The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary

In addition to the Main Building there are separate villas Extensive grounds Hard and grass tennis courts cricket and croquet grounds and a court for badminton There are also wireless installations Golf may be had within easy distance Occupational therapy

VOLUNTARY TEMPORARY AND CERTIFIED PATIENTS received

The Hospital is nine miles from Manchester 50 minutes by rail from Liverpool and 3¼ hours from London

For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT

Telephone GATLEY 2231 (3 lines)

THE CLINIC

20 Devonshire Place London, W.1

Tel Welbeck 1441 (20 lines)

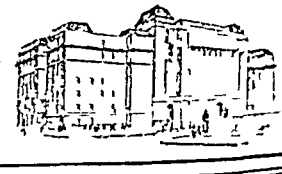
A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns to 18 gns per week (Average—14 gns)
8 Operating Theatres
150 State Registered Nurses
2 Resident Medical Officers (for emergencies)

Patients only received under the supervision of their own Medical Practitioner

Drugs and Dressings free (other than Proprietary Articles)

Illustrated Brochure on application to Secretary



THE ROYAL EARLSWOOD INSTITUTION

FOR MENTAL DEFECTIVES REDHILL, SURREY

(Formerly the EARLSWOOD ASYLUM)

PATRON H M THE KING

FOR THOSE REQUIRING CONTROL with EXPERT SUPERVISION and needing SPECIAL TRAINING in useful occupation *SCHOOLS FARMING and various TRADE WORKSHOPS*

Inclusive fees from £110 p a *THOSE UNABLE TO PAY FULL FEES* admitted by votes of subscribers with part payment towards cost

RECREATIONS Outdoor games MALE STAFF BAND for Concerts Dancing etc

Apply THE MEDICAL SUPERINTENDENT Earlswood Redhill Surrey *Phone* REDHILL 344
or to the Secretary Mr H STEPHENS 14-16 Ludgate Hill E C 4 *Phone* CITY 4697

WYE HOUSE, BUXTON, AND CLINIC

for the PREVENTION and TREATMENT of NERVOUS and MENTAL DISORDERS in both sexes Large country house beautifully situated in its own grounds Croquet lawns hard tennis courts billiards wireless installation throughout Every facility for specialised modern treatment Hydrotherapy psychotherapy occupational therapy Electrotherapy light diathermy Private rooms with separate sitting rooms if required Voluntary Temporary and Certified patients received—For terms apply to the Medical Superintendent HELEN S E MURRAY M D

Nat Tel 130

About the Harrogate CURE

Harrogate specialises in the Treatment of—Disorders of the Liver—congestion cirrhosis jaundice cholecystitis cholelithiasis and tropical life Also in Diseases of the Skin—eczema psoriasis the local infections of the skin etc The Chronic Rheumatic Diseases—Arthritis Fibrositis Neuritis Gout Hyperpiesis Mucous Colitis Functional Disorders of the Heart Pelvic Disorders of Women Convalescence from acute illness

A wide range of Sulphur and Iron waters is available for dealing with the large group of disorders amenable to Spa treatment Prescribed diets for Spa patients can be obtained at hotels and boarding houses without extra charge Complimentary and reduced price facilities for the Cure Accommodation and Amusements are available for Members of the Medical Profession

Full details of Harrogate for Cure and Holiday will be sent free upon application to Spa Manager Information Bureau Harrogate 1 (State if a medical enquiry)

HARROGATE

"IT'S QUICKER BY RAIL"

Cheap monthly return tickets to Harrogate from all stations Any train any day

The MUNDESLEY SANATORIUM

The central building makes the Mundesley Sanatorium the best equipped building in England for the cure of Tuberculosis All the bedrooms have hot and cold running water electric light and wireless headphones The public rooms are spacious and comfortable

Resident Physicians
S VERE PEARSON
M D (Cantab) M R C P (Lond)
E C WYNNE EDWARDS
M B (Cantab) F R C S (Edin)
GEORGE H DAY
M D (Cantab)

For all information apply
The Secretary
THE SANATORIUM MUNDESLEY
NORFOLK
Telephone Mundesley 94 and 95
(2 lines)

The buildings face S S W and are sheltered from the sea by a pine clad ridge The sunshine record and dry air complete a perfect site The medical equipment is of the latest kind and there is a day and night nursing staff

TERMS FROM 7½ GUINEAS WEEKLY

THE CORNISH RIVIERA SANATORIUM

ROSEHILL PENZANCE.

For the treatment of patients suffering from tuberculosis

The Sanatorium stands in its own grounds of 13 acres of garden lawn and woodland and is well sheltered from cold winds The climate is mild in winter cool in summer Artificial pneumothorax and other modern forms of treatment are available Day and night nursing staff Electric light Wireless in all rooms

Medical Supt **Francis Chown** M B Lond D P H Consulting Physician (late Med Supt) Cornwall County Sanatorium

Terms 5 to 7 guineas weekly **Phone Penzance 398**

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S S W sheltered from North and East elevation 800 feet. Pure bracing air **Special Treatment by Artificial Pneumothorax** (X ray controlled) **Tuberculins and Ultra-violet Rays** are available when necessary without extra charge X ray plant Fully equipped Dental Department. Electric light Radiators hot and cold basins and Wireless in all rooms Up to date main drainage

Full day and night Nursing Staff Terms 5 gns to 7 gns a week in Institute

Med Supt GEOFFREY A. HOFFMAN B A M B T C Dub *Asst Phys* MARGARET A HARRISON M B B S Lond *Pathologist* EDGAR N DAVEY M B B Ch *Consult Laryngologist* CASSIDY DE W GIBB F R C S Edin *Consulting Dental Surg* GEORGE V SAUNDERS L D S R C S Lond Apply Secretary The Cotswold Sanatorium Cranham Gloucester *Tel* 81 and 82 WITCOMBE. *Grams* HOFFMAN. BIRDLIP

TORQUAY
GRESHAM COURT HOTEL

RECENTLY OPENED A small luxury Hotel 2 mins Sea almost on level Luxurious comfort combined with an earnest desire to please

The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure M TEL 3658

THE HOTEL GREAT CENTRAL
Marylebone Road, N W.1

The Hotel Great Central is within a few minutes walk of the London Clinic and Harley Street

Special terms for friends visiting Nursing Homes in vicinity

Apply Manager Telephone Padd 1220

HOSPITAL FOR CONSUMPTION
AND DISEASES OF THE CHEST BROMPTON
and FRIMLEY SANATORIUM

PAYING PATIENTS RECEIVED
BOTH MEDICAL and SURGICAL CASES
5 to 8 guineas per week at the Hospital. 3 to 4 guineas per week at the Sanatorium.
APPLY TO THE SECRETARY —BROMPTON HOSPITAL S W.3

MONTANA HALL, Montana, Switzerland

OPEN ALL THE YEAR

THE ONLY SANATORIUM IN SWITZERLAND UNDER BRITISH OWNERSHIP AND CONTROL AND WITH A DAY AND NIGHT STAFF OF BRITISH TRAINED NURSING SISTERS.

INCLUSIVE TERMS—from 7 guineas (sterling) per week.

Med Supt HILARY ROCHE, M D (Melb) M R C P (Lond) Tuberculous Dis Dip (Wales)

CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy Cases of alcoholism and drug addiction are admitted The Physiotherapy Department has separate units fully equipped for X ray work heliotherapy short wave therapy electro therapy and hydrotherapy (swimming bath prolonged baths Scotch and Vichy douches Plombières treatment electric and Turkish bath cabinets etc) There is a fully equipped gymnasium under qualified instructors Facilities are provided under special recreational therapists for all indoor and outdoor games including golf course cricket football and hockey grounds lawn tennis and squash courts croquet and bowling greens

The Hospital has its own Cinema Library and Hairdressing Saloon Terms include regular motor drives

Private rooms suites or villas are available and special nurses can be provided

The Hospital grounds extending to nearly 1 000 acres are situated in delightful country and include an extensive farm (T T herd) gardens and orchards

As the Hospital is well endowed terms are exceptionally moderate *e g* First Department 3 to 30 guineas per week Second Department 2 and 2½ guineas per week Voluntary and certified patients are received Medical Certificates given anywhere in the British Isles are valid for admission of patients For prospectus necessary forms and further information apply to

Physician Superintendent P K McCOWAN J P M D F R C P D P M Barrister at Law
July 1st Tel Dumfries 1119

Smedley's

Great Britain's Greatest Hydro

Matlock

Full range of Hydropathic Treatment in Unrivalled suites of Baths Turkish and Russian Baths Aix and Vichy Douches Massage Plombieres Treatment Studio Chair Electric Installation for Baths and other Medical Purposes Dowsing Radiant Heat Infra red Light Artificial Sunlight D'Arsonval High Frequency Diathermy Nauheim Baths Soapless Foam Baths etc Certified milk from own farm Large Winter Garden Orchestra Special Provision for Invalids Night Attendance Over 40 trained Male and Female Nurse Masseurs Attendants etc

Terms 13/ to 18/6 per day inclusive board
Illustrated Brochure M J on request

Resident Physicians
G C R HARBINSON M B B Ch B A O (R U I) R MacLELLAND, M D C M
Phone No 17 Grams Smedleys Matlock

QUEEN CHARLOTTE'S MATERNITY HOSPITAL

MARYLEBONE ROAD, N W 1

Medical Students and Qualified Practitioners admitted to the Practice of this Hospital Unusual opportunities are afforded of seeing Obstetrical Complications and Operative Midwifery (about one half of the total admission being primiparous cases) Over 2 700 patients are admitted to the Wards annually and in the Antenatal department there are over 20 000 attendances per annum Clinical demonstrations are given by the Staff daily

For rules fees etc apply H B STOKES Secretary Superintendent

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)
CITY ROAD E C 1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Dental Clinics and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Residential) Nearly 2 000 patients annually

RALPH B CANNINGS Secretary

DIPLOMA IN PUBLIC HEALTH
The Royal Institute of Public Health and Hygiene

The Course of Instruction can be commenced at any time Special provision is made for students who can give only part time to the work

A prospectus and further particulars can be obtained from the Secretary
Telephone Langham 2[illegible]
[illegible] Portland Place London W 1

STAMMERING SPEECH DEFECTS

BEHNKE METHOD Estb 1890 Cases non resident treated at 39 Earl's Court Sq S W 5 and in residence in the Summer holidays at Miss Behnke's house on the Chilterns Treatment stops education and treatment of stammering and other speech defects — Times The principles [illegible] are continually correct and perfectly e — Guy Hospital Gazette

Stammering *Cleft Palate Speech Lisping*
3 3 Miss BEHNKE 39 Earl's Court Sq S W 5

F R C S. (Edin)

EDINBURGH POSTAL COURSES

For details of [illegible] and Oral Classes — H C Orr F R C S Surgeons Hall Edinburgh

LONDON HOSPITAL MEDICAL COLLEGE

PRIMARY FELLOWSHIP EXAMINATION

A SPECIAL COURSE OF INSTRUCTION for the above Examination will begin on Monday September 12th

The fee for the Course is 15 guineas

Further particulars may be obtained from — DR A E CLARK KENNEDY M D F R C P Dean Turner Street London E 1

LONDON HOSPITAL MEDICAL COLLEGE

F.R.C.S.

A Course of Instruction for the FINAL FELLOWSHIP EXAMINATION will begin on Thursday September 1st 1938 Fees (exclusive of Operative Surgery) 25 guineas Operative Surgery 10 guineas

Further particulars may be obtained from — DR A E CLARK KENNEDY M D F R C P Dean London Hospital Medical College Turner Street London E 1

EXAMINING BOARD IN ENGLAND

BY THE
ROYAL COLLEGE OF PHYSICIANS OF LONDON
AND THE
ROYAL COLLEGE OF SURGEONS OF ENGLAND

Notice is hereby given that the following Examinations will commence on the dates stated below —

PRE MEDICAL EXAMINATION
(Chemistry Physics and Biology)
MONDAY SEPTEMBER 19th

FIRST EXAMINATION
(Anatomy Physiology and Pharmacology)
THURSDAY SEPTEMBER 22nd

FINAL EXAMINATION
(Pathology Medicine Surgery and Midwifery)
MONDAY OCTOBER 3rd

Candidates who have fulfilled the necessary conditions and who desire to present themselves for Examination must give notice in writing to the Secretary Examination Hall 8 11 Queen Square London W C 1 at least twenty-one days before the date of the Examination transmitting at the same time such certificates as may be required by the Regulations of the Board

HORACE H REW Secretary

University College Hospital Medical School,

University Street, W C 1

WINTER SESSION commences Tuesday October 4th 1938

Scholarships and Prizes exceeding £1 000 awarded annually and numerous Vacancies for House Appointments and Senior Posts for Registrars etc

Dental School Department

(National Dental Hospital Great Portland Street W 1)

Recently reorganized and equipped on the highest standard of modern requirements

Full particulars can be obtained on application to the Dean

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LICENCE IN DENTAL SURGERY

Notice is hereby given that the FIRST EXAMINATION will commence on WEDNESDAY SEPTEMBER 21st

Candidates who have fulfilled the necessary conditions and who desire to present themselves for Examination must give notice in writing to the Director of Examinations Examination Hall 8-11 Queen Square London W C 1 at least twenty days before the date of the Examination transmitting at the same time such certificates as may be required by the Regulations of the Board

HORACE H REW Director of Examinations

THE MILROY LECTURES ON STATE MEDICINE AND PUBLIC HEALTH

The Council of the Royal College of Physicians are prepared to receive applications for the office of MILROY LECTURER for 1940

Applications should be addressed to the Registrar Royal College of Physicians Pall Mall East S W 1 before September 17th 1938 and should contain a statement of the division of the subject selected by the candidate

The course consists of two lectures

The Lectures are to be given on a Tuesday and Thursday in February or March 1940

Suggestions on subject of his bequest and information as to emolument may be obtained from the Registrar

A copy of Dr Milroy's

August 1938

UNIVERSITY OF LONDON

Applications are invited for the WILLIAM JULIUS MICKLE FELLOWSHIP which is of the value of at least £400 and is awarded by election to the man or woman who being resident in the and a graduate of the University has in the of the Senate done most to advance MEDICINE ART or SCIENCE within the previous [illegible]

Applications must be made before October 1st 1938 Further particulars should be obtained from the Academic Registrar University of London Senate House London W C 1

Westminster Medical School Hospital (University of London)

NEW MEDICAL SCHOOL BUILDING, OPENED MAY, 1938

Hospital Centrally Situated (opposite Westminster Abbey) Extensive Sports Ground Entrance Fee £13 13s Annual Composition Fee £46 4s Valuable Entrance Scholarships awarded annually

The Dean will be pleased to arrange for intending students and parents to inspect the Hospital and Medical School at any time Only male students are admitted

A prospectus and full particulars may be obtained on application to the Dean

ADOLPHE ABRAHAMS, O B E. M A, M D, F R C P, Westminster Hospital Medical School

Telephone Victoria 6041 17, Horseferry Road S W 1

THE HOSPITAL FOR DISEASES OF THE SKIN

(Established 1841)

71, BLACKFRIARS ROAD LONDON, S E 1

Telephone WATerloo 6001

New patients can be seen at 2 o'clock from Monday to Friday both inclusive also from 5 30 to 6 30 on Tuesday and Friday evenings Necessitous cases admitted free, others on payment of a small contribution

LIGHT THERAPY TREATMENT X RAY DEPARTMENT

Classes held twice a year for post graduates by arrangement with the Fellowship of Medicine

All enquiries should be addressed to The Secretary

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17 RED LION SQ., LONDON W C 1.

FOUNDED IN 1882

by E. S. WEYMOUTH M A (Lond)

POSTAL OR ORAL PREPARATION FOR ALL MEDICAL EXAMINATIONS

SOME SUCCESSES

M D (Lond)	1901 37 (11 Gold Medallists during 1913-37)	413
M S (Lond.)	1901 37 (including 4 Gold Medallists)	24
M B B S (Lond)	*Final* 1918-37 (Completed Exam)	255
F R C S (Eng),	*Primary*	199
1919-37	*Final*	192
M R C P (Lond.)	1919 37	286
D P H	(Various) 1906-37 (Completed Exam)	348
F R C S (Edin.)	1918-37	65
M R C S L R C P	*Final* 1919-37 (Completed Exam)	606
M D	Various By Thesis Many successes	

Preparation for the above also for Medical Preliminary and all examinations leading up to M R C S L R C P or M B of various Universities also for M R C P (Edin) D P M D O M S D T M & H D L O D C H D A D M R E M M S A L M S S A D C O G and some exams of Dominions Universities

ORAL CLASSES

M R C P M D Primary and Final F R C S F R C S (Edin) also Final M B B S and M R C S L R C P Museum and Microscope Work Also Private Tuition

MEDICAL PROSPECTUS (47 pp)

CONTENTS The method and the cost of entering the Medical Profession *Particulars of all Medical Examinations* Postal Courses and Oral Classes Suggestions for the Higher Medical Examinations Suggestions for the Higher Surgical Examinations Suggestions for the Special Diploma Examinations Refresher Courses. Openings for Women Hints for writing theses

Medical Prospectus gratis along with list of Tutors etc on application to the Principal 17 Red Lion Sq London W C 1 (Telephone Holborn 6313)

HIGHER MEDICAL QUALIFICATIONS

Are you desirous of obtaining one of the special higher qualifications?

Diploma in Anaesthetics
Diploma in Psychological Medicine
Diploma in Ophthalmology
Diploma in Radiology
Diploma in Laryngology, Otology, and Rhinology
Diploma in Child Health
Diploma in Tropical Medicine
Mastery of Midwifery
M C O G and D C O G
M D Thesis (all Universities)
All Medical and Surgical Degrees and Diplomas

You can qualify for any of the above by taking our Combined Postal and Practical Courses

Write at once stating your requirements to the

Secretary,
MEDICAL CORRESPONDENCE COLLEGE
19 Welbeck Street London, W 1.

WE SPECIALISE IN POST GRADUATE COACHING FOR ALL EXAMINATIONS

Send Coupon below for Free Guide

Name

Address

Examination in which interested

M D THESIS

(Cambridge Edinburgh Glasgow Durham) SKILLED COACHING GUIDANCE and ADVICE

from Special Tutors in conformity with the Regulations of the various Universities Apply for particulars and free booklet Hints on Writing a Thesis for the M D Degree to the SECRETARY Medical Correspondence College 19 Welbeck Street London W 1

LONDON HOSPITAL MEDICAL COLLEGE AND DENTAL SCHOOL

THE WINTER SESSION will open on MONDAY, OCTOBER 3rd

The London Hospital serves the East End of London and with eight hundred and ninety beds is the largest voluntary Hospital in England The Out patient Department which deals with a hundred thousand new patients per annum is extensively used for teaching

The size of the Hospital necessitates a large number of resident medical officers Every year seventy resident house physicians and house surgeons and eighty salaried non resident clinical assistants are appointed from among recently qualified students The opportunities which these appointments offer for obtaining clinical experience are invaluable

The Medical College is attached to the Hospital and is staffed by Professors of Anatomy Physiology Bacteriology Chemical Pathology Morbid Anatomy and Medicine of the University of London

Special Courses in Anatomy and Physiology for the Primary F R C S and advanced courses in Surgery for the Final F R C S Examination and in Medicine for the M D and M R C P Examinations are held twice a year

Entrance Scholarships and prizes of the total value of £950 are awarded annually Research Funds to the value of £113 000 permit of assistance being given to students and graduates engaged in medical research

The Medical College contains a modern Museum of Pathology and a Library provided with all the current medical periodicals in charge of a full-time librarian There is also an Athenaeum Club and Dining Hall a Gymnasium a Fives Court and two Squash Courts in the Students Hostel The Athletic Ground of 13 acres at Hale End is within easy distance of the Hospital

The Hospital is only 20 minutes from Charing Cross and Baker Street Stations For those who wish to live in immediate proximity to the Hospital there is accommodation for seventy five students in the Students Hostel

Further details may be obtained from the Dean Dr A. E. Clark Kennedy M D F R C P Physician to the Hospital and Fellow of Corpus Christi College Cambridge who is always pleased to meet students wishing to see the Hospital and College and to whom application for admission should be made

Turner Street London E 1

Preliminary Examinations

The COLLEGE OF PRECEPTORS hold Preliminary Examinations for Medical and Dental Students in London and at Provincial Centres in March June September and December For Regulations apply to the Secretary College of Preceptors Bloomsbury Square London W C 1

DERBYSHIRE EDUCATION COMMITTEE

SCHOOL MEDICAL SERVICE

ASSISTANT SCHOOL MEDICAL OFFICER (Male)

Applications are invited for the post of Assistant School Medical Officer (male) at a salary of £500 rising by annual increments of £25 to £700 per annum together with a travelling allowance in accordance with the County scale

Candidates must be registered medical practitioners of at least three years standing The duties will include work under the Maternity and Child Welfare Service and experience in this work and in Mental Deficiency is desirable

The appointment will be a designated post under the Local Government and Other Officers Superannuation Act and the successful candidate will be required to pass a medical examination

The officer appointed will not be allowed to engage in private or consulting practice but will be required to devote the whole time to the duties of the office and will act under the direction of the School Medical Officer

Forms of application may be obtained from the undersigned to whom they should be returned completed together with copies of not more than three recent testimonials on or before September 5th 1938 endorsed Assistant School Medical Officer The appointment will be terminable by three months notice on either side

New County Offices W M ASH
St Mary s Gate School Medical Officer
Derby

UNIVERSITY OF GLASGOW

BARCLAY LECTURESHIP IN SURGERY AND ORTHOPAEDICS IN RELATION TO INFANCY AND CHILDHOOD

The Selection Committee gives notice of a Vacancy in the Barclay Lectureship in Surgery and Orthopaedics in Relation to Infancy and Childhood tenable at the Royal Hospital for Sick Children Glasgow

The post carries with it the appointment as a VISITING SURGEON to the Royal Hospital for Sick Children Salary (for the combined post) £700

Information regarding the Lectureship may be obtained on application to the Secretary of the University Court The University Glasgow W 2 to whom applications should be sent not later than September 30th 1938

J S MUIRHEAD
August 1938 Secretary of University Court

BRITISH POSTGRADUATE MEDICAL SCHOOL

Applications are invited for the post of RESIDENT ANAESTHETIST on the staff of the British Postgraduate Medical School at Hammersmith Hospital (L C C) Ducane Road Shepherd s Bush London W 12 The appointment will be for six months to commence duty on October 1st 1938

Salary will be at the rate of £150 per annum with board lodging and laundry Preference will be given to candidates who have held a similar appointment

Applications with copies of testimonials should be sent to the Dean British Postgraduate Medical School Ducane Road Shepherd s Bush London W 12 not later than the morning of Wednesday August 31st 1938

BRITISH POSTGRADUATE MEDICAL SCHOOL

There are two vacancies for HOUSE SURGEONS to the Surgical Unit British Postgraduate Medical School Hammersmith Hospital The appointments are for six months and are not renewable

Salary £105 per annum with board residence and laundry Duties to commence on October 1st 1938 Duties are mainly in General Surgery Applicants must have held a previous House appointment

Applications with copies of testimonials should be sent to the Dean British Postgraduate Medical School Ducane Road Shepherd s Bush London W 12 not later than the morning of Wednesday August 31st 1938

LONDON COUNTY COUNCIL

DEPUTY MEDICAL SUPERINTENDENT (man or woman) (age under 40) required at Horton Hospital (for nervous and mental disorders) Epsom Surrey

Must be registered to practise both in medicine and surgery in England have held residential position in general hospital for six months or have had comparable hospital experience and must hold diploma or degree in psychological medicine

Administrative experience essential

Salary £450 rising to £500 No emoluments [illegible] on hospital estate Economic rent [illegible] Marriage terminates [illegible]

Local [illegible] form returnable by September [illegible] endorsed addressed foolscap envelope to [illegible] (B.X) Chief Medical Officer Shell [illegible] Strand W C 2 Canvassing dis[illegible]

UNION OF SOUTH AFRICA

VACANCY FOR

(A) SENIOR PROFESSIONAL OFFICER (PHYSIOLOGY)—ONE POST (Salary Scale £700 £25 £800)

(B) SENIOR PROFESSIONAL OFFICER (BIOCHEMISTRY)—ONE POST (Salary Scale £700 £25 £800)

Applications are invited from suitable candidates for appointment to the above mentioned posts in the Department of Agriculture and Forestry in the Union of South Africa

The commencing salaries will be determined according to qualifications and experience.

SPECIAL QUALIFICATIONS

1 *For the Post of Senior Professional Officer (Physiology)*

Applicants must be in possession of a doctorate in science with thorough training in physiology and must have given special attention to this branch in their advanced studies Consideration will be extended to experience in physiological research especially in the direction of fruit research although the latter qualification will not necessarily be regarded as essential

2 *For the Post of Senior Professional Officer (Biochemistry)*

Applicants must be in possession of a doctorate *in science with thorough training in biochemistry* and must have given special attention to this branch in their advanced studies Experience in biochemical research work especially in the direction of fruit research will be a recommendation although this qualification will not necessarily be regarded as essential

Candidates should furnish full particulars regarding qualifications and experience *Original certificates and testimonials should not be submitted in the first instance*

Before appointment to the fixed establishment in a permanent capacity the successful candidates will *be required to serve on probation for a period of* not less than twelve months they must be British subjects and have resided in the Union of South Africa or in the Mandated Territory of South West Africa for not less than three years and they must furnish satisfactory certificates of birth and health Successful candidates who do not satisfy the nationality and/or residential qualifications will be appointed on contract until if their services are satisfactory they acquire eligibility for permanent appointment Proficiency in one of the official languages—English and Afrikaans) (or Nederlands)—is an essential requirement

Copies of publications and/or scientific reports of which the applicant is the author must be attached to all applications where possible

Any degrees obtained by candidates must be those of universities of recognized standing Any qualifications additional or of a standard equal to those which are required will also be taken into account

Application must be made on the prescribed form (Z 83) which is obtainable from the Secretary *Office of the High Commissioner for the Union* of South Africa South Africa House Trafalgar Square London W C 2 to whom all completed forms must be addressed

Applications must reach the High Commissioner s office not later than September 12th 1938

LIVERPOOL COUNTY BOROUGH

LOCAL EDUCATION AUTHORITY

ASSISTANT SCHOOL MEDICAL OFFICER (WOMAN)

Applications are invited for an Assistant School Medical Officer (woman) in the Department of the Medical Officer to the Local Education Authority at a salary of £500 per annum rising by annual increments of £25 to £700 per annum

(Where the successful candidate holds a similar appointment under another Local Education Authority and receives a salary in excess of the advertised minimum a commencing salary of not less than the salary which the candidate is receiving under her existing appointment (not exceeding the maximum under the Liverpool Scale) may be paid)

Candidates must be registered medical practitioners and must have had at least three years experience

The Officer appointed will be required to reside within the City and devote whole time service to the Local Education Authority under the direction of the Medical Officer to the Local Education Authority *and will not be allowed to undertake* any private practice

The appointment will be subject to the Local Government and Other Officers Superannuation Act 1922 and the Standing Orders of the City Council

Form of application which may be obtained by forwarding a stamped addressed foolscap envelope should be returned together with copies of three recent testimonials to the undersigned not later than September 3rd 1938 and endorsed Assistant School Medical Officer

The canvassing of members of the Education Committee or the City Council is strictly prohibited and will be considered a disqualification

Municipal Buildings W H BAINES
Liverpool 2 Town Clerk and Clerk to
August 15th 1938 the Local Education Authority

MINISTRY OF HEALTH

The Minister of Health invites applications from registered medical practitioners (men and women) for six vacant appointments as MEDICAL OFFICERS on the staff of the Ministry

The salary commences at £850 per annum and rises by annual increments of £30 to a maximum of £1 000 per annum

The appointments will be subject to the usual Civil Service conditions as to pension holidays etc

Candidates must be registered medical practitioners of not less than five years standing and have experience in Public Health or Hospital services

Generally preference will be given to candidates possessing a University degree in Medicine and a Diploma of Public Health but for one of the appointments special surgical experience of the treatment of Cancer by modern methods and for another special knowledge of pharmacology would be taken into consideration

Medical Officers are required to devote their whole time to the Public Service and must be prepared to work in any part of England or Wales if required to do so

Canvassing through members of Parliament or in other ways will render a candidate liable to disqualification

Forms of application with further particulars of the appointments may be obtained from

The Director of Establishments
Ministry of Health
Whitehall S W 1

No application can be considered unless received on the prescribed form not later than September 13th 1938

GOVERNMENT OF INDIA

Applications are invited from women candidates for the appointment of PROFESSOR OF MATERNITY AND CHILD WELFARE at the ALL INDIA INSTITUTE OF HYGIENE AND PUBLIC HEALTH CALCUTTA

Candidates must possess a registrable medical qualification and must have experience of the executive and administrative aspects of Maternity and Child Welfare Preference will be given to candidates possessing also experience in directing or conducting research and in lecturing to students

Agreement for five years in the first instance Pay Scale Rs 1 000 rising by biennial increments of Rs 50 to Rs 1350 a calendar month plus Overseas Pay of Rs 150 (Rupee=1s 6d approximately) Provident fund First-class passage to India and return passage *on* satisfactory termination of service (Overseas Pay and return passage admissible only to appointee of non-Asiatic domicile)

Applications will be accepted from members of the Women s Medical Service (India) who possess the requisite qualification In respect of such candidates different terms and condition will apply details of which will be furnished on request

Further particulars and forms of application may be obtained on application by postcard from the HIGH COMMISSIONER FOR INDIA General Department India House Aldwych London W C 2 Last date for receipt of completed applications September 10th 1938

DERBYSHIRE COUNTY COUNCIL

WOMAN ASSISTANT MATERNITY AND CHILD WELFARE MEDICAL OFFICER

The Derbyshire County Council require the services of a fully qualified whole time Woman Assistant Maternity and Child Welfare Medical Officer with experience in Ante natal work Midwifery and Children s Diseases to hold (under the direction of the County Medical Officer of Health) consultations at the Ante natal and Maternity and Child Welfare Centres of the Derbyshire County Council and (under the like direction) to perform such other duties as appertain to the office

The salary will be £600 per annum rising by £25 per annum to £700 per annum

The appointment will be a designated post under the Local Government and Other Officers Superannuation Act and the successful candidate will be required to pass a medical examination

Forms of application may be obtained from the undersigned to whom they must be returned *together with copies of not more than three testimonials* not later than September 4th 1938

W M ASH
New County Office County Medical Officer
St Mary s Gate of Health
Derby
August 12th 1938

WOMENS HOSPITAL MELBOURNE

Applications are invited from [illegible] Australian *Medical Practitioners for the post of* PATHOLOGIST

Salary £1 000 per annum

Duties commence at beginning of 1939 or [illegible]

Further particulars *from the* Secretary [illegible] satisfactory *Bureau of the* British Empire [illegible] Street London W C 1 Application to the Secretary Women s Hospital Street Carlton N 3 [illegible]

ROYAL NAVAL MEDICAL SERVICE

Vancancies exist for Medical Officers in the Royal Navy, and applications are invited for entry in September, 1938

Candidates below the age of 28 years are preferred, and they must be registered under the Medical Acts No examination in professional subjects will be held, but candidates will be required to attend for interview by a Selection Board

Selected candidates will be entered for Service for a period of three years, which if desired is usually extended to five years at the discretion of the Admiralty

Officers who leave the Service at the end of the initial period of three years will be eligible for a gratuity of £400, and those who leave at the end of five years for a gratuity of £1,000

At the end of five years' Short Service, permanent commissions will be given to selected officers who wish to make the Naval Medical Service their permanent career Officers transferred to the permanent list will receive a gratuity of £1,000 (less Income Tax)

Full opportunities exist for transfer to the permanent list, and periods of unemployed or half pay are very rare The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Opportunities are available for officers on the permanent list for postgraduate study, to specialise, to take higher examinations, and to obtain further qualifications

Naval Medical Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers

Copies of the regulations for entry and conditions of service, including rates of pay, allowances and retired pay, may be obtained from the Medical Director General of the Navy, Admiralty, S W 1, and from the Deans of all Medical Schools

Applications for entry from intending candidates must be received not later than August 31st, 1938

Appointments for Medical Officers in the ROYAL AIR FORCE

Medical men are invited to apply for Short Service Commissions in the Royal Air Force. Candidates must be registered under the Medical Acts and be not more than 31 years of age on entry

The period of service is 3 years—extendible to 5 years A gratuity of £400 or £1 000 is payable at the termination of 3 or 5 years respectively Permanent commissions are awarded in a number of cases _ These offer a pensionable career with the opportunity of extra leave on full pay for specialised study Applicants who hold—or are likely to hold —post graduate appointments in civil hospitals may on joining the Royal Air Force be seconded until the termination of their appointments (for a period not exceeding one year) An antedate of commission up to twelve months is allowed for appointments held at approved hospitals

Fuller information can be obtained from The Director of Medical Services, Air Ministry, Kingsway, London

Red D 10 L23 10 Medical Tutors etc 17 Red Lion Holborn 6313

CITY OF BIRMINGHAM

MENTAL HOSPITALS DEPARTMENT

RUBERY HILL AND HOLLYMOOR DIVISION

The Committee of Visitors invite applications from duly qualified medical men for the position of JUNIOR MALE ASSISTANT MEDICAL OFFICER. The successful candidate will be required to reside in the Hospital.

The commencing salary will be £350 per annum plus the usual residential emoluments of board, lodging, laundry and attendance. An increase of £50 will be granted on completion of twelve months' satisfactory service and thereafter increases of £25 per annum up to a maximum salary of £450 per annum. An additional £50 per annum will be paid to a holder of the D.P.M. qualification or to a person obtaining the D.P.M. after appointment. All fees received in connexion with panel work will be required to be paid into the Borough Funds but for making insurance reports, reports on compensation cases and Coroner's inquests the fees can be retained.

A person who has held for at least six months a medical or surgical residential post in a general hospital will be regarded as having an additional qualification. Previous mental hospital experience is not essential but experience in the administration of anaesthetics is desired.

The candidate appointed will be required to pass a *medical examination* and will be placed on the permanent staff after one year's satisfactory service when he will be required to contribute under the Asylums Officers' Superannuation Act, 1909. He will be required to serve in such institution belonging to the Mental Hospitals Committee as they may from time to time direct. The appointment is subject to one month's notice on either side.

Applications, stating full particulars of qualifications, experience and appointments held, accompanied by copies of three recent testimonials must be addressed to the undersigned so as to be received not later than September 1st, 1938.

Town Clerk's Office, Council House, Birmingham, 1. F. H. C. WILTSHIRE, Clerk to the Committee of Visitors.

CITY OF PORTSMOUTH

TUBERCULOSIS OFFICER AND SENIOR ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited for the above appointment from registered Medical Practitioners having special experience in the diagnosis and treatment of Tuberculosis. Previous experience in general public health and the possession of a D.P.H. are essential.

Salary will be at the rate of £750 per annum rising by three biennial increments of £50 and one of £37 10s. to a maximum of £937 10s., but the commencing salary will be fixed according to the previous experience of the successful applicant.

Applicants not to exceed 40 years of age.

The duties will be concerned mainly with Tuberculosis, but the successful candidate will be required to perform other duties in the Health Department and to deputize for the Medical Officer of Health during his absence in certain aspects of the work.

The post is designated as an established post under the Local Government and Other Officers' Superannuation Act, 1922, and the salary and emoluments will be subject to a statutory deduction of 5 per cent. under that Act. Successful candidates will be required to pass a medical examination and may reside in any district of Portsmouth or Southsea.

Application forms may be obtained from, and must be returned to, the Medical Officer of Health, The Guildhall, Portsmouth, not later than Saturday, September 10th, 1938.

Canvassing either directly or indirectly will be deemed a disqualification.

The Guildhall, Portsmouth. F. J. SPARKS, Town Clerk.

BOROUGH OF CHORLEY

APPOINTMENT OF MEDICAL OFFICER OF HEALTH

Applications are invited for the position of whole-time Medical Officer of Health and School Medical Officer.

Candidates must have had previous experience in the various duties attaching to the position of Medical Officer of Health, and in addition to the qualifications prescribed by statute must possess the Diploma of Public Health.

Salary £650 per annum, plus an allowance of £50 per annum for travelling expenses. The post is pensionable under the Superannuation Act, 1922. Its appointment will be subject to the Salary Officers (Qualified Medical) Regulations, 1924, and to the approval of the Local Government Board.

Further particulars and form of application may be obtained from the undersigned, by whom applications must be received not later than [illegible].

GEORGE JACKSON, Town Clerk.

CITY OF LEEDS

KILLINGBECK SANATORIUM

ASSISTANT RESIDENT MEDICAL OFFICER

Applications are invited from registered medical practitioners (male) for the post of ASSISTANT RESIDENT MEDICAL OFFICER at the Tuberculosis Sanatorium, Killingbeck (242 beds).

Applicants must be unmarried and preference will be given to those who have held a general hospital appointment. The appointment is for one year and the present Salaries Scale of the Corporation provides for a salary of £250 together with board, residence and laundry.

Form of application may be obtained from the undersigned. Applications endorsed "Assistant Medical Officer, Killingbeck," together with copies of three recent testimonials must be received at the Health Department, 12 Market Buildings, Vicar Lane, Leeds, 1, not later than 10 a.m. on Saturday, September 3rd, 1938.

Canvassing in any form, either directly or indirectly, will be a disqualification.

J. JOHNSTONE JERVIS, Medical Officer of Health.

CITY OF MANCHESTER

BOOTH HALL HOSPITAL FOR CHILDREN (760 Beds)

The Public Health Committee invites applications from registered medical practitioners for two posts of RESIDENT ASSISTANT MEDICAL OFFICER (one man, one woman) at the above-named hospital.

The salary for each appointment is £200 per annum with board, residence and laundry in addition, subject to the Manchester Corporation conditions of service.

The appointments will be made in the first instance for a period of six months, renewable for a further six months but not renewable thereafter.

Full information and forms of application may be obtained from the Medical Officer of Health, Town Hall, Manchester, 2, and applications for the posts must be received by him not later than September 3rd, 1938.

T. E. WARBRECK HOWELL, Town Clerk.

Town Hall, Manchester, 2. August 18th, 1938.

CITY AND COUNTY OF NEWCASTLE UPON TYNE

BARRASFORD SANATORIUM (100 Beds)

RESIDENT MEDICAL ASSISTANT

Applications are invited for the above post from duly qualified and registered Medical Practitioners who have held a previous resident appointment.

The sanatorium is fully equipped for the treatment of male and female cases of pulmonary tuberculosis.

The salary in respect of the appointment which is tenable for one year only is £250 per annum with board, lodgings, etc. The post does not provide facilities for the taking of the D.P.H.

Applications on the prescribed form which can be obtained on application to the Medical Officer of Health, Town Hall, Newcastle upon Tyne, must be submitted not later than Saturday, September 3rd, 1938.

CITY AND COUNTY OF NEWCASTLE UPON TYNE

NEWCASTLE GENERAL HOSPITAL (800 Beds)

APPOINTMENT OF ASSISTANT RADIOLOGIST

Applications are invited from duly qualified and registered Medical Practitioners for the whole-time appointment of ASSISTANT RADIOLOGIST in charge of the Deep Therapy Department at the above-mentioned Hospital. Salary £600 per annum rising by two annual increments of £50 to £700.

Applications which should give full details of training and experience, together with copies of two testimonials, should be submitted to the Medical Officer of Health, Health Department, Town Hall, Newcastle upon Tyne, 1, not later than Saturday, September 3rd, 1938.

COUNTY BOROUGH OF SOUTHEND-ON-SEA

SOUTHEND MUNICIPAL HOSPITAL

The Health Committee of the Town Council invite applications for the appointment of an ASSISTANT MEDICAL OFFICER (male, Grade II) at their Municipal Hospital situated at Rochford, Essex (beds 475). Salary £325 per annum with full residential emoluments valued for superannuation purposes at £100 per annum.

The duration of appointment is limited to one year. Applicants must have had previous experience in the administration of Anaesthetics.

Applications on forms to be obtained from the Medical Superintendent, Southend Municipal Hospital, Rochford, Essex, should be returned to him on or before Monday, September 5th, 1938.

Town Clerk's Office, Southend-on-Sea. H. J. WORWOOD, Town Clerk.

STAFFORDSHIRE COUNTY COUNCIL

ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

Applications are invited from medical men holding the Diploma of Public Health for the above post. Candidates should have had at least three years' experience in the practice of their profession subsequent to qualification. Preference will be given to those who have held residential hospital appointments.

The person appointed will work under the direction of the County Medical Officer and the duties of the office will include school medical and maternity and child welfare work in addition to such general public health work as may from time to time be prescribed.

The salary will be at the rate of £500 per annum rising by annual increments of £25 to £600 per annum subject to a deduction of 5 per cent. established under the Local Government and Other Officers' Superannuation Act, 1922.

The successful candidate will be required to undergo a medical examination and to produce a birth certificate.

The appointment will be subject to three calendar months' notice on either side.

Forms of application may be obtained from the undersigned and should be returned by first post on September 1st, 1938, together with copies of not more than three testimonials.

H. L. UNDERWOOD, Clerk of the County Council.

County Buildings, Stafford. August 16th, 1938.

LANCASHIRE COUNTY COUNCIL

BIDDULPH GRANGE ORTHOPAEDIC HOSPITAL

Applications are invited for the post of JUNIOR Registered Medical [illegible] above *Hospital which contains 88 beds*.

Salary is at the rate of £200 per annum, with board residence and laundry.

Preference will be given to candidates who have held resident hospital appointments and who are competent anaesthetists. The appointment will be for a period of six months in the first instance and for a further six months at the option of the County Council but will not be renewable after that time.

Applications with copies of two recent testimonials should be sent not later than September 3rd, 1938, to Dr. T. Hall, School Medical and Child Welfare Department, County Offices, Preston. Duties to commence October 1st, 1938.

County Offices, Preston. GEORGE ETHERTON, Clerk of the County Council.

August 15th, 1938.

LANARKSHIRE MENTAL HOSPITALS JOINT COMMITTEE

LANARK DISTRICT ASYLUM, HARTWOOD

Applications are invited for the post of SENIOR ASSISTANT MEDICAL OFFICER. Applicants must be male between 30 and 40 years of age, duly qualified in Medicine and Surgery. Preference will be given to candidates having a Diploma in Psychological Medicine.

The commencing salary will be at the rate of £650 per annum rising by £50 annually to £750 per annum together with furnished apartments, board, laundry and attendance (valued at £150 per annum for Superannuation purposes), or house available meantime.

Applications stating age, qualifications, experience, etc., together with copies of three recent testimonials to be sent to the undersigned not later than September 20th, 1938.

WALTER HENDERSON, Clerk and Treasurer to the Joint Committee.

Lanarkshire House, 191 Ingram Street, Glasgow. August 20th, 1938.

HULL CORPORATION HEALTH DEPARTMENT

ANLABY ROAD INSTITUTION (HOSPITAL), 540 Beds

ASSISTANT MEDICAL OFFICER (WOMEN)

Applications are invited from unmarried or widowed women medical practitioners for the appointment for a period of one year.

Salary £350 per annum, together with an allowance at the rate of £150 per annum for board and residence outside the hospital.

The hospital is equipped with modern X-ray and Radium Departments.

Application forms etc. may be obtained from and should be returned duly completed to the undersigned not later than 10 a.m. on [illegible] September 5th, 1938.

NICOLAS GEBBIE, M.D., Medical Officer of Health.

Health Department, Guildhall, Hull. August 15th, 1938.

COUNTY BOROUGH OF ROTHERHAM

DEPUTY MEDICAL SUPERINTENDENT ALMA ROAD HOSPITAL AND OBSTETRIC OFFICER

Applications are invited from fully qualified Medical Practitioners for the post of Deputy Medical Superintendent at the Alma Road Hospital Rotherham and Obstetric Officer at a salary of £ 0 per annum less emoluments to the value of £85 The successful applicant will be required to reside either at the said hospital or in such house as the Council may direct

Candidates must be qualified registered Medical Practitioners and must have held previous resident appointments in maternity hospitals and have had experience in ante natal work

The officer appointed will be responsible for the care and supervision of the obstetric work at the Alma Road Hospital and at Fetham House Maternity Home and in addition will be required to perform duties in the various maternity and gynaecological clinics at the hospital and elsewhere and to assist in the supervision of district midwives and any other duties assignable to midwifery The officer appointed will act under the direction of the Medical Officer of Health and the Medical Superintendent

The appointment is subject to the provisions of the Local Government and Other Officers' Superannuation Act 19 and the successful candidate will be required to pass a medical examination as to physical fitness

The appointment will be terminable by three months notice on either side

Applications stating age experience and qualifications accompanied by copies of not more than three recent testimonials and endorsed Deputy Medical Superintendent and Obstetric Officer should be received by the undersigned not later than Tuesday September 6th 1938

Forms of application may be obtained from the Medical Officer of Health Municipal Offices Rotherham

Municipal Offices CHAS L DES FORGES
Rotherham Town Clerk

CITY OF PLYMOUTH

CITY GENERAL HOSPITAL (5 0 Beds)

Applications are invited from duly qualified and registered Medical Practitioners for the following posts —

JUNIOR ASSISTANT MEDICAL OFFICERS

Salary at the rate of £ 0 per annum with full residential emoluments All fees received by the Officer must be refunded to the Council

The appointment will be for a period of six months in the first instance and renewable for a further period of six months and will be terminable by one month's notice on either side

The duties of the posts will be general but in one post the duties will be largely on the surgical side of the Hospital in another the duties will be mainly in the medical wards

Further details may be obtained from the Medical Superintendent

Forms of application may be obtained from the undersigned and should be forwarded together with copies of not more than three recent testimonials not later than Monday September 5th

Town Hall T PEIRSON
Stonehouse Medical Officer of Health
Plymouth

COUNTY BOROUGH OF BOLTON

PUBLIC ASSISTANCE AND PUBLIC HEALTH COMMITTEE

TOWNLEYS HOSPITAL

Wanted for the Townleys Hospital Farnworth near Bolton an ASSISTANT MEDICAL OFFICER (male) for a period of one year

The salary will be at the rate of £250 per annum with rations furnished apartments attendance etc

Application forms with conditions of appointment may be obtained from the Public Health Department Civic Centre Bolton and must be returned to reach the undersigned not later than Friday September 9th 1938 endorsed Assistant Medical Officer

R M CALLOWAY M D
Medical Officer of Health

Public Health Department
Bolton August 26th 1938

CITY OF SHEFFIELD

KING EDWARD VII HOSPITAL Rivelin Valley Road

RESIDENT ASSISTANT MEDICAL OFFICER (woman) required on October 1st for the above hospital which is for the treatment of Surgical Tuberculosis and other Orthopaedic conditions (140 beds) The officer appointed will be required to attend the Out-patient Department for Surgical Tuberculosis and the Orthopaedic Clinic of the Maternity and Child Welfare Centre Salary at the rate of £300 per annum with board and laundry Appointment for twelve months

Applications with testimonials should be sent as soon as possible to the Medical Superintendent

WARWICKSHIRE AND COVENTRY JOINT COMMITTEE FOR TUBERCULOSIS

ASSISTANT TUBERCULOSIS OFFICER

Applications are invited from qualified and registered Medical Practitioners for the post of Assistant Tuberculosis Officer Applicants must be prepared to devote the whole of their time to the duties of the office and must have had special practical experience in the treatment of tuberculosis in anatomical dispensaries and otherwise and must be thoroughly acquainted with modern methods of diagnosis and treatment

The commencing salary is at the rate of £600 per annum rising by annual increments of £ 0 to £ 00 per annum and is subject to a deduction of 5 per cent in respect of contribution under the Local Government and Other Officers' Superannuation Act 19 In addition motor-car allowances in accordance with the Committee's scale and reasonable travelling expenses are paid The appointment is also subject to a satisfactory medical examination by one of the Committee's independent medical referees

Form of application and statement of the duties and terms of the appointment can be obtained from the undersigned Applications marked Assistant Tuberculosis Officer with copies of not more than three recent testimonials must be received by me not later than first post on Saturday September 10th 1938

Canvassing directly or indirectly will be considered a disqualification

Shire Hall L EDGAR STEPHENS
Warwick Clerk of the Joint Committee
August 22nd 1938

ESSEX COUNTY COUNCIL

ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

The County Council of the Administrative County of Essex invite applications for the above appointment from duly qualified registered medical practitioners holding a Diploma of Public Health and not over 45 years of age

The salary will be at the rate of £500 per annum and will rise subject to satisfactory service by annual increments of £25 to £600 per annum Travelling expenses will be allowed

The appointment will be held by the successful candidate during the pleasure of the Council and will be determinable by the officer by three months notice in writing

The person appointed will be required to pass a medical examination and to contribute to the fund established by the County Council under the Local Government and Other Officers Superannuation Act 19

The appointment will be subject to the Council's Sick Pay Rules and Regulations a copy of which will be forwarded on application

Applications on the prescribed form obtainable from the undersigned accompanied by copies of not more than three testimonials (which will not be returned) should be addressed to me and delivered at the County Hall Chelmsford not later than 10 a m on Monday September 5th 1938

County Hall E S HOLCROFT
Chelmsford Clerk of the County Council
August 16th 1938

GLOUCESTERSHIRE JOINT BOARD FOR TUBERCULOSIS

STANDISH HOUSE SANATORIUM Stonehouse Glos

Applications are invited from registered medical men for the post of JUNIOR ASSISTANT MEDICAL OFFICER at the above Institution No previous professional experience is necessary

There are at present 0 beds including men women and children There is an orthopaedic block

The salary is £ 50 per annum with board furnished apartments and laundry in addition

The appointment is for six months (with the possibility of extension for a further period of six months) and may be terminable within that period by one month's notice on either side

Applications stating qualifications and age and accompanied by copies of three recent testimonials should be received not later than September 10th

Shire Hall RICHARD L MOON
Gloucester Clerk of the Joint Board
August 18th 1938

CITY OF LEICESTER

RESIDENT MEDICAL OFFICER

Resident Medical Officer (male) required for the City Isolation Hospital and Sanatorium Groby Road Appointment for a period of six months renewable if service is satisfactory for a further period of six months

Salary at the rate of £300 per annum with the usual residential emoluments The officer appointed may be required to assist with Infant Welfare work

Applications on forms to be supplied to be sent to the undersigned not later than September 7th 1938

Health Offices E K MACDONALD
Grey Friars Medical Officer of Health
Leicester August 1938

THE KING EDWARD VII WELSH NATIONAL MEMORIAL ASSOCIATION

Applications are invited from duly registered medical practitioners for the post of Half time ASSISTANT TUBERCULOSIS OFFICERS (three in number) to be attached to the Cardiff Newport and Pontypridd areas respectively and commencing duty on October 1st next The appointments are limited to one year at a remuneration for the year of £ 0 During their tenure successful candidates will be expected to take during the other half of their time the Course for the Diploma in Tuberculosis Diseases (Wales) at the Tuberculosis Department Welsh National School of Medicine and afterward sit the examination Particulars as to fees for this course can be obtained from the Secretary Welsh National School of Medicine, Cardiff

Applicants must have held a house appointment in medicine or surgery at a general hospital for at least six months and must also have held either a post as resident for a period of twelve months in an institution for the treatment of Tuberculosis (medical or surgical) or a period of whole time work accepted by the Senate equivalent thereto

Applications stating age qualifications experience etc together with copies of three recent testimonials should reach the undersigned not later than Wednesday August 31st 1938

Memorial Offices D A POWELL
Westgate Street Principal Medical Officer
Cardiff August 23 1938

COUNTY BOROUGH OF WEST BROMWICH

HALLAM HOSPITAL (4 Beds)

(a) RESIDENT OBSTETRICAL OFFICER
(b) RESIDENT ASSISTANT MEDICAL OFFICERS (Two)

Applications are invited from duly qualified (unmarried) male registered practitioners for the above appointments

(a) Candidates for the Obstetrical Officer's post must have had previous resident hospital experience in both general and maternity work The duties will include conduction of certain ante natal clinics The appointment will be for twelve months at a salary of £ 00 plus usual resident emoluments The appointment is determinable by either party giving two months notice

(b) Resident Assistant Medical Officers for general duties Salary £ 00 together with usual resident emoluments Appointment is for six months and renewable for a further six months but can be terminated by either party giving six weeks notice All fees received by the persons appointed will be payable into the funds of the Council

Applications stating age experience and qualifications together with copies of three recent testimonials must be forwarded to the Medical Officer of Health 2 Lodge Road West Bromwich so as to arrive not later than by first post on Wednesday September 7th 1938

Town Hall G F DARLOW
West Bromwich Town Clerk
August 24th 1938

CITY AND COUNTY OF BRISTOL

ASSISTANT MEDICAL OFFICER OF HEALTH

The Council invite applications for a whole time Assistant Medical Officer of Health for maternity and child welfare and school medical work Age not exceeding 40 years

Salary £ 00 rising by annual increments of £50 to £ 00 per annum

The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 19 2 The Diploma of Public Health is essential Particulars of the duties of the post may be obtained from the undersigned

Applications on form to be obtained from the Medical Officer of Health 40 Prince Street Bristol 1 accompanied by not more than three recent testimonials must be received by him not later than September 9th 1938 Envelopes should be endorsed Assistant Medical Officer of Health

Canvassing will disqualify

Council House, JOSIAH GREEN
Bristol 1 Town Clerk
August 1938

VICTORIA HOSPITAL BURNLEY (1 0 Beds)

HOUSE PHYSICIAN (Male)

Applications are invited for the above post which will become vacant on September 14th next The duties include the giving of a certain number of anaesthetics The appointment is for six months in the first instance at a salary of £1 0 per annum to either with board residence and laundry At the end of this period reappointment may be applied for and if granted the salary for the second six months will be at the rate of £ 00 per annum

Applications giving full details of qualifications and experience stating nationality to either with copies of recent testimonials should be addressed *to the undersigned forthwith*

J E. WHEATCROFT Secretary

SOUTHEND ON SEA GENERAL HOSPITAL

235 Beds extensions in prospect
Eight Residents
Hon Specialist Staff of twenty members

APPOINTMENT OF R M O and MEDICAL REGISTRAR

Applications are invited for the post of Resident Medical Officer and Medical Registrar duties to begin on or about October 1st 1938 The appointment will be for one year with eligibility for annual re-election for a further maximum period of two years and will be resident with board etc provided Commencing salary £300 p a

Applicants should possess the degree of M R C P (London) and must have held resident appointment as House Physician at a General Hospital Original medical work will be encouraged

Application forms with copies of the regulations and duties of the post may be obtained from the undersigned and must be returned with copies of three recent testimonials not later than September 15th 1938

By Order of the Committee
P H CONSTABLE
Secretary

SUTTON AND CHEAM HOSPITAL
Sutton Surrey
(75 Beds)

Applications are invited for the post of SENIOR RESIDENT MEDICAL OFFICER (male) Salary £150 per annum with residence board and laundry The appointment will be for six months from October 1st next

Applications giving full particulars as to age and qualifications together with copies of three recent testimonials should be sent to the Secretary not later than September 16th next

Applications are invited for the post of JUNIOR RESIDENT MEDICAL OFFICER (male) Salary £100 per annum with residence board and laundry The appointment will be for six months from October 1st next

Applications giving full particulars as to age and qualifications together with copies of three recent testimonials should be sent to the Secretary not later than September 16th next

W N MURCH
Secretary

ROYAL SUSSEX COUNTY HOSPITAL
Brighton

Applications are invited for the undermentioned Honorary Offices from gentlemen possessing the usual necessary medical and surgical qualifications and who are duly registered under the Medical Acts —

1 HONORARY PHYSICIAN and in the event of a vacancy occurring
2 an HONORARY ASSISTANT PHYSICIAN
3 HONORARY ANAESTHETIST
4 HONORARY CLINICAL ASSISTANT to the Dermatological Department

Further particulars of the above-mentioned appointments may be obtained from the undersigned

Applications must reach the Secretary Superintendent at the Hospital before 12 noon on Saturday September 24th 1938

L L W LANCASTER GAYE
Secretary Superintendent

SHEFFIELD RADIUM CENTRE AT THE ROYAL INFIRMARY SHEFFIELD

Applications are invited for the post of RADIOTHERAPIST at the above Centre Commencing salary £400-£500 per annum according to experience

Application stating qualifications and experience with copies of three recent testimonials should be sent to the undersigned not later than September 2nd

A Y GREEN
Secretary

ST JAMES HOSPITAL FOR NERVOUS AND MENTAL DISORDER
Milton Portsmouth

LOCUM TENENS ASSISTANT MEDICAL OFFICER (male) required age not to exceed 35 years There is a possibility of a permanent appointment

Salary £4 4s a week with board lodging and laundry

Apply to the Medical Superintendent

NORTH DEVON INFIRMARY
Barnstaple
(70 Beds (including Maternity Ward))

Wanted on September 27th duly qualified SECOND RESIDENT MEDICAL OFFICER Salary £[illegible] per annum with board apartments and [illegible] appointment to be for not less than six months at a time and qualification [illegible] to be sent to the [illegible]

THE BIRMINGHAM UNITED HOSPITAL

NEW HOSPITALS CENTRE AT EDGBASTON (500 Beds)

MEDICAL SCHOOL

Applications are invited from fully qualified candidates for the following resident appointments

One RESIDENT MEDICAL OFFICER Salary £175 per annum

One RESIDENT SURGICAL OFFICER (F R C S Eng Edin or Ireland essential) Salary £175 per annum

Three RESIDENT HOUSE PHYSICIANS Salary £70 per annum

Three RESIDENT HOUSE SURGEONS Salary £70 per annum

All with full residential emoluments

Applications stating age experience qualifications and nationality with copies of recent testimonials should be forwarded at once to the undersigned but not later than Thursday September 8th 1938

G HURFORD
(House Governor at Queen's Hospital)

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke on Trent (390 Beds)

HOUSE SURGEON (CASUALTY)

The Committee invite applications for the above post—half duties in Casualty Over 6 000 casualties per annum Salary at the rate of £150 per annum with board residence and laundry

The appointment will be made for six months renewable

Eligible for the other resident posts as vacancies arise

Applications stating age and experience with copies of two recent testimonials to be sent to the undersigned immediately

By Order
W STEVENSON
Secretary and House Governor

August 22nd 1938

NORTH RIDING INFIRMARY
Middlesbrough
(General Hospital 143 Beds Three Residents)

Wanted SENIOR HOUSE SURGEON to take duties on September 23rd 1938 Candidates must be male unmarried and of British nationality Preference will be given to applicants who have held a previous hospital appointment

Salary is at the rate of £175 per annum with board residence and laundry

Applications stating age qualifications and experience together with copies of three recent testimonials should be sent to the undersigned on or before September 5th 1938

GERALD A KENYON
Secretary Superintendent

THE GUEST HOSPITAL DUDLEY
(General Hospital 139 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons

HOUSE SURGEON (male) required To commence duty on September 1st 1938 Salary at the rate of £150 per annum with furnished apartments board and laundry Candidates must be fully qualified and registered

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned

H RAYMOND HURST
House Governor and Secretary

August 15th 1938

THE LADY CHICHESTER HOSPITAL
Hove Brighton
For Functional Nervous Diseases
(60 Beds)

SENIOR HOUSE PHYSICIAN (woman) required Six months appointment £100 per annum all found Valuable experience for Diploma in Psychological Medicine

Also JUNIOR (woman) at £75 per annum

Applications with testimonials to be sent to the Secretary Mr P F SPOONER 33 West Street Brighton

July 25th 1938

THE CHILDREN'S HOSPITAL SHEFFIELD
(157 Beds)

Applications are invited for the post of HOUSE PHYSICIAN vacant September 1st 1938

The appointment is for six months Salary £100 per annum with board residence and laundry Candidates (male and unmarried) who must possess registered qualifications should forward applications stating age nationality etc together with copies of three recent testimonials to the undersigned

T H G GARTLAND
Superintendent and Secretary

THE PRINCE OF WALES'S HOSPITAL
Greenbank Road Plymouth
(Formerly South Devon and East Cornwall Hospital)
(264 Beds)

Applications are invited for the post of RESIDENT ANAESTHETIST and HOUSE SURGEON to the Special Departments

Salary £120 per annum with board residence and laundry

Appointment is tenable for six months and is subject to renewal Duties to commence September 10th

The Hospital is officially recognized for the surgical practice required before admission to the Final Fellowship Examination of the Royal College of Surgeons of England

Applicants must be registered under the Medical Acts

Applications stating age and qualifications with copies of three recent testimonials to reach the undersigned not later than September 2nd 1938

ARTHUR R CASH
August 22nd 1938 Secretary

THE PRINCE OF WALES'S HOSPITAL
Lockyer Street Plymouth
(Formerly Central Hospital Lockyer Street Plymouth) (50 Beds)

Applications are invited for the post of HOUSE SURGEON Salary £150 per annum with board residence and laundry Duties to commence September 19th

Appointment is tenable for six months and is subject to renewal

Applications stating age and qualifications with copies of three recent testimonials to reach the undersigned by September 2nd

ARTHUR R CASH
General Superintendent
Prince of Wales's Hospital
Greenbank Road Plymouth

HULL ROYAL INFIRMARY

Applications are invited for the post of SECOND CASUALTY OFFICER (male) vacant September 2nd

Salary £150 per annum plus board residence and laundry

In addition to carrying out duties in the Casualty Department the officer appointed will act as House Surgeon to one of the Honorary Assistant Surgeons and will thus obtain Ward and Theatre experience He will be eligible for promotion to a more senior post when a vacancy occurs

The appointment will be for a period of six months but will be determinable at any time by one month's notice on either side

Applications giving particulars of age experience and nationality together with copies of testimonials should be addressed to the undersigned

R J CARLESS
August 22nd 1938 House Governor

THE CHESTER ROYAL INFIRMARY
(225 Beds)

Applications are invited for the post of HOUSE SURGEON (male) to take up duty on October 5th 1938 Salary £150 per annum with board lodging and laundry Duties will include work in the Orthopaedic Department and Fracture Clinic The appointment is approved in connexion with the M S (London University) and F R C S (Eng) Examinations Application 1st M S (London University) and F R C S (Eng) Examinations Application 1st closes September 10th 1938 Application forms may be obtained from

W H GRACE M D M R C I
Hon Secretary Medical Committee

THE CHESTER ROYAL INFIRMARY
(225 Beds)

Applications are invited for the post of HOUSE SURGEON (male) to take up duty on October 1st 1938 Salary £150 per annum with board lodging and laundry The appointment is approved in connexion with the M S (London University) and F R C S (Eng) Examinations Application 1st closes September 10th 1938 Application forms may be obtained from

W H GRACE M D M R C P
Hon Secretary Medical Committee

THE ST HELENS HOSPITAL

Applications are invited for the position of JUNIOR HOUSE SURGEON (male) Salary £[illegible] per annum together with board residence and laundry

Applications together with copies of three recent testimonials to be sent to the Secretary the St Helens Hospital St Helens Lancashire not later than August 31st

BAILBROOK HOUSE BATH

HOUSE PHYSICIAN required [illegible] Small private mental hospital Salary £[illegible] per annum full board and laundry Good opportunities for study and experience for D P H

Applications to undersigned

A GUIRDHAM Medical Superintendent

KENT COUNTY OPHTHALMIC AND AURAL HOSPITAL, MAIDSTONE
(109 Beds)

Applications are invited for the post of HOUSE SURGEON (male) to the Ear, Nose and Throat Department which post will be vacant in October. Candidates must be duly qualified and registered Medical Practitioners, and of British birth and nationality, and should have had some experience in the treatment of diseases of the Ear, Nose and Throat. The Hospital is recognized by the Examining Board for the D.L.O. The appointment is for six months, but a senior post at a higher salary may be given after that period if mutually agreed upon. Salary at the rate of £100 per annum with board, residence and laundry.

Applications, stating age, together with copies of not more than three testimonials, should be sent to the undersigned.

JOHN W. STRICKLAND,
Secretary.

JERSEY GENERAL HOSPITAL AND POOR LAW INFIRMARY

Applications are invited for the following posts (vacant October 1st, 1938):
(a) HOUSE SURGEON (male).
(b) CASUALTY OFFICER and HOUSE PHYSICIAN (male).

The appointments are for six months, subject to reappointment.

Salaries £175 per annum.

Board, residence and laundry are provided.

Applications, stating age, nationality and qualifications, with recent testimonials, to be addressed to the undersigned on or before Saturday, September 3rd.

General Hospital, Jersey, C.I. — H. J. PLYMEN, Secretary-Accountant.

EAR AND THROAT HOSPITAL
Birmingham 3

FIRST HOUSE SURGEON REQUIRED (RESIDENT)

Must be fully qualified and with clinical experience. Salary at the rate of £100 per annum with full board and residence.

Appointment for six months, commencing October 1st. Facilities for training for D.L.O.

Applications and testimonials to be forwarded to the undersigned.

W. H. LOMAS, Secretary.

EAR AND THROAT HOSPITAL
Birmingham 3

THIRD HOUSE SURGEON wanted (non-resident). Must be qualified and with clinical experience. Salary at the rate of £100 per annum with lunch on six week-days and an allowance of £50 per annum in lieu of board and lodging.

Appointment for six months, commencing October 1st. Candidates are eligible for election to senior posts. Facilities for training for D.L.O.

Applications and testimonials to be forwarded to the undersigned.

W. H. LOMAS, Secretary.

KENT AND CANTERBURY HOSPITAL
New Hospital (180 Beds—4 R.M.O.s)

HOUSE SURGEON required, male, unmarried. Six months' appointment, commencing September 17th, 1938. Salary £125 per annum with board, residence and laundry.

The Hospital is recognized under F.R.C.S. regulations.

Applications, together with copies of testimonials, should be sent immediately to the undersigned.

J. F. KENT,
Superintendent and Secretary.

DORSET COUNTY HOSPITAL

HONORARY RADIOLOGIST

There will be a vacancy on the Honorary Medical Staff of the Dorset County Hospital for an Honorary Radiologist on October 16th next.

Applications should be made accompanied by three recent testimonials to the Secretary by October 1st.

Particulars of the above appointment may be obtained from the Secretary.

COUNTY MENTAL HOSPITAL
Mickleover, Derby

ASSISTANT MEDICAL OFFICER (male) required. Commencing salary £350 per annum, rising by increments of £25 to £400, together with board, quarters and attendance. A further increment of £50 will be given on obtaining the Diploma of Psychological Medicine.

Applications, giving full particulars and enclosing copies of two recent testimonials, should be addressed to the Medical Superintendent.

ANCOATS HOSPITAL, MANCHESTER 4

RESIDENT MEDICAL OFFICER required to commence duties on October 1st next. Appointment for six months and is renewable. Salary at the rate of £100 per annum with board, residence, laundry, etc. Previous experience in a similar capacity essential. The appointment includes the supervision of the Medical Beds and work in the Medical Out-Patient Clinic.

CASUALTY OFFICER required to commence duty on September 1st next. Appointment for twelve months. Salary £100 per annum with board, residence, laundry, etc. Preference will be given to applicants who have passed the Primary Fellowship examination of one of the Royal Colleges of Surgeons. The successful applicant will also duty for the Resident Surgical Officer at alternate weekends and other scheduled times.

Applications for the above posts, stating age, qualifications, experience and full particulars of previous appointments, to be forwarded to the undersigned not later than Wednesday, September 7th, together with copies of three recent testimonials.

By Order of the Board,
HERBERT J. DAFFORNE,
General Superintendent and Secretary.

NORTHAMPTON GENERAL HOSPITAL
(359 Beds.)

There will be the following vacancies for Resident Medical Officers on October 1st, 1938:—

One HOUSE SURGEON to the Ear, Nose and Throat Department.
One RESIDENT ANÆSTHETIST.
One HOUSE SURGEON to the Maternity and Gynæcological Department.

Salaries will be at the rate of £100 per annum with board, residence and laundry. Candidates who must be duly qualified and registered must be males and of British nationality.

The successful candidates will be elected for a period of six months and will be eligible for re-election for a further period of six months.

Applications, stating age, qualifications, etc., with copies of three testimonials, must reach the undersigned not later than the first post on Wednesday, September 7th, 1938.

GORDON S. STURTRIDGE, M.B., B.S.,
August 22nd, 1938. Superintendent.

ROYAL BERKSHIRE HOSPITAL, READING

The following resident appointments will become vacant on October 1st, 1938:

RESIDENT MEDICAL OFFICER (male) at the Blagrave Branch Hospital and Assistant to the Pathologist (combined appointment). To reside at and have charge of 64 beds at Branch Hospital and to work as Assistant in the Pathological Department of the main Hospital. (Previous experience in Pathology not essential.)

The appointment is for six months and candidates must be fully qualified and registered.

Remuneration at the rate of £100 per annum with board, residence and laundry.

Applications, stating age and experience, with copies of testimonials, to be sent to the undersigned on or before Friday, September 9th, 1938.

H. E. RYAN,
Secretary and House Governor.

ROYAL SURREY COUNTY HOSPITAL
Guildford

WANTED 1st OCTOBER HOUSE SURGEON (Male)

General Surgery, Gynæcological and Ophthalmic six month appointment recognized for the F.R.C.S. Salary £100 per annum with board, residence and laundry.

Applications stating age and essential particulars, with copies of not more than three testimonials to reach the Secretary, Superintendent not later than September 6th, 1938.

ROYAL ISLE OF WIGHT COUNTY HOSPITAL
Ryde, Isle of Wight.

HOUSE SURGEON (Senior Resident) wanted for October, either sex, unmarried, qualified and registered. State age and nationality. Salary at the rate of £140 a year with board, residence and laundry.

Apply, enclosing copies of testimonials to Secretary before Wednesday, September 7th. Return third-class fare for selected candidates.

A. S. GORDON, Secretary.

ROYAL ISLE OF WIGHT COUNTY HOSPITAL
Ryde, Isle of Wight.

HOUSE PHYSICIAN with care of Casualty and Special Departments wanted for October, either sex, unmarried, qualified and registered. State age and nationality. Salary at the rate of £130 a year with board, residence and laundry.

Apply, enclosing copies of testimonials to Secretary before Wednesday, September 7th. Return third-class fare for selected candidates.

A. S. GORDON, Secretary.

SOMERSET AND BATH MENTAL HOSPITAL
Cotford, near Taunton, Somerset

SENIOR ASSISTANT MEDICAL OFFICER

Applications are invited for the appointment of a Resident Senior Medical Assistant Medical Officer at the above Hospital at a commencing salary of £700 by annual increments of £50 to a maximum of £760 plus emoluments consisting of an unfurnished house, rates, fuel, light, and the privilege of purchasing meat from Hospital stores at cost prices. Non-emoluments deduction at 6s. per week for a year with superannuation purposes.

Candidates must be legally qualified and registered and must hold a diploma in Psychological Medicine.

The appointment will be subject to the provisions of the Asylums Officers' Superannuation Act, 1909, and terminable by three months' notice on either side.

Applications, stating age, experience and qualifications, accompanied by copies of three recent testimonials, must reach the Medical Superintendent of the Hospital by Monday, September 5th.

August 17th, 1938. A. W. CALEY,
Clerk to the Visiting Committee.

ROYAL EAST SUSSEX HOSPITAL, Hastings.

Applications are invited for the posts of Honorary SURGEON and Honorary ASSISTANT SURGEON to the above Institution.

Candidates must be Fellows of the Royal College of Surgeons of England, Edinburgh or Ireland, or Graduates in Surgery of one of the Universities of the United Kingdom or Ireland, and also be duly registered under the Medical Acts.

Applicants for the post of Hon. Assistant Surgeon must be under 45 years of age.

An Hon. Assistant Surgeon is an applicant for the post of Hon. Surgeon.

Applications, accompanied by copies of three recent testimonials, should reach the Secretary not later than Saturday, September 10th, 1938.

WILFRID G. KEMSLEY, Secretary.

SALFORD ROYAL HOSPITAL
(246 Beds.)

Applications are invited from registered candidates (male) for:

RESIDENT SURGICAL OFFICER for twelve months from October 1st. Salary £90 per annum.
HOUSE PHYSICIAN.
HOUSE SURGEONS (Three).
CASUALTY HOUSE SURGEON

for six months from October 1st. Salary £125 per annum.

Forms of application obtainable from the undersigned should be delivered on or before September 6th next.

By Order of the Board,
H. B. SHELSWELL,
General Superintendent and Secretary.

July 29th, 1938.

ROYAL EYE HOSPITAL,
Pevensey Road, Eastbourne.

NON-RESIDENT HOUSE SURGEON required to commence duty in August. The appointment will be for six months in the first instance.

Salary £100 per annum and allowance in lieu of board-residence £175 per annum.

Applications stating age, qualifications and ophthalmic experience, together with recent testimonials, should reach the undersigned as soon as possible.

Before engagement candidates have to be interviewed by the Hon. Surgeon, from whom further particulars could be obtained in person.

H. BYGRAVE, Hon. Secretary.

ROCHDALE INFIRMARY AND DISPENSARY
(110 Beds.)

The Board of Management invite applications for the appointment of SENIOR HOUSE SURGEON. The salary attached to the appointment is at the rate of £250 per annum including board, residence and laundry.

Applications, stating age, nationality, etc., together with copies of three recent testimonials to be sent to the Secretary, endorsed "House Surgeon." Conditions of the appointment may be had on application to the Secretary.

Infirmary Office, Rochdale Lanes. W. WYNNE, Secretary.

ST. MARY'S HOSPITALS, MANCHESTER

Two HOUSE SURGEONS for the Whitworth Street West Hospital (Maternity and Casualty) and the Whitworth Park Hospital (Gynæcological Dept.) each for a period of six months from November 1st next. Salaries at the rate of £100 per annum with board and residence.

Applications with copies of three testimonials to be sent to the undersigned on or before September 14th.

A. R. WISE,
Superintendent and Secretary.

COUNTY COUNCIL OF DURHAM

DISTRICT TUBERCULOSIS MEDICAL OFFICER

The County Health Committee invite applications for a District Tuberculosis Medical Officer at a commencing salary of £500 per annum rising by annual increments of £25 to £700 per annum Travelling allowance will be paid by the County Council in accordance with a scale to be approved from time to time The appointment will be held subject to three calendar months notice on either side and to the following conditions

1 The officer appointed must be a registered medical practitioner under the age of 50 years must devote the whole of his time to the duties of the office and must not engage in private practice

2 He should have held a previous appointment as Tuberculosis Medical Officer with the approval of the Minister of Health or

(i) have had at least three years experience in the practice of his profession

(ii) have spent in general clinical work a period of not less than eighteen months of which not less than six months have been spent in a hospital as Resident Medical Officer in charge of beds occupied by general medical or surgical cases and

(iii) have received special training for a period of not less than six months in the diagnosis and treatment of tuberculosis

3 He will be attached to the County Health Department and will subject to the direction of the County Medical Officer be under the control of the Central Tuberculosis Medical Officer

4 He will be required to reside in his Dispensary area or such other area as required by the Council

5 He must be prepared if called upon to act as locum tenens to other members of the medical staff of the County Medical Officer

6 The holding of a Diploma in Public Health will be deemed an additional qualification for the post

The candidate appointed will be required to pass the County Council's medical examination and will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922

Applications endorsed District Tuberculosis Medical Officer and accompanied by copies of not more than three recent testimonials must be addressed to the County Medical Officer Shire Hall Durham and must be received by him not later than first post on Monday September 12th 1938 J K HOPE

Shire Hall Clerk of the County Council
Durham August 23rd 1938

COUNTY BOROUGH OF WOLVERHAMPTON

NEW CROSS HOSPITAL (350 Beds)

ASSISTANT MEDICAL OFFICER (RESIDENT)

Applications are invited from single gentlemen duly qualified for appointment as Assistant Medical Officer at the above Hospital which contains Medical Surgical Maternity Children's and Isolation Departments and is modernly equipped Experience in Anaesthetics a knowledge of Clinical Pathology and previous Hospital experience will be deemed additional assets

Salary will be at the rate of £200 per annum with apartments board attendance etc The appointment will be limited to a term not exceeding one year Further information as to duties etc may be obtained from the Medical Officer of the Hospital

Applications stating age qualifications and nationality together with copies of recent testimonials should be addressed to—

Stafford Street A G ALDRIDGE
Wolverhampton Public Assistance Officer

EAST SUFFOLK AND IPSWICH HOSPITAL
Ipswich

TO MEDICAL WOMEN

Applications are invited from fully qualified medical women for the position of WHOLE TIME ASSISTANT PATHOLOGIST Some experience in general pathology and particularly bacteriological work desirable Commencing salary £450 per annum

Applications stating age qualifications and experience accompanied by copies of three recent testimonials to be sent to me by September 10th ARTHUR GRIFFITHS

August 27th 1938 Secretary

VICTORIA HOSPITAL DEAL
(40 Beds)

Applications are invited for the post of RESIDENT MEDICAL OFFICER (male) British qualified The appointment is for six months Salary £150 per annum board residence and laundry Special terms for married couple

Applications stating age and qualifications to be sent to the Hon Medical Board Victoria Hospital Deal

ROYAL DEVON AND EXETER HOSPITAL
Exeter (280 Beds)

THREE HOUSE SURGEONS (Male) ONE HOUSE PHYSICIAN (Male)

Applications are invited for these posts which become vacant on September 30th Appointments are for six months but candidates are eligible for re election Salary at the rate of £150 per annum with board lodging and washing

Applications giving particulars as to age and qualifications together with copies of three recent testimonials should be sent to the undersigned on or before Saturday September 10th 1938

S S COLE
Secretary and Manager

N B—The duties of the third House Surgeon will be to act as House Surgeon to the Ear Nose and Throat Department and also as House Surgeon to one of the Honorary Surgeons

ROYAL UNITED HOSPITAL BATH

Applications are invited for the following posts

HOUSE PHYSICIAN duties to commence *October 1st*

HOUSE SURGEON (Obstetrics and Gynaecology and Anaesthetics) duties to commence September 14th

Salary for both appointments £150 per annum with board residence and laundry

Applications stating age qualifications and experience together with a copy of three testimonials to be addressed to the undersigned by September 5th J LAWRENCE MEARS

August 23rd 1938 Secretary-Superintendent

THE ROYAL GWENT HOSPITAL
Newport Mon (210 Beds)

CASUALTY OFFICER required previous experience essential from September 26th next to April 30th 1939

Salary at the rate of £135 per annum with board residence and laundry

Applications stating age nationality and experience together with copies of three testimonials should be forwarded to the undersigned as early as possible

ALAN RUDDLE
Secretary Superintendent

MANCHESTER AND SALFORD HOSPITAL FOR SKIN DISEASES
(54 Beds 14 500 Out patients per annum)

HOUSE SURGEON

Applications are invited for the post of House Surgeon Must be registered The appointment is for six months from Oct 1st Salary at the rate of £150 per annum with board and residence

Applications with copies of three testimonials to be sent to the undersigned Quay Street Manchester not later than September 6th

JOHN NALL Secretary

YORK COUNTY HOSPITAL
(204 Beds)

Applications are invited for the post of HOUSE SURGEON to the EYE EAR NOSE and THROAT DEPARTMENT Salary £150 per annum with board residence and laundry

Applications stating age and previous experience together with copies of not more than three recent testimonials to be sent to the undersigned not later than 9 a m on Wednesday August 31st 1938

J R MACKRILL
Secretary

YORK COUNTY HOSPITAL
(204 Beds)

Applications are invited for the post of HOUSE PHYSICIAN Salary £150 per annum with board residence and laundry

Applications stating age and previous experience together with copies of not more than three recent testimonials to be sent to the undersigned not later than 9 a m on Wednesday August 31st 1938

J R MACKRILL
Secretary

ROYAL HOSPITAL RICHMOND SURREY

The Committee of Management invite applications for the following appointment

HONORARY ASSISTANT RADIOLOGIST (Male)

Applications together with full particulars as to age qualifications and previous experience with copies of testimonials should be forwarded to the Secretary Superintendent CAPTAIN G M EDEN M B E by *September 8th*

WHITEHAVEN AND WEST CUMBERLAND HOSPITAL

HOUSE SURGEON required for end of September Ninety beds Two House Surgeons in residence Six months appointment Salary at the rate of £150 per annum board residence and laundry

Applications with copies of three recent testimonials to be sent to the Secretary

MANCHESTER ROYAL INFIRMARY

SECOND RESIDENT CLINICAL PATHOLOGIST

The Board of Management of the Manchester Royal Infirmary invite applications for the above post vacant on September 30th 1938 Applicants must hold a medical and surgical qualification and be registered

The duties are whole time working under the Director of the Clinical Laboratory

Salary £150 per annum with board residence and allowance for laundry plus a proportion of private fees

Ten sets of applications with two testimonials stating age to be sent to the General Superintendent not later than August 31st 1938

By Order
F J CABLE
August 10th 1938 General Supt and Secretary

KENT AND SUSSEX HOSPITAL
Tunbridge Wells (210 Beds)

Applications are invited for the appointment of HOUSE SURGEON (male) *Salary £150 per annum Board residence* and laundry in the Hospital

The Hospital includes the following Departments Medical Surgical Ear Nose and Throat Ophthalmic Orthopaedic Gynaecological X-ray and Electro-therapeutic Massage Pathological Venereal Diseases etc

Successful candidate will be required to take up duty on Friday September 9th 1938

Applications, stating qualifications together with certificate of registration and copies of not more than three recent testimonials to be sent to the undersigned as soon as possible

T C [illegible]
August 10th 1938 Sup

FIFE AND KINROSS JOINT SANATORIUM BOARD

RESIDENT MEDICAL OFFICER (male) wanted for Glenlomond Sanatorium by Kinross for period of one year 140 Beds Previous hospital experience desirable Salary £ 00 with rooms board etc

Applications stating age etc along with three copies of testimonials to be lodged with the undersigned by September 10th 1938

County Buildings J M MITCHELL
Cupar Clerk and Treasurer
August 27th 1938 Fife and Kinross Joint Sanatorium Board

GRIMSBY AND DISTRICT HOSPITAL
(164 Beds)

Applications are invited for the post of RESIDENT ORTHOPAEDIC OFFICER Salary £225 per annum with board residence The appointment is for twelve months subject to renewal Candidates must be registered under the Medical Acts reside in the Hospital and have had experience in Orthopaedic and Fracture work

Applications with copies of not more than three testimonials to the undersigned at once

H B COATES
August 16th 1938 Secretary Superintendent

ROYAL NORTHERN HOSPITAL
Holloway N 7

Applications are invited for the post of MEDICAL REGISTRAR Candidates will be required to attend at the Hospital from Monday to Friday inclusive The appointment is for one year from November 1st 1938 with eligibility for re-election

Honorarium £200 per annum with luncheon and tea provided

Applications with copies of testimonials should be sent by September 9th to the undersigned from whom the necessary forms of application and full particulars can be obtained

GILBERT G PANTER
Secretary

CHARING CROSS HOSPITAL

OBSTETRIC REGISTRAR

The Council invite applications for the post of Obstetric Registrar Honorarium £100 per annum

Applications together with copies of three testimonials must be submitted to the undersigned not later than September 20th 1938

Charing Cross Hospital GEORGE J JONES
London W C 2 Secretary

GERMAN HOSPITAL DALSTON LONDON E 8

HONORARY OPHTHALMIC SURGEON

The Committee invite applications for the Honorary Ophthalmic Surgeon at the above Institution Fellowship of the Royal College of Surgeons and some knowledge of the German language desired

Applications to be sent to the Secretary forthwith

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association B M A House, Tavistock Square, W C 1 (in the case of Scottish appointments, with the Scottish Secretary, 7, Drumsheugh Gardens, Edinburgh)

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—*(contd.)*	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY *(Medical Officer)*	MID RHONDDA MEDICAL AID SOCIETY *(Assistant Medical Officer)*	MIDDLESBROUGH EDUCATION COMMITTEE *(Senior Assistant School Medical Officer)*
BLAENAVON MEDICAL SOCIETY *(Chief Medical Officer)*	NEATH AND DISTRICT *(Medical Aid Association)*	COUNTY OF ROXBURGH *(Assistant Medical Officer of Health)*
GILFACH GOCH GLAMORGAN *(Workmen's Medical Scheme)*	OGMORE VALLEY GLAMORGAN *(Wyndham Colliery Medical Aid Society)* *(Workmen's Medical Scheme)*	**DISPENSARY APPOINTMENTS**
LLWYNYPIA CLYDACH VALE, PENYGRAIG GLAMORGAN *(Workmen's Medical Scheme)*	OAKDALE, MON *(Medical Officer for Medical Aid Association)*	LIMERICK CITY *(Whole time Dispensary Medical Officers)*

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association, B M A House, Tavistock Square, W C 1

Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch
NEW SOUTH WALES *(All Friendly Society Appointments)*	The Medical Secretary New South Wales Branch 135 Macquarie Street Sydney N S W	**VICTORIA** *(All Institute or Medical Dispensaries)*	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria	**WESTERN AUSTRALIA** *(Contract and Lodge Practices)*	The Hon Sec Western Australian Branch British Medical Association Shell House 205 St Georges Terrace Perth Western Australia
QUEENSLAND *(Brisbane Associate Friendly Societies Institute)*	The Hon Sec Queensland Branch British Medical Association B M A House 225 Wickham Terrace Brisbane B 17				

August 24, 1938 By Order of the Council G C ANDERSON, *Secretary*

BIRMINGHAM AND MIDLAND EYE HOSPITAL (114 Beds)

Applications are invited from duly qualified Medical Practitioners for the post of RESIDENT SURGICAL OFFICER at the above Hospital Salary £200 per annum and £10 laundry allowance

The Resident Staff consists of a Resident Surgical Officer and three House Surgeons and in the event of one of the latter being promoted to the position of Resident Surgical Officer applicants should state whether they will be willing to accept appointment as House Surgeon at a salary of £130 (rising at the end of six months satisfactory service to £150) per annum

Applications with testimonials and evidence of registration should be forwarded to—

Church Street J W PEARCE
Birmingham 3 House Governor

GENERAL INFIRMARY SALISBURY (Voluntary Hospital 215 Beds)

HOUSE SURGEON (male) required to commence duty September 11th 1938

The appointment is for six months with the right of applying for reappointment for a further period of six months Candidates must be unmarried fully qualified and registered The Hospital is recognized under F R C S regulations Salary £125 per annum with board residence

Applications with copies of testimonials to be sent to the House Governor from whom a copy of the rules may be obtained

DERBYSHIRE ROYAL INFIRMARY DERBY (General Hospital 362 Beds) Recognized under F R C S Regulations

Applications are invited for the post of HOUSE SURGEON for General Surgery (male single) Candidates must be qualified and registered under the Medical Acts Salary will be £150 per annum with apartments board etc

Applications with copies of testimonials to be sent to the undersigned

ARTHUR TAYLOR
August 16th 1938 Superintendent and Secretary

ABERDEEN ROYAL INFIRMARY

The Board of Directors invite applications for the post of GYNAECOLOGICAL REGISTRAR The successful candidate will also be a part time Assistant in the Department of Midwifery of the University of Aberdeen

Salary £300 per annum Appointment for one year with eligibility for reappointment on application at expiry

Applications with recent testimonials (six copies of each) must be lodged not later than 10 a m on September 3rd 1938 with the undersigned from whom particulars as to salary and term of appointment may be obtained

JOHN A McCONACHIE
Clerk and Treasurer

1 Albyn Place Aberdeen.
August 11th 1938

GRANTHAM HOSPITAL (100 Beds)

Applications are invited from fully qualified medical practitioners for the post of RESIDENT MEDICAL OFFICER The appointment is for six months (renewable) and will become available on October 9th 1938 Salary £200 per annum with board residence and laundry Preference given to applicants who have already held a resident appointment

Applications stating age nationality qualifications and experience with copies of three recent testimonials should be sent to the undersigned

JOHN E RAY
Secretary Superintendent

BEDFORD COUNTY HOSPITAL

Wanted SECOND HOUSE SURGEON to take over his duties for a term of not less than six months He must be fully qualified male unmarried Salary £150 per annum with board lodging and laundry

Applications stating age nationality and qualifications to be sent to the Secretary Hon Medical Staff Committee with three recent testimonials

WILTS COUNTY MENTAL HOSPITAL DEVIZES

The Visiting Committee invite applications for the appointment of JUNIOR ASSISTANT MEDICAL OFFICER (male) preferably married at a salary of £350 per annum rising by annual increments of £5 to £400 with unfurnished house and garden laundry coal light and milk valued at £106 per annum together with an allowance in lieu of board of £57 An additional £50 per annum will be paid if the successful candidate holds the D P M or when he obtains the same

The appointment is subject to deductions under the A O S Act and the successful applicant will be required to furnish a certificate as to good health

Applications giving age qualifications and previous experience and endorsed Assistant Medical Officer together with copies of not more than three recent testimonials (which will not be returned) must reach me not later than first post on Monday September 12th 1938

GUY W JACKSON
Clerk to the Visiting Committee
St John Street Devizes Wilts

THE RADCLIFFE INFIRMARY OXFORD

Applications are invited from qualified men or women for the post of RESIDENT MEDICAL OFFICER to that section of the Infirmary consisting of 40 beds and dealing with the diagnosis and treatment of pulmonary tuberculosis known as the Osler Pavilion Headington Oxford as from October 1st 1938

Appointment will be for six months in the first instance.

Salary at the rate of £120 per annum with board etc

Applications with copies of testimonials must be forwarded to the undersigned not later than September 7th

A G E SANCTUARY Administrator

(Appointments continued on p 49)

TO ADVERTISERS

The BRITISH MEDICAL JOURNAL has a larger circulation than that of all other British weekly medical periodicals combined

CIRCULATION OF THIS ISSUE—11,750

TERMS FOR ADVERTISING

SMALL PREPAID ADVERTISEMENTS

The MINIMUM charge is 9s which covers up to 30 words Extra words are charged 1s 6d for 5 or less e g 33 words would be charged 1s for 35 Name and address should be included when counting words for cost

If BOX NUMBER is used it should be reckoned as 3 words in the total Advertisements accompanied by remittance should reach this office not later than NOON TUESDAY for insertion in ensuing number

DISPLAYED ADVERTISEMENTS

Whole Page £24 and *pro rata* to one eighth page

Special positions dates and rates on application

EVERY EFFORT IS MADE TO ENSURE THE ACCURACY OF ADVERTISEMENTS APPEARING IN THE JOURNAL NO RECOMMENDATION IS IMPLIED BY ACCEPTANCE AND THE BRITISH MEDICAL ASSOCIATION RESERVES THE RIGHT TO REFUSE OR INTERRUPT THE INSERTION OF ANY ADVERTISEMENT

ADVERTISEMENT MANAGER
BRITISH MEDICAL JOURNAL
B M A House, Tavistock Square
London, W C 1
Telephone EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA

TOBACCO GOOD SMOKES at a low price quality guaranteed Box of 50 for 25/ post free — Sole Manufacturers J J FREEMAN & CO LTD 90 Piccadilly London W 1 (GRO 1529)

"BIZIM" CIGARETTES

THESE luxurious deliciously satisfying smokes 50 s or 100 at 6/3 per 100 58/6 per 1 000 post free —Sole Manufacturers J J FREEMAN & CO LTD 90 Piccadilly London W 1 (GRO 1529)

"SOLACE CIRCLES" TOBACCO

THE finest combination ever discovered of Choice Natural Tobaccos Every pipeful an indescribable pleasure 12/6 per ½ lb tin post free —Sole Manufacturers J J FREEMAN & CO LTD 90 Piccadilly London W 1 (GRO 1529)

ECRASEUR FOR USE IN PERFORMING Embryotomies — PATENT 158014 The owner of this Patent is desirous of arranging by way of licence or sale for the manufacturing and commercial development of the invention in this country Communicate Office VANDER HEYM 172 bd Voltaire Paris

NATIONAL ADOPTION SOCIETY 4 BAKER STREET W 1 Telephone Welbeck 7211 OFFERS ASSISTANCE in the legal adoption of illegitimate and orphan babies into suitable family life Chairman THE LADY GWENETH CAVENDISH

SHIPS DOCTOR REQUIRED VOYAGE Glasgow/Australia preferably Australian wishing to return Australia New ship departing about September 12th —Apply BURNS PHILP AND CO LTD c/o BARCLAY CURLE AND CO LTD Glasgow

TYPEWRITING TECHNICIAN for TYPEWRITING [illegible] WANTED for [illegible] Wards Ltd [illegible] Street S W 1 Whitehall [illegible]

TYPEWRITING DUPLICATING TRANSCRIPTIONS Legible accurate HENRY MONEMAN [illegible] Mark that envelope Medical Dept *Dean & Bell Ltd* [illegible] W C 1 Of BMA House [illegible]

NEW VOCATION FOR LADIES OF REFINED KENNEL MAID [illegible] Fees £10 10s for [illegible] Particulars with [illegible] Kennels [illegible] Mrs [illegible] Kennels [illegible]

WHEN YOU COME TO LONDON TRY AT THE HANDBOOK RESIDENTIAL CLUB FOR GIRLS [illegible] Hanover Street W 1 Close to Oxford Circus [illegible] Bedrooms 15s to £2 per week [illegible] Bathrooms Restaurant [illegible] Meals and Lunches [illegible] for students [illegible] Apply Secretary EUSton 4455

ASSISTANCIES

WANTED IMMEDIATELY — OUTDOOR ASSISTANT for part [illegible] in pleasant country town [illegible] and [illegible] hospital Excellent [illegible] to assist [illegible] resident hospital experience Must have [illegible] Salary £450 p a Send full particulars of [illegible] and references — Address No 8231 BMA House Tavistock Square W C 1

WANTED IMMEDIATELY INDOOR AND OUTDOOR ASSISTANTS for town and country practices with and without [illegible] Good [illegible] offered State full particulars — British Medical Bureau 31 Cross Street Manchester 2

WANTED IMMEDIATELY ASSISTANT Indoor (non-resident) for Midland practice Married man under 35 Salary £350 all found plus £50 car allowance Partnership in 18 months —Address No 8241 BMA House Tavistock Square W C 1

WANTED IMMEDIATELY MARRIED ASSISTANT British for South Wales colliery practice Salary £450 and £50 car allowance or car provided Free unfurnished house — Address No 8031 BMA House Tavistock Square W C 1

WANTED IMMEDIATELY MARRIED ASSISTANT for South Yorkshire practice with early view Salary £400 with car allowance free unfurnished house Sports graduate preferred —Address No 8230 BMA House Tavistock Square W C 1

WANTED (EARLY SEPTEMBER) WOMAN ASSISTANT indoor woman's practice NW London Salary £300 p a all found and small allowance if own car —Address No 8226 BMA House Tavistock Square W C 1

WANTED FOR OCTOBER 1st ASSISTANT male outdoor Pleasant residential district Yorkshire Large cottage hospital Commencing salary £300 per annum all found Car provided — Address No 8248 BMA House Tavistock Square W C 1

WANTED ASSISTANT MALE SINGLE IN mixed practice East Coast town Dispenser kept £300 per annum all found Write stating age experience nationality etc —Address No 8249 BMA House Tavistock Square W C 1

WANTED EXPERIENCED ASSISTANT FOR very sound mixed suburban practice with an early view to partnership Applicants should be British Protestant not over 29 years of age Salary £500 p a Apply with photograph if possible —Address No 8228 BMA House Tavistock Square W C 1

WANTED OUTDOOR ASSISTANT EXPERIenced at once General practice near Manchester State nationality and if married or single Salary £500 p a and furnished rooms Car required —Address No 8213 BMA House Tavistock Square W C 1

WANTED MALE OUTDOOR ASSISTANT rural Kent old established growing practice panel and private four partners Salary £550 inclusive Prospects good car necessary State essential details —Address No 8209 BMA House Tavistock Square W C 1

WANTED INDOOR MALE ASSISTANT FOR practice near Cardiff Must be energetic sober and able to drive a car Salary £350 — Particulars to Address No 8227 BMA House Tavistock Square W C 1

WANTED INDOOR ASSISTANT FOR LATE [illegible] Work [illegible] BMA [illegible] W C 1

WANTED MALE ASSISTANT (OUTDOOR) [illegible] (Mr [illegible] Surg [illegible] BMA [illegible] W C 1

WANTED YOUNG MALE INDOOR ASSISTANT [illegible] Mr [illegible] Cardiff [illegible] BMA House Tavistock Sq W C 1

WANTED MALE OUTDOOR UNMARRIED ASSISTANT [illegible] Carmarthenshire [illegible] Salary £400 with [illegible] Car provided Duties [illegible] Applications [illegible] BMA House Tavistock Sq W C 1

WANTED OUTDOOR ASSISTANT WITH [illegible] Salary £450 [illegible] BMA House Tavistock Square W C 1

WANTED ASSISTANT LIVERPOOL 2nd [illegible] Salary £400 [illegible] BMA House Tavistock Square W C 1

WANTED WELL QUALIFIED AND EXPERIenced ASSISTANT [illegible] Salary £400 to £500 [illegible] Kent S E Salary £400 [illegible] particulars — Address No 8245 BMA House Tavistock Square W C 1

ASSISTANT REQUIRED MALE SCOTTISH or English unmarried [illegible] experience in general practice preferred Glasgow district Kent district £350 per annum all found £50 at allowance and extra —Write No 8240 BMA House Tavistock Square W C 1

ASSISTANT WANTED (OCTOBER 1st) British male Salary £400 plus £50 car allowance Mixed urban and rural practice Midlands Five partners —Address No 8118 BMA House Tavistock Square W C 1

LONDON EAST—WOMAN ASSISTANT required (Oct) by woman doctor partner private practice dispenser kept commencing salary £300 State age and experience —Address No 8215 BMA House Tavistock Square W C 1

NORTH WEST LANCS NEAR COAST— ASSISTANT wanted with view to [illegible] partnership (in six months time) in old-established practice in pleasant district —Address No 8244 BMA House Tavistock Square W C 1

PART TIME ASSISTANT WANTED IMMEdiately London mixed practice Excellent opportunity postgraduate Work exceptionally easy Sleep in at surgery Remuneration to be arranged —Address No 8201 BMA House Tavistock Square W C 1

LOCUMS

WANTED LOCUM TENENS SEPT 11th for about eight days in general practice at London With or without own car —Address No 8211 BMA House Tavistock Square W C 1

WANTED FOR GENERAL PRACTICE NEAR Cardiff LOCUM with experience of Public Appointments able to drive car for 5 weeks from September 19th —Address No 8236 BMA House Tavistock Square W C 1

MEDICAL POSTS DISPENSERS

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request qualified and with practical experience in private practice and dispensary work also trained in Bacteriological Laboratories of the LONDON COLLEGE OF PHARMACY FOR WOMEN Preparations for Examinations —Write wire or phone (Bays water 0969) Secretary 7 Westbourne Park Road W 2

A [illegible] IN DISPENSING GORDON HALL [illegible] and Secretary Dispensers can be supplied to Doctors Sessions January April and September —Apply Principals School of Pharmacy Drayton House Gordon Street W C 1 Phone Euston 3930

DISPENSING CAREER FOR YOUNG LADIES FULL TRAINING [illegible] Certificate Entrements every three [illegible] — Apply The Principal Central School of Pharmacy [illegible] Street, London, SW1 Telephone Victoria 1641

DOCTORS REQUIRING QUALIFIED Dispensers Nurse Dispensers Secretary Dispensers for Chancellor Dispensing [illegible] to write [illegible] Temple Bar 5 THE DISPENSERS BUREAU 3 Lindsay House 177 Shaftesbury Avenue London WC2

DOCTOR'S DAUGHTER 19 WELL EDUCated and of very [illegible] character seeks POST [illegible] — Address No [illegible] BMA House Tavistock Square WC1

LADY DISPENSER RECENTLY QUALIFIED requires post Hall assistant or Secretary [illegible] — Address No 17 BMA House Tavistock Square WC1

SECRETARY GOOD EDUCATION AND [illegible] experienced in medical work [illegible] shorthand typing desires [illegible] to those engaged in medicine — Address No [illegible] BMA House Tavistock Square WC1

SRN WITH FULL SECRETARIAL training seeks POST as a Medical [illegible] Use to type and file and [illegible] Excellent references — Address No [illegible] BMA House Tavistock Square WC1

TEMPORARY OR PERMANENT POST wanted by Secretary Librarian [illegible] Public Health Dept Experience in [illegible] and shorthand typing [illegible] — MMO West Ham Sanatorium Dunmow

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION 5 Eccleston Square, SW1 (Telephone Victoria [illegible]) supplies qualified Dispensers, Book keepers, Laboratory Assistants Sanitary Assistants Male Nurses Mental and Special Treatment Orderlies Dental Clerk Orderlies, Porters, Caretakers etc without charge to prospective employers.

PARTNERSHIPS

WANTED PARTNER PREFERABLY married in middle-class practice Surrey (10 miles London) 1 assistant £[illegible] panel 8 000 no personal experience Modern house 4 bedroom rent or buy Share offered £1 500 at 2 years purchase Preliminary assistantship considered — Address No 8 [illegible] BMA House Tavistock Square WC1

WANTED JUNIOR PARTNER IN LARGE old-established Practice North London district Financially sound excellent prospects Preliminary assistantship indoor £300 and £50 car allowance —Address No 8 07 BMA House Tavistock Square WC1

AN OLD ESTABLISHED PARTNERSHIP OF doctors near London is desirous of negotiating for a JUNIOR PARTNER Candidates should be British Protestant 26 to 30 years experienced and decided on doing general practice Share worth £1 500 for disposal at 2 years purchase Increase later Short preliminary assistantship — Address No 8217 BMA House Tavistock Square WC1

LONDON —PARTNERSHIP WITH VIEW TO SUCCESSION in sound old-established general practice Initial share worth £1 000 gross at 2 years purchase Preliminary assistantship can be arranged Scotsman preferred Protestants only Excellent opportunity to suitable man with experience —Address No 8 46 BMA House Tavistock Square WC1

LANCS TOWN —PARTNERSHIP YIELDING £1 000 gross Middle and working-class Panel 2 000 Private house with garage for sale Premium £1 500 including drugs, book debts — Address No 905 BMA House Tavistock Square WC1

LONDON PARTNER REQUIRED BY Specialist with growing practice engaged in advanced effective treatment Must be about 40 and of good appearance etc Excellent references exchanged One third share £800 —Address No 8106 BMA House Tavistock Square WC1

MD, SCOTCH UNIVERSITY MARRIED keenly interested medicine three years postgraduate teaching hospital and GP seeks PARTNERSHIP following short assistantship Suitable house to rent. Educational facilities Hospital appointment if possible —Address No 8 19 BMA House Tavistock Square WC1

PARTNER WANTED IN LARGE KENTISH town [illegible] with hospital experience [illegible] at 2 years purchase [illegible] Preliminary assistantship [illegible] — Address No 8 [illegible] BMA House Tavistock Square WC1

PARTNERSHIP IN CORNISH TOWN £1 000 at two years purchase Partner's house by [illegible] staff of 4 with good medical [illegible] — Address No 8 [illegible] BMA House Tavistock Square WC1

PARTNERSHIP —A THIRD SHARE WORTH £[illegible] 000 gross in [illegible] practice [illegible] — Address No [illegible] BMA House Tavistock Square WC1

PARTNERSHIP OFFERED IN PURELY RADIOLOGICAL and ELECTROLOGICAL practice Hospital [illegible] — Address No [illegible] BMA House Tavistock Square WC1

SOUTH WEST ENGLAND —MEDICAL PARTNER wanted in [illegible] Hospital appointment Apartment Partner's Quarters and [illegible] purchase [illegible] — Address No 4 BMA House Tavistock Square WC1

SURGICAL PARTNERSHIP —TWO-THIRDS SHARE in [illegible] £4 000 a country town in South West Hospital appointment [illegible] Lincoln and gain FRCS [illegible] Further details [illegible] — Address No [illegible] BMA House Tavistock Square WC1

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed

Applications should be separately enclosed and clearly addressed

Address No
B M A House
Tavistock Square W C 1

All communications are forwarded to advertiser under plain cover

SHARE IN OR PURCHASE SOUND WEST end PRACTICE Ample capital available Married middle-aged great experience surgery medicine especially midwifery Late consultant large eastern hospital Personal London references —Address No 8 14 BMA House Tavistock Square WC1

WELL-QUALIFIED PARTNER NEEDED TO join a high-class non-dispensing Midland practice Four months assistantship at £[illegible] p.a. Share £1 100 at 2 years purchase Equality later Residential district House £[illegible] p.a. —Address No 9 03 BMA House Tavistock Square WC1

PRACTICES

WANTED IMMEDIATELY PRACTICE IN London preferably in western half. Income about £2 000 with a fairly large panel Cash available —Address No 793 BMA House Tavistock Square WC1

WANTED IMMEDIATELY PREFERABLY IN Greater London general PRACTICE about £2 000 Large panel and good house essential no branch surgery —Address No 8 [illegible] BMA House Tavistock Square, WC1

WANTED NOVEMBER OR DECEMBER mall country PRACTICE in Dorset, Devon or Cornwall £400 to £600 House to rent preferred —Address No 7913 BMA House Tavistock Square WC1

WANTED URGENTLY TOWN PRACTICE, about £1 500 good panel Capital available —Address No 8 31 BMA House Tavistock Square WC1

AN OLD-ESTABLISHED PRACTICE FOR sale in a good [illegible] and [illegible] centre in A county —Address No [illegible] BMA House Tavistock Square WC1

A NUMBER OF SMALL PRACTICES AT LOW prices with [illegible] Excellent opportunities for practitioners with a view to [illegible] Apply PEACOCK AND HUDLEY LTD 67/68 Chandos Place Strand WC2

BIRMINGHAM OR VICINITY —MIDDLE aged man with [illegible] PRACTICE or PARTNERSHIP or [illegible] Capital available No [illegible] — Address No 16 BMA House Tavistock Square WC1

BIRMINGHAM OR WITHIN 30 MILES — Wanted a PRACTICE or [illegible] a year No [illegible] — Address No 15 BMA House Tavistock Square WC1

DEVONSHIRE —OLD-ESTABLISHED PRACTICE [illegible] County town Excellent [illegible] Apply [illegible] Gross [illegible] Good [illegible] Sole [illegible] — Address No [illegible] BMA House Tavistock Square WC1

FASHIONABLE RESORT SOUTH COAST — Modern [illegible] PRACTICE [illegible] Two years [illegible] Beautiful [illegible] (6 bedrooms) [illegible] £[illegible] freehold [illegible] Sole [illegible] — Address No [illegible] BMA House Tavistock Square WC1

FOR SALE VERY OLD-ESTABLISHED country PRACTICE in Northumberland with [illegible] Population [illegible] Panel nearly 1 000 Present 12 years' Commodious house with grounds and [illegible] Sole [illegible] Intimate [illegible] —GARFORTH DEURY AND KNIGHT Incl. Solicitors Newcastle-upon-Tyne, 1

FOR EARLY DISPOSAL —OLD-ESTABLISHED PRACTICE market town Lincolnshire about £2 000 p.a. 11 years' purchase panel 1 200 House freehold rent or purchase 5 main bedrooms small garden and [illegible] (two cars) —Address No [illegible] BMA House Tavistock Square WC1

GENUINE SALE —BIG PRACTICE, ESSEX large town and [illegible] Londonfar. Large panel average receipts last 3 years £3 000 Senior partner retiring (ill-health) Half-share or sale 2 years purchase —Address No [illegible] BMA House Tavistock Square WC1

LONDON S.E.—PRACTICE FOR SALE Income £[illegible] Panel 1,3[illegible] increasing Lock up surgery Car not necessary Expenses low ex ellent scope price £2 000 Good house and garden on lease —Address No 49 BMA House Tavistock Square WC1

LONDON N.W. —FOR SALE NUCLEUS worked from lock-up surgery Panel 1 000 Suit man or woman —Address No 823 BMA House Tavistock Square WC1

MIDLANDS —UNOPPOSED COUNTRY PRACTICE. [illegible] miles county town Receipts £730 increasing panel 5 000 Premium 1 years' purchase Modern detached house all services large garden —Address No 8[illegible] BMA House, Tavistock Square WC1

MIDDLESEX —WELL ESTABLISHED PRACTICE Receipts £[illegible] 000 panel 1 000 increasing Corner house Good scope Premium for practice and house £1 000 —PEACOCK AND HUDLEY LTD 67/68 Chandos Place Strand WC2

MB, HOSPITAL AND GENERAL PRACtice experience, desires PRACTICE or PARTNERSHIP Willing to take assistantship with view Keen on motoring Free now — Address No 8[illegible] BMA House, Tavistock Square WC1

NEWCASTLE-ON-TYNE —COUNTRY PRACTICE for sale within 3 miles of Newcastle good house 8 rooms [illegible] only £3[illegible] Apply in writing to J W ARMSTRONG AND SON 2 Collingwood Street, Newcastle-on-Tyne 1

NURSING HOME, NEWCASTLE UPON TYNE —Two large double fronted houses (free of) beds for twenty five patients and ample staff accommodation Two operating theatres x-ray plant and up-to-date equipment For sale as a going concern Owner retiring for health reasons —Address No 870 BMA House Tavistock Square WC1

NEAR HENDON N.W.—OLD ESTABLISHED PRACTICE. Receipts £650 p.a. panel 855. Corner house, rent £100 p.a. Mid-terrace. Scope. Premium £1,300.—Trocock and Hedley, Ltd., 67/68, Chandos Place, Strand, W.C.2.

OLD ESTABLISHED PRACTICE. RESIDENTIAL district, South-east London. Average £900 per annum, panel 1,200, transferable appointment £50. Price £1,000, or near offer. Excellent freehold house for sale, £1,000.—Address, No. 8110, B.M.A. House, Tavistock Square, W.C.1.

PRACTICE (NORTH LONDON) ESTABLISHED over thirty years, recently taken part. Splendid scope for energetic; safe train. Failing health. Premium £700 or near.—Address, No. 7012, B.M.A. House, Tavistock Square, W.C.1.

PRACTICE, LONDON SUBURB FOR SALE. Low premium.—Address, No. 8147, B.M.A. House, Tavistock Square, W.C.1.

SHROPSHIRE.—OLD ESTABLISHED UNOPPOSED country PRACTICE. Panel 1,400. Receipts about £700, including appointments. Good accommodation to rent. Premium, including fittings, etc., £950 for quick sale. Vendor taking up partnership.—Address, No. 8115, B.M.A. House, Tavistock Square, W.C.1.

SURREY (GROWING DISTRICT).—DOCTOR'S HOUSE to rent, 37s. 6d. per week, in line, 4 bedrooms, bath, garden. Panel 41, increasing with NUCLEUS which did £50 last year. Will accept £50.—BM/GLVN, London, W.C.1.

SOUTH COAST.—EASILY WORKED PRACTICE, over £1,300 per year, panel over 1,100, also I.M.S. Sale owing to ill-health. Growing district. Freehold house and garage for sale or rental. Practice premium 12 years. Fullest particulars.—Address, No. 8120, B.M.A. House, Tavistock Square, W.C.1.

WELL ESTABLISHED PANEL AND PRIVATE PRACTICE of £500 in North London. 11 years purchase. Scope. Easily worked. Good house and garden to be let or sold.—Address, No. 8105, B.M.A. House, Tavistock Square, W.C.1.

WELL KNOWN TOWN (2½ HOURS London).—Well established PRACTICE. Receipts £730 p.a., panel 758. House, garden, rental. Good scope. Premium £450.—Trocock and Hedley, Ltd., 67/68, Chandos Place, Strand, W.C.2.

IMPORTANT

to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for CLERGYMEN of DISCRIMINATE TASTE. Exactly Cut, Fitted and Made from Finest Quality Materials and Best Possible Style, yet at Reasonable Prices, ready to wear or made to measure.

The Invariable Practice of Messrs. A. of our 14 Expert West End Cutters and Fitters is always at your disposal.

ALL HALLZONE Tested and are HAND FINISHED IN EVERY ESSENTIAL DETAIL.

SPECIAL OFFER

JACKET & VEST (Oxford grey)	£4 4
Fine Best quality Art Saxella Art Silk Mixed	
SOLID FANCY WORSTED TROUSERS	£1 10
The Ideal Suit for Town, Country and Sporting Wear	
LOUNGE SUITS	from £5 5
OVERCOATS	£5
DINNER SUITS	£8 8
DRESS SUITS	from £10 10s.
FOUR-FOLD SUITS	from £5 5
THE IDEAL Suit for Country and Sporting Wear	
GOLD MEDAL RIDING BREECHES (to measure)	£2 2
RIDING HABITS	£5 5
RIDING BOOTS	£3 3
COSTUMES & TOPCOATS	£6 6

UNSOLICITED APPRECIATIONS

I am only writing to say that I am very pleased with the suit I have had from you. Harry Hall Ltd. are all the others I have had from them 35 years have been perfect in fit, cut and finish.

(Sgd.) J. S. J. V. M.A. M.D. ERCUS

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self-measurement Form or Tailor's Card sent

Visitors to London can order and have a Day Special Patterns would then be sent and Perfect Fitting Clothes supplied after without trying on.

HARRY HALL, LTD.

Governing Director Harry Hall

THE Coat Breech Habit and Costume Specialists

181 OXFORD ST. W.1 (13 CHEAPSIDE E.C.2)

Telephones

Gerrard 4305, 4906 and 4907 National 7057

Makers of Finest Quality Bespoke Civil Service and Hunting Clothes for Ladies and Gentlemen

Highest Award—Gold Medal

For over 30 years

MISCELLANEOUS SALES, etc.

INCOME TAX

YOUR Income is OUR business

Tax Appeal Note to the Medical Profession.

HARDY & HALDY

13 CHANCERY LANE, LONDON, W.C.2

Telephones: Holborn 6629

Write to Inspector at Assessment Date.

D.C. TO A.C. ROTARY CONVERTERS. All capacities 500 watts to 5 kW. Offer Wanted. Electric Co., 9 Cecil Court, W.C.2.

FOR SALE, COMPLETE THEATRE EQUIPMENT. Has been used at Assembly Hall, Bournemouth. Apply Hall Manager, Assembly Hall, Bournemouth.—Address, No. 8125, B.M.A. House, Tavistock Square, W.C.1.

MOTOR CAR FOR SALE.—DOCTOR WISHES sell his Standard Saloon, Model 1935, 10 h.p., 4 cylinder, 4 speed, synchromesh gear box, Dunlop tyres, Triplex glass throughout, Lucas lighting and starting, Smith's heater, Bluemel's screen wipers, Jackall, etc. Perfect condition throughout. Owner has purchased new car.—Apply, Dr. [illegible], [illegible], Kent.

TALBOT 14 HP. DE LUXE SALOON. Very fine example. Trade value £110. Will accept £80 for quick sale. Owner has purchased new car.—Address, No. 8124, B.M.A. House, Tavistock Square, W.C.1.

HOUSES, CONSULTING ROOMS

HARLEY STREET AND MEDICAL DISTRICT

For all types of available premises, Surveyed and Valued

BERTRAM & CO., 7 Connaught Street, W.2. Paddington 1022.

FOR SALE, RESIDENCE WITH SURGERY. Separate entrance, at 74, Albany Road, Cardiff.—Further particulars from Dr. F. [illegible], Beckenham, or Wimbushurst and Co., Auctioneers, Hertford.

SMALL ADVERTISEMENT FOR INSERTION IN BRITISH MEDICAL JOURNAL.

The MINIMUM charge is 9s., which covers up to 30 words. Extra words are charged 1s. 6d. for 5 or less. Example: 33 words would be charged as for 35. Name and address should be included when counting words for cost.

If BOX NUMBER is used, it should be reckoned as 5 words in the total.

PLEASE WRITE CLEARLY—ONE WORD IN EACH SPACE.

1						
2						
3						
4						
5						
6					(30 words)	9/
7						10/6
8						12/
9						13/6
10						15/

To the Advertisement Manager, BRITISH MEDICAL JOURNAL, B.M.A. House, Tavistock Square, London, W.C.1.

Please insert my advertisement in ..... issues. Name .....

dated ..... Address .....

I enclose remittance value £ ..... Date .....

Freehold
CONSULTING ROOMS
PROFESSIONAL HOUSES & FLATS
in Harley Street and the medical area served by the adjoining Mayfair
LEY CLARK & PARTNERS
AUCTIONEERS SURVEYORS & VALUERS
3a, Wimpole Street Cavendish Square W 1
Telephone Langham 1046-7
Represented at Cannes, Nice and Monte Carlo

CONSULTING SUITE BARGAIN HARLEY STREET Ground floor suite of 3 newly decorated consulting rooms with part of partial attendance Lease by arrangement Recommended by Mivart and Co (Agents) Bertram and Co) 9 Conduit Street W — (Paid 1642)

HARLEY STREET AND DISTRICT—A NUMBER of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application—ELCOCK AND Co 10 Henrietta Place Cavendish Square W 1 Langham 4601

DEVONSHIRE STREET TWO DOORS FROM Harley Street an excellent CONSULTING SUITE of three good rooms in one of the finest professional houses Rent only £150 per annum or single rooms may be had at £100 per annum with suite on the floor and all services Vacant Sept 29th 1938—Address No 7610 B M A House Tavistock Square W C 1

PART TIME USE OF ROOM ON PREMISES of General Practitioner in London REQUIRED by occupant good rent offered—Apply Box 0 HANNAFORD AND GOODMAN LTD 47/59 Ludgate Hill London E C 4

QUEEN ANNE STREET—ONLY £40 P A secures exceptionally fine CONSULTING ROOM for use when required, with attendance and all services Residential accommodation available —Address No 6315 B M A House Tavistock Square, W C 1

1, BENTINCK STREET (CORNER WELBECK Street)—Finest New CONSULTING SUITES in Medical Area Each 2 rooms and lavatory Also well-appointed FLATS—Sole Agents ERNEST DUBERRIDGE AND Co 4 Duke Street, W 1 Welbeck 8295

NEAR MARBLE ARCH—WHOLE OR PART OF HOUSE to let Excellent situation.—Agents ERNEST DUBERRIDGE AND Co 4 Duke Street W 1 Welbeck 0295

APPOINTMENTS—Contd.

CENTRAL LONDON THROAT NOSE AND EAR HOSPITAL
Gray's Inn Road W C 1

RESIDENT HOUSE SURGEON (MALE)

There will be a vacancy for a Third Resident House Surgeon to enter on duty on October 1st The appointment will be for a period of nine months three months as Third House Surgeon three months as Second House Surgeon and three months as First House Surgeon Remuneration at the rate of £75 per annum

Applications accompanied by copies of not more than three testimonials should be sent to the undersigned as soon as possible and in any case not later than September 12th

JOHN H YOUNG
Secretary Superintendent

QUEEN MARY'S HOSPITAL FOR THE EAST END
Stratford London E.15

RESIDENT MEDICAL OFFICER

Applications are invited from fully qualified and registered medical men (only) for the above post The Hospital contains 219 beds including 50 for Maternity patients

The appointment will be for six months datung from October 1st 1938 to March 31st, 1939 with salary at the rate of £1 0 per annum In addition to his salary the Resident Medical Officer receives certain sums paid by the National Health Insurance

Candidates who must be single and who should previously have held hospital appointments should send applications accompanied by testimonials to the undersigned not later than Thursday September 1st 1938

RAPHAEL JACKSON Major
Secretary

ROYAL LONDON OPHTHALMIC HOSPITAL
(Moorfields Eye Hospital)
City Road E.C.1

Applications are invited for the post of SENIOR RESIDENT OFFICER

Candidates must be registered Medical Practitioners and must be prepared to begin duties on November 1st 1938

Salary at the rate of £110 per annum with board and residence in the Hospital Additional income will accrue to this post the care of private patients being included in the duties

In the event of the First House Surgeon being appointed other candidates are requested to state whether they would accept the office of First House Surgeon at the rate of £110 per annum Second House Surgeon at the rate of £105 per annum Third House Surgeon at the rate of £100 per annum The candidate elected as Third House Surgeon must be prepared to begin his duties with the present officer on October 1st 1938 and will be in preference until November 1st 1939

The appointments are for a period of six months as from November 1st 1938

Applications with testimonials stating age and qualifications must be received not later than September 15th 1938 by

A J M TARRANT
Secretary

ST JOHN'S HOSPITAL LEWISHAM S.E.13

Applications are invited for the appointment of HONORARY PHYSICIAN to Psychological Medicine (Male)

Preference will be given to candidates who have had appointments in Mental Hospitals for not less than three years The successful candidate will be required to take an O P Clinic on one half-day a week and will be in charge of patients admitted to the wards

Applications stating age with copies of testimonials should reach the undersigned who will be pleased to give further information not later than September 10th

J C GILBERT
Secretary Superintendent

THE ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road London S W 3

Applications are invited for the post of RESIDENT MEDICAL OFFICER to commence duties on Oct 1st 1938 The appointment is for twelve months at a salary at the rate of £140 per annum with board residence and laundry At the end of this period reappointment for a further twelve months may be granted for

Applications to be made on a form which will be supplied by the Secretary with copies of not more than three recent testimonials to be sent to the Secretary not later than the first post on September 16th 1938

CLEMENT COBBOLD Secretary

THE MANOR HOUSE HOSPITAL
Golders Green London N W 11
(150 Beds)

Applications are invited for the post of JUNIOR MEDICAL OFFICER Salary at the rate of £150 per annum with board residence

Appointment tenable for six months which may be renewed if mutually agreeable Candidates male and unmarried must be fully qualified registered The successful candidate will be required to take up his duties at the earliest possible moment

Applications stating full particulars and accompanied by copies of not more than three recent testimonials should be forwarded to the undersigned forthwith

JAMES W LINKHORN F C C S
Secretary

THE QUEEN'S HOSPITAL FOR CHILDREN
Hackney Road London E.2 (160 Beds)

HOUSE PHYSICIAN required October 1st 1938
Ear Nose and Throat HOUSE SURGEON required October 1st 1938

Six months appointments Salary at the rate of £100 per year with board lodging and laundry in each case

Applications must be made on forms to be obtained from the undersigned and be sent in with copies of not more than three testimonials on or before September 14th 1938

CHARLES H BESSELL Secretary

THE SOUTH LONDON HOSPITAL FOR WOMEN
Clapham Common S W 4 (140 Beds)

A General Hospital for Women and Children

Applications are invited from medical women for the undermentioned appointment

HOUSE PHYSICIAN for a period of six months from October 1st 1938

Salary at the rate of £100 per annum with board residence and laundry

Candidates are requested to call on members of the Hon Medical Staff before Saturday September 10th by which date applications and copies of testimonials must reach the Secretary at the Hospital

ROYAL MASONIC HOSPITAL
Ravenscourt Park W 6.

A post of RESIDENT SURGICAL OFFICER (Male) one of three Residents will be vacant on October 1st 1938 Salary at the rate of £120 per annum with board residence and laundry The appointment is for six months Candidates must be registered and must have had resident appointments at a general hospital The Institution (145 beds at present, but to be increased) is primarily for paying patients of both sexes of moderate means usually unable to afford ordinary Nursing Home treatment etc

Applications stating full particulars to be sent on or before Monday September 5th 1938 to the Honorary Secretaries from whom further information may be obtained

ST MARY'S HOSPITAL, LONDON W 2

MEDICAL REGISTRAR

Applications are invited for the above post Candidates for the appointment must be Registered Medical Practitioners and Fellows Members or Licentiates of the Royal College of Physicians of Graduates in Medicine of a University in the British Empire

The salary is £400 per annum with luncheon and tea provided

Copies of the regulations for the Medical Registrar may be obtained on application at the Secretary's Office

Applications with copies of testimonials should reach the undersigned on or before Wednesday September 14th 1938

W PARKES House Governor

WEST END HOSPITAL FOR NERVOUS DISEASES

In-Patient Department Gloucester Gate, Regent's Park N W 1
Out Patient Department 3 Welbeck Street W 1

The Committee of Management invites applications to fill the following vacancies

HON ASSISTANT OPHTHALMIC SURGEON Candidates who must be Fellows of the Royal College of Surgeons Eng are requested to obtain further particulars from the undersigned before Monday September 12th Twelve copies of the application with not more than three recent testimonials will be required

HON SURGICAL ASSISTANT Candidates who must be Fellows of the Royal College of Surgeons Eng should send in their application with copies of not more than three recent testimonials to the undersigned before Monday September 12th
21 Welbeck Street W 1 J P WETENHALL
Secretary and House Governor

WEST HAM HOSPITAL FOR NERVOUS AND MENTAL DISORDERS
Goodmayes Ilford Essex

Applications are invited for a male JUNIOR ASSISTANT MEDICAL OFFICER at the above Hospital Candidates must be unmarried

The commencing salary is at the rate of £350 per annum rising by annual increments of £25 to a maximum of £400 per annum together with emoluments consisting of board laundry and attendance valued for superannuation purposes at £110 per annum The person appointed will also be paid in addition to his salary the sum of £20 per annum on obtaining the Diploma of Psychological Medicine

The appointment is subject to six months probation and to the provisions of the Asylum Officers Superannuation Act 1909 Class I and to a satisfactory medical examination

A knowledge of bacteriological work will be an advantage

Applications stating age and experience accompanied by copies of three testimonials must reach the Medical Superintendent not later than August 31st 1938

WEST LONDON HOSPITAL
Hammersmith W 6 (230 Beds)

Required one HOUSE PHYSICIAN one HOUSE SURGEON and one RESIDENT ANAESTHETIST The duties of House Physician will include some work in the Children's Dept and of the House Surgeon some work in the Genito-Urinary Dept These three appointments (males) are tenable for six months from October 1st next, subject to one month's notice on either side Salary at the rate of £100 per annum with board and lodging Candidates must be registered under the Medical Act

Applications (which must be made on printed forms obtained from me) must reach me not later than first post Wednesday September 14th Selected candidates will be required to call upon such members of the Medical Staff as directed to be in attendance at the Medical Council Meeting on Friday September 23rd at 4.30 p.m and the House Committee Meeting at 5 p.m the same day when the appointments will be made.

H A MADGE
Secretary

BOLINGBROKE HOSPITAL
Wandsworth Common S.W.11
(135 Beds)

Applications are invited for the post of RESIDENT SURGICAL OFFICER (male unmarried). The post is that of Senior Resident Officer and the work being chiefly surgical preference will be given to candidates holding the F.R.C.S. qualification.

The appointment is for twelve months certificated from October 1st 1938.

Salary £110 per annum with board residence and laundry.

Applications stating age qualifications and experience with copies of not more than three testimonials should be sent to the undersigned not later than September 7th 1938.

W. S. RANDOLPH BISS
Secretary Superintendent.

ALBERT DOCK HOSPITAL
Alnwick Road E.16
(Seamen's Hospital Society)

RESIDENT MEDICAL OFFICER required for six months from October 1st. Salary £110 per annum and a proportion of fees with board residence and laundry. Candidates must be qualified and single.

Applications with copies of three testimonials to be sent in not later than September 17th to the undersigned.

F. A. LYON
Seamen's Hospital Society, Greenwich, S.E.10. Secretary.
August 10th 1938.

RESIDENT SURGICAL OFFICER REQUIRED
For the new ALBERT DOCK HOSPITAL E.16 (850 Beds with Tuberculosis Clinic and Rehabilitation Centre).

Appointment will commence October 1st 1938 and will be for one year in the first instance but renewable up to three years. Commencing salary £250 per annum. Candidates (male) should be Fellows of the Royal College of Surgeons.

Applications stating age and previous experience with copies of not more than three testimonials to be sent in on or before Thursday September 15th to the undersigned from whom further particulars may be obtained.

Seamen's Hospital Society, Greenwich, S.E.10. F. A. LYON, Secretary.

CHARING CROSS HOSPITAL
MEDICAL REGISTRAR

The Council invites applications for the post of Medical Registrar. Candidates must be registered Practitioners (male). Honorarium £150 per annum.

A copy of the Regulations can be obtained from the undersigned to whom applications together with copies of three recent testimonials must be submitted not later than September 20th 1938.

GEORGE J. JONES
Charing Cross Hospital, London, W.C.2. Secretary.

ALL SAINTS HOSPITAL (FOR GENITO URINARY DISEASES)
Austral Street, West Square, S.E.11

RESIDENT HOUSE SURGEON (male) required on October 1st for six months being three months as Junior House Surgeon with salary at £100 per annum followed by three months as Senior House Surgeon with salary at £150 per annum.

Applications giving particulars of age, experience, qualifications and enclosing copies of three recent testimonials should reach me not later than September 3rd.

D. H. EADE, Secretary.

CITY OF LONDON MATERNITY HOSPITAL
City Road, E.C.1

Applications are invited for the post of male ASSISTANT RESIDENT MEDICAL OFFICER for three months from October 1st—salary at the rate of £80 per annum. At the end of the period the candidate will if satisfactory be appointed Senior for three months at £100 per annum.

Forms of application returnable not later than September 10th may be obtained from the undersigned.

RALPH B. CANNINGS
Secretary.

BATTERSEA GENERAL HOSPITAL
London, S.W.11. (85 Beds)

Applications are invited for the post of RESIDENT HOUSE SURGEON (male or female). Salary £130 per annum. The appointment is for a period of approximately six months and the successful candidate will be required to take over *immediately*.

Applications stating age, experience and qualifications together with two copies of recent testimonials should be sent to the Secretary of the Hospital.

BROMPTON HOSPITAL, LONDON, S.W.3
MEDICAL SUPERINTENDENT

The Governors of the Hospital invite applications for the appointment of a Medical Superintendent. Salary £500 per annum.

The appointment will be made in the first instance for a period of three years, but is renewable.

Applications, which must be received not later than October 1st 1938, should be addressed to the undersigned, from whom further particulars may be obtained.

F. A. LYON
Secretary.

BROMPTON HOSPITAL, LONDON, S.W.3
(Seamen's Hospital Society)

HOUSE PHYSICIAN required for three months from October 1st. Salary £110 per annum and a proportion of fees with board residence and laundry. Candidates must be qualified and single.

Applications with copies of three testimonials to be sent in not later than September 17th to the undersigned.

F. A. LYON
Secretary.

BROMPTON HOSPITAL, LONDON, S.W.3
(Seamen's Hospital Society)

HOUSE SURGEON required for three months from October 1st. Salary £110 per annum and a proportion of fees with board residence and laundry. Candidates must be qualified and single.

Applications with copies of three testimonials to be sent in not later than September 17th to the undersigned.

F. A. LYON
Secretary.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1

Applications are invited for the following posts:

RESIDENT MEDICAL OFFICER. Salary £175 per annum, board residence and laundry allowance.

CASUALTY OFFICER. Salary £110 per annum board, residence and laundry allowance.

HOUSE SURGEON. Salary £100 per annum board residence and laundry allowance.

The appointment is for a period of six months in each case, to those who have held resident posts. Candidates must submit applications stating qualifications, age, etc., with copies of not more than three testimonials by Monday September 5th addressed to the Secretary.

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St. Quintin Avenue, North Kensington, W.10
(75 Beds)

HOUSE SURGEON (male) required for six months from October 1st 1938. Salary at the rate of £110 p.a. for the first three months and £130 p.a. for the second three months with board residence and laundry.

Application with copies of three recent testimonials must be submitted on a form to be obtained from the undersigned and must reach him not later than Monday September 12th 1938.

H. J. ELLY
Secretary.

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL

Applications are invited for the posts of HOUSE SURGEON (two male unmarried) one for seven months from October 1st and one for six months from November 1st renewable for a further period of six months on the recommendation of the Medical Board. £150 per annum with full board, quarters and laundry. Applicants should be registered Medical Practitioners.

Applications with copies of testimonials should be sent to the House Governor, 234 Great Portland Street, W.1 not later than September 14th.

THE WEIR HOSPITAL
Weir Road, Balham, S.W.12
(30 Beds)

SENIOR RESIDENT MEDICAL OFFICER (male unmarried) required October 10th. Salary £250 per annum with board residence and laundry. Candidates must be fully qualified and duly registered.

Applications with copies of three testimonials to be sent to the Secretary from whom further information may be obtained.

THE QUEEN ELIZABETH OF YORK HOSPITAL FOR CHILDREN
[illegible]
(135 Beds)

A HOUSE SURGEON is required [illegible]

THE PRINCESS ELIZABETH OF YORK HOSPITAL FOR CHILDREN
[illegible]
(135 Beds)

A HOUSE PHYSICIAN [illegible]

THE LONDON CHEST HOSPITAL
Victoria Park, E.
(Bus, Tram and Rail Centre: Bow Road Station, L.M.S. Railway)

The Council of Management [illegible]

THE CENTURY INSURANCE COMPANY LTD
7, LEADENHALL STREET, LONDON, E.C.3
18, CHARLOTTE SQUARE EDINBURGH

ASSISTS DOCTORS TO PURCHASE A PRACTICE OR PARTNERSHIP

NO GUARANTORS REQUIRED
REPAYMENTS ARRANGED BY EQUAL QUARTERLY INSTALMENTS, WHICH DO NOT VARY WITH FLUCTUATIONS IN THE BANK RATE

PLEASE WRITE FOR PARTICULARS, STATING AGE NEXT BIRTHDAY

MENTION 'B.M.J.'

PERCIVAL TURNER
LTD
MEDICAL AGENCY
ESTABLISHED 60 YEARS

25, MAIDEN LANE, STRAND, W.C.2
(Corner of Bedford Street)
Telegrams: "Epsomian, London"
Phones: Temple Bar 3011 (3 lines)
After office hours: Wat. 3400 (Thames 185)
Assistants and Locums licensed without fee to Principals. Trades investigated. Book keeping, Debt Collecting etc.

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY OR SALE OF PRACTICE OR SHARE EXCLUSIVE OF HOUSE PROPERTY £50. FULL TERMS ON REQUEST FOR DISPOSAL.

HANTS COAST—NON PANEL NON DISPENSING. Over £1,000 p.a. Better class Secret panel. Vendor specially free. Excellent house 5 bed etc. Price £3,...0 for house and practice—1.

BUCKS.—WELL ESTABLISHED £9/1,000 p.a. House 3 recep. 4 bed etc. Would sell or let—

EASTERN COUNTY—TOWN PRACTICE, within 30 miles. £1,000 p.a. Panel 500. Premium 1 year purchase. Good family house rent or sell. Preliminary correspondence—3.

WEST OF ENGLAND.—COUNTRY PRACTICE £750 p.a. Panel 750. Excellent house 7 bed etc. Nice garden. Freehold £4,500—4.

SURREY—NEAR LONDON. £800 P.A. rapidly increasing. Panel now 650. Small house £75 p.a. Premium £1,250—5.

LONDON S.W.—LOCK UP LADY'S PRACTICE. £445 p.a. Panel 300 (approx.). Premium £600—6.

FRENCH RIVIERA—POPULAR Resort. Old-established PRACTICE. M.D. essential—7.

DERBYSHIRE.—COUNTRY PRACTICE about £700 p.a. good class select panel increasing and scope; choice of house. Premium 1½ years purchase—8.

NORTHERN TOWN.—ABOUT £2,000 p.a. Very old-estd. Panel Clubs and Appts. £1,500 p.a. Visits 5/- to 6/-. Trem. £3,000 incl. book debts etc. House only £700—9.

KENT COAST.—WOMAN'S PRACTICE. Average £4,000 p.a. Panel over 1,000. Visiting fees 5/- to 10/6. Premium £6,000. House 4 bed etc. Rent £85 p.a.—10.

MIDDLESEX.—HALF-SHARE OF £1,000 p.a. with scope. Panel 1,000. Appts. over £100 p.a. Premium £400. Nice house to rent—11.

LONDON W.S.—ABOUT £550 P.A. Panel 860. Visits 3/6 to 5/-. Premium 2 years purch. House 4 bed etc. also to rent—12.

LONDON N.W.—ONE FIFTH SHARE of over £5,000 p.a. Panel 6,000. Appts over £100. Fees 2/6 to 10/6. Prem. 2 years purch. Small maisonette to let—13.

NUCLEI.—LONDON W.10 £400 panel 350.—N.7 £...0 panel 900.—Harrow £300 panel 3,000.—Devon Coast £...0—14.

SCOTLAND (N.).—COUNTRY OVER £1,000 p.a. incl. panel of £300 p.a. Visits 5/- to 5/6. Premium 1½ years purchase or offer. Good house rent or sell—15.

MIDDLESEX.—SUBURB £1,030 P.A. Panel 600 increasing. P.M.S. £100. Premium 2 years purch. Comfy house (4 bed.) sell or let—16.

SURREY SUBURB.—HALF SHARE of £3,000 p.a. Old-est. increasing modern house, garden and garage to let. Premium £3,000—17.

LANCSTOWN.—OLD EST. INCREASING £1,100 p.a. Select panel of 1,000. Nice house ample accommodation. Premium £1,550 incl. drugs and surgery furniture—18.

SOUTH COAST.—OLD EST. NEARLY £1,400 p.a. increasing. Fair panel, mixed middle and better class. Detached house, garden and garage for sale or might let. Premium £2,500—19.

COUNTY TOWN WITHIN 100 MILES OF LONDON.—PARTNERSHIP with early succession in E.N.T. Practice about £1,350 p.a. and appointments £850 p.a. 2 years purchase. Purchaser should have F.R.C.S. Choice of house—20.

BIRMINGHAM NEAR.—NEARLY £800 p.a. good scope, panel nearly 800, developing area. House, garden, garage for sale at £8,000 or let at 27s. 6d. p.w. Premium £1,500—21.

HANTS.—OLD EST. AVERAGE £1,000 p.a. Panel 1,000. Appts. about £150 p.a. Good family house, nice garden and garage. Rent £105. Premium 1½ years purchase—22.

YORKSHIRE DALES.—BEAUTIFUL country old estab. £1,000 p.a. Large house and grounds, rent only £60 p.a. Suit resident patients. Smaller house available. Panel worth £340 p.a. Premium £1,500—23.

NO CHARGE TO PURCHASERS.
FINANCIAL ASSISTANCE ARRANGED.
ASSISTANTS.—VACANCIES IN Town and Country. Indoor and Outdoor. List on application.

THE MEDICAL AGENCY, Ltd.
DUDLEY HOUSE, 36/38 SOUTHAMPTON ST., STRAND, W.C.2
Telephones—Temple Bar 1034-1054. Established in 1893 by J. A. REASIDE.

LONDON (Residential suburb).—PARTNERSHIP. Good middle-class mixed pract. G.P. Receipts approx. £1,...00. Panel (elect.) over 900. Fees £1,...0 up. Half share 3 years purchase. Or near offer.

WEST COUNTRY.—PARTNERSHIP. Old established town and Country Practice suit to experienced surgeon. One third share offered with view to half. Receipts £4,600. Large panel. Premium 2 years purchase.

LONDON W.—Mixed G.P. residential locality. Double fronted house. Large garden, garage. Receipts nearly £2,000. Panel 1,300. Premium for goodwill and house £4,000 or near offer.

LONDON S.E.—Working-class G.P. House to rent. Receipts approx. £1,...00. Panel 3,...00. Fees 1/6 up. 1 App. Prem. 3 years purchase. Free.

LONDON W.—Easy distance West End. Middle class G.P. House to rent on lease. Receipts approx. £2,...00. Panel 1,...00. Several applicants. Fees 3/6 up. Premium £3,000 or near offer.

N.E. COAST.—Mixed G.P. Receipts approx. £2,000. Panel nearly 2,...00. Clubs nearly £500. 1 App. Premium £...,000 or near offer to include Book Debts, Surgery Furniture, Drugs etc.

YORKSHIRE.—Mixed G.P. Residential locality near large town. Medium-sized house. Large garden, garage. Receipts £1,500. Panel over 2,000. Fees 3/6 up. Premium £...800.

LONDON W.—PARTNERSHIP. Suburban G.P., scope. House to rent. Receipts nearly £6,000. Panel approx. 4,...00. One fifth share. 3 years purchase with view to one third share.

MIDDLESEX (W.).—G.P. growing residential locality. Excellent house with large pleasant garden. Receipts approx. £3,...00. Panel 1,...00. Fees 3/6 up. Prem. 2 years purchase. Free hold house and furniture £3,000.

LONDON N.E.—Middle-class G.P. Receipts approx. £...,...00. Panel 1,...00. Premium 2 years purchase or near offer.

MANY OTHERS FOR SALE. DETAILS ON REQUEST.

ESTABLISHED 1877
LEE & MARTIN, LTD.
The Birmingham Medical Agency,
71 TEMPLE ROW, BIRMINGHAM
Telegrams: Locum, Birmingham. *Telephone*: Midland 1563, Birmingham.

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED
MAXIMUM FEE £10 if exclusively entrusted to us.
ACCOUNTS INVESTICATED AND INCOME TAX RETURNS PREPARED
RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORT NOTICE, also ASSISTANTS.

WANTED TO PURCHASE

1 BIRMINGHAM (or within 30 miles thereof).—Good Mixed PRACTICE with a Panel of 1,000 over and receipts of from £1,000-£3,000. URGENTLY REQUIRED. CAPITAL AVAILABLE.
2 REQUIRED.—Good English, Scottish and Irish LOCUMS immediately. Also ASSISTANTS good posts to offer with and without view.

FOR DISPOSAL

1 NORTHANTS.—Old-established unopposed country PRACTICE. Receipts £1,600 p.a. Panel 700. Excellent house which may be rented with all services.
2 MIDLANDS.—Rapidly increasing mixed private and panel PRACTICE. Receipts average £1,600 p.a. Panel 1,100. Excellent house with all services.
3 STAFFS.—Rapidly increasing mixed private and panel PRACTICE. Receipts last year £1,000 and panel 1,300 over. Excellent house.
4 SOUTH WALES.—Well-established middle and working-class PRACTICE. Receipts average £2,...00 p.a. Panel 1,100 ample scope to increase and good house.
5 MIDLANDS.—Old-established industrial and middle-class PRACTICE. Receipts average £1,068 p.a. Panel 1,... with scope to increase and good house.
6 GLOUCESTERSHIRE.—Well established middle and working-class PRACTICE. Receipts average £1,...0 p.a. Panel 1,...00 scope to increase and good house with all services.

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partnerships on very reasonable terms. Full particulars on application.

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE.

Telephone: Welbeck 4...8
Telegrams: ASSISTAMO, LONDON
NURSES
MALE OR FEMALE

TRAINED NURSES FOR MENTAL, MEDICAL, SURGICAL AND FEVER CASES

Nurses reside on the premises and are available for urgent calls Day and Night

THE NURSES ASSOCIATION
(In conjunction with the MALE NURSES ASSOCIATION)
29 York St., Baker St., London, W.1
Mrs. MILLICENT HICKS, *Supt.*
W. J. HICKS, *Secretary*

THE WESTERN MEDICAL AGENCY
LONDON and BRISTOL
Dr. K. H. BENNETT and Dr. W. J. PRATORE who give personal attention to every client.
Financial Assistance to Purchasers and all Classes of Medical Insurance arranged
LOCUMS AND ASSISTANTS SUPPLIED WITHOUT CHARGE TO PRINCIPALS
For exclusive Agency maximum commission is £50 which includes everything sold except house property.

1 NORTHANTS.—Unopposed country PRACTICE in good part. Good schools and all sports. Low expenses. Panel 900. Receipts £1,600 p.a. Old-established. 3 years purchase or near offer. House sale or rent.
2 MIDLAND CITY.—PARTNERSHIP in pleasant part. Panel 600. £...1 last year. Half share at £3,000 or near offer. Choice of house.
3 BRISTOL.—Woman's PRACTICE offering excellent scope. Vendor is retiring and constantly refusing work. Receipts over £1,600 p.a. Offers considered.
4 MIDDLESEX.—Going in reasing PRACTICE 10 miles from London. Low expenses. Premium £4,000.
5 MIDLAND CITY.—Steadily increasing PRACTICE. Average £...,400 p.a. Panel 2,100. Premium £5,...30. Excellent house £...,000.
6 MIDLAND CITY.—Woman's PRACTICE. This practice has been worked entirely independently to the above but they can easily be amalgamated and worked to either if required. Average £560 p.a. Panel 400. Good scope. Premium £1,...00. House rent.
7 LONDON W.—Well-established PRACTICE doing about £1,000 p.a. Small panel. Premium £1,000 or offer. House rent.
8 SOMERSET COAST.—PARTNERSHIP in country town. Scope for ophthalmic work. Panel 1,400. Over £3,000 p.a. Third share at 2 years purchase. House rent.
9 LONDON W.C.—Panel 1,104. Average £1,000 p.a. Premium £...,000. Lock up surgeries to rent.
10 DURHAM.—Panel 2,...15. About £7,000 p.a. 2 years purchase or near offer. House £...00.

22 CLARE STREET, BRISTOL, 1.
Teleg. Medicine Bristol. *Tel.* Bristol 2...689
15 BEDFORD ST., STRAND, W.C.2
Tel. Temple Bar 2532.

ESTABLISHED 1868
PEACOCK & HADLEY, Ltd,
MEDICAL TRANSFER AGENCY
67-68 Chandos Place, Bedford St., Strand, W.C.2
Teleg. ams: Herbaria, Lesquare, London.
Telephone: Temple Bar 5...64

This old-established Agency negotiates the Sale of PRACTICES and PARTNERSHIPS on reasonable term which can be obtained on application. LOCUM TENENS and ASSISTANTS supplied free of charge to principals.

CAVENDISH NURSES
★ MALE AND FEMALE
Head Office
51 BEAUMONT STREET, LONDON, W.1
Branches: MANCHESTER 176 *Oxford Road*, GLASGOW 8 *Windsor Terrace*, DUBLIN 23 *Upper Baggot St.*
Telephones: London 1477 Welbeck (2 lines), Manchester 3151 Ardwick, Dublin 60...06 Glas. 3477 Dougl.
Telegrams: Tactear London Surgical Glasgow, Tactear Manchester, Tactear Dublin.

INDEX TO ADVERTISEMENTS

PUBLISHERS

British Medical Association 2
British Medical Association 210
Churchill J & A 3
Kimpton Henry 3
Lewis H K & Co Ltd 2

ASSURANCE & INSURANCE

Century Insurance Co 6
Medical Defence Union Ltd Supp iii

BANKS & FINANCE

British Medical Finance Ltd
Century Insurance Co 46

CHEMISTS

Abbott Laboratories 17
Allen & Hanburys Ltd 14
Bayer Product Ltd Cover ii
Boots Pure Drug Co Ltd 10
British Alkaloids Ltd 10
British Drug Houses Ltd 15
Burroughs Wellcome & Co 22
Carnrick G W Co Cover iv
Christy Thos & Co Ltd Supp iii
Coates & Cooper Ltd 9
Dinneford & Co Ltd 12
Eli Lilly & Co Ltd 17
Evans Sons Lescher & Webb Ltd 13
Fairchild Bros & Foster 12
Hewlett C J & Son Ltd Supp iv
Iron Jelloid Co Ltd 26
Kaylene Ltd 9
Parke Davis & Co 18
Pearson E T & Co Ltd 9
Peat Products Ltd 8
Phil Sano Ltd 26
Reckitt & Sons 11
Reeves Remedies Ltd 26
S P Charges Co 8
Simpkin A L & Co Ltd 26
Sparklets Ltd 26

FOODS, BEVERAGES

Bovril Ltd 5
Cadbury Bros Ltd 1
Cerebos Ltd 9
Chivers & Sons Ltd 11
Horlicks Malted Milk Co Ltd 31
Hovis Ltd 32
Huntley J K & Co Ltd 4
Lea & Co Ltd 2
Nestlé's Milk Food Co Supp iii
Wander A Ltd 13

FOOTWEAR, TAILORING & CLOTHING, etc.

Clark C & J Ltd 25
Rowan Dress Co 4

MOTORS & ACCESSORIES

Healy 5
Lodge Plugs Ltd. 2

NAME PLATES, etc

Cookes (Emsbury) Ltd 27
Hall J B & Co 27
Herd S J & Co 27
Osborne J & Co Ltd 27
White Bronze Co 27

SURGICAL APPARATUS

Curtis H L & Son Ltd 6
Franklin J G & Son Ltd 26
Hanger J E & Co Ltd 7
Hilliard 27
Salt & Son Ltd 24

TOBACCO & CIGARETTES

Players Navy Cut 4

VACCINES, SERA, etc

Wellcome Physiological Laboratories 21

X-RAYS AND ELECTRO MEDICAL

Baird & Tatlock (London) Ltd 3
Ediswan Nalder Bros & Thompson Ltd 3
Watson & Sons (Electro-Medical) Ltd 8

HOMES & INSTITUTIONS

Bethesda 24 29 32

HOUSE AGENTS

Payne 35

HOSPITALS & CLINICS

London Clinic 30

SANATORIA

Cornish Riviera Sanatorium 31
Cotswold Sanatorium 31
Hospital for Consumption Frimley 31
Montana Hall 31
Mundesley Sanatorium 31

SPAS, HEALTH RESORTS, & HYDROS

Harrogate 31
Smedley's Hydro 32

MEDICAL SCHOOLS, TUTORS & LECTURERS

Taylor 34

NURSING, etc

Queen's 33

TRANSFER AGENTS

Dental Medical Agency 34
British Medical Bureau 34
Hall & Martin Ltd. 1
Medical Agency Ltd 1
Parkes & Hardy Ltd. 34
Taylor Dental Ltd 1
Wilson Medical Agency 1

CONTRACT PRACTICE

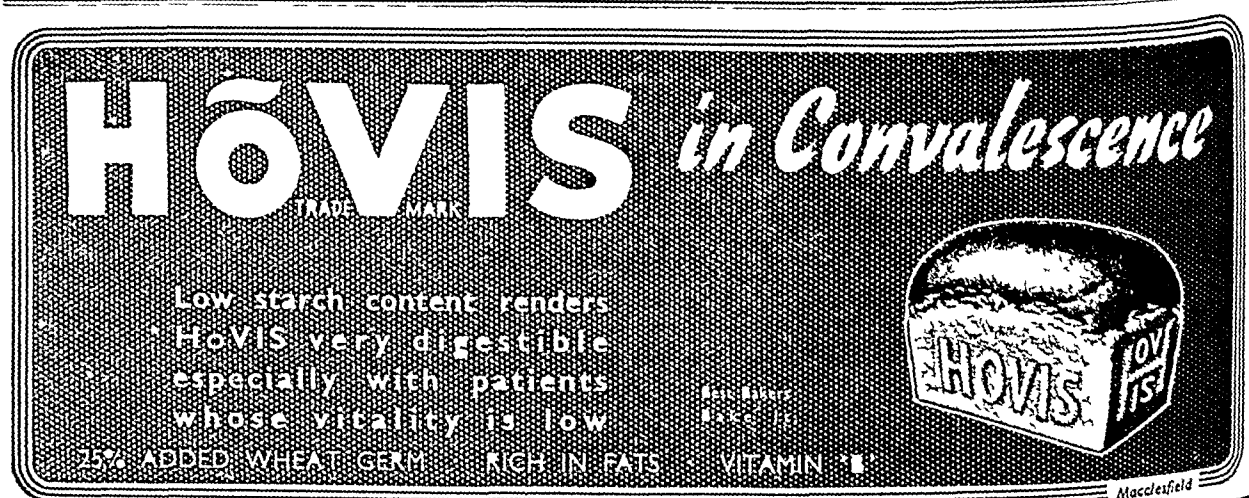
Lists 34

HOSPITAL VACANCIES, etc.

Pages 34 35 36, 37 38 39 40 41 42 46

CLASSIFIED ADVERTISEMENTS—(Wanted & Vacant)

Pages 42 43



Published by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Eyre and Spottiswoode Limited, East Harding St, Fleet St, London, E C 4 Printed in Great Britain Entered as Second Class at New York, U S A, Post Office

British Medical Association
Publications

A General Medical Service for the Nation
50 pp 8vo — FREE ON APPLICATION TO THE SECRETARY

Medical Insurance Practice
By R. W. Harris and Leonard Shocten Sack
Fourth Edition January 1937
Price 2s post free

Medical Practitioners' Handbook
[illegible] pp 8vo — Price 2s 10d post free

Report of Committee on Nutrition
[illegible] pp 8vo — Price 6d post free

The Doctors' Cookery Book
[illegible] pp 8vo — Price 1d post free

Facts about Small Pox and Vaccination
(Revised Edition 1924)
[illegible] pp — Price 1d post free

Report of Committee on Immunization, including Vaccination
[illegible] pp 8vo — Price 6d post free

Report of Committee on Tests for Drunkenness
[illegible] pp 8vo — Price 1d post free

Report of Special Committee on the Relation of Alcohol to Road Accidents
[illegible] pp 8vo — Price 1d post free

Relationship of the Private Practitioner to the Treatment of Mental Disability
[illegible] pp 8vo — Price 6d. post free

Report of Mental Deficiency Committee
52 pp 8vo — Price 1s post free

The Essentials of a National Medical Service
16 pp 8vo — Price 2d post free

Hospital Policy
[illegible] pp 8vo — Price 1d post free

Problem of the Out Patient
[illegible] pp 8vo — Price 1d post free

Report of Committee on the Diagnosis and Certification of Miners Nystagmus
16 pp 8vo — 1d or 2s 6d per doz post free

Report of Committee on Fractures
32 pp 8vo — 1d or 3s 6d per doz post free

The Osteopaths Bill
Report of the Proceedings before a Select Committee of the House of Lords
156 pp 8vo — Price 1s 3d post free

Report of the Psycho-Analysis Committee, July, 1929
24 pp 8vo — Price 3d post free

Report of Committee on Medical Education
32 pp 8vo — Price 6d post free

Report of Committee on Physical Education
[illegible] pp 8vo — 6d or 5s 6d per doz post free

National Maternity Service Scheme for England and Wales
18 pp 8vo — Price 1d post free

B M A Model Forms (No 1) for Doctors' use when sending a Patient to Hospital
Price 1s per 100 post free

B M A Model Forms (No 2) for use of Hospital when Patient attends without a Doctor's Letter
Price 6d per book of 50 forms

British Medical Association
B·M·A· House, Tavistock Square, W.C.1

THELESTRIN

OVARIAN FOLLICULAR HORMONE

A standardized preparation of the ovarian follicular hormone for intensive ovarian therapy by hypodermic injection.

Indicated in the treatment of scanty menstrual flow, amenorrhoea and the vasomotor and nervous symptoms of the menopause.

Boxes of 6 1-cc. ampoules. 2,000 international units in oil.

G. W. CARNRICK CO.

20 Mt Pleasant Ave, Newark, N J., U S A.

DISTRIBUTORS

BROOKS & WARBURTON, LTD.,
240 Vauxhall Bridge Road, London, S.W 1

BRITISH MEDICAL JOURNAL

JOURNAL OF THE

BRITISH  MEDICAL

ASSOCIATION

SATURDAY SEPTEMBER 3 1938

ANNUAL EDUCATIONAL NUMBER

PRINCIPAL CONTENTS

The Medical Curriculum and Present-day Needs	p 481	Medical Schools and Colleges	p 505
The Profession of Medicine	484	Women in Medicine	523
General Medical Council	489	Postgraduate Study	525
Universities and Corporations	492	Tropical Medicine	529
Clinical Hospitals in England	522	Psychological Medicine	531
The Special Diplomas	549	Public Health Medical Services	534
Dental Surgery	551	The Public Services	537
		Medical Practice Over-seas	545

WITH SUPPLEMENT

LONDON

BRITISH MEDICAL ASSOCIATION

TAVISTOCK SQUARE

No 4052, WEEKLY, PRICE 1 3

Copyright

REGISTERED AS A NEWSPAPER

The Prophylaxis of Diphtheria

The following prophylactics are made and standardised at

THE EVANS BIOLOGICAL INSTITUTE

APT Evans
(Alum Precipitated Toxoid)
A "two dose" prophylactic prepared by precipitating the antigenic fraction of formol toxoid of high value with alum. The first injection should be 0·1 to 0·2 cc. and the final injection 0·5 cc. after two weeks. For children of eight years and under.

TAF Evans
(Toxoid Antitoxin Floccules)
TAF should be used when the subject is more than eight years of age. TAF has a high immunizing efficiency whilst reaction is rare.

TAM Evans
(Toxoid Antitoxin Mixture)
Produces immunity more slowly and is generally recognized to be less efficient than APT and TAF.

FT Evans
(Formol Toxoid)
An efficient prophylactic. It may cause disturbance in some older children and in adults. It is recommended that its use be restricted to children between 1 and 8 years of age.

Dosage of FT, TAM., and TAF

These "three dose" prophylactics are administered subcutaneously. With the FT and TAM the doses are 0·5 cc., 1 cc. and 1 cc., but with TAF each 1 cc. A course of 0·5 cc., 1 cc. and 1·5 cc. has also been suggested. It is recommended that the intervals between the injections should be one or preferably two weeks.

In the very few instances where a positive Schick reaction is obtained after such a course of treatment further injections are necessary to establish immunity. It is recommended that the Schick Test be made not earlier than eight weeks after the third injection.

(Special prices and detailed literature will be forwarded to Public Health Authorities)

Evans Sons Lescher & Webb Ltd.
LIVERPOOL and LONDON

BRITISH MEDICAL JOURNAL

SEPTEMBER 3 1938

TABLE OF CONTENTS

THE MEDICAL CURRICULUM AND PRESENT-DAY NEEDS By Sir Walter Langdon Brown M.D. D.Sc. 481

THE PROFESSION OF MEDICINE Introductory Article 484

NUMBERS OF THE MEDICAL PROFESSION (With Chart) 488

THE GENERAL MEDICAL COUNCIL—Admission of Medical Students to Schools of Medicine—Professional Education—Special Considerations 489

THE BRITISH MEDICAL ASSOCIATION Its Aims, Work, and Constitution 504

ENGLISH UNIVERSITIES

UNIVERSITY OF OXFORD 497
UNIVERSITY OF CAMBRIDGE 497
UNIVERSITY OF LONDON 498
UNIVERSITY OF BIRMINGHAM 498
UNIVERSITY OF BRISTOL 498
UNIVERSITY OF DURHAM 498
UNIVERSITY OF LEEDS 498
UNIVERSITY OF LIVERPOOL 498
VICTORIA UNIVERSITY OF MANCHESTER 498
UNIVERSITY OF SHEFFIELD 498

UNIVERSITY OF WALES 498

ENGLISH CORPORATIONS

CONJOINT BOARD IN ENGLAND 499
ROYAL COLLEGE OF PHYSICIANS OF LONDON 499
ROYAL COLLEGE OF SURGEONS OF ENGLAND 500
SOCIETY OF APOTHECARIES OF LONDON 500

BRITISH COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS 500

SCOTTISH UNIVERSITIES

UNIVERSITY OF ST ANDREWS 501
UNIVERSITY OF GLASGOW 501
UNIVERSITY OF ABERDEEN 501
UNIVERSITY OF EDINBURGH 501

SCOTTISH CORPORATIONS

CONJOINT BOARD IN SCOTLAND 502
ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH 502
ROYAL COLLEGE OF SURGEONS OF EDINBURGH 502
ROYAL FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW 502

IRISH UNIVERSITIES AND CORPORATIONS

MEDICAL REGISTRATION IN EIRE 503

Irish Universities—
UNIVERSITY OF DUBLIN 504
QUEEN'S UNIVERSITY BELFAST 504
NATIONAL UNIVERSITY OF IRELAND 504

Irish Corporations—
CONJOINT BOARD IN IRELAND 504
ROYAL COLLEGE OF PHYSICIANS OF IRELAND 505
ROYAL COLLEGE OF SURGEONS IN IRELAND 505
APOTHECARIES HALL OF IRELAND 505

CLINICAL HOSPITALS IN ENGLAND

General Information 512
London Clinical Hospitals—
Children's Hospital 517
Hospitals for Women 522
Eye Hospitals 522
Fever Hospitals 523
Chest Hospitals 523
Nose Throat and Ear Hospitals 523
Miscellaneous Special Hospital 523

PSYCHOLOGICAL MEDICINE

Mental Hospital Appointments 531
Instruction in Mental Disorder 532
Diplomas 532
Courses of Instruction 533

POSTGRADUATE STUDY

General Information 516
British Postgraduate Medical School —
Fellowship of Medicine and Postgraduate Medical Association 516
Royal Ear Institute and Moorfields Eye Hospital 516
North East London Postgraduate College 516
West End Hospital for Nervous Diseases 516
Manchester Postgraduate Facilities 516
Postgraduate Courses at Bristol 516
Postgraduate Courses at Newcastle 516
Postgraduate Study in Cardiff 517
Edinburgh Postgraduate Courses 517
Postgraduate Training in Glasgow 517

SUPPLEMENT

Co-operation in Public Health Administration
By Sir William Willcox K.C.I.E. C.B., C.M.G. M.D. F.R.C.P.

The Laboratory and N.H.I.S.
By S. C. Dyke D.M. F.R.C.P.

The Distribution of Cancer B
W. E. Snell M.A. M.D. M.R.C.P.
and H. A. Bathurst B.A.

Epidemiology Section
Table of Infectious Diseases and Vital Statistics
Epidemiological Notes

Insurance Medical Service
Postgraduate News
Association Notices Vacancies and Appointments Diary

WOMEN IN MEDICINE

Examinations 523
Medical Education 523
Number of Women Students 523
London School of Medicine for Women 524
Opening for Medical Women 524
Public Appointments 524
Women's Medical Service for India 525

TROPICAL MEDICINE

Diplomas and Degrees 530
London School of Hygiene and Tropical Medicine 530
University of Edinburgh 530
Liverpool School of Tropical Medicine 530

DENTAL SURGERY

Dentists Act 1921 551
The Dental Board 552
Dental Education and Examination 553
G.M.C.'s Recommendations 553

MEDICAL SCHOOLS AND COLLEGES

London—
Charing Cross Hospital 505
Guy's Hospital 506
King's College Hospital 507
The London Hospital 507
The Middlesex Hospital 508
St. Bartholomew's Hospital 508
St. George's Hospital 509
St. Mary's Hospital 509
St. Thomas' Hospital 510
University College Hospital 511
Westminster Hospital 511
London (Royal Free Hospital) School of Medicine for Women 512
King's College 512
University College 513
West London Hospital Medical School 513

Provinces—
Oxford and Cambridge 514
Birmingham 514
Bristol 514
Durham 515
Leeds 516
Liverpool 516
Manchester 516
Sheffield 517

Wales—
Welsh National School of Medicine 518

Scotland—
Aberdeen 518
Edinburgh 518
Glasgow 519
St. Andrews and Dundee 520

Ireland—
The School of Physic Dublin 520
The Schools of Surgery Dublin 521
University College Dublin 521
Clinical Teaching in Dublin 521
Belfast 521
University College Cork 521
University College Galway 522

THE PUBLIC HEALTH MEDICAL SERVICES

The Medical Services of the Central Authority 534
The Medical Services of the Local Authorities 534
Medical Officers of Health 534
School Medical Officers 535
Tuberculosis Medical Officers 535
Maternity and Child Welfare Officers 535
Venereal Diseases Officers 535
Remuneration in the Public Health Service 535
Curriculum for the D.P.H. 536
Training and Examining Centres 536
Qualifications in Tropical Medicine and Hygiene 537

THE PUBLIC SERVICES

Royal Naval Medical Service 537
Royal Army Medical Corps 538
Medical Branch of the Royal Air Force 539
Indian Medical Service 541
Local Government Hospital Services 542
Prison Medical Service 542

MEDICAL PRACTICE OVER SEAS

Registration in British Dominions and Foreign Countries 546
The Colonial Medical Service 546
Commercial Appointments Over-seas 549
Medical Missionaries 549

SPECIAL DIPLOMAS

Diplomas in Medical Radiology 549
Diploma in Laryngology and Otology 550
Diplomas in Ophthalmic Medicine 550
Diplomas in Obstetrics 550
Diploma in Child Health 550
Diplomas in Anaesthetics 550
Tuberculous Diseases Diploma 551
Diploma in Clinical Pathology 551
University of Lausanne 551

With Doctors

J. & A. CHURCHILL'S

OPHTHALMOLOGY

PARSONS DISEASES OF THE EYE
New (Second) Edition 8 Plates and 160 Text figures 18s

DUKE-ELDER'S RECENT ADVANCES IN OPHTHALMOLOGY
Third Edition 8 Plates (2 Coloured) and 150 Text figures 15s

DUKE-ELDER'S PRACTICE OF REFRACTION
New (Third) Edition 183 Illustrations 10s 6d

GOULDEN'S REFRACTION OF THE EYE
New (Second) Edition 181 Illustrations 12s 6d

NEAME AND WILLIAMSON-NOBLE'S HANDBOOK OF OPHTHALMOLOGY
Second Edition 12 Plates 10 Coloured Illustrations and 147 Text figures 12s 6d

NEAME'S ATLAS OF EXTERNAL DISEASES OF THE EYE
31 Coloured Illustrations 15s

KOBY'S SLIT-LAMP MICROSCOPY OF THE LIVING EYE
Translated by C. COUTELEN *OBE* FRCS and CLARA LOMAS HARRIS MB *Second Edition* 104 Illustrations 15s

FORENSIC MEDICINE

SYDNEY SMITH'S TEXTBOOK OF FORENSIC MEDICINE
New (Sixth) Edition 163 Illustrations 21s

TAYLOR'S PRINCIPLES AND PRACTICE OF MEDICAL JURISPRUDENCE
Ninth Edition Edited by SYDNEY SMITH MD FRCP and W. G. H. COOK LLD
47 Illustrations Two Volumes 63s

LESCHKE'S CLINICAL TOXICOLOGY
Translated by C. I. SIEWAKI MSc PhD and O. DOKRIKI PhD 25 Illustrations 15s

LAMBERT'S MEDICO-LEGAL POST-MORTEM IN INDIA
With a Foreword by SYDNEY SMITH, MD FRCP 5s

PSYCHOLOGY and NEUROLOGY

NEUSTATTER'S MODERN PSYCHOLOGY IN PRACTICE
With a Foreword by R. D. GILLESPIE MD FRCP DPM 10s 6d

EAST'S MEDICAL ASPECTS OF CRIME
18 Illustrations 18s

BRAIN AND STRAUSS' RECENT ADVANCES IN NEUROLOGY
Third Edition 40 Illustrations 15s

YELLOWLEES' CLINICAL LECTURES ON PSYCHOLOGICAL MEDICINE
12s 6d

DEVINE'S RECENT ADVANCES IN PSYCHIATRY
Second Edition 4 Illustrations 12s 6d

CULPIN'S RECENT ADVANCES IN THE STUDY OF THE PSYCHONEUROSES
4 Illustrations 12s 6d.

PHARMACOLOGY

CUSHNY'S TEXTBOOK OF PHARMACOLOGY AND THERAPEUTICS
Eighth Edition Revised by A. R. CUSHNY MD FRS and T. J. HALL MD FRCP 250 Illustrations

CLARK'S APPLIED PHARMACOLOGY
Second Edition 58 Illustrations

HALE-WHITE'S MATERIA MEDICA
Twenty-third Edition Revised by W. H. DOURTHWAITE MD FRCP 10s 6d

MICKS' ESSENTIALS OF MATERIA MEDICA PHARMACOLOGY AND THERAPEUTICS
New (Second) Edition 7s 6d

COWS' SYNOPSIS OF PHARMACOLOGY
Third Edition Revised by C. NORMA MYERS MD BSc FRFPS(G)

BURN'S RECENT ADVANCES IN MATERIA MEDICA
25 Illustrations 10s 6d

TROPICAL MEDICINE

ROGERS' & MEGAW'S TROPICAL MEDICINE
Second Edition 8 Coloured Plates and 158 Text figures 15s

GILL'S SEASONAL PERIODICITY OF MALARIA and The Mechanism of the Epidemic Wave
(Just Published) 18 Illustrations 10s 6d

CHAMBERS ON YAWS (Framboesia Tropica)
With a Foreword by Sir DAVID WILKIE *OBE* FRCS FRSEd 15 Illustrations
(Ready in September)

KIRK'S PUBLIC HEALTH PRACTICE IN THE TROPICS
80 Illustrations 15s

CONNOR'S SURGERY IN THE TROPICS
99 Illustrations 12s 6d

HYGIENE

LING'S RECENT ADVANCES IN INDUSTRIAL HYGIENE AND MEDICINE
20 Illustrations 12 6d

JAMESON & PARKINSON'S SYNOPSIS OF HYGIENE
Fifth Edition 17 Illustrations 21s

COX'S CHEMICAL ANALYSIS OF FOODS A Practical Treatise on the Examination of Foodstuffs and the Detection of Adulterants
New (Second) Edition 41 Illustrations 21s

LIVERSEEGE'S ADULTERATION AND ANALYSIS OF FOODS AND DRUGS
36s

CLAYTON'S COLLOID ASPECTS OF FOOD CHEMISTRY AND TECHNOLOGY
64 Illustrations 36s

ANATOMY

WHILLIS' ELEMENTARY ANATOMY AND PHYSIOLOGY
Second Edition 12s 6d (*Ready in September*)

MASSIE'S SURGICAL ANATOMY
Third Edition 153 Illustrations 10s 6d

FRAZER'S ANATOMY OF THE HUMAN SKELETON
Third Edition 210 Illustrations 12s 6d

JOHNSTON'S SYNOPSIS OF REGIONAL ANATOMY
Third Edition 111 Illustrations 12s 6d

BUNDY'S TEXTBOOK OF ANATOMY AND PHYSIOLOGY
Second Edition Revised by DAN WEEDER, MD 220 Illustrations (47 in Colour) 12s

PHYSIOLOGY

STARLING'S PRINCIPLES OF HUMAN PHYSIOLOGY
Second Edition Revised and Edited by C. LOVATT EVANS FRS 354 Illustrations (6 in Colour) 21s

LOVATT EVANS' RECENT ADVANCES IN PHYSIOLOGY
Fifth Edition Revised by W. H. NEWTON MD MSc 140 Illustrations 15s

WINTON'S & BAYLISS' HUMAN PHYSIOLOGY
Second Edition 221 Illustrations 15s

HARRIS' EXPERIMENTAL PHYSIOLOGY FOR MEDICAL STUDENTS
Second Edition 230 Illustrations and Plate in Colour 12s 6d

ROBSON'S RECENT ADVANCES IN SEX AND REPRODUCTIVE PHYSIOLOGY
47 Illustrations 12s 6d.

BIOCHEMISTRY

THORPE'S BIOCHEMISTRY FOR MEDICAL STUDENTS
4 Plates and 33 Text figures 12s 6d. (*Ready in September*)

CAMERON & GILMOUR'S BIOCHEMISTRY OF MEDICINE
Second Edition 31 Illustrations 21s

CAMERON'S TEXTBOOK OF BIOCHEMISTRY
Fourth Edition 2 Plates and 13 Text figures 15s

CAMERON & WHITE'S COURSE IN PRACTICAL BIOCHEMISTRY
Third Edition 4 Plates and 3 Text figures 8s 6d

CAMERON'S RECENT ADVANCES IN ENDOCRINOLOGY
Third Edition 65 Figures including 3 Plates 15s

HARRIS VITAMINS AND VITAMIN DEFICIENCIES
With a Foreword by Sir FREDERICK GOWLAND HOPKINS OM FRCP FRS
Vol I 50 Illustrations 8s 6d (*Ready in September*)

J & A CHURCHILL LTD.

FAVOURITE BOOKS

With Students

MEDICINE

BEAUMONT'S MEDICINE Essentials for Practitioners and Students
Third Edition 74 Illustrations 21

TAYLOR'S PRACTICE OF MEDICINE
Seventeenth Edition Edited by E. H. POULTON, D.M. F.R.C.P. Fifth Impression (16 Coloured) 104 Text figures 25

BEAUMONT & DODDS RECENT ADVANCES IN MEDICINE
Eighth Edition 45 Illustrations 15s. 6d.

NEWMAN'S MEDICAL EMERGENCIES
Second Edition 5s. 6d.

PINEY & WYARD'S CLINICAL ATLAS OF BLOOD DISEASES
New (Fourth) Edition 42 Plates 38 Coloured 15s. 6d.

HEGGS M.B., B.S. FINALS
A Collection of Five Papers set at the London M.B., B.S. Examinations for Recent Years 1935–1938. 6

GOLDSMITH'S RECENT ADVANCES IN DERMATOLOGY
8 Coloured Plates and 30 Text figures 15s.

POYNTON & SCHLESINGER'S RECENT ADVANCES IN THE STUDY OF RHEUMATISM
Second Edition 91 Illustrations 15s.

BURRELL'S RECENT ADVANCES IN PULMONARY TUBERCULOSIS
Third Edition 43 Plates and 22 Text figures 15s.

PUNCH & KNOTT'S MODERN TREATMENT OF DISEASES OF THE RESPIRATORY SYSTEM
96 Plates and 31 Text figures 15s.

RUSSELL'S ESSENTIALS OF CARDIOGRAPHY
73 Illustrations 6d.

BRAY'S RECENT ADVANCES IN ALLERGY
Third Edition 107 Illustrations 15s.

PATHOLOGY and BACTERIOLOGY

HARRISON'S CHEMICAL METHODS IN CLINICAL MEDICINE
Second Edition 30 Coloured Plates and 80 Text figures 25s.

HADFIELD & GARROD'S RECENT ADVANCES IN PATHOLOGY
New (Third) Edition 69 Illustrations 15s.

PANTON & MARRACK'S CLINICAL PATHOLOGY
Third Edition 12 Plates (10 Coloured) and 30 Text figures 15s.

WHITBY & BRITTON'S DISORDERS OF THE BLOOD
Second Edition 15 Plates (8 Coloured) and 160 Text figures 21s.

WHITBY'S MEDICAL BACTERIOLOGY Descriptive and Applied
New (Third) Edition 79 Illustrations 11s. 6d.

HEWLETT & McINTOSH'S MANUAL OF BACTERIOLOGY
Ninth Edition 43 Plates and 166 Text figures 18s.

DIBLE'S RECENT ADVANCES IN BACTERIOLOGY
Second Edition 29 Illustrations 15s.

OBSTETRICS and GYNAECOLOGY

GIBBERD'S SHORT TEXTBOOK OF MIDWIFERY
150 Illustrations 15s.

SHAW'S TEXTBOOK OF GYNECOLOGY
Second Edition 410 Coloured Plates and 191 Illustrations 15s.

EDEN & HOLLAND'S MANUAL OF OBSTETRICS
Eighth Edition 211 Illustrations (6 Coloured) 15s. Text figures 25s.

EDEN & LOCKYER'S GYNECOLOGY
Fourth Edition Revised by H. BEECHEY WHITEHOUSE, M.B., F.R.C.S. 9 Coloured Plates 1619 Text illustrations 35s.

QUEEN CHARLOTTE'S TEXTBOOK OF OBSTETRICS
By Members of the Staff of the Hospital. *Fifth Edition* 410 Coloured Plates and 391 Text figures 18s.

JELLETT & TOTTENHAM'S SHORT PRACTICE OF GYNECOLOGY
Sixth Edition 4 Coloured Plates and 190 Illustrations 12s. 6d.

BROWNE'S ANTENATAL AND POSTNATAL CARE
Second Edition 9 Illustrations 15s.

JELLETT'S SHORT PRACTICE OF MIDWIFERY FOR NURSES
Tenth Edition 7 Plates (4 Coloured) and 153 Text figures 6s. 6d.

BOURNE'S MIDWIFERY FOR NURSES
110 Illustrations 5s.

CHILDREN

SHELDON'S DISEASES OF INFANCY AND CHILDHOOD
New (Second) Edition 125 Text figures 15s. 13 Plates 25s.

PEARSON & WYLLIE'S RECENT ADVANCES IN DISEASES OF CHILDREN
Third Edition 23 Plates and 138 Text figures 15s.

JEWESBURY'S MOTHERCRAFT Antenatal and Postnatal
Second Edition 14 Illustrations 13 in Colour 10s. 6d.

RADIOLOGY

BRAILSFORD'S RADIOLOGY OF BONES AND JOINTS
Second Edition 340 Illustrations 30s.

KERLEY'S RECENT ADVANCES IN RADIOLOGY
Second Edition 106 Illustrations 15s.

WARD & SMITH'S RECENT ADVANCES IN RADIUM
4 Coloured Plates and 140 Text figures 25s.

DAVIES PRACTICAL X-RAY THERAPY
47 Illustrations 8s. 6d.

GAITSKELL'S RADIOLOGICAL TERMINOLOGY

SURGERY

ILLINGWORTH'S SHORT TEXTBOOK OF SURGERY
8 Plates and 179 Text figures 21s.

ROMANIS & MITCHINER'S SCIENCE AND PRACTICE OF SURGERY
Sixth Edition Two Volumes 800 Illustrations 30s.

ILLINGWORTH & DICK'S TEXTBOOK OF SURGICAL PATHOLOGY
New (Third) Edition 299 Illustrations 36s.

ROWLANDS & TURNER'S OPERATIONS OF SURGERY
Fifth Edition Vol. I. 143 Illustrations 38 in Colour 36s. Vol. II. 114 Illustrations 4 in Colour 36s.

WILLIAMS MINOR SURGERY and the Treatment of Fractures
Twelfth Edition 284 Illustrations 10s. 6d.

BURNS & ELLIS RECENT ADVANCES IN ORTHOPEDIC SURGERY
148 Illustrations 15s.

BAILEY & MATHESON'S RECENT ADVANCES IN GENITO-URINARY SURGERY
89 Illustrations 15s.

SCOTT-STEVENSON'S RECENT ADVANCES IN LARYNGOLOGY AND OTOLOGY
138 Illustrations including 13 Plates 15s.

DARLING'S SURGICAL NURSING AND AFTER-TREATMENT
New (Sixth) Edition 106 Illustrations 9s.

WHITE'S ELEMENTARY SURGICAL HANDICRAFT
243 Illustrations 8s. 6d.

WILLIS' SPREAD OF TUMOURS IN THE HUMAN BODY
103 Illustrations 25s.

HEWER'S RECENT ADVANCES IN ANÆSTHESIA AND ANALGESIA
Second Edition 113 Illustrations 15s.

ASHWORTH'S PRACTICAL POINTS IN ANÆSTHESIA
Illustrations 6d.

MASSAGE

KNUDSEN'S TEXTBOOK OF GYMNASTICS (Form Giving Exercises)
Translated by T. BRAAE HANSEN 216 Illustrations 12s. 6d.

LACEY'S MASSAGE AND MEDICAL GYMNASTICS
94 Illustrations 10s. 6d.

MENNELL ON BACKACHE
Second Edition 59 Illustrations including 11 Colour 10s. 6d.

MORRIS MEDICAL ELECTRICITY FOR MASSAGE STUDENTS
103 Illustrations 15s.

ARVEDSON'S TECHNIQUE EFFECTS AND USES OF SWEDISH MEDICAL GYMNASTICS AND MASSAGE
Translated by MINA L. DOBBIE, M.D. *Third Edition* 131 Illustrations 12s. 6d.

ARVEDSON'S MEDICAL GYMNASTICS AND MASSAGE IN GENERAL PRACTICE
Translated by MINA L. DOBBIE, M.D. *Fourth Edition* 8s. 6d.

OXFORD MEDICAL PUBLICATIONS

A Selection from our list of Standard Books

NET

CUNNINGHAM'S TEXT-BOOK OF ANATOMY (7th Edition)
Edited by J C BRASH M D F R C S and E B JAMIESON M D
Pp 1532 1171 Illustrations (653 in Colour) 76 Plates 42s

CUNNINGHAM'S MANUALS OF PRACTICAL ANATOMY (9th Edition)
Edited by the Same
Vol 1 Introduction Upper Limb Lower Limb Pp 442 210 Illustrations (114 in Colour)
Vol 2 Thorax and Abdomen Pp 520 238 Illustrations (120 in Colour)
Vol 3 Head Neck and Brain Pp 564 240 Illustrations (101 in Colour)
Each Volume 12s 6d

COMPANION TO MANUALS OF PRACTICAL ANATOMY (4th Edition)
By E B JAMIESON M D
Pp 663 12s 6d

DIXON'S MANUAL OF HUMAN OSTEOLOGY
Revised by E B JAMIESON M D
Pp 474 160 Illustrations (35 in Colour) 28 Plates 21s

POCKET ATLAS OF ANATOMY (3rd Edition)
By VICTOR PAUCHET and S DUPRET
Pp 380 345 Illustrations (173 in Colour) 12s 6d

HISTOLOGY FOR MEDICAL STUDENTS
By H HARTRIDGE M A M D Sc D M R C P and F HAYNES M A
Pp 412 514 Illustrations (502 in Colour) 15s

HISTOLOGICAL TECHNIQUE for Normal Tissues, Morbid Changes, and the Identification of Parasites (2nd Edition)
By H M CARLETON B Sc D Ph
Pp 400 18 Illustrations 17s 6d

THE DISSECTION AND STUDY OF THE SHEEP'S BRAIN as an Introduction to the Study of the Human Brain
By JAMES WILKIE B Sc
Pp 110 53 Illustrations (2 Colour Plates) 6s

APPLIED PHYSIOLOGY (6th Edition)
By SAMSON WRIGHT M D F R C P
Pp 718 282 Illustrations (2 Colour Plates) 20s

NET

TEXT-BOOK OF THE PRACTICE OF MEDICINE (5th Edition)
Edited by FREDERICK W PRICE M D F R S
Edited with the assistance of 27 Collaborators
Pp 2040 112 Illustrations Standard Edition 30s
India Paper Edition 45s

THOMSON AND MILES' MANUALS OF SURGERY (8th Edition)
Edited by ALEXANDER MILES M D LL.D. F R C S and SIR DAVID WILKIE M D F R C S
Vol 1 General Surgery Pp 590 176 Illustrations
Vol 2 Extremities Head and Neck Pp 701 303 Illustrations
Vol 3 Thorax and Abdomen Pp 590 117 Illustrations
Each Volume 12s 6d

OPERATIVE SURGERY (2nd Edition)
By the Same
Pp 651 329 Illustrations 21s

POST-MORTEM APPEARANCES (3rd Edition)
By J M ROSS M D B S
Pp 252 7s 6d.

TWEEDY'S PRACTICAL OBSTETRICS (7th Edition)
Revised and largely rewritten by BETHEL SOLOMONS M D F R C P F C O G and NINIAN FALKINER M D F R C P F C O G
Pp 790 296 Illustrations 25s

MUIR AND RITCHIE'S MANUAL OF BACTERIOLOGY (10th Edition)
Revised by C H BROWNING M D D P H F R S and T J MACKIE M C D P H
Pp 996 212 Illustrations 6 Colour Plates 20s

SKIN DISEASES IN GENERAL PRACTICE (3rd Edition)
By H HALDIN DAVIS D M F R C P
Pp 414 90 Illustrations 7 Colour Plates 17s 6d

TEXT-BOOK OF NUTRITION
By J A NIXON M D F R C P and D G C NIXON M B B S
Pp 230 9 Illustrations 7s 6d

A TEXT-BOOK OF PSYCHIATRY (4th Edition)
By D K HENDERSON M D F R F P S F R C P and R D GILLESPIE M D F R C P D P M
Pp 618 18s

Oxford University Press
AMEN HOUSE, WARWICK SQUARE, LONDON, E.C.4

SAUNDERS TEXTBOOKS

"MALLORY"
Pathological Technique

By FRANK B MALLORY A M M D S D Consulting Pathologist to the Boston City Hospital Octavo of 434 pages Illustrated Cloth 20s net

New

"JORDAN & BURROWS"
General Bacteriology

By EDWIN O JORDAN PhD Revised by WILLIAM BURROWS PhD Assistant Professor of Bacteriology University of Chicago Octavo of 685 pages Illustrated Cloth 25s net

New, Twelfth, Edition

"RANSON"
Anatomy of Nervous System

By STEPHEN W RANSON M D Professor of Neurology Northwestern University Medical School Octavo of 691 pages 351 Illustrations some in colours Cloth 27s 6d net

Fifth Edition

"CURTIS"
Textbook of Gynaecology

By ARTHUR HALE CURTIS M D Professor of Obstetrics and Gynaecology Northwestern University Medical School Octavo of 603 pages with 318 Illustrations Cloth 30s net

New, Third, Edition

"SCHUMANN"
Textbook of Obstetrics

By EDWARD A SCHUMANN A B M D F A C S Professor of Obstetrics University of Pennsylvania Octavo of 780 pages with 381 Illustrations on 497 figures Cloth 27s 6d net

Recent

"HARROW & SHERWIN"
Textbook of Biochemistry

Edited by BENJAMIN HARROW PhD Associate Professor of Chemistry The City College College of the City of New York and CARL P SHERWIN M D Sc D Dr P H LL D Member of the Staff of St Vincents and French Hospitals New York Octavo of 797 pages Illustrated Cloth 25s net

Recent

"HOWELL"
Textbook of Physiology

By WILLIAM H HOWELL PhD M D Emeritus Professor of Physiology Johns Hopkins University Octavo of 1110 pages 305 Illustrations many in colours Cloth 30s net

Thirteenth Edition

"MAXIMOW & BLOOM"
Textbook of Histology

By ALEXANDER A MAXIMOW and WILLIAM BLOOM Associate Professor of Anatomy University of Chicago Octavo of 668 pages 542 Illustrations some in colours Cloth 30 net

New, Third, Edition

"HEILBRUNN"
General Physiology

By L V HEILBRUNN Associate Professor of Zoology in the University of Pennsylvania Octavo of 695 pages Illustrated Cloth 21s net

New

"DeLEE"
Principles and Practice of Obstetrics

By JOSEPH P DeLEE A M M D Professor of Obstetrics and Gynaecology Emeritus University of Chicago Large octavo of 1,211 pages with 1277 Illustrations on 955 figures 271 of them in colour Cloth 35s net

New, Seventh, Edition

"DORLAND"
Illustrated Medical Dictionary

Edited by W A NEWMAN DORLAND M D Octavo of 1575 pages 945 Illustrations over 100 in colour and 100 elaborate tables Flexible or Stiff Binding Plain 30s net Thumb indexed 32s 6d net

New, Eighteenth, Edition

"TODD & SANFORD"
Clinical Diagnosis

By JAMES CAMPBELL TODD M D formerly Professor of Clinical Pathology University of Colorado and ARTHUR HAWLEY SANFORD M D Professor of Clinical Pathology University of Minnesota Octavo of 792 pages with 300 Illustrations on 370 figures 29 in colour Cloth 25s net

Eighth Edition

Teachers and Students should ask for SAUNDERS NEW CATALOGUE POST FREE

W B SAUNDERS COMPANY, LTD, 7, Grape Street, London, W C 2

Ready September 5th

THE NEW THIRTEENTH EDITION

OSLER'S PRINCIPLES AND PRACTICE OF MEDICINE

Revised by **HENRY A. CHRISTIAN, M.D.**

Thoroughly revised, rewritten, rearranged and enlarged, the new edition is the most up-to-date textbook of medicine available. 1150 pages. Charts and Illustrations. 35s

Ready September 22nd

MEDICAL BACTERIOLOGY — **D. L. BELDING** and **A. T. MARSTON**

A textbook and not a reference book. The illustrations included are used to add to the information or to simplify descriptions and will consist of seventy line drawings and one coloured plate. 30s

FUNDAMENTALS OF INTERNAL MEDICINE — **W. M. YATER, M.D.**

Presents the minimum amount of knowledge of clinical medicine, a medical student or general practitioner should have. 30s

ESSENTIALS OF PATHOLOGY

LAWRENCE W. SMITH, M.D., and **EDWIN S. GAULT, M.D.**

Material has been selected to give the student only those basic pathological processes which can be applied to his study of medicine as his clinical experience increases. 108 large half-tone plates, each containing four to six gross and microscopic pathological illustrations, sometimes more. Many of the illustrations are of subjects that have never previously appeared. 30s

PARASITOLOGY With special reference to Man and Domesticated Animals

ROBERT HEGNER, FRANCIS M. ROOT, DONALD L. AUGUSTINE, and **CLAY G. HUFF**

Presents the material in a carefully revised form to include the many additions to knowledge that have been made during the last nine years. *Just Issued.* Illustrated. 29s

UNIVERSALLY RECOGNISED STANDARDS

WILLIAMS' OBSTETRICS

Revised by **H. J. STANDER, M.D.,** from the text of **J. WHITRIDGE WILLIAMS, M.D.**

1283 pages. 747 Illustrations. Seventh Edition. 40s

A TEXTBOOK OF BACTERIOLOGY

HANS ZINSSER, M.D., and **STANHOPE BAYNE-JONES, M.D.**

1226 pages. 174 Illustrations. Seventh Edition. 30s

PREVENTIVE MEDICINE AND HYGIENE — **MILTON J. ROSENAU, M.D.**

1512 pages. 172 Illustrations. Sixth Edition. 42s

HOLT'S DISEASES OF INFANCY AND CHILDHOOD

Revised by **L. EMMETT HOLT, Jnr., M.D.,** and **R. McINTOSH, M.D.**

1240 pages. Five Plates in colour and 204 Illustrations in the text. Tenth Edition. 42s

APPROVED LABORATORY TECHNIQUE

JOHN A. KOLMER, M.D., and **FRED BOERNER, V.M.D.**

923 pages. Twelve Plates in colour and 382 Illustrations. Second Edition. 30s

A TEXTBOOK OF HISTOLOGY — **H. E. JORDAN**

738 pages. 610 Illustrations. New Seventh Edition. 30s

A TEXTBOOK OF DIAGNOSTIC ROENTGENOLOGY

LEWIS J. FRIEDMAN, M.D.

650 pages. 483 Illustrations. 42s

All prices are NET

D. APPLETON-CENTURY COMPANY, 34, BEDFORD STREET, LONDON

THE PRACTITIONER

Edited by
SIR HUMPHRY ROLLESTON BT GCVO KCB MD FRCP and ALAN MONCRIEFF MD FRCS

DISORDERS OF SEX

SEPTEMBER 1938

It is generally agreed that medical education still presents several troublesome deficiencies One of these undoubtedly is instruction on the problems of sexual disorders In *The Practitioner* for September a group of experts deal with these maladies and their management from different angle Dr Havelock Ellis rightly explains in his introduction that the medical chools provide for this subject little if any better than they did fifty years ago Medical practitioners and students will find great help therefore in this attempt to remedy a striking defect in the medical curriculum

PRINCIPAL CONTENTS

SEX EDUCATION AND THE GENERAL PRACTITIONER
By Havelock Ellis FRCP

SEXUAL DEVELOPMENT OF THE CHILD AND ADOLESCENT
By H Crichton Miller MD MRCP *Honorary Senior Physician Tavistock Clinic London*

SEX PROBLEMS IN MARRIAGE
By J A Hadfield MA MB CHB *Director of Studies Tavistock Clinic London Lecturer in Psychopathology and Mental Hygiene University of London*

PROBLEMS OF CELIBACY IN THE MALE
By Kenneth Walker FRCS *Lecturer in Venereal Diseases St Bartholomew's Hospital Surgeon Royal Northern Hospital and St Paul's Hospital London*

SEX PROBLEMS OF THE SINGLE WOMAN
By Laura Hutton BA MRCS LRCP *Physician Tavistock Clinic London*

HOMOSEXUALITY
By Desmond Curran MB FRCP DPM *Psychiatrist and Lecturer in Psychological Medicine St George's Hospital London*

This number also contains practical articles on the following subjects

LOCAL ANAESTHESIA AND ANALGESIA
SPLINTS FOR THE PRACTITIONER
SPEECH DEFECTS IN CHILDHOOD
THE TREATMENT OF ASTHMA IN CHILDHOOD
DIET IN RHEUMATISM AND GOUT

120 pages of text Price 4s post free

¶ The October issue will be a greatly enlarged Special Number on "Advances in Diagnosis and Treatment 1938" (Price 7s 6d)

ORDER FORM

To the Publishing Department
The Practitioner
5 Bentinck Street London W 1

I enclose £2 2s Please send to me *The Practitioner* post free for one year subscription to include two Special Numbers without extra cost

NAME

ADDRESS

BMJ 39 8

MODERN TEXTBOOKS for the

TEN STANDARD WORKS

MEDICAL JURISPRUDENCE AND TOXICOLOGY

Sixth Edition By Professor JOHN GLAISTER M D D Sc 710 pp 107 Illus 8 Plates 25s net postage 7d (March 1938)

¶ *Thoroughly revised reduced in size and price Two new colour plates Many new illustrations*

HANDBOOK OF PRACTICAL BACTERIOLOGY

Fifth Edition By Professor I J MACKIE M D D P H and J E McCARTNEY M D D Sc Crown 8vo 600 pp Illustrated 12s 6d net postage 6d (January 1938)

CLINICAL CHEMISTRY IN PRACTICAL MEDICINE

By C P STEWART Ph D M Sc and Professor D M DUNLOP M D M R C P *Second Edition* Revised and Enlarged 384 pp Illustrated 10s 6d net postage 6d (October 1937)

¶ *Shows how essential pathological and chemical tests are to accurate diagnosis*

A MANUAL OF TUBERCULOSIS

For Nurses and Public Health Workers

By E ASHWORTH UNDERWOOD M A B Sc M B Ch B D P H *Second Edition* 424 pp with 53 Illustrations 8s 6d net postage 6d (November 1937)

WHEELER & JACK'S HANDBOOK OF MEDICINE

Tenth Edition Revised by Professor JOHN HENDERSON M D 720 pp Illustrated 12s 6d net postage 6d (August 1937)

ILLUSTRATIONS OF REGIONAL ANATOMY

By E B JAMIESON M D *Sections* 1 5 *Second Edition* Each Section in attractive loose leaf case The complete set is published at 50s net but purchasers taking the seven sections at one time can obtain them at the reduced price of 47s 6d net postage 9d

MUIR'S BACTERIOLOGICAL ATLAS

Second Edition Enlarged and rewritten by C E van ROOYEN M D 83 Beautifully Coloured Plates 15s net postage 6d (June 1937)

¶ *The Illustrations are superb* —MEDICAL PRESS AND CIRCULAR

DIAGNOSIS AND TREATMENT OF VENEREAL DISEASES

Revised by ROBERT LEES M B F R C P *Third Edition* 624 pp 85 Illustrations and 8 Coloured Plates 15s net postage 6d (January 1937)

TEXTBOOK OF MEDICINE

Third Edition By J J CONYBEARE M D F R C P and contributors Demy 8vo 1050 pp Illustrated Index of 5000 references 21s net postage Inland 7d Abroad 1s 6d (Reprint January 1938)

HANDBOOK OF DISEASES OF CHILDREN

Second Edition By BRUCE WILLIAMSON M D M R C P Crown 8vo 340 pp 60 Illustrations and Frontispiece 10s 6d net postage 6d (November 1936)

¶ *It can be thoroughly recommended* —SOUTH AFRICAN MEDICAL JOURNAL

RECENT NEW BOOKS

ESSENTIALS OF MODERN SURGERY
By HANDFIELD JONES and PORRITT
Particulars on page opposite

MANUAL OF PUBLIC HEALTH

FIRST VOLUME RECENTLY PUBLISHED

LABORATORY PRACTICE

560 pp 107 Illustrations 21s net postage 7d

SECOND VOLUME JUST PUBLISHED

HYGIENE

360 pp 34 Illustrations 12s net postage 6d (July 1938)

By *Professor J R CURRIE* M A M D D P H Department of Public Health University of Glasgow

¶ *The first volume on Principles and Procedure is in active preparation*

READY SHORTLY

CHEMICAL ANALYSIS

For Medical Students

By RON E HILLINGWORTH Ph D B Sc Lecturer on Chemistry Royal College of Physicians Edinburgh Over 140 pp Illustrated Probable price 5s net. (October 1938)

¶ *A new book on Practical Chemistry for the first year student*

AN INTRODUCTION TO BACTERIOLOGICAL CHEMISTRY

By C G ANDERSON Ph D D (Bact) London University of Edinburgh 300 pp Illustrated 10s 6d net postage 6d (November 1937)

¶ *A very useful book to the student who wishes to take up Bacteriological work as a career It deals concisely and efficiently with its chemical aspect*

DISEASES OF THE NOSE, THROAT AND EAR

By I SIMSON HALL M B F R C P F R C S 400 pp 55 Illustrations and Coloured Frontispiece 10s 6d net postage 6d (March 1937)

¶ *The teaching is clear and definite and the advice given is so sound that the work should have an established place among the smaller textbooks on the subject* —LANCET

MEDICO-LEGAL ASPECTS OF THE RUXTON CASE

By Professor JOHN GLAISTER M D D Sc University of Glasgow and Professor JAMES C BRASH M A M D University of Edinburgh 300 pp with 172 Illustrations 21s net postage 6d (September 1937)

¶ *The medico legal and other scientific aspects of a case without parallel in the annals of crime*

SEVEN RECOMMENDED TEXTBOOKS

BIGGART	**PATHOLOGY OF THE NERVOUS SYSTEM**		15s net postage 6d
CAMPBELL	**HANDBOOK OF THERAPEUTICS**	*Second Edition*	12s 6d net postage 6d
GARDINER	**HANDBOOK OF SKIN DISEASES**	*Third Edition*	10s 6d net postage 6d
HAULTAIN & KENNEDY	**MIDWIFERY AND GYNECOLOGY**	*Second Edition*	15s net postage 6d
McKIE	**HANDBOOK OF SURGERY**		12s 6d net postage 6d
OAKES & DAVIE	**POCKET MEDICAL DICTIONARY**	*Third Edition*	3s net postage 2d
ROSS & FAIRLIE	**HANDBOOK OF ANAESTHETICS**	*Fourth Edition*	10s 6d net postage 6d

1'6 NET Per Part — **THE CATECHISM SERIES IS BEST FOR QUICK REVISION** — 64 Eighty page Parts — New Editions continually appearing — **1'6 NET** Per Part

E. & S. LIVINGSTONE, MEDIC

STUDENT and PRACTITIONER

PRELIMINARY ANNOUNCEMENT OF AN OUTSTANDING NEW VOLUME FOR PUBLICATION EARLY IN OCTOBER.

THE ESSENTIALS OF MODERN SURGERY

EDITED BY

R. M. HANDFIELD-JONES *and* A. E. PORRITT

MC MS, FRCS

SURGEON TO OUT PATIENTS ST MARY'S HOSPITAL SENIOR SURGEON FLORENCE NIGHTINGALE HOSPITAL CONSULTING GENERAL SURGEON HOSPITAL FOR WOMEN SOHO SQUARE CONSULTING SURGEON ST GILES HOSPITAL (L.C.C.) LEYTONSTONE DENTAL HOSPITAL AND THE WEST HAM DENTAL HOSPITAL LECTURER IN OPERATIVE SURGERY AND SURGICAL TUTOR FOR UNIVERSITY DEGREES ST MARY'S HOSPITAL MEDICAL SCHOOL EXAMINER IN SURGERY UNIVERSITY OF CAMBRIDGE LATE HUNTERIAN PROFESSOR R.C.S. ASSISTANT DIRECTOR SURGICAL UNIT ST MARY'S HOSPITAL SURGEON TO THE MILLER GENERAL HOSPITAL AND THE PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN

MA MCh, FRCS

SURGEON TO HIS MAJESTY'S HOUSEHOLD SURGEON TO OUT PATIENTS AND ASSISTANT DIRECTOR OF THE SURGICAL UNIT ST MARY'S HOSPITAL SURGEON PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN AND CONSULTING SURGEON ACTON ORTH HERTS AND SOUTHEND TEDDINGTON HAMPTON WICK AND DISTRICT AND SAVERNAKE HOSPITALS

CONTRIBUTORS

E P BROCKMAN MCh FRCS
LIONEL COLLEDGE MB BCh FRCS
A TUDOR EDWARDS, MA, MD, MCh, FRCS
G GORDON TAYLOR OBE, MA, MS, FRCS, Hon FRACS
R M HANDFIELD JONES, MC, MS, FRCS
WALTER HOWARTH MA MB BCh FRCS
R VAUGHAN HUDSON, FRCS
G L M McELLIGOTT, MA, MRCS, LRCP
A W MATTHEW, MRCS, LRCP
WALTER MERCER, MB, ChB (Ed), FRCS (Ed), FRCS (Ed),
R Y PATON, MA (St Andrews), BA, MB, BCh (Camb), FRCS
A E PORRITT, MA, MCh, FRCS
JULIAN TAYLOR, OBE, MS, FRCS
LESLIE H W WILLIAMS, MD, MS, FRCS, FCOG
A DICKSON WRIGHT, MS, FRCS, DTM &H

CONTENTS

1 INFLAMMATION AND INFECTION 2 SPECIFIC AND NON-SPECIFIC INFECTIONS 3 VENEREAL INFECTIONS 4 NEW GROWTHS AND CYSTS 5 WOUNDS AND THEIR EFFECTS 6 ULCERATION AND GANGRENE 7 GENERAL SURGICAL TECHNIQUE 8 ANÆSTHESIA 9 PHYSIOTHERAPY AND RADIOTHERAPY 10 SURGICAL DISEASES OF THE SKIN AND ITS APPENDAGES 11 INFECTIONS OF THE FINGERS AND HAND 12 THE HEART AND BLOOD VESSELS 13 THE LYMPHATIC SYSTEM 14 THE FACE AND JAWS 15 THE MOUTH PALATE TONGUE AND SALIVARY GLANDS 16 THE NECK AND THYROID GLAND 17 THE EAR 18 THE NOSE, NASAL FOSSÆ AND NASOPHARYNX 19 THE FAUCES PHARYNX AND ŒSOPHAGUS 20 THE LARYNX AND TRACHEA 21 THE CHEST LUNGS AND PLEURÆ 22 THE BREAST 23 THE ABDOMEN AND PERITONEUM 24 HERNIÆ 25 THE STOMACH AND DUODENUM 26 THE INTESTINES 27 INTESTINAL OBSTRUCTION 28 THE RECTUM AND ANAL CANAL 29 APPENDICITIS 30 THE LIVER AND GALL BLADDER 31 THE PANCREAS AND SPLEEN 32 THE KIDNEY AND URETER 33 THE BLADDER PROSTATE AND VESICLES 34 THE PENIS AND URETHRA 35 THE TESTIS SPERMATIC CORD AND SCROTUM 36 THE FEMALE GENITAL SYSTEM 37 THE SCALP AND SKULL 38 THE BRAIN AND ITS COVERINGS 39 THE SPINAL CORD 40 DISEASES OF NERVES 41 INJURIES OF BONES AND JOINTS 42 INJURIES OF THE UPPER EXTREMITY 43 INJURIES OF THE LOWER EXTREMITY 44 DISEASES OF BONE 45 DISEASES OF JOINTS 46 DEFORMITIES 47 DISEASES OF MUSCLES TENDONS AND BURSÆ INDEX.

EXTRACT FROM PREFACE:

We believe that there is room for a single volume textbook in which surgical teaching is based on the fundamental principles of anatomy, physiology and pathology.

Our object has been to provide students and practitioners with the essentials of modern surgery in as concise a form as possible, and also to produce a book which will be of practical use to students studying for the higher examinations. We have attempted to show that in many diseases the clinical picture follows logically on the pathological changes, and without entering into detailed controversy have indicated those lines along which still unsolved problems should be pursued.

Royal 8vo 1,200 pp Probable price, 30s net

Containing over 500 illustrations, some in colour, and printed on fine art paper

Write for our 1938 Illustrated Catalogue

BLISHERS, 16-17, TEVIOT PLACE, EDINBURGH

INFLUENZA

In 'A Study of Epidemic Influenza' the Medical Research Council presents results of correlated clinical and laboratory studies undertaken during the epidemics of influenza and influenzal diseases in 1936 and 1937. Influenza due to virus infection can be distinguished from 'febrile catarrh' by laboratory methods the present work shows how far such a distinction can be made from symptoms and signs. The question is an important one in view of the possibility of prophylaxis and serum treatment. Report No. 228, 2s. 6d. (2s. 9d.)

EPIDEMICS IN SCHOOLS

School Communities offer somewhat special facilities for the investigation of epidemic and other illnesses, and the Medical Research Council has now made available a careful study, based on data collected over five years, which throws a great deal of light on the problem of school infections generally, and points to the important problems still unsolved and indicates how they may best be tackled. Report No. 227, 1s. 6d. (1s. 11d.)

SYPHILIS

'An Analysis of the Results of Treatment of Early Latent and Muco-cutaneous Tertiary Syphilis' is a study of 570 cases treated at Glasgow between 1919 and 1932. By following up over this long period cases of syphilis which had received a standard course of treatment, and of which the diagnosis had depended on constant methods, it was possible to see in their proper perspective the conditions which allowed the maximum amount of success, and those which were followed by comparative failure. No. 224, 2s. (2s. 2d.)

MENTAL DEFICIENCY

Material likely to determine the general course in research in Mental Deficiency in this country for some years to come is contained in Report No. 229 of the Medical Research Council. The work is based on researches undertaken since 1930 which involve a close clinical and genetical study of a representative group of 1,280 patients of all grades and types of mental deficiency. The cases studied were carefully graded and subsequently classified by clinical diagnosis. The Council states that the researches constitute a new and refreshing approach to the old and much-discussed problem of the relative roles of heredity and environment in the development of the human race. That the problem with which they deal is one of urgency is apparent from the fact that it is estimated that there are some 300,000 mental defectives in England and Wales alone. 2s. 6d. (2s. 9d.)

All prices are net. Those in brackets include postage

H.M. STATIONERY OFFICE

LONDON, W.C.2: York House, Kingsway
EDINBURGH 2: 120 George St. MANCHESTER 1: 26 York St.
CARDIFF: 1 St. Andrew's Cres. BELFAST: 80 Chichester St.
or through any bookseller

Portrait of a Great Surgeon

Surgeon Extraordinary

by LOYAL DAVIS, M.D., M.S., Ph.D. 8/6 *net*

TO-DAY every surgeon or physician must keep abreast of new discoveries and developments. Sixty years ago J. B. Murphy, the Irish-American surgeon, had to fight for recognition of his discoveries against professional jealousy and public disapproval. He invented the Murphy button for intestinal suturing, he was the first to diagnose and operate for appendicitis in its early stages. He was accused of courting publicity, he was brought up before the American Medical Association for charges of unethical conduct four years after he had been its President.

Dr. Loyal Davis, who here tells of Murphy's progress from the obscurity of a country druggist's assistant to world fame, is Professor of Surgery in the Medical School of North-Western University, U.S.A., being the eighth holder of the chair of which Murphy was the fourth.

From all booksellers. Published by Harrap

MEDICAL INSURANCE PRACTICE

By R. W. Harris and Leonard Shoeten Sack
Fourth Edition, January, 1937
Price 2s. post free

MEDICAL PRACTITIONERS' HANDBOOK

232 pp. 8vo. Price 3s. 10d. post free

REPORT OF COMMITTEE ON NUTRITION

48 pp. 8vo. Price 6d. post free

THE DOCTORS' COOKERY BOOK

50 pp. 8vo. Price 4d. post free

Publications of the British Medical Association
B.M.A. House, Tavistock Sq., W.C.1

BOOKS FOR STUDENTS

JUST PUBLISHED

FOURTH EDITION, ENTIRELY RESET AND THOROUGHLY REVISED

With 50 more illustrations and many new figures

Demy 8vo With 318 Illustrations of which 109 are coloured 28s net postage 8d (Abroad 1s 6d)

A SHORT PRACTICE OF SURGERY

By **HAMILTON BAILEY**, FRCS Eng
Surgeon Royal Northern Hospital London etc
and
R J McNEILL LOVE, MS Lond FRCS Eng
Surgeon Royal Northern Hospital London etc

COMMON SKIN DISEASES
By A C ROXBURGH MD FRCP *Fourth Edition* With 8 Coloured Plates and 105 Illustrations
Demy 8vo 15 net postage 6d (*General Practice Series*)

DISEASES OF THE EAR, THROAT AND NOSE
By J D McLAGGAN FRCS With 9 Plates and 150 Text Illustrations Demy 8vo 15s net postage 6d
(*General Practice Series*)

MEDICAL DIAGNOSIS Some Clinical Aspects
By S LEVY SIMPSON MA MD MRCP Pp xii — 244 Demy 8vo 10 6d net postage 6d
(*General Practice Series*)

SURGICAL ANATOMY AND PHYSIOLOGY
By NORMAN C LAKE MD FRCS and C JENNINGS MARSHALL MD FRCS With 238 Illustrations
Demy 8vo 30s net postage 7d

THE CLINICAL EXAMINATION OF THE NERVOUS SYSTEM
By G H MONRAD KROHN MD FRCP MRCS *Seventh Edition* 111 Illustrations Crown 8vo
8s 6d net postage 6d *Just Published*

ELEMENTARY PATHOLOGICAL HISTOLOGY
By W G BARNARD MRCS With 176 Illustrations on 52 Plates Crown 4to 7s 6d net postage 6d

PRACTICAL HISTOLOGY FOR MEDICAL STUDENTS
By D T HARRIS DSc MD *Third Edition* With 2 Plates Crown 4to 7s 6d net postage 6d

ELEMENTARY PATHOLOGY An Introduction to the Process of Disease
By KEITH S THOMPSON MRCS With 3 Coloured Plates and 29 other Illustrations Crown 4to
10s 6d net postage 6d

A GUIDE TO HUMAN PARASITOLOGY for Medical Practitioners
By D B BLACKLOCK MD DPH DTM and T SOUTHWELL DSc PhD
Third Edition With 2 Coloured Plates and 122 Text Illustrations Royal 8vo 12s 6d net postage 6d

PRACTICAL BACTERIOLOGY HAEMATOLOGY AND ANIMAL PARASITOLOGY
By E R STITT MD ScD LLD PAUL W CLOUGH MD and MILDRED C CLOUGH MD
Ninth Edition With 4 Plates and 208 other Illustrations Pp xiv + 970 8¾ × 5¾ins 30s net postage 7d

COMPARATIVE ANATOMY
By H V NEAL Professor of Zoology Tufts College and H W RAND Professor of Zoology Harvard University With 540 Illustrations 21s net postage 7d

A GUIDE TO VETERINARY PARASITOLOGY AND ENTOMOLOGY
for Veterinary Students and Practitioners
By T SOUTHWELL DSc PhD and A KIRSHNER, MB ChB DTM
Second Edition, Enlarged With 123 Illustrations Demy 8vo 10s net postage 6d *(In the Press)*

A GUIDE TO THE SURGICAL PAPER With Questions and Answers
By R J McNEILL LOVE MS FRCS Fcap 8vo 5s net postage 2d

A SHORTER SURGERY
By R J McNEILL LOVE MS FRCS *Third Edition* With 96 Illustrations Demy 8vo 16s net postage 6d

LANDMARKS AND SURFACE MARKINGS OF THE HUMAN BODY
By L BATHE RAWLING MB BCCantab FRCS *Seventh Edition* Demy 8vo 7s 6d net postage 6d

STEPPING STONES TO SURGERY Anatomy Applied to Surgery
By L BATHE RAWLING MB BCCantab FRCS With 97 Illustrations Demy 8vo
12s 6d net postage 6d

SURGICAL NOTE-TAKING A Booklet for Surgical Dressers and Clerks commencing Clinical Studies
By C F M SAINT MD MS FRCS *Second Edition* Crown 8vo 3s net postage 3d

---

Lewis's Publications are obtainable of all Booksellers

London H K LEWIS & Co Ltd, 136 Gower Street, WC1

GRAY'S ANATOMY

DESCRIPTIVE AND APPLIED

Twenty seventh Edition Edited by T B JOHNSTON M D Assisted by J WHILLIS M D M S

With 1 336 Illustrations of which 624 are Coloured and 29 are X Ray Plates 8vo 15s net

Ready September 26

A MANUAL OF PRACTICAL ANATOMY

A Guide to the Dissection of the Human Body

By THOMAS WALMSLEY M D In Three Parts With Illustrations

Part I—The Upper and Lower Limbs Second Edition 12s 6d net

Part II—The Thorax and Abdomen 10s 6d net

Part III—The Head and Neck New Edition 12s 6d net

DENTAL SURGERY AND PATHOLOGY

By SIR J F COLYER K B E F R C S L D S and EVELYN SPRAWSON M C M R C S L R C P L D S

Sixth Edition With 972 Illustrations 8vo 32s net

BAINBRIDGE AND MENZIES' ESSENTIALS OF PHYSIOLOGY

Eighth Edition Edited by H HARTRIDGE F R S With Illustrations 14s net

SCHAFER'S ESSENTIALS OF HISTOLOGY

Descriptive and Practical for the Use of Students

Fourteenth Edition Edited by H M CARLETON M A B Sc D Phil

With Numerous Illustrations Ready Shortly 16s net

SCHAFER'S EXPERIMENTAL PHYSIOLOGY

Sixth Edition By W A BAIN Ph D F R S E

With 97 Illustrations Ready in September 7s 6d net

LONGMANS, GREEN & CO. LTD., 39, PATERNOSTER ROW, LONDON, E.C.4

MODERN SURGICAL TECHNIC

by **MAX THOREK, M D**

Complete in Three Volumes With 2 174 illustrations originals principally by W C Shepard

With a Foreword by DONALD C BALFOUR M B M D (for) LL D F A C S F R A C S

Ready shortly Tentative price £6 15s 0d

This concise work on surgical operations is up to date and intended particularly for students for general surgeons and for those general practitioners who are occasionally called upon to perform emergency operations

OUTLINE OF ROENTGEN DIAGNOSIS

An Orientation In The Basis Principles of Diagnosis by the Roentgen Method

by **LEO G RIGLER, B S M B, M D**

ATLAS EDITION 254 illustrations shown in 227 figures presented in drawings and reproductions of roentgenograms Figures 6 to 51 and 55 to 72 are drawings in an original technic by Jean E Hirsch

Ready shortly 30s

To speed up your ability to accurately diagnose conditions through the roentgen ray method Dr Rigler has completely covered this very extensive subject in an illustrated outline form that is admirably suited to everyday practice

ANUS: RECTUM: SIGMOID COLON

DIAGNOSIS AND TREATMENT

by **HARRY ELLICOTT BACON, M D, F A C S, F A P S**

487 Illustrations Ready shortly 38s

The object of the author is to place within the reach of all divisions of the medical profession a comprehensive and readily intelligible exposition of our present knowledge of the various affections of the Anus Rectum and Sigmoid Colon

EXPERIENCE IN THE MANAGEMENT OF FRACTURES AND DISLOCATIONS

(Based on an Analysis of 4,390 Cases)

Under the General Editorship of **PHILIP D WILSON, M D**

1419 Illustrations Ready shortly Tentative price 65s

This book is the most complete and practical thesis on fractures ever published Dr Wilson is co author of Wilson & Cochrane's FRACTURES AND DISLOCATIONS a widely read and successful book published some years ago

J. B. LIPPINCOTT COMPANY, 16, John Street, Adelphi, LONDON, W.C. 2

HEINEMANN

Students' Books

CLINICAL PÆDIATRICS (The Baby)
Edited by W R P COLLIS, M A, M D, F R C P, D P H Medium 8vo Fully Illustrated **21s** net

TEXTBOOK OF BACTERIOLOGY FOR MEDICAL STUDENTS
By R W FAIRBROTHER (Author of "Filterable Viruses") Small Royal 8vo Illustrated **15s** net

TEXTBOOK OF HISTOLOGY FOR MEDICAL STUDENTS
By E E HEWER, D Sc (Lond) Crown 4to Fully Illustrated **15s** net

POULSSON'S TEXTBOOK OF PHARMACOLOGY AND THERAPEUTICS
Second English Edition thoroughly revised by STANLEY ALSTEAD, M D (Liverp), M R C P (Lond) Royal 8vo **25s** net

A TEXTBOOK OF BACTERIOLOGY FOR DENTAL STUDENTS
by ARTHUR BULLEID, M R C P (Lond), M R C S, L D S (Eng) Second Edition Demy 8vo Fully Illustrated **15s** net

THE ART OF SURGERY (Third Edition)
By H S SOUTTER, M A, M D (Oxon), F R C S (Eng) Large Crown 4to Fully Illustrated **30s** net

AN INTRODUCTION TO THE STUDY OF THE NERVOUS SYSTEM (Second Edition)
By E E HEWER, D Sc (Lond) and G N SANDES, F R C S (Eng), M B, B S (Lond) Crown 4to Fully Illustrated in Colour **21s** net

PRACTICAL MORBID HISTOLOGY (Second Edition)
A Handbook for Use of Students and Practitioners
By ROBERT DONALDSON, M A, M D, Ch B (Edin), F R C S L, D P H Crown 4to 214 Original Illustrations **42s** net

AN INTRODUCTION TO BIOCHEMISTRY
By WILLIAM ROBERT FEARON, M A, Sc D, M B, F I C Large Demy 8vo Waterproof Binding **10s 6d** net

PRACTICAL BIOLOGY FOR MEDICAL STUDENTS
By C J WALLIS, M A (Cantab), Master in Charge of Biology, University College School, Hampstead Demy 8vo Waterproof Binding Fully Illustrated Cheap Edition, **7s 6d** net

THE PRINCIPLES AND PRACTICE OF PSYCHIATRY
By ALEXANDER CANNON, M D, and E D T HAYES, M D Crown 4to Fully Illustrated **25s** net

By the same Authors

THE PRINCIPLES AND PRACTICE OF NEUROLOGY
With a special clinical Examination by Prof H G MONRAD-KROHN, M D, F R C P Crown 4to Fully Illustrated **25s** net

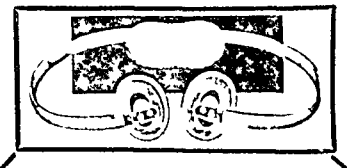
HANDBOOK OF FILTERABLE VIRUSES
By R W FAIRBROTHER, D Sc, M D, M R C P, Lecturer in Bacteriology and Assistant Director of the Public Health Laboratory, Manchester University **7s 6d** net

In Preparation

TEXTBOOK OF PATHOLOGY (General and Special) (Fourth Edition)
By J MARTIN BEATTIE, M A, M D (Edin), and W E CARNEGIE DICKSON, M D B Sc, F R C P (Edin) Fourth Edition, with the collaboration of A M DRENNAN M D (Edin) Professor of Pathology, University of Edinburgh

For further particulars and detailed prospectus apply to

WILLIAM HEINEMANN (Medical Books) LTD.
99, GREAT RUSSELL STREET, LONDON, W C 1



DOCTORS PRESCRIBE
the famous
SALMON ODY BALL & SOCKET TRUSS

Most scientific and reliable yet devised Perfect support comfort resiliency

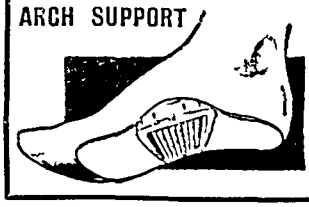
Single 30/- Double 50/-

Most of our clients are sent to us by Doctors

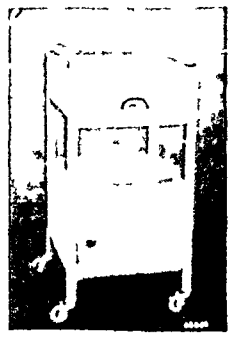
WRITE FOR BOOKLET

NOTE NEW ADDRESS
SALMON ODY LTD
Truss Makers for 130 years
74, NEW OXFORD ST.,
LONDON, W C 1
Phone Mus um 313

ARCH SUPPORT



SURGERY TROLLEY AND LOCKER



£3 . 10 . 0
Carria e extra

£3 . 3 . 0
Carria e extra

SPECIAL OFFER OF TRIAL CASES
(Ex Army Stock)

Highly polished hinged mahogany tray and padded lid Contents
80 Spherical Concave and convex 0.25 to 20.00
11 Cylinders Concave and convex 0.25 to 10.00 Prisms Trial Frame and Trial Frame accessories
Condition —Practically as new
£7 . 10 . 0 set

All Surgery equipment FURNITURE INSTRUMENTS BLOOD PRESSURE APPARATUS ELECTRIC DIAGNOSTIC OUTFITS &c at strictly economical prices

SATISFACTION DEFINITELY GUARANTEED

Current List of Secondhand Instruments and Equipment forwarded on application

A FLEMING & CO. (*Successors*)
51, Mortimer St , London W 1 *Tel Mus 6 2*

OUR 50 YEARS' REPUTATION
& a 10 years' guarantee



and behind the e watche Offered to Doctors and Nur es for immediate po e sion without di lace ment of capital they repre ent the highe t po ible value and perfection of work man hip and are made e pecially for your profes ional needs

FRANKLAND S VITAL PULSE WATCH (Regd)
(For Doctors) Fully jewelled lever movement
Silver chrome 60 or 13 payments of 5 Gold £5 17 6 or 16/ down and 11 payments of 10/ 10 YEARS GUARANTEE

Visit our howrooms or S lections ent on Approval

DEPARTMENTS—Furs Fur Coats Jewellery Plate Cutlery Furniture etc
Write for Catalogue

PROTECTIVE MONTHLY PAYMENT TERMS

E J FRANKLAND & Co , Ltd (Dept M) 12 37 Imperial Buildings
Estab 1885 *Phone Central* 2188 Ludgate Circus London E C 4

CATALOGUE OF SECOND HAND SURGICAL INSTRUMENTS



OSTEOLOGY, MICROSCOPES, POST FREE Telephone Temple Bar 2..06

Half Sets of Osteology, Articulated Skeletons and Disarticulated Skulls and Microscopes

MILLIKIN & LAWLEY, 67 & 68, CHANDOS PLACE, STRAND, W C 2
(Adjacent to Charing Cross Ho pital Medical School)

If you have any OVERDUE ACCOUNTS
which require firm but tactful handling, write to —
NORWICH & EAST OF ENGLAND MEDICAL PROTECTION SOCIETY
2 & 4, VALENTINE STREET, NORWICH
(*Prospectus on application*)

SURFACE AND RADIOLOGICAL ANATOMY
For Students and General Practitioners
By Arthur B Appleton M A, M D (Cantab) Professor of Anatomy in the University of London Wilfred J Hamilton M D B Ch (Pelt) D Sc (Glas) F R S E Professor of Anatomy in the University of London and Ivan C C Tchmeroff M A M D B Ch (Cantab) D M R E Assistant Radiologist St Thomas's Hospital London
Illustrated 15s net

This book is easily the best value for money that we have seen for a long time For 15s are given 336 illustrations in colour and monochrome They are superbly reproduced by a new process which emphasizes details We have never seen better radiograms No one can fail to benefit from a study of this book particularly students and practitioners —*Clinical Journal*

"A splendid addition to anatomical literature —*Practitioner*

A MANUAL OF RADIOLOGICAL DIAGNOSIS
For Students and General Practitioners
By Ivan C C Tchmeroff M A, M D D M R E, Assistant Radiologist St Thomas's Hospital London Foreword by Philip H Mitchiner M D M S, F R C S, Surgeon to St Thomas's Hospital
Second Impression Illustrated 21s net

"A practical addition to radiological literature"—*Lancet*

We can heartily recommend this book —*British Medical Journal*

"This is an excellent book"—*Clinical Journal*

STEROLS AND RELATED COMPOUNDS
A Series of three lecture delivered at the Institute of Biochemistry, Cambridge
By Professor E Friedmann, M D, Ph D Foreword by Professor Sir Frederick Gowland Hopkins, O M F R S *7s 6d net*

"A lucid, connected account summarising our present knowledge of these groups of substances The book is well furnished with chemical formulæ"—*Lancet*

BASIC GERMAN FOR SCIENCE STUDENTS
With vocabulary and English translation of the German passage
By M L Barker, M A, Ph D, Lecturer in German, University of Edinburgh
Third enlarged edition 6s net

"The best book of its kind known to us"—*Edinburgh Medical Journal*

W. HEFFER & SONS Ltd.,
CAMBRIDGE, ENGLAND,
and of all booksellers

CONSTANT FAVOURITES

Cassell and Company, Ltd., La Belle Sauvage, London E.C.4

(IN THE PRESS) *NEW (FIFTEENTH) EDITION*

The Pharmacology and Therapeutics of the Materia Medica

(Bruce and Dilling) By Professor WALTER J. DILLING, M.B., Ch.B. This new edition entirely reset and new in format is in the press and will appear shortly. Crown 8vo. 648 pages. 10s. 6d. net.

(IN THE PRESS) *NEW (SIXTH) EDITION*

The Student's Handbook of Surgical Operations

By Sir FREDERICK TREVES, Bart. Revised by CECIL P. G. WAKELEY, D.Sc., F.R.C.S.Eng., F.A.C.S., F.R.A.C.S. (Hon.). New Edition. Thoroughly Revised and Enlarged. Crown 8vo. 564 pages. With 246 Text figures. 12s. net.

Sick Children: Diagnosis and Treatment *NEW (THIRD) EDITION*

By DONALD PATERSON, B.A., M.D., F.R.C.P.Lond. Crown 8vo. 600 pages. With 15 Plates and 76 Text figures. 12s. 6d. net.

Diseases of the Nose and Throat *Fourth Edition*

By Sir STCLAIR THOMSON, M.D., F.R.C.P.Lond., F.R.C.S.Eng., and V. E. NEGUS, M.S., F.R.C.S.Eng.

There is scarcely any condition, symptom or method of treatment that is not mentioned therein and the work will retain its place as a classical British text book.—*Lancet*

Medium 8vo. 976 pages. With 29 Plates, 13 in colour, and 386 Text figures. 45s. net.

Diseases of the Eye

By EUGENE WOLFF, M.B., B.S.Lond., F.R.C.S.Eng.

Here indeed is a wonderful new book.—*Glasgow University Medical Journal*

This is a new book on eyes in a new style that is a delight to read.—*London Hospital Gazette*

Quarto. 236 pages. With 5 Colour Plates and 120 Text figures. 15s. net.

Manson's Tropical Diseases *Tenth Edition*

Edited by PHILIP H. MANSON-BAHR, C.M.G., D.S.O., M.A., M.D., D.T.M. & H.Cantab., F.R.C.P.Lond. Demy 8vo. 1004 pages. With 22 Colour and 15 Half-tone Plates, 381 Figures in the Text, 6 Maps and 38 Charts. 31s. 6d. net.

Clinical Methods *Tenth Edition*

By ROBERT HUTCHISON, M.D., LL.D., F.R.C.P.Lond., and DONALD HUNTER, M.D., F.R.C.P. Lond. Foolscap 8vo. 658 pages. With 19 Colour and 2 Half-tone Plates and 142 Text figures. 12s. 6d. net.

Pulmonary Tuberculosis: Medical and Surgical Treatment

By H. MORRISTON DAVIES, M.A., M.D., M.Ch.Cantab., F.R.C.S.Eng. Demy 8vo. 464 pages. With 77 Radiographic Plates and 69 Half-tone and Line Text figures. 27s. 6d. net.

Diseases of the Skin

By S. ERNEST DORE, M.D., F.R.C.P.Lond., and JOHN L. FRANKLIN, M.D., M.R.C.P.Lond. Crown 8vo. 420 pages. With 46 Half-tone Plates. 10s. 6d. net.

Herman's Difficult Labour *Seventh Edition*

Revised by CARLTON OLDFIELD, M.D., F.R.C.P.Lond., F.R.C.S.Eng. Crown 8vo. 574 pages. With 8 Radiographic Plates and 197 Text figures. 16s. net.

Elements of Surgical Diagnosis *Eighth Edition*

By Sir ALFRED PEARCE GOULD. Revised by ERIC PEARCE GOULD, M.D., M.Ch., F.R.C.S.Eng. Foolscap 8vo. 730 pages. With 22 Radiographic Plates. 10s. 6d. net.

Surgical Applied Anatomy *Ninth Edition*

By Sir FREDERICK TREVES, Bart., and C. C. CHOYCE, C.M.G., M.D., F.R.C.S.Eng. Foolscap 8vo. 720 pages. With 174 Illustrations, 66 in Colour. 14s. net.

A Textbook of Gynaecological Surgery *Third Edition*

By Sir COMYNS BERKELEY, M.A., M.C., M.D., F.R.C.P.Lond., F.R.C.S.Eng., and VICTOR BONNEY, M.S., M.D., B.Sc., F.R.C.S.Eng., F.R.C.S.A. Completely revised and enlarged. Royal 8vo. 863 pages. With 530 new Descriptive Drawings and 17 Colour Plates. 45s. net.

Surgical Diseases and Injuries of the Genito-Urinary Organs *Second Edition*

By Sir JOHN THOMSON-WALKER, D.L., M.B., C.M.Edin., F.R.C.S.Eng., and KENNETH WALKER, M.A., M.B., B.C.Cantab., F.R.C.S.Eng. Medium 8vo. 974 pages. With 58 Plates, 25 in Colour, and 233 Text Illustrations. 32s. 6d. net.

Modern Operative Surgery *Second Edition*

Edited by G. GREY TURNER, M.S., F.R.C.S.Eng., F.A.C.S.(Hon.). Two Volumes. Medium 8vo. 1780 pages. With 11 Half-tone Plates and 806 Figures in the Text. £3 3s. net the set.

A System of Surgery *Third Edition*

Edited by C. C. CHOYCE, C.M.G., C.B.E., B.Sc., M.D., F.R.C.S.Eng. Editor of Pathology: J. MARTIN BEATTIE, M.A., C.M., M.D. Three Volumes. Medium 8vo. 3300 pages. With 60 Colour Plates, 117 Half-tone Plates and 929 Text figures. £4 net the set.

WRIGHT'S PUBLICATIONS

EMERGENCY SURGERY

By HAMILTON BAILEY F.R.C.S. (Eng.). Third Edition. Fully Revised. Large 8vo. 544 pp. With 516 Illustrations, a few number of which are in colour. 40s. net. postage 1s.

Forms a full and up-to-date account of practice in both London and in the country. The Lancet

DEMONSTRATIONS OF PHYSICAL SIGNS IN CLINICAL SURGERY.

By HAMILTON BAILEY F.R.C.S. (Eng.). Sixth Edition. Fully Revised. 8vo. 384 pp. With 335 Illustrations, some of which are in colour. 21s. net. postage 1s.

It fully maintains the very high standard set by its predecessors. Practitioner

THE SHIP SURGEON'S HANDBOOK.

By [illegible] J. MACCURDY, M.D. Recently Published. Demy 8vo. [illegible] pp. [illegible]

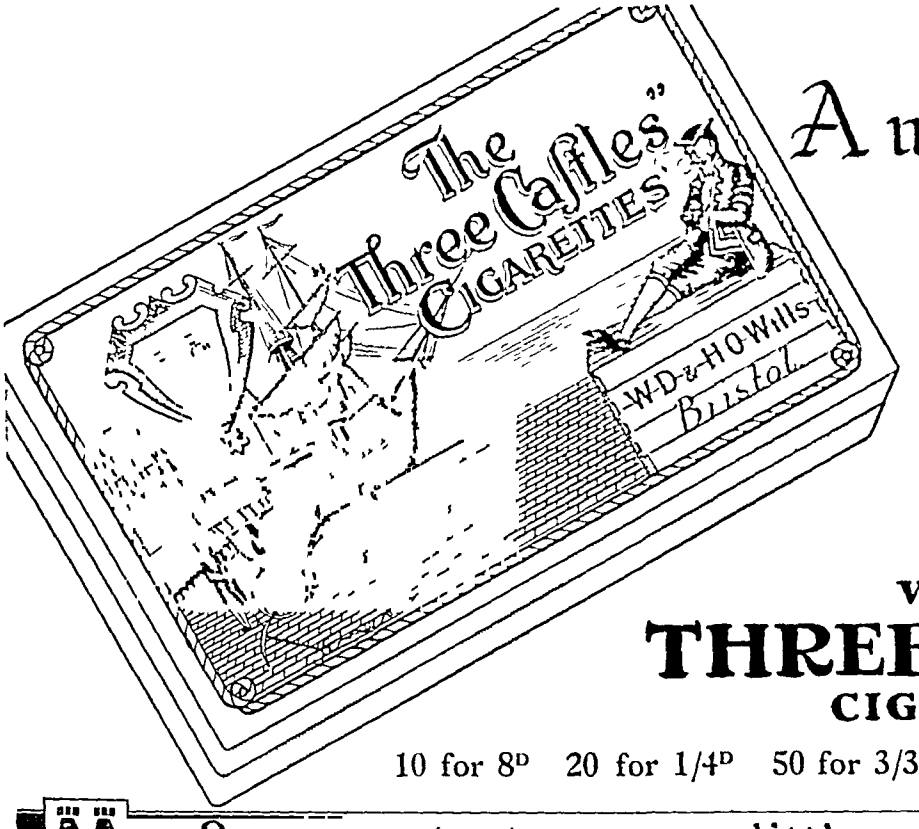
[illegible] for the Ship's Surgeon. Shipping Gazette

SYNOPSIS OF PHYSIOLOGY.

By [illegible] D.M., F.R.S., and J. C. DRUMMOND, D.Sc., M.B. Third Edition. Fully Revised. 12mo. 320 pp. Illustrated. [illegible] Interleaved for Notes. 7s. 6d. net. postage 4d.

[illegible] for the student who wishes to obtain a knowledge of the subject without reading a large number of books. The Lancet

Bristol JOHN WRIGHT & SONS LTD London SIMPKIN MARSHALL LTD



A new flat box

Specially convenient for pocket or handbag

1/- for 15

WILLS'S
THREE CASTLES
CIGARETTES

10 for 8D 20 for 1/4D 50 for 3/3D Handmade:—20 for 1/6

One expects to pay a little more for a cigarette of such excellent Quality.

Issued by The Imperial Tobacco Co (of Great Britain and Ireland) Ltd

T.T.L.7.B

DR DEIMEL GARMENTS are soft, porous and cleanly, never irritating, cumbersome, damp or overheating, but always satisfactory. They give greater comfort and safety and more satisfaction than any other form of underwear. The fabric absorbs perspiration freely, thus leaving and keeping the skin in proper condition. It even "tones up" the skin to all proper activity, yet without ever chafing it even in the faintest degree.

Can be washed in boiling water for sterilization without injury

Dr Deimel
DEIMELIN
Underwear
BRITISH MADE

Please write for full particulars of this remarkable Underwear

DEIMEL FABRIC COMPANY, 99, NEW BOND ST., LONDON, W.1

HAWKSLEY & SONS LTD

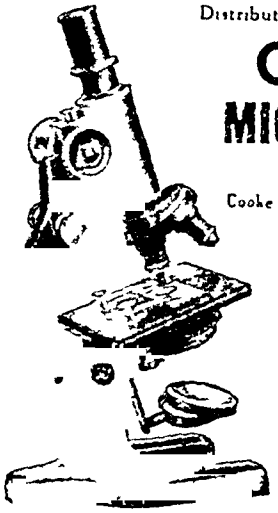
Distributors for Great Britain of

COOKE MICROSCOPES

British made by

Cooke Troughton & Simms Ltd

Illustrated List on request



SECOND-HAND MICROSCOPES
by makers of repute

REPAIRS
to Microscopes and Objectives Microtomes Optical Projection and other apparatus Estimates submitted

NEW STUDENT'S HAEMACYTOMETER
(BRITISH MADE)
Solid glass counting chamber 2 cover glasses 2 pipettes complete in case **£1.7.6**

Manufacturers and Importers of Scientific Instruments

Contractors to H M Govt ICC etc

17, NEW CAVENDISH STREET, LONDON, W 1

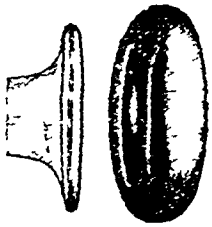
Phone WELbeck 38 9 *Grams* DIStract Wesdo London

The SIMPLIC (Patent) BREAST RELIEVER PAD

Eliminates pain bruising and nervous strain unavoidable with the ordinary glass ended breast reliever

The SIMPLIC Patent Pad is made of special sponge filled Rubber and is instantly detached for sterilizing Clinically approved as giving extreme comfort and relief

OBTAINABLE FROM SURGICAL SUPPLY HOUSES or from Sole Manufacturers —



J G FRANKLIN & SONS LTD,
BIRKBECK RUBBER WORKS, LONDON, E 8

SECOND-HAND MICROSCOPES

by

SWIFT BECK WATSON
BAKER ZEISS LEITZ
REICHERT HIMMLER
BAUSCH & LOMB etc



MICROSCOPES BOUGHT for CASH OR TAKEN IN EXCHANGE



A large selection of all kinds available List on application

CLARKSON'S, 338, HIGH HOLBORN, LONDON, W C 1

Opp Gray's Inn Rd. Phone HOLborn 2149 Estab over a Century

FIG 1

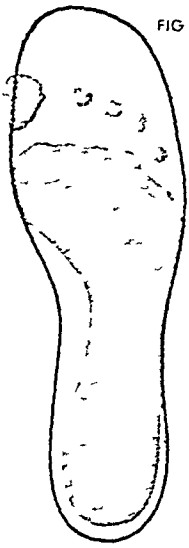


FIG 2

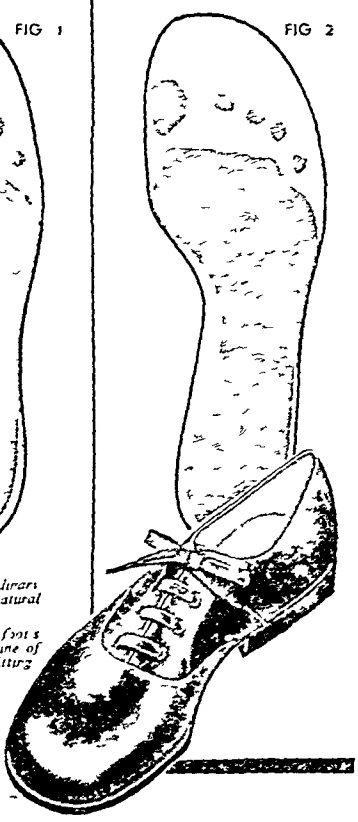


FIG 1 *Shows how ordinary shoe fail to provide a natural fit for children's feet*

FIG 2 *Shows the same foot as in print within the outline of a Clarks formative fitting shoe*

for *unspoiled* feet

Clarks formative fitting shoes are designed with a 'ground plan that follows very closely the natural outline of normal unspoiled feet Graded fittings provide for various types of feet from very slender to extra wide and in each model there is *correctly planned space* to allow toes to grow *forward* without risk of cramping or distorting Space at the toes is valueless if poor fitting enables the feet to slip forward in the shoes Clarks shoes fit gently but securely at the heel and instep giving adequate support and leaving the toes free to develop naturally

Clarks

SHOES AND SANDALS
***safe* for growing feet!**

Illustrated leaflet B 6 and name of local agent gladly supplied on request CLARKS STREET SOMERSET

WHY WAIT FOR INTRAVENOUS SOLUTIONS?



Baxter's Intravenous Solutions of Dextrose, Saline and Acacia are ready for use in the "Vacoliter" container in less than three minutes from stockroom to patient In "Vacoliters" Baxter's Solutions are always ready when you are ready to use them

Baxter's Intravenous Solutions in "Vacoliters" make it possible for you to have Intravenous Solutions ready in any quantity and to keep them at the highest degree of purity, stability, sterility and of a constant pH value They cannot become contaminated because they are packed in a high vacuum and tightly sealed with a metal closure

Baxter's service of Intravenous Solutions in "Vacoliters" is unmatched, and is not more costly than your own product

JOHN BELL & CROYDEN
Wigmore Street, London, W.1.
DAY AND NIGHT SERVICE.

Sole Distributors in Great Britain for Baxter Laboratories Ltd 24, Conway Road, N 15

The Wisdom of Specifying

CURTIS
RTM

Medical appliances designed to the practitioner's exact instructions

Carefully correct in every detail

Complying strictly with all ethical rules

Famous over a period of many years

SUCH are the products of H E Curtis & Son Abdominal supports and belts, special corsets, Colostomy appliances, surgical trusses, elastic hosiery—full particulars and measurement forms of all these are given in the Curtis Book of Appliances If you have not already received a copy of the latest edition, please send us your card

H. E. CURTIS & SON, LTD.,
Specialists in Abdominal Appliances,
7, Mandeville Place, Wigmore Street, London, W 1
Telegrams Curtis, Welbeck 2921
Telephone Welbeck 2921

A DIAGNOSTIC SET with ELECTRIC HEADLAMP

This set contains the components of the popular 3004 set together with a Wickham electric headlamp worked from the battery handle To assist in manipulating the various instruments a useful extension handle—the Plandle—is provided

The Headlamp uses ordinary spot light torch lamps with a carefully designed optical system producing a brilliant patch of even illumination adjustable from 1 to 10 ins in diameter It is light and having a sponge rubber washable forehead pad *is very comfortable to wear*

The Plandle facilitates the handling of separate components under awkward conditions allowing the battery handle to be placed out of the way in the pocket or on the table

Set No 3010 containing May Ophthalmoscope Auriscope and three Specula Duplay Nasal Speculum Bent Arm Throat Lamp one each Laryngeal and Post nasal Mirrors Flat tongue Depressor Plandle Wickham Headlamp large Battery Handle Spare lamp complete in case



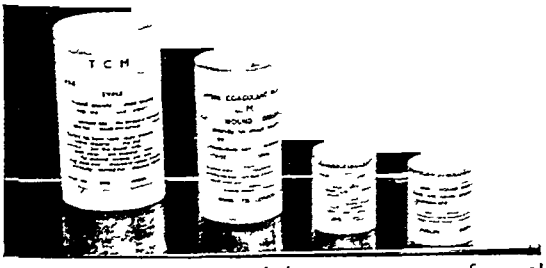
Gowlland

electric diagnostic instruments

Obtainable from all Surgical Supply Houses

THROMBIN-COAGULANT-MAW DRESSINGS HAVE PROVED THEIR EFFICIENCY!

In the short time they have been on the market Maw s T C M Dressings have achieved remarkable success Members of the profession who have used them have been impressed by the rapidity with which coagulation is achieved and numerous instances are recorded of severe haemorrhage being checked almost instantly T C M Dressings are treated with Thrombin-Coagulant Maw a preparation of natural Thrombin which accelerates blood coagulation and causes clotting within 5-15 seconds They are supplied sterile in sealed drums ready for immediate use and the series consists of special Lint Squares suitable for most purposes Special T C M Dressings can be supplied when required



They cost only a trifle more than ordinary Dressings and are well worth the extra charge We ask you to give them a fair trial for we are confident that you will be satisfied with the results

A Product of the Maw Laboratories

Full details and technical information on request

S MAW, SON & SONS, LTD, 7/12, ALDERSGATE ST, LONDON, E C 1

BY APPOINTMENT

Schweppes

SUGAR-FREE GINGER ALE . . . .
SUGAR-FREE TONIC WATER. . .
SUGAR-FREE SPARKLING LIME

Approved by the Institute of Hygiene and the Diabetic Association

These beverages have been analysed by the Institute of Hygiene and found "free from sugar and metallic contaminants" The analyses shown have been accepted by the Medical Advisory Council of The Diabetic Association and recommended for diabetic and obese subjects

ANALYSIS SHOWED THE FOLLOWING RESULTS

Schweppes Sugar-Free Dry Ginger Ale		*Ordinary Dry Ginger Ale*
Carbohydrates	absent	6 2%
Protein	absent	absent
Fat	absent	absent

Schweppes Sugar-Free Tonic Water		*Ordinary Tonic Water*
Carbohydrates	absent	9 1%
Protein	absent	absent
Fat	absent	absent

Schweppes Sugar-Free Sparkling Lime		*Ordinary Sparkling Lime*
Carbohydrates	absent	11 8%
Protein	absent	absent
Fat	absent	absent

FOR FREE SAMPLES WRITE TO MESSRS SCHWEPPES LTD, 1 CONNAUGHT PLACE, LONDON, W 2

NUTRITION AND PUBLIC HEALTH

"The importance of the new knowledge of nutrition as a factor in public health" is emphasised in the Annual Report of the Ministry of Health (1937 8) So also is *"the importance of discrimination in the selection of those [foods] which are more valuable for their growth-promoting and protective qualities"*

MARMITE

is known to be exceptionally valuable for its growth-promoting and protective qualities.

Marmite is an autolysed extract of fresh brewers' yeast It is rich in vitamin B_1 and the B_2 complex and provides principles of special efficacy in the treatment of certain forms of anæmia

Marmite is prescribed extensively in private practice and in hospitals, schools, and welfare centres

Sample and literature on request

THE MARMITE FOOD EXTRACT CO LTD

Walsingham House - Seething Lane - London, E C 3

In jars 1 oz 6d 2 oz 10d 4 oz 1s 6d 8 oz 2s 6d 16 oz 4s 6d

Special quotations for Marmite packed for use in hospitals and welfare centres

389

IMMUNISE NOW AGAINST COLDS AND INFLUENZA

Detoxicated Vaccines - - *for Safety*
Ordinary Vaccines - - *for Economy*
Oral Vaccines - - - - *for Convenience*
Spray Vaccines - - *for Local Immunity in the Respiratory Tract*

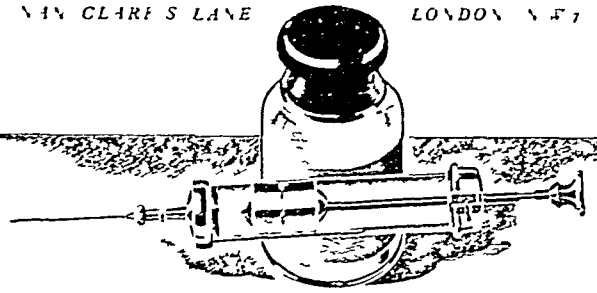
THE ABOVE VACCINES WHICH ARE PREPARED IN

THE PICKETT-THOMSON RESEARCH LABORATORY

IPE NOW SUPPLIED ONLY BY

RESEARCH PRODUCTS LTD.

SAN CLARE'S LANE LONDON N.7



DAI

CHLOROFORM

(DUNCAN)

PURE

PREPARED from ETHYL ALCOHOL

METHYLATED

PREPARED from INDUSTRIAL ALCOHOL

BLUE LABEL

(DUNCAN)

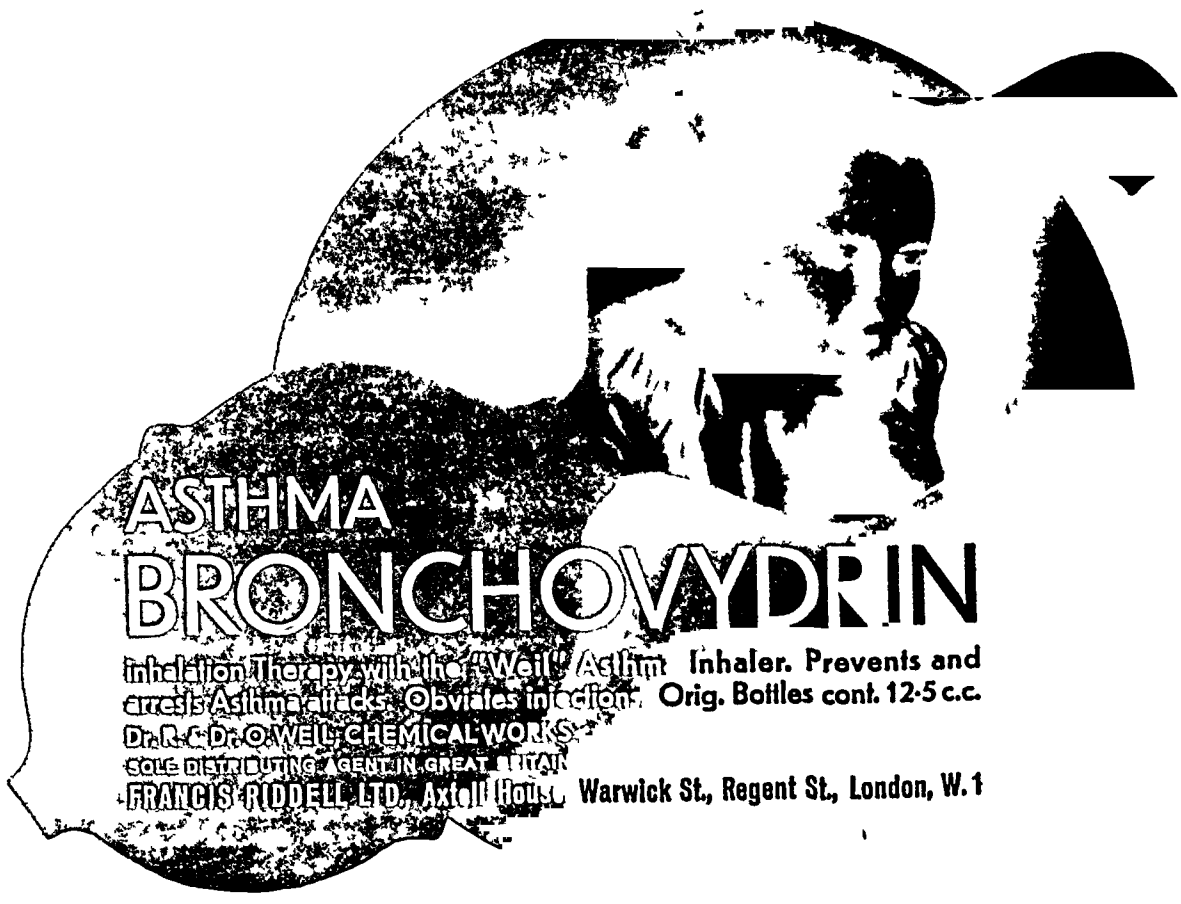
These three varieties are guaranteed to be absolutely pure according to the specifications of the British Pharmacopoeia They are the result of many years experience in the manufacture of anaesthetics and are recognized as the most reliable and perfect products offered to the medical profession

LITERATURE AND PRICES ON APPLICATION

DUNCAN, FLOCKHART & CO.

EDINBURGH and LONDON

104/8 Holyrood Road 8 155 7 Farringdon Road E C 1



HOW IMPORTANT
ARE MINERALS IN THE DIET?

?

They are absolutely essential for the maintenance of an adequate state of nutrition However, not infrequently an apparently minor mineral deficiency may weaken the body's defensive mechanism to such a point that

Pregnancy, Infection, or
any other unusual tax

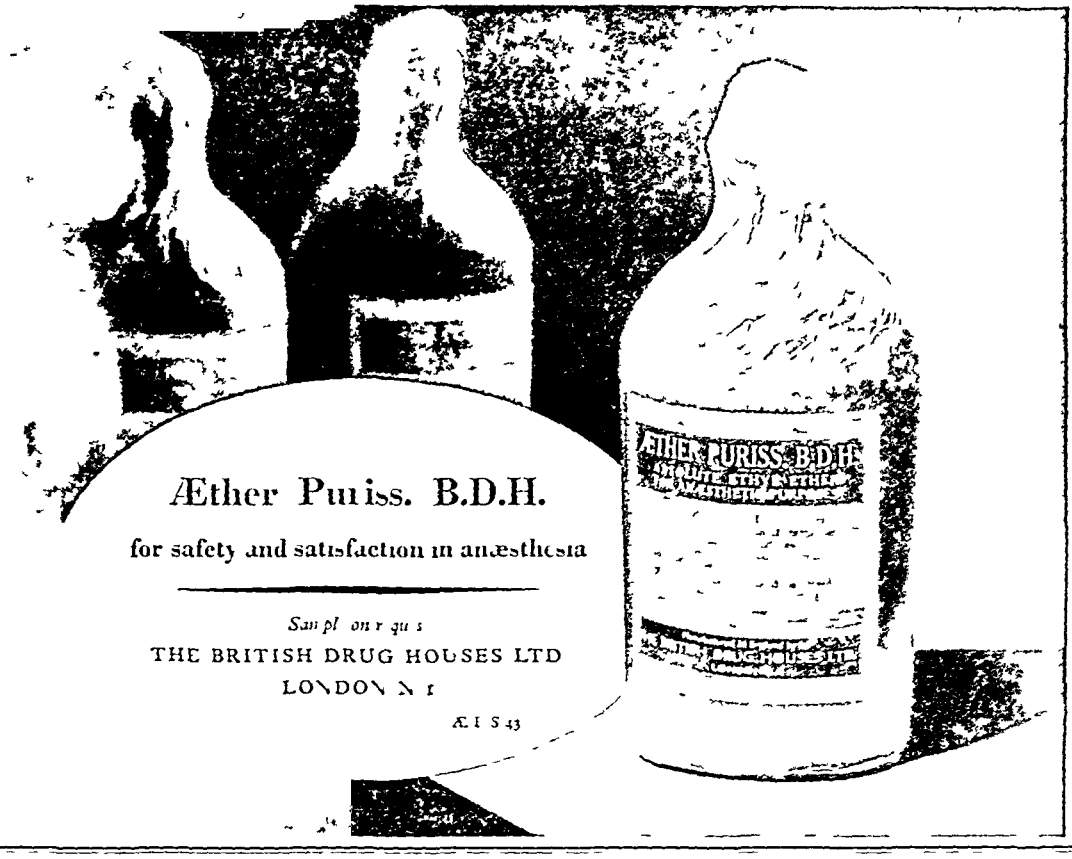
may lead to a prolonged period of convalescence.

!

COMPOUND SYRUP OF HYPOPHOSPHITES
TRADE **"FELLOWS"** MARK
CONTAINS THE DEFICIENT MINERALS!

Samples on request

FELLOWS MEDICAL MFG. CO., Ltd.
286 St Paul Street West Montreal, Canada



Æther Puriss. B.D.H.

for safety and satisfaction in anæsthesia

Samples on request

THE BRITISH DRUG HOUSES LTD

LONDON N 1

ÆTS 43

THE most MODERN MANUFACTORY in CHESHIRE

COMPLETED IN MAY 1938

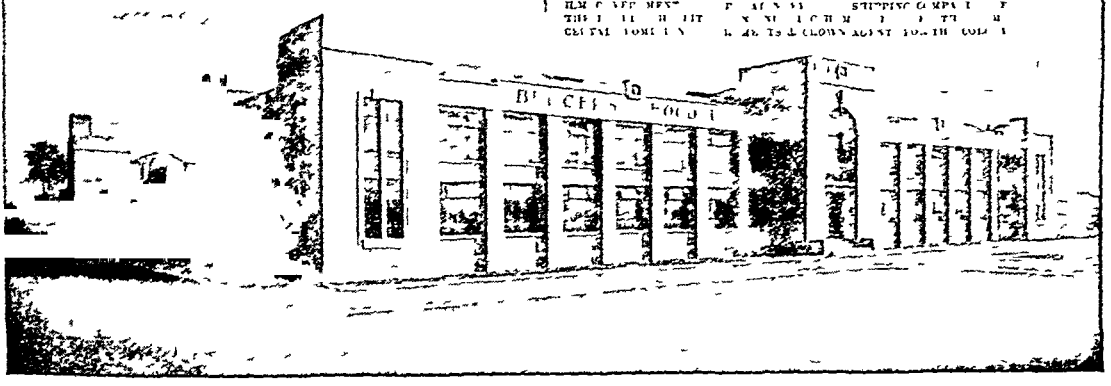
BENGER'S FOOD, LTD

HOLMES CHAPEL CHESHIRE

Sole Proprietors and Manufacturers of Benger's Food.
Manufacturers of scientific dietetic preparations for the use of the Medical Profession

LIQUOR PANCREATICUS	PEPTONISED CHICKEN JELLY
LIQUOR PEPTICUS	PANCREATIN PILLS
EXTRACT	PEPSIN PILLS
ESSENCE OF RENNET	PEPTONISING POWDERS
PEPTONISED BEEF JELLY	LIQUOR THYROIDIN

FARINACEOUS LENTIL FLOUR





Energen

Dietary Service

The Energen Dietary Service invites members of the medical profession to avail themselves of the information facilities provided and already being used by upwards of 28,000 doctors

Balanced schemes of diet, on the basis of modern authoritative medical opinion, supplied for all conditions of health where dietetic control is indicated

Dietaries for special or difficult cases, with calculated values of carbohydrate, protein, fat, and calorie content, drawn up by request

ENERGEN DIETARY SERVICE (B M J 1), WILLESDEN, LONDON, N W 10

TRADE **HEWSOL** MARK

A NON-POISONOUS, NON-CORROSIVE GERMICIDE HAVING A RIDEAL-WALKER CARBOLIC ACID CO-EFFICIENT OF 5 0, AND IS THEREFORE ABOUT TWICE AS EFFECTIVE AS LYSOL THIS PREPARATION HAS A FRAGRANT PINE ODOUR

Superior to LYSOL, IODINE, PHENOL, Etc

NON-STAINING . NON-IRRITATING ECONOMICAL IN USE

In Pint Bottles, ½ Gallon Winchester Quarts and 1 Gallon Tins

Free Samples to Members of the Medical Profession

C. J. HEWLETT & SON, LTD.,

Wholesale Druggists and Manufacturing Chemists

35-42, CHARLOTTE ROAD, LONDON, E.C.2.

TRADE MARK

'AMYTAL'

BRAND

Iso-amyl Ethyl Barbituric Acid

FOR SEDATION AND HYPNOSIS

The tranquil sleep of children is always the envy of less fortunate adults to whom at times this boon is denied because of sickness or other conditions which upset the psychic or emotional equilibrium

'Amytal' supplies the relaxation and sleep which are essential to recuperation of vital forces It may be prescribed wherever there is need to combat insomnia, restlessness, or apprehension A noteworthy margin of safety is characteristic of 'Amytal,' and since destruction of the hypnotic within the body appears to be accomplished rapidly there is little tendency to unwelcome side reactions or after depression

'Amytal' is supplied in ½ grain, ¾ grain, and 1½ grain tablets in bottles of 10 and 500

Lilly

TRADE MARK

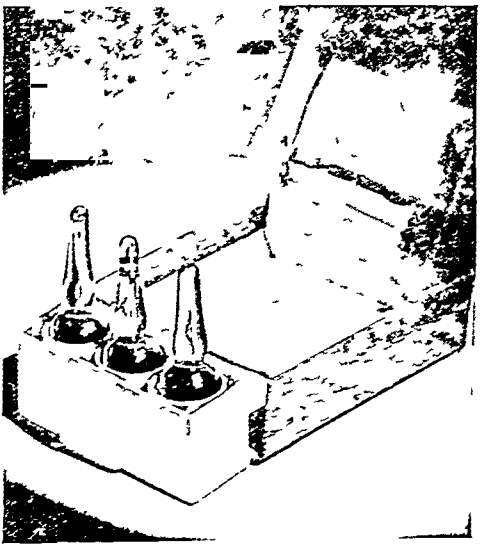
ELI LILLY AND COMPANY LIMITED

2, 3 & 4, Dean Street London, W 1

Distributing Agent in Britain for ELI LILLY AND COMPANY, INDIANAPOLIS, U S A

ANAHÆMIN B.D.H.

The dependability of Anahæmin B D H in the treatment of pernicious anæmia has been established in the routine of clinical practice during a period upwards of 2½ years In many cases an initial dose of 2 c c followed by 1 c c fortnightly constitutes effective treatment In those instances, however, in which it is impracticable to make periodic blood examinations, it is important that the patient should receive adequate medication, this can always be ensured by increasing the dosage of Anahæmin B D H or by more frequent injections, without fear of causing untoward effects



Sample on request

THE BRITISH DRUG HOUSES LTD
LONDON N 1

Telephone Clerkenwell 3000
Telegrams Tetradome Telex London

INSULIN . . . BOOTS

Insulin-Boots is manufactured under Licence No 19 (Therapeutic Substances Act, 1925) and tested in the Laboratories of Boots Pure Drug Co Ltd A sample of every batch, together with protocols of the tests carried out, is submitted to the British Medical Research Council, whose certificate must be obtained before the batch is issued

One Quality only—The highest obtainable Purity and Potency Guaranteed

CURRENT PRICES

Ordinary Strength		Double Strength	
5 c c vial (100 units) -	1/-	5 c c vial (200 units)	1 10½
10 c c vial (200 units) -	1/10½	10 c c vial (400 units)	3/8
25 c c vial (500 units) -	4 6		
Quadruple Strength 10 c c vial (800 units) - - -			7/1

Obtainable through all branches of

Boots

or from the Wholesale and Export Dept

BOOTS PURE DRUG CO. LIMITED
NOTTINGHAM - - - - ENGLAND



EFFICIENCY ESTABLISHED BY BIOLOGICAL TESTS AND CLINICAL USE

AN EXTRACT OF ADRENAL CORTEX FOR THE TREATMENT OF ADDISON'S DISEASE

AND OTHER CONDITIONS

LUCORTONE is an extract of adrenal cortex, containing the hormone cortin It is highly successful in Addison's disease Particularly striking is its rapid restoration of appetite, weight, strength, and feeling of well being

Successes have now been reported from the use of adrenal cortical extract in various other conditions, including neurasthenia, psoriasis, and hyperemesis gravidarum

IN ACUTE TOXÆMIA OF BURNS—*Lancet* 1936 June 20th, p 1400

Three cases of acute toxæmia from burns were treated with LUCORTONE and recovered In two of the cases, death within a short time could have been predicted almost certainly In the investigator's experience of these conditions, recovery under any methods of treatment previously used had not occurred The investigators attributed the recovery in these cases with every confidence to LUCORTONE

LUCORTONE is biologically standardized on adrenalectomized animals **It has now been further purified and concentrated** It is practically free from nitrogen and adrenaline, contains no irritant or toxic substance, and is sterile **One c cm of the extract is equivalent to 75 grams of adrenal cortex or about 110 grams of the whole gland** LUCORTONE is administered intramuscularly, intravenously (in crises), and subcutaneously (in chronic cases)

TRADE **EUCORTONE** MARK

(CORTIN, A & H)

In rubber capped bottles of 10 c cm, 25/- Particulars and literature on application

ALLEN & HANBURYS LTD, LONDON, E 2

Telephone Bishopsgate 3201 (12 lines) Telegrams Greenburys Estb London

ANTISEPSIS

The full development of Antisepsis demands an agent which while efficient, does not damage human tissues, nor inhibit the normal function of the natural defences against infection That Verpine is efficient has been proved during years of clinical trial When used at fully antiseptic strengths Verpine has negligible effect on human tissues while one of its active principles encourages natural resistance to infection by promoting leucocytosis and is a protoplasmic stimulant Verpine, moreover is agreeable to use, and possesses a pleasant, refreshing odour

VERPINE Regd ANTISEPTIC AND GERMICIDE NON POISONOUS

Sample and literature gladly sent upon request

C G Fox and Company Ltd - 61 St Mary Axe London E C 3

VITAMIN E CAPSULES B.D.H.

for the treatment of Habitual Abortion, Defective Lactation and Sterility, also of Impotence in the Male

A concentrate of Vitamin E is issued in soft gelatin capsules for oral administration

Each batch of the concentrate is tested biologically before issue, and one capsule is equivalent in activity to 5 grammes of wheat-germ oil of full potency

Further information in reference to this product will be gladly supplied on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

VitE/S/359

For use in the treatment of the
Chest *and* **Lungs**
and surgical uses generally . . .

"Gamgee Tissue"
REGD TRADE MARK

Made exactly according to the direction of its inventor, the late Sampson Gamgee, F.R.S.E., Consulting Surgeon to the Queen's Hospital, Birmingham. Composed of high grade cotton wool enclosed in absorbent gauze.

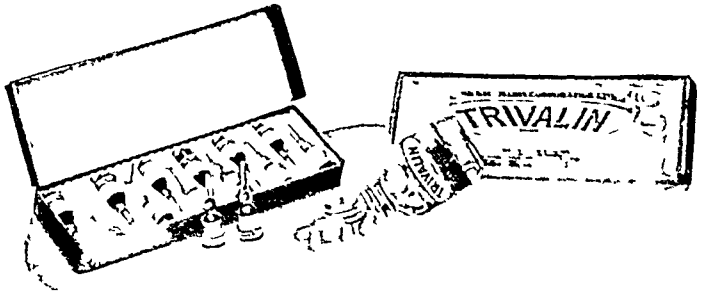
Obtainable in three qualities from all chemists

SOLE PROPRIETORS & MANUFACTURERS ROBINSON & SONS LTD OF CHESTERFIELD & 168 OLD ST., LONDON, E.C.1

TRIVALIN

THE FINEST ANODYNE

(Supplied solely to the Medical Profession)



In Ampoules for injection, Capsules and Tablets

Extracts from Clinical Reports

Cancer. "I have used Trivalin with most satisfactory results in Carcinoma of the Mamma. No preparation I have tried including Morphia (which produced vomiting), gave so much relief.

I consider the addition of Hyoscine valuable in Morphia suppression, and have found the combination valuable in hysterical frenzies and other forms of mental excitement.

I shall continue to use it when Morphia is indicated, and particularly when Morphia-action is indicated but Morphia itself contra-indicated.

LITERATURE AND PRICE LIST ON REQUEST

THE SACCHARIN CORPORATION LTD.

(Pharmaceutical Department)

72, OXFORD STREET, LONDON, W.1

Telephone Museum 8096 Telegrams Saccrino Rath London

Australian Agents J. L. BROWN & Co. 271 Moreland Road Moreland N.13 Melbourne

SAFE AND CERTAIN BIOLOGICAL THERAPY

★ ANTIPEOL OINTMENT

The rapidity and efficacy of the treatment of skin troubles with ANTIPEOL OINTMENT is primarily due to its polyvalent antivirus content. Since various strains of streptococci staphylococci and B pyocyaneus are the root cause of nearly all the common infections of the skin (acne eczema boils carbuncles shingles etc.) the destruction of those germs and the prevention of their further development is the first essential to healing Antipeol destroys those germs biologically without harming the tissues and healing begins immediately A test on an infected wound burn bedsore or persistent ulcer will quickly prove the value of ANTIPEOL OINTMENT and justify its use in any and every skin trouble

The LIQUID FILTRATE is indicated for ear infections suppurating wounds septic cavities (dental and others) and inflammatory conditions Used as a gargle with a little glycerine and water ANTIPEOL LIQUID is both prophylactic and therapeutic for infective conditions of the throat.

★ GONO-ANTIPEOL

The antivirus treatment of Gonorrhoea and Genito-urinary infections is effective because it introduces and reproduces in the human body the antibodies of the gonococci and reaches the remote sites of infection GONO ANTIPEOL contains the sterile vaccine filtrates of numerous strains of gonococci as well as the streptococci staphylococci and B pyocyaneus common to gynaecological infections It is thus a preventive of the development of germs and aborts the disease when already contracted Non toxic, non irritating yet potently microbicide GONO ANTIPEOL is a perfectly safe simple and effective therapy

★ OPHTHALMO-ANTIPEOL

In addition to the antivirus of various strains of streptococci staphylococci and B pyocyaneus OPHTHALMO ANTIPEOL contains the autolysins of pneumococci Fraenkel and gonococci since these micro-organisms are so frequently associated with eye troubles The semifluid nature of OPHTHALMO ANTIPEOL facilitates its dispersal over the affected area, and its soothing properties and efficacy are demonstrable from the first application It is perfectly innocuous and may be used on babies

★ RHINO-ANTIPEOL

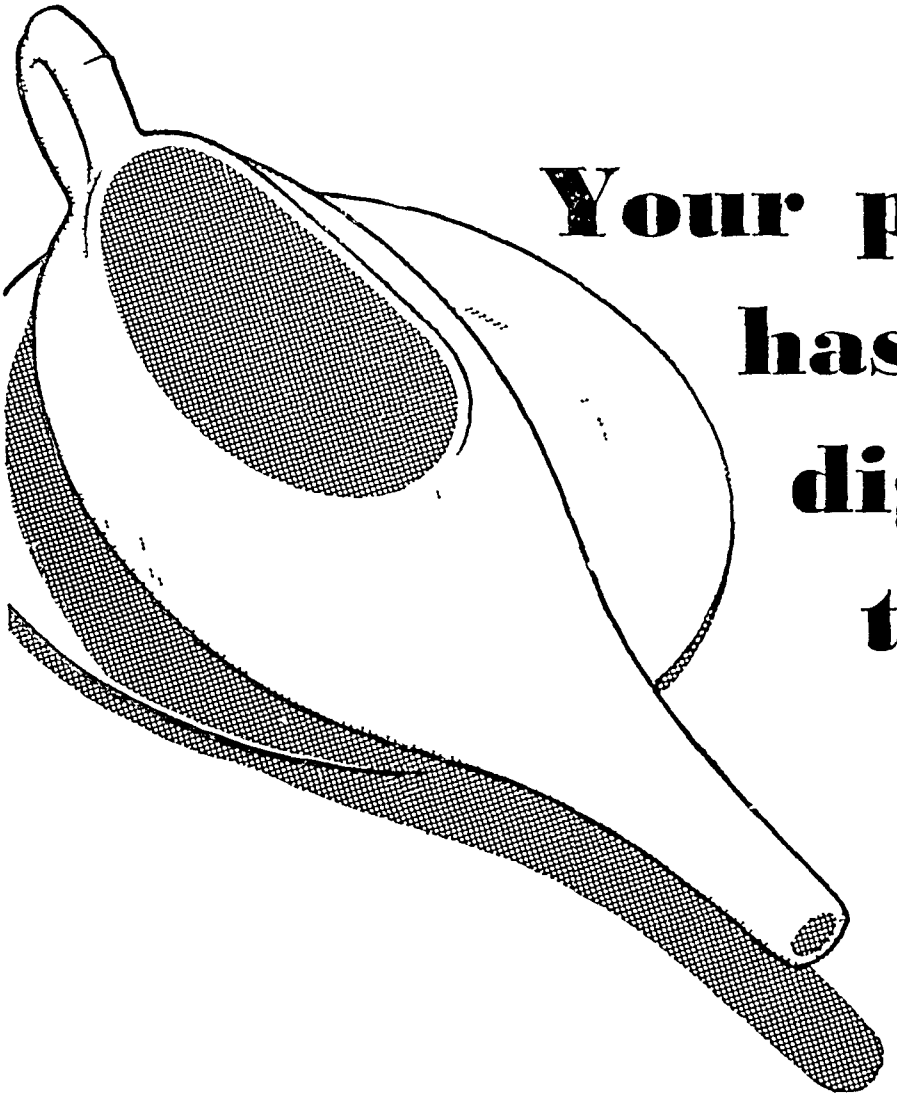
The biological disinfection of the rhino-pharynx ensures antisepsis without the irritation associated with so many chemical disinfectants RHINO ANTIPEOL contains the antivirus and autolysins of the principal germs of naso-pharyngeal infections—staphylococci streptococci B pyocyaneus pneumococci pneumobacilli enterococci M catarrhalis and B Pfeiffer—as well as calmative de congestive ingredients ensuring a rapid clearing of the nasal passages During epidemics of colds influenza and diphtheria, RHINO ANTIPEOL is the ideal prophylactic, and rapid relief follows its application in cases of Nasal Catarrh Hay Fever Coryza and other infections of the naso-pharynx.

★ ENTEROFAGOS (ORAL)

Nature's normal way of combating microbic infection is the production of antibodies (bacteriophages) capable of destroying the germs ENTEROFAGOS is a combination of over a hundred strains of bacteriophages of the micro-organisms common to gastro-intestinal infections and when administered by mouth immediately gets to the site of infection and acts as a perfectly natural therapy The intestinal troubles of early babyhood invariably respond to ENTEROFAGOS as do seasonal diarrhoeas and the more serious dysenteric conditions of Typhoid and Paratyphoid fevers and Bacillary Dysentery Certain major maladies trace their origin to intestinal infections and the practical field of application of bacteriophage has by no means yet found its limit ENTEROFAGOS is equally effective in the veterinary field as greyhound and prize cat owners have found to their joy and the dreaded white scour in calves has no terrors when treated with ENTEROFAGOS A non irritant, innocuous medication administered by mouth ENTEROFAGOS disinfects and immunises the digestive tract, and is more rapidly effective than vaccines without the inherent disadvantages of the latter A clinical test will prove these facts

SAMPLES FROM

MEDICO-BIOLOGICAL LABORATORIES, LTD, CARGREEN ROAD, SOUTH NORWOOD, LONDON, S E 25



Your patient has acute digestive trouble

You prescribe a strict diet The patient must take nothing that can in any way aggravate his complaint Milk and "slops" alone leave him depressed and weak

When the digestion must be kept at rest, the unique stimulating properties of Brand's Essence are never contra-indicated Brand's contains no meat fibre or any other irritant matter—precipitates no solids in stomach or intestines and is easily and quickly assimilated

A copious flow of gastric juice is stimulated, but the acid is competently controlled at all times through adsorption by proteins The Essence can safely be administered even in cases of gastric ulcer Strength is maintained chiefly through Brand's protein-sparing action

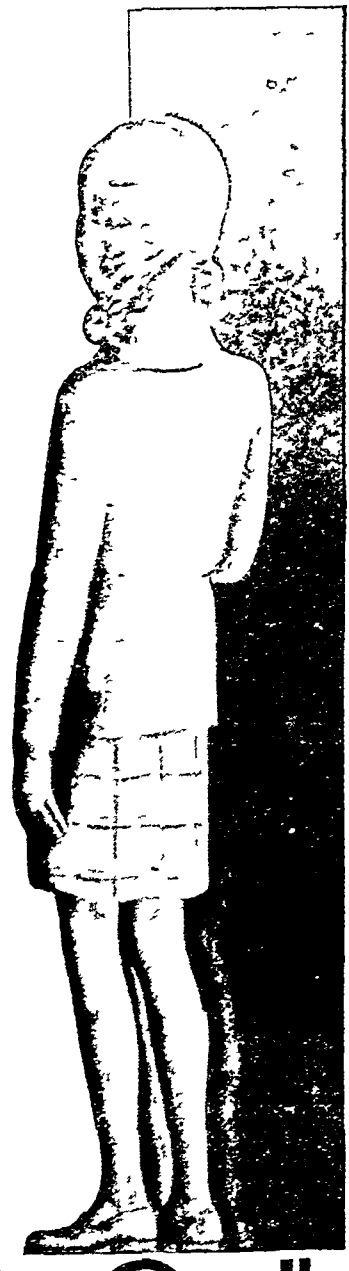
BRAND'S CHICKEN OR BEEF ESSENCE

is never contra-indicated

BRAND & CO., LTD., SOUTH LAMBETH ROAD, LONDON, S.W.8

The

CONSTIPATED CHILD



Agarol simplifies the treatment of constipation by making it pleasant, children not only take Agarol with the greatest of ease but actually enjoy it

This palatable emulsion of mineral oil and agar-agar with phenolphthalein is the ideal treatment for constipation in children It is gentle in action and furnishes the natural stimulus to a comfortable and normal peristalsis Its capacity for lubricating the bowel, softening the faecal mass and easing its passage to the rectum and final expulsion, is unsurpassed

Further advantages of Agarol are that it is not habit-forming and, by mixing freely with the intestinal contents, it makes the occurrence of seepage extremely improbable

AGAROL

BRAND COMPOUND

Agarol is not advertised to the public Supplied in 4½ oz, 7½ oz and 17 oz bottles

Trial supplies to members of the Medical Profession on request

WILLIAM R WARNER & CO LTD, POWER ROAD, CHISWICK, LONDON, W 4.

"ALOCOL"

Colloidal Hydroxide of Aluminium

Rational Antacid Therapy

APART from those cases due to actual organic disease, the treatment of the syndrome of symptoms known as indigestion generally resolves itself into an attempt to overcome hypersecretion of acid and to soothe the irritated or inflamed gastric mucosa

That Alocol possesses intrinsic qualities which render it particularly valuable as a gastric sedative and antacid is now well established Its freedom from the constipating effect of bismuth the laxative action of magnesium salts and the gas forming properties of sodium bicarbonate are especially noteworthy

Alocol forms with the gastric contents a colloidal jelly which has the power of adsorbing free hydrochloric acid Its markedly soothing effect on the gastric mucosa promptly relieves pain and discomfort It does not interfere with the normal process of digestion and is free from the danger of alkalosis



Indian Saraswati playing the Vina (12th Century)

Complete chemical history of Alocol with convincing clinical reports and supply for trial sent free to physicians on request

A WANDER, Ltd, Manufacturing Chemists,
181 Queens Gate, London, S W 7

Works KINGS LANGLEY HERTFORDSHIRE

M.56

ALASIL

Safe Salicylate Therapy

THE popularity of acetyl salicylic acid is undoubtedly due to the fact that it is one of the safest and most effective non narcotic analgesics available Too often however its use has been discarded by the physician on account of its tendency to irritate the stomach and because entirely pure preparations are not always available

Alasil provides the beneficial therapeutic effects of pure acetyl-salicylic acid in such a form that it is acceptable even by disordered digestions This tolerability is due to the fact that it combines calcium acetyl salicylate—the least irritating salicylate compound—with Alocol a potent gastric sedative and antacid

Since Alasil is better tolerated than acetyl salicylic acid its use can be pushed or prolonged to a much greater extent than the latter Alasil is therefore an analgesic antipyretic and anti rheumatic which can be employed with complete confidence in all the many conditions in which such an agent is indicated

A supply for clinical trial with full descriptive literature sent free on request

A WANDER, Ltd, Manufacturing Chemists,
184 Queens Gate London S W 7
Laboratories and Works KINGS LANGLEY HERTS

M 67

Intestinal Toxæmia with Hypertension
Gastric Fermentation and Distension



'CHARKAOLIN adsorbs toxins and gases in the stomach and intestines An index of its adsorptive activity is its complete deodorisation of the intestinal contents

'CHARKAOLIN has given remarkable results in some cases of hypertension with intestinal auto intoxication

"CHARKAOLIN is the original preparation of activated charcoal with 'Osmo Kaolin

CHARKAOLIN GRANULES In bottles at 2/6
CHARKAOLIN TABLETS In bottles at 1/6 and 2/6
Prices in Great Britain and Northern Ireland

Descriptive literature and clinical sample on request

'CHARKAOLIN'

Allen & Hanburys Ltd., London, E.2

'Euvalerol' Elixirs
for the treatment of Nervous Disorders

The "Euvalerol' Elixirs are prepared from fresh valerian root by a special process which, while ensuring the retention of the active principles contained in the volatile oil of valerian, eliminates the objectionable odour that ordinary valerian products have

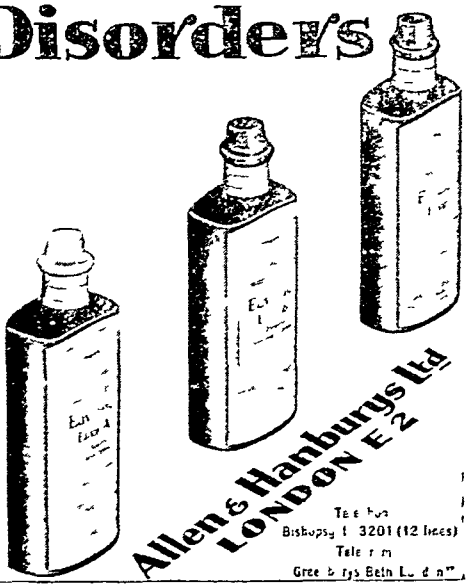
Euvalerol Elixir A
contains the odourless preparation of valerian in Aromatic Elixir Each fluid ounce is equivalent to approximately one fluid drachm of Tinct. Valer Ammon B.P

'Euvalerol" Elixir B
is Euvalerol Elixir A with the addition of phenyl barbitone gr ½ to each fluid drachm and with a light tint, for ease of identification.

'Euvalerol Elixir C
is "Euvalerol Elixir A with ammonium bromide gr 30 strontium bromide gr 15 and a small amount of sal volatile in each fluid ounce It has a darker tint than the two other Euvalerol Elixirs

For Prescribing 4 oz and 8 oz. bottles
For Dispensing 40 oz. and 80 oz. bottles.

Descriptive Literature will be sent on application



Allen & Hanburys Ltd
LONDON E 2

Telephone
Bishopsgate 3201 (12 lines)
Telegrams
Greenbarrys Beth London

INDICATIONS FOR 'SANATOGEN' No 11

DIARRHŒA OF CHILDHOOD

"Disturbing Death Rate"

A recent investigation of infectious disorders in the children's wards of British hospitals has shown how common and how serious infantile gastro-enteritis still is It retains high place in the official table of causes of death Two well-known New York epidemiologists a few months ago stated that in that City during the past ten years an actual rise had occurred in the death-rate from diarrhœa among the very young, in spite of the fall in the death-rate at later ages

Prompt and appropriate treatment is essential if the characteristic dehydration, collapse and disturbance of the acid-base balance are to be checked in time A distinguished children's physician advises in nearly all cases a preliminary twenty-four hours' starvation, only water, with or without orange juice, being given during that period Then comes the problem of affording, in gradually increased amounts, suitable nourishment Milk is rarely desirable, and fat should for a time be avoided, so, also, should sugar in other than the smallest quantities Whatever food is given should be readily digestible and absorbable, and should have small residue In numerous cases, 'SANATOGEN' has been found of the highest value at this stage

'SANATOGEN' is a carbohydrate and fat-free product of ninety-five per cent pure milk casein with five per cent sodium glycerophosphate It is readily digested and absorbed, leaving no appreciable residue, and it is non-irritating to the intestinal mucous membrane.

I prescribe Sanatogen in Gastro intestinal and debilitated conditions with beneficial results Lately I have prescribed it to Nursing Mothers It appears to improve the quantity and quality of the milk in cases where the baby is not thriving —M R C S, M B, D P H

'I started using Sanatogen in a case of chronic gastro intestinal catarrh The patient has done remarkably well Convenience in administration and palatability combined with high nutritive value, make Sanatogen the ideal food — M R C S L R C P

I have used 'Sanatogen for some years now and do not think there is any preparation to equal it for cases of nervous exhaustion convalescence after debilitating diseases, and after recovery from acute diseases of the gastro intestinal tract It appears to be most readily assimilated and its stimulating and strengthening effect is almost immediately appreciated by the patient — M D, D P H

'SANATOGEN'

(Trade Mark)

A brand of Casein and Sodium Glycerophosphate

Sold by all chemists price 2/3 to 19/9

DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants ½ teaspoonful added to each bottle feed

The word Genatosan of Casein — Mark of brand

A [illegible] GENATOSAN Ltd Loughborough Leicestershire.

Clinical samples and literature available on request to

GENATOSAN LTD., LOUGHBOROUGH, LEICESTERSHIRE

TAXOL

Formula

Intestinal glands - 0·05 grms
Biliary extract - - 0·10 „
Lactic ferments - - 0·05 „
Agar agar - - - 0·05 „
Fia tablet - - - 0·3 „

Initial Daily Dose
Two Tablets

Laxatives, it is well known nowadays must have two essential characteristics

1 The must be biological i e they must accord with and imitate in their action the natural physiological processes of the intestine

2 The must be capable of educating the intestine, so that the habit of a laxative is no formed and the intestine can function unaided when bowel adjustment is attained

Taxol has both these advantages

Taxol has not the violent irritant action of many laxatives and purgatives but stimulates the intestine by processes which resemble those of nature The intestinal gland which is an important part of its composition acts on the intestine by reinforcing the deficient function which has culminated in constipation This stimulating action is gentle and does not force the weakened intestine to efforts beyond its power which would culminate in aggravation of the constipation

Taxol is not habit forming It re educates the intestine to resumption of normal function unaided, thanks to the biological nature of its action It contains no irritant drug of violent and artificial action to which the intestine can become accustomed On the *contrary, many stubborn cases of constipation,* after a course of TAXOL, revert to normal and regular peristalsis

CONTINENTAL LABORATORIES LTD

CL

30 MARSHAM STREET, [illegible]



Practical Effervescent Products

'TABLOID' Effervescent Products present popularly prescribed medicaments in an acceptable and practical form

The precise intended dose is taken without resource to the arbitrary method of spoon measurement Medicinal properties are released upon solution in water

℞

Sodii Bicarbonatis	*gr* 5 (0 324 *gm*)
Calcii Lactophosphatis	*gr* 3 (0 194 *gm*)
Potassii Bicarbonatis	*gr* 1 (0 065 *gm*)
Magnesii Sulphatis Exsiccati	*gr* 1 (0 065 *gm*)
Sodii Chloridi	*gr* 1 (0 065 *gm*)
Salis Effervescentis	*q s*

TRADE MARK **'TABLOID'** BRAND

ALKALINE COMPOUND EFFERVESCENT

Produces a pleasant effervescent draught Re-establishes the alkaline reserve following fatigue or relieves acidosis in acute infections

Tubes of 25 products, at 1/10 per tube

TRADE MARK **'TABLOID'** BRAND

THREE BROMIDES EFFERVESCENT

Presents the bromides as a palatable, sparkling draught Sedative in nervous conditions Invaluable before dental operations Effective in counteracting sea-sickness

℞

Potassii Bromidi	0 4 *gramme* (*gr* 6½ *appr* x)
Sodii Bromidi	0 4 *gramme* (*gr* 6½ *appr* x)
Ammonii Bromidi	0 2 *gramme* (*gr* 3 *appr* x)
Salis Effervescentis	*q s*

Tubes of 25 products, at 2/1 per tube

London Prices to the Medical Profession

For full list of products with prices, see WELLCOME'S MEDICAL DIARY

BURROUGHS WELLCOME & CO, LONDON

Address for communications SNOW HILL BUILDINGS EC1

Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W 1

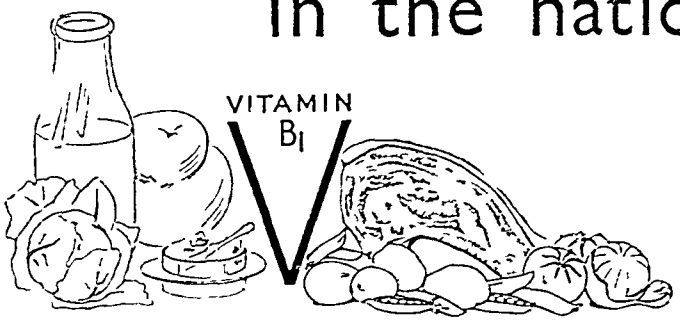
Associated Houses

NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

H 3627

COPYRIGHT

Strengthening the weak spot in the national diet



An apparently adequate diet may fail fully to sustain health or vitality

Loss of Vitamin B_1 during preparation of the food is a frequent cause

The gap may be filled with 'Ryzamin-B' which presents Vitamin B_1 in small bulk

It stimulates appetite Promotes growth and alertness in children who lack weight and vigour

Invaluable to nursing mothers and artificially fed babies

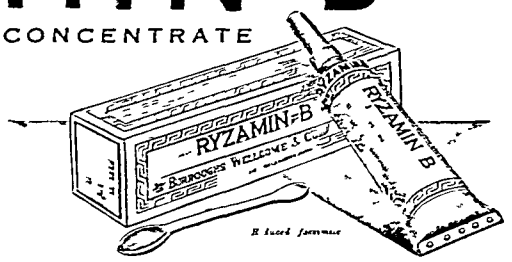
Descriptive literature to Medical Men, on request

TRADE MARK **'RYZAMIN-B'** BRAND

RICE POLISHINGS CONCENTRATE

Collapsible tube —
15 *grammes* (½ oz. *approx.*) 1/10 *per tube*
100 *grammes* (3½ oz. *approx.*) 10/ *per tube*

Lo dot Price to the Medical Profession



BURROUGHS WELLCOME & CO, LONDON

Address for communications SNOW HILL BUILDINGS E C 1

Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W 1

Associated Houses
NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

H 3635

COPYRIGHT

OSTERMILK

NUMBER 1 & NUMBER 2

Declaration of the measured vitamin D and iron content of Ostermilk, the successful dried-milk infant food, enables the medical practitioner to plan bottle feeding with as much regard for vitamin D and iron as for protein, fat, and sugar

Adaptation to the varying circumstances of age, weight and other individual characteristics is effected by the availability of Ostermilk in two forms.

OSTERMILK No 1
The formula of Ostermilk No 1 approximates to that of human breast milk Both the fat and protein content are diminished to suit the digestive capacity of the infant during the first months of life Suitable for premature and weakly babies
VITAMIN D 200 International units incorporated per pint of reconstituted milk
IRON 5 parts per million reconstituted

OSTERMILK No 2
is a full-cream full protein dried milk introduced usually at the third or fourth month (when the infant digestion is more strongly established) and is used thereafter for the remaining months of bottle-feeding
VITAMIN D 165 international units incorporated per pint of reconstituted milk
IRON 5 parts per million reconstituted

The variable vitamin D and the deficient iron content of cow's milk and its ordinary dried food derivatives is corrected during the manufacture of Ostermilk by the incorporation of these protective elements in dependable and appreciable amounts

Ostermilk, therefore, constitutes an estimable and calculable source of those nutritional factors which safeguard the infant against the risks of rickets and anæmia

Constancy of composition and the greatest possible bacterial purity are accepted features of Ostermilk Also, it is sold in sealed tins, a further protection against contamination

Not a new product, Ostermilk, composed according to tried and proven formulæ, has been a successful food in infant feeding for nine years, and is manufactured by a firm with special experience in the production of infant foods Ostermilk maintains the high standard of all G L products at a price which makes it available, through chemists, to every class of patient

PRODUCT OF THE GLAXO LABORATORIES

GREENFORD, MIDDLESEX TELEPHONE BYRon 3434

GL 194

BRITISH MEDICAL JOURNAL

LONDON SATURDAY SEPTEMBER 3 1938

EDUCATIONAL NUMBER, SESSION 1938-9

THE MEDICAL CURRICULUM AND PRESENT-DAY NEEDS

BY

SIR WALTER LANGDON BROWN, M D, D Sc, F R C P

Emeritus Professor of Physic in the University of Cambridge
Consulting Physician to St Bartholomew's Hospital

A recently qualified man once wrote to the late Sir Norman Moore asking his advice as to what he should read He received a list containing most of the English classics That was Sir Norman's characteristic way of urging that a medical man should possess a general education and not merely a technical training With the ever increasing demands on the student's time this desideratum becomes more and more difficult to attain Yet if a medical man is to fulfil his role adequately his interests must be wide and his general education sound The General Medical Council has taken a step in the right direction by trying to raise the standard of the entrance examinations to the profession As nearly every medical school is embarrassed by a surplus of students and as these students find it increasingly difficult to earn a living after qualification it is eminently reasonable not to open the door of entry too wide Recently I strongly contested the statement in the public press by a teacher of the preliminary subjects that it was generally recognized that the students of to day were mentally and morally inferior to their predecessors of thirty years ago Mr Hentschel who also teaches these subjects while agreeing with me on the general question pointed out that during the years of business depression a considerable number of quite unsuitable youths entered only to be rejected at the early examinations whereby we clinical teachers were spared much trouble There always seems to be an inverse ratio between business prosperity and the number of entrants into the professions All this strengthens the case for stiffening the entrance examination It is much kinder to both the prospective student and his parents that he should be checked at the outset from attempting a career for which he is not adequately fitted disappointment and loss of time and money would thus be avoided

A Recent Development

An interesting development of the last fifteen years or so has been the way in which the universities and hospitals have thrown the responsibility for teaching the preliminary subjects—chemistry physics and biology—on to the schools Thus an increasing number of students enter Cambridge having already passed the First M B and I gather this is the experience elsewhere The standard of teaching in chemistry at school has generally been very satisfactory and that in physics soon followed suit but for several years that in biology lagged behind At Cambridge we found that the percentage of rejections in biology was far higher for the school candidates than for those trained at the University Of late however that difference has been steadily diminishing—evidence of the improved teaching of biology in the schools Now the average boy will pass an examination permitting him to enter on his medical education at 16 and he will probably attempt to pass in these preliminary subjects a year later I am convinced that this is a mistake I am one of those who have strongly maintained that the study of anatomy and physiology should not start before the age of 18 If two years are taken over the preliminary subjects they will not be rushed in the way they too often are and there would be time for general education to be continued It is a mistake to restrict education to professional subjects so early in life as 16

Training in the Basal Sciences

The natural and proper enthusiasm of the teachers of these preliminary subjects is I think sometimes apt to lead them to forget that they are training students for medicine and not as embryo chemists physicists or biologists Since these basal sciences are the foundation on which medicine rests some knowledge of them is of course imperative But it is the principles rather than a mass of facts that are needed To this the teachers reply that principles are the last thing which the elementary student can grasp and that he must study for instance a considerable number of types in biology before he can appreciate generalizations I am impressed with the validity of that argument but am not satisfied that principles are more insisted upon now that a larger number of types are studied than formerly I believe the same thing applies to chemistry and physics which prove an excellent mental training and a practice in exact observation but I should like to feel sure that here too the principles were put in the forefront It is all to the good in my opinion that the amount of mechanics in the First M B at Cambridge has been drastically reduced The time occupied in the study of anything more than the most elementary principles of mechanics such as the parallelogram of forces and the properties of levers can then be devoted to electricity which provides just as much mental training Also it is more important that a medical student should know something of gamma rays rather than problems concerning elephants sliding down inclined planes

Mr H S Souttar wrote recently The medical curriculum has reached the limit of human endurance and it is only the genius of the medical student for clearing his brain completely after every examination that enables him to preserve his sanity It is a matter to which I have devoted some attention for I have sat on three committees each and severally designed to improve and lighten the curriculum The results were not impressive Everyone agreed that the curriculum ought to be lightened but each thought that the other man's subject could be cut down while more attention should be given to his own In this matter I ran true to type and stressed the importance of clinical medicine and a more psychological consideration of ill health There was in

fact a general consensus of opinion in favour of adding some psychology to the curriculum, but I do not see that it has been materially lightened thereby

How Much Anatomy?

But this is to anticipate We must return to the student, his preliminary studies cleared off, standing at the portal of his medical school rather ruefully regarding the superscription over it, "Art is long, but life is fleeting —a truth which must haunt him to the end of his days He is now about to start the study of anatomy and physiology When we wished to lighten the curriculum we found the anatomists steadfast, unmovable, always abounding in the faith that dissection of the whole body is necessary unto salvation Many non-anatomists do not think so "Son of man, can these dry bones live? How often I repeated those words as I dolefully studied them with Holden's *Osteology* by my elbow Technique, exact observation, and memory training—true, all these are developed thereby, but when men tell me that after demonstrating anatomy for ten years or so they rapidly forget the finer details and only remember what is of practical importance to their surgery, then I ask, How much anatomical detail can you expect the average student to remember? I fully realize that the teaching of anatomy is a very different thing to day In my time we were taught almost as much error as truth so far as the viscera were concerned To-day the student sees on the screen the stomach as it is in life and activity, he learns its variability within the limits of normal, and we too have had to learn the wide variations in the position of the colon compatible with health and normal function He sees the skeleton living and moving on the fluorescent screen But is it fair to expect the student to carry the whole weight of the old anatomy in addition to the new?

Physiology has become almost as abstract as physics, and a survey of examination results suggests that in some schools the teaching of it has departed from the lines suitable for the training of those designed to become doctors and not whole-time physiologists If this is so, it is to be regretted, for there is no sounder foundation for medicine than physiology

Materia medica has been cut down almost to the vanishing-point in most curricula, and rightly so Now that the old type of apothecary has disappeared, doctors do not handle the raw material from which medicines are made, and the time formerly occupied in learning about them can be more profitably employed As to the teaching of pharmacology, this has largely come under the aegis of the physiologist, who has in turn handed over histology to the anatomist I am strongly in favour of the examination in this subject being conducted by pharmacologists and clinicians working in pairs In this way its practical therapeutic aspect is kept to the fore

Bridging the Gulf between Pre-clinical and Clinical Studies

The committees to which I have referred were deeply concerned to try to bridge the gulf between pre-clinical and clinical studies Only in this way can the student be convinced that anatomy and physiology will really be useful to him in after-life and are not merely subjects for examination which can be conveniently forgotten as soon as may be after the examination has been passed The method of illustrating anatomy and physiology by demonstrating patients in the pre clinical period and by classes in applied anatomy and physiology during the clinical years is a step in the right direction A case of hemiplegia or of tabes can be made to illustrate vividly the tracts in the cord to a Second M B candidate, while at the bedside every effort should be made to induce the student to build up his interpretation from physiological principles, thereby encouraging him to develop his own powers of judgment I have been struck by the unwillingness even of students who have done brilliantly in physiology to attempt this I have repeatedly had to remind them that there is a lot of common sense deduction in medicine—it is not an esoteric mystery We must do our best to encourage the formation of a balanced judgment ready to accept new truth after critical investigation and able to detect specious fallacies

Systematic lectures in medicine and surgery could be reduced, if not entirely abandoned, in favour of further clinical lectures and demonstrations, which are more stimulating at the time and make the subsequent reading of textbooks more interesting Formal lectures are a survival of the time when textbooks were few and inadequate Surgery is outside my province, but I feel that too much time is spent by students trying to get an unsatisfactory view of operations which they will never be called upon to perform

Observation in the Wards

It is often alleged that the student of to day relies too much on what he is told, rather than on what he can observe for himself For this no doubt the examination system is somewhat to blame Nothing can take the place of living in the wards as much as possible and observing closely the progress of actual cases

It is a special advantage of our English plan of clinical clerkships that the student is taught to regard a certain number of the ward inmates as *his* patients—he is *their* doctor, the personal individual relation is encouraged from the very beginning, and it is the best introduction to general practice I used to make a point of urging upon all my students the prime importance of taking a full history I told them, what is the literal fact, that as I have gone on I have found myself taking more and more time over the history compared with the time occupied by the physical examination I would point out that the history tells them so much about the patient, his general outlook and temperament, and prepares them for the kind of examination specially called for I would go on to say something of this sort At the outset remember the enormous difference in the effect on the patient that can be produced by your attitude towards him Some patients are uncommunicative, others loquacious, but it is fairly certain that they are in a state of fear—whether obvious or concealed This may make them exaggerate or it may make them minimize their symptoms, because in the former case they are afraid that if they don't emphasize their sufferings you will overlook some thing, in the latter the fear that you will confirm their own fears if they let you know how much they are suffering But both alike are in a suggestible state and they are watching you closely, and are much readier to accept an unfavourable than a favourable suggestion, even though they react by a tendency to contradict you Keep a straight face when the patient tells you his interpretation of his symptoms, however preposterous it may be Another difficulty may be that the patient will persist in attaching a label invented by himself or obtained from his relatives or possibly from another doctor After explaining how to get down to the facts as accurately as possible, I would go on to show how the patient's statements, though demonstrably false, told them a lot about him—his fears and his reactions to them They

might even find that his disease *was* fear and they could proceed to investigate the origin of that fear

After the formal round I tried to have a private talk with the patient and also if possible with a relative. Such relevant particulars as I could glean I would tell the students on the next round but away from the patient's bed.

The Psychological Aspects of Disease

With regard to the more specific teaching of the psychological aspects of disease I may summarize the views of one of our conferences of which I was a member. It is highly important that the student should be made familiar with the psychological aspects of patients in hospital whether they are under treatment for organic disease or for functional nervous disorders or are admitted merely for the purpose of observation and investigation. With this object a series of demonstrations should be held at least once a fortnight throughout the student's period of in patient clerking and in patient dressing. It is recognized that in every ward there are many patients suitable for investigations and demonstrations of this kind but that a considerable amount of time is required in some instances for their preliminary study by a psychotherapist before they can be used for the purposes of teaching. In some medical schools such demonstrations are in force and have met with great success and we suggested that the physician or surgeon in charge of the ward may undertake them himself or may hand over that duty to a colleague who is attached to the hospital for the purpose of teaching medical psychology.

The medical officer in charge could hardly dissent if he was given the option of taking on this work himself if he had any desire to do so. If he had not he could scarcely object if someone else did it and this could hardly be regarded as an intrusion. It would be well for the physician and the medical psychologist to meet in consultation in the ward at any rate in the first instance. I am sure this arrangement would be mutually helpful.

We thought at the conference that in some such way the teacher of medical psychology would be able to draw upon the material in the hospital as a whole for teaching purposes and by selecting patients whose condition is not primarily one of mental disorder the psychological features of any sick man woman or child could be brought to the notice of the medical student in proper perspective. We also recommended that in the final qualifying examination adequate knowledge of the psychological aspects of ill health should be expected from the candidates and should be tested not only in the written papers but in the clinical and oral parts of the examination. Some such arrangement is bound to be made eventually. my own experience as a teacher has shown me this. the pressure to teach the neuroses is coming from below—the students are eager for it clamouring for it and if they don't get it from one man *or in one school they will go elsewhere. In the future* no school will be able to maintain its prestige for long if it persists in neglecting its opportunities in this direction. I believe that in this way a man going into practice would not have the humiliating experience of finding himself confronted with conditions that he had never met with in his textbooks. Having allowed for or excluded organic factors he would know how to look round for the psychical causes at work.

Above all we must not overwhelm the student with a mass of facts at the expense of developing his powers of observation and deduction. With those powers at his disposal he will be able to go on educating himself. Some of my suggestions as to the methods by which these desirable ends may be attained may not meet with general approval. I can only claim for them that they are based on an experience of more than forty years of teaching various subjects in the curriculum ranging from biology to clinical medicine.

The Examinations

The *Examination of Examinations* published by Sir Philip Hartog and Dr E. C. Rhodes in 1935 was a shock to our confidence in the system. We had already travelled far from the point of view which underlay the original attitude of London University indeed it seems incredible to-day that a mere examining body should ever have been regarded as a university. The enormous building now rapidly rising in Bloomsbury shows how far London University itself has left such an attitude behind. But it was disturbing to find how widely different were the marks allotted by different examiners to the same papers and even by the same examiner re-reading the same papers after an interval. To take a chance example the papers of three candidates were marked by seven examiners the marks of the first varied from nineteen to fifty-eight out of 100 of the second from thirty-seven to seventy-one of the third from thirty-eight to seventy. A different fate was allotted to half the candidates by one examiner on a second reading! When one considers what depends on the result of examinations such discrepancies are indeed perturbing. Yet the authors of this inquiry have no alternative to offer.

These instances are not quoted from medical examinations but if we believe ourselves entirely free from such errors we deceive ourselves. The rules of the General Medical Council do what is possible to reduce such errors to a minimum. No candidate can be rejected on the verdict of one examiner alone. Two examiners must be present throughout the clinical and oral examination of every candidate. Where there are a considerable number of examiners it is well for the candidate to have his work surveyed by different pairs. Thus at Cambridge the first paper is looked over by one pair the second by another the clinical examination is conducted by a third and the oral examination by a fourth. In this way every candidate is reviewed by eight individuals and as every doubtful case is discussed at the examiners' meeting it is not likely that substantial injustice will result. If arrangements permit of more than one pair of examiners participating in the clinical examination of each candidate so much the better.

The plan instituted in the National University of Ireland by Professor Henry Moore at Dublin is the best I have met with. It necessitates three pairs of examiners. The candidates have an hour to examine and write up their first case they are then put on to a second case which they go over in the presence of two examiners pass on to a spot case with two more and are finally cross-questioned on their first by the examiners who have had an opportunity of reading the scripts. The examiners deal with the same cases it is the candidates who change over. As I cordially agree with the G.M.C. rule that no candidate should pass who fails to obtain half marks in the clinical examination it is a wise precaution that such a decision should depend on the judgment of more than one pair of examiners. It is usual to allot only 15 per cent. of the total marks to each of the two papers 20 per cent. to the oral and 50 per cent. to the clinical. It may be thought inequitable to allot a smaller proportion of marks to three hours written paper than to an oral

examination not lasting more than a quarter of an hour, yet most examiners of experience are confident that they can judge a candidate's capacity better by oral than by written examination This is true if the candidate remains in a normal state of mind, unfortunately some of them seem to become disorientated and aphasic under the ordeal I remember an able man who had been a combatant major in the war breaking down completely, he told me that he would rather go over the top any time than face an oral! Every effort should be made not to keep candidates locked up and waiting for a long time, for fear is infectious under such conditions, a fact I bear in mind when I come to the later members of a batch I realize that it is the irresistible tendency of outgoing candidates to communicate 'tips' to the incoming ones which necessitates this rather barbarous practice, but it should be possible to call up small batches for certain hours, and to change the questions for each new batch If this became recognized as the usual practice the hunting for tips might cease to be so keen I think it is better for the papers marks not to be known at the time of the clinicals it is apt to prejudice the examiner for or against a candidate On the other hand, it is well for the examiner at the final oral to know all the candidates marks and to adjust his test accordingly

It is clear that, on the usual scale, high marking for the clinical may entirely compensate for weak papers, and a man who has been unable to show adequate knowledge during six hours' writing may, through luck in the cases he is given, reach a pass mark on the total More insistence on a pass mark for the papers is needed, in my opinion, in some places, though I agree that at least half the total marks should be allotted to the clinicals if we are to let loose on the public men with practical rather than merely theoretical knowledge

The Candidates

I have thought it worth while to discuss rather fully the conduct of the final examination, since the whole system of testing knowledge thereby has recently come rather under a cloud of suspicion I hope I have shown that care is taken to diminish the element of chance as much as possible, and I should next like to offer some advice to prospective candidates I would, in the first place, remind them that their examiners have all been candidates themselves and know both the difficulties experienced and the devices adopted—particularly the latter I would say, do not imagine we are out to trap you, we want to see what you know, not what you don't know Map out your time for the different questions in the papers It is not easy to gain many extra marks by a specially long answer, while to omit a whole question for lack of time seriously reduces your total It is quite easy, on the other hand, to get 25 to 30 per cent of the marks by giving a synopsis of an answer if you have not allowed yourself time to answer it fully Don't try to impress us with your learning by giving rare causes first, it only proves you lack a sense of proportion If at the oral you do not know the answer to a question, say so—do not waste time which should be devoted to gaining more marks by glaring helplessly at the examiner If at the clinical you are asked the position of the apex beat of the heart, say it is in the 4th space 3 inches from the middle line, and not "I thought that perhaps it might be a little out," and then with a hurried attempt to read the examiner's expression, add 'but I wasn't quite sure" an exasperating trick, and a very common one Do feel the pulse and be able to say something about the condition of the radial artery One might think the modern student never feels the pulse, but merely demands to see the electrocardiogram! Remember that you will get more credit for routine examination of the patient and good observation than for a lucky shot at the diagnosis Two candidates I recently asked the relevant question, "Is the patient a married woman?" replied that they had not asked her, yet her wedding ring was freely displayed! Remember also that 'tips' are dangerous and often misleading At one examination we showed a juvenile hemiplegia in the morning, in the afternoon it happened that a boy of about the same age suffering from Friedreich's ataxia was occupying the same place Candidates went on diagnosing hemiplegia in a patient whose lesion was obviously bilateral Comment is unnecessary Put clinical points first If asked what is the first thing you would do when called in to see a case of jaundice, do not reply, "I would do a van den Bergh," or that the first thing you would do for haematemesis is a test meal or a barium meal You know you would do nothing of the sort, at least I hope so I am quoting from my actual experience I must admit that the attitude of clinical teachers may do something to contribute to developing this absurd state of mind The student is influenced more by what he sees his teacher do than by what is said, and he is quick to notice that the newer methods interest the teacher most

In conclusion, let me welcome new recruits for the study of the most fascinating, if one of the most exasperating, professions Its combination of scientific and human interest will provide the satisfying feeling that a life spent in its pursuit has not been lived in vain

THE PROFESSION OF MEDICINE

In accordance with long-standing custom we preface the main contents of the annual Educational Number of the *British Medical Journal* with some remarks by way of guidance to those who contemplate entering the profession of medicine

REVISION OF CURRICULUM

A revision of the medical curriculum has been under consideration for the last few years and a good deal of The discussion is still continuing, based mainly upon four important reports the final report of the American Commission on Medical Education, the report of the British Medical Association's clinical committee, a Bulletin on "Medical Education and the Reform of Medical Studies" issued under the auspices of the Health Organization of the League of Nations, and the report of a Conference of Representatives of the Universities of Oxford, Cambridge, and London, the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Society of Apothecaries of London These reports are essentially at one as to the main points of reform So far as relates to the British position, there has been common agreement that it is undesirable to lengthen the five years medical course, but it is recognized that this course should be regarded as beginning at the time when the study of human anatomy and physiology is entered upon, and that this should be

at approximately the age of 15 years—rather later than is permitted under the present regulations It is held further that a higher standard of general education than the present minimum should be demanded of those entering upon this course that the requirements as to knowledge of the basic sciences of physics chemistry and biology should be modified and extended that instruction in psychology genetics and methods of clinical examination should be introduced into the first two years of the curriculum that the course should be regarded as a whole, with greater co operation among the teachers of the several subjects and not split into segregated departments and that throughout the preventive and psychological aspects of medicine the living human personality in health, the sociological duties required from doctors should receive more attention than has hitherto been common Two years ago the General Medical Council passed new resolutions and recommendations based upon these principles These are to come into force on November 1 next Though the new pre registration requirements do not actually apply to students entering on their studies in October next such students should familiarize themselves with the changes which become operative before their period of study is completed Moreover parents and students in future years should have in mind that the pre registration requirements bear upon the course of study in school between the ages of 16 and 18 years It must be remembered that the powers of the General Medical Council are limited and that quite as much depends upon the action of licensing bodies and medical school authorities as upon the Council Indeed it may be said that whatever regulations and minimum requirements are laid down and however admirable are the arrangements set out in the prospectus of a university or teaching body success depends upon the ability and inspiration of the teacher and an adequate response on the part of the student

Of the eleven chapters of a large work *American Medicine*[1] published in New York last year the third chapter on medical education covers 230 pages and brings out the continuous relation between the teaching of the medical student and every other aspect of medicine dealt with in the report It is clear from this chapter that the problems now facing the medical schools of the British Isles have close counterparts in America

FINGER-POSTS

The first object of the Educational Number is to inform prospective students and their parents of the steps that must be taken in order to become a registered medical practitioner The second is to help those wishing to know what a medical career has to offer, and others who having already decided to study medicine are uncertain about the line of work for which they are best suited This introductory article gives an opportunity of touching upon some aspects of medical study and practice and of directing attention to a few points that might not occur to anyone without experience of the medical life If many sentences have a familiar ring to the medical reader it must be remembered that they are addressed each year to a new audience of the rising generation

The classified sections that follow this general article give an account of the course of training required of students at the present time the places where it can be obtained and the bodies which test the knowledge gained and confer degrees or diplomas entitling successful candidates to become legally qualified medical practitioners Sections are included also on postgraduate study on the higher qualifications, and on most of the varied spheres of work private or official which are open to registered medical men and women at home and abroad The details given are founded on official information and arranged along the customary lines

PORTALS OF THE PROFESSION

The *Medical Register* is the official statutory list of legally qualified medical practitioners kept by the General Medical Council There are many ways in which admission can be obtained to the *Register* No fewer than twenty seven bodies—eighteen universities and nine corporations—either separately or jointly issue registrable qualifications and the number of teaching institutions is even larger Nevertheless the medical courses of the various universities and schools in Great Britain and Ireland run on parallel lines and the obligatory curriculum is much the same for all students But the individual teaching and examining bodies have different standards and requirements and bestow different qualifications and the choice should therefore be made early so that a definite plan may be followed The possession of a university degree is generally regarded as an advantage in practice yet a considerable proportion of medical men in this country find themselves debarred from obtaining it because the Conjoint Examining Boards formed by the union of medical corporations have no power to grant degrees The decision to study for a university degree in medicine should if possible be made by the time a boy or girl is 15 A matriculation examination or its equivalent should be attempted without delay and the parent should ensure that the special requirements of the medical faculty of the selected university are fulfilled

The conditions with which those who wish to enter the profession must comply are regulated by the General Medical Council which is a statutory body set up under the Medical Acts a summary of its functions and requirements is given at page 489 That section should be read with care because of the important changes which are about to come into operation regarding the admission of medical students to schools of medicine

Every student after passing examinations in the subjects of general education and in the preliminary sciences of chemistry and physics must take a course of training at a recognized medical school covering a period of at least five years but usually extended to six years or more Examination of candidates as to their fitness to practise medicine surgery and obstetrics is left to the licensing bodies, which are of two kinds—the universities and certain medical corporations in England Scotland and Ireland The requirements of these licensing bodies are summarized elsewhere under separate headings One of the functions of the General Medical Council besides that of keeping the *Medical Register* and maintaining discipline within the profession is to make sure that the tests at each stage do not fall below a certain standard and that the students examined have undergone prescribed courses at approved institutions Successful candidates eventually receive either degrees in the case of a university or diplomas or licences in the case of a corporation these qualifications entitle them to claim insertion of their names on the *Medical Register* Every student as soon as he obtains his qualification to practise should at once register otherwise he cannot hold a public medical

[1] *American Medicine Expert Testimony out of Court* Two volumes (Pp 1435 3 50 dollars the set) The American Foundation 565 Fifth Avenue New York City

appointment, or sign any certificate required from a legally qualified practitioner (such as a death certificate), or recover professional fees in a court of law

COST OF MEDICAL EDUCATION

This resolves itself into the cost of training at medical school and hospital, and the cost of living during the five or six years of undergraduate study Besides differences in the charges made for instruction there are differences in examination fees, as well as in the fees for certificates of qualification, and those who seek the higher degrees and diplomas must expect to pay more for the additional courses and tests and certificates School and examination fees together with the cost of board, lodging, clothes, travelling, and recreation, form the largest items, and to these must be added the money spent on books, microscope, instruments, and so forth

Since professional education must continue for five years at least (a period exceeded by the vast majority), and since the cost of living varies much in different parts of the country, while personal expenditure varies still more, it can only be said in a general way that anyone who thinks of entering the profession should be prepared for an outlay of at least £1,500 Something between two thirds and three quarters of the whole amount would probably be spent on maintenance and the rest in fees for tuition, examinations, and admission to degrees or diplomas For those who have to live in rooms away from relatives £120 per annum for board and lodging, etc, is probably a minimum figure The fees charged by the different schools and licensing bodies are stated in the paragraphs relating to each on other pages of this issue When making an estimate of the probable outlay, the many helps available nowadays for the reduction of expense should not be ignored At nearly all the medical schools more scholarships and money prizes are offered now than in the past, at the Scottish universities bursaries are numerous, and the Carnegie Trust (whose regulations are summarized at page 502) gives pecuniary help to many Scottish students The main thing to bear in mind when considering costs is that, as compared with other professions, the period of training in medicine is long, and for most students expensive Further guidance on this matter will be found in a memorandum[1] issued by the General Medical Council This pamphlet gives much useful information, including a comparative table of the cost of study and examination at the various institutions

NUMBERS OF STUDENTS AND DOCTORS

The following brief survey should be read with the notes and tables printed at page 488 on the numbers of registered students and practitioners More new students mean more new doctors five or six years later, though there is a fairly constant wastage

At the close of the last century the annual number of men and women who registered as medical students in the United Kingdom had been on the average about 800 and then for the next thirteen years it stood at about 1 400 During the war period, though many male students left to serve with the Forces, the entries grew steadily larger, so that in 1918 they were 2,253, and in the following year, when demobilization was in active progress, they reached 3,420 In the next five years the numbers rapidly fell, but from 1923 to 1928 they remained at a fairly steady level rather below the immediate pre-war average In 1929 the entries rose again to 1,502, and in 1930 to 1 792 In the seven following years they were 1,643, 1,947, 2,287, 2,350, 2,603, 2,544, and 2,297

In the past seventeen years the numbers of new practitioners registering each year have greatly exceeded the usual pre-war figure of eleven hundred or so The large additions to the profession in recent times brought the total number of names on the *Medical Register* up to 60 163 at the end of 1937 This is about 6,400 more than the figure for 1927, 16,350 more than that for 1917, and 20 350 more than that for 1907 The population of the British Isles has not increased at anything like that rate during the same decennial periods, and the ratio of doctors to inhabitants is therefore much higher now than formerly Some think that the saturation point has been reached, that there is real risk of an overstocked profession and "an unemployed medical proletariat" On the other hand, the Regius Professor of Medicine at Oxford has publicly given his opinion that the profession is far from being overcrowded I am in the habit of preaching that we could do with twice as many doctors as we have, but that is only if the work of the doctors in the future is going to be somewhat different from what it has been in the past The work of doctors in the future will be that of preserving health and preventing disease The trend of events is in that direction For the time being it is safe to say that there are quite enough doctors to satisfy present demands Of the total number of registered practitioners to-day some 10 per cent are women, and, according to returns published by the University Grants Committee, women constituted 16 1 per cent of the total full-time students of medicine and dentistry in England, Scotland, and Wales in the academic year 1936–7

CHOICE OF CAREER

The months immediately after registration may be put to the greatest advantage by serving as house physician, house surgeon, or casualty officer in a hospital, by working as assistant or locumtenent in private practice, or by seeing something of the world as a ship surgeon As a preliminary to practice of whatever kind, a year spent in junior appointments at a teaching hospital—"clinical experience under supervision"—is a most profitable investment

Despite the apparent wealth of choice, the average newly qualified practitioner has to choose between private practice and an official or institutional career Among the paths open are general medical practice, which absorbs three-quarters of all who qualify, Government service at home or abroad, including the medical branches of the Armed Forces, public health appointments and other administrative or official posts, institutional work, such as that of the municipal hospital (a rapidly widening field nowadays), the mental hospital, the fever hospital, and the sanatorium, academic positions in schools of medicine, general consulting practice as physician, surgeon, or obstetrician, and special work in scientific research or in one of the many subdivisions of clinical medicine and surgery Most of these careers are discussed in some detail in later sections, but a few words may be said here about general practice and the work of a consultant or specialist

Further information about such matters will be found in *The Medical Practitioners Handbook*, published by the

[1] *Memorandum on the Procedure to be Adopted by those who desire to enter the Profession of Medicine with Notes on Costs and Prospects* General Medical Council, 44, Hallam Street, Portland Place W 1 Price 1s post free

British Medical Association[1] This comprises articles on openings for members of the profession on practical aspects of medical work on registration and the privileges of practitioners on practice under the Insurance Acts on specialization and special diplomas and on medical defence societies

GENERAL PRACTICE

General practice whether in town or country is entered in one of three ways The newcomer may take a house put up a plate and wait for work to come to him he may buy the goodwill of a practice rendered vacant by retirement or death or he may become a partner in an established firm The first is more risky than the second and the second than the third A well managed partnership of three or more has this advantage over single handed practice that it allows each partner leisure for recreation and for keeping up with the progress of medicine Success in private practice demands a great deal of knowledge beyond that gained at the medical schools and hence a man is more likely to be accepted as a partner or to do well on his own account if he has already some experience as an assistant or deputy Hints on how to begin general practice and some of its pitfalls are given in a little book first published six years ago Another book recently issued *An Introduction to General Practice* will be of great value to senior students and the newly qualified

Since three quarters of those who pass out of the medical schools become family doctors sooner or later it seems clear that the main purpose of the curriculum ought to be the training of the student for general practice In its Proposals for a General Medical Service for the Nation lately revised[1] the British Medical Association states as an axiom that the medical service of the community must be based on the provision for every individual of a general practitioner or family doctor and the whole series of proposals rests on this as a fundamental principle In regard to the prevention of disease on which the Association lays great stress in its memorandum, the general practitioner has an increasingly important part to play

The national system of compulsory health insurance now more than twenty five years old has had a profound influence on general medical practice in this country On the whole the insurance system has proved of substantial benefit to medicine By raising the standard of living among doctors it has induced a better class of man to enter the profession and the service has steadily improved in efficiency The Insurance Acts provide domiciliary medical attendance for some nineteen million persons and more than 19 000 doctors undertake the medical care of this vast section of the community Thus the bulk of the general practitioners of Great Britain now give in large or small measure attendance and treatment under a system embracing almost the whole working population These practitioners by placing their names on the panel (or medical list), signify their assent to the terms of service set out in the Medical Benefit Regulations and other relevant provisions Their interests are watched over by the Insurance Acts Committee of the British Medical Association which is the executive body of the Annual Conference of Representatives of Local Medical and Panel Committees

[1] *The Medical Practitioners Handbook* British Medical Association Tavistock Square W C 1 (3s 6d net post free 3s 9d)
A Guide to General Practice By A H Douthwaite H K Lewis and Co (4s 6d)
An Introduction to General Practice By Sir Kaye Le Fleming E Arnold and Co (5s)
The revised memorandum is issued as a pamphlet by the British Medical Association and copies can be obtained from the Secretary

CONSULTING PRACTICE HIGHER DIPLOMAS

The term consulting practice comprises in ordinary usage the work of the general physician that of the general surgical consultant or operating surgeon and that of the gynaecologist and obstetrician These are the three large divisions of consulting practice as distinct from general practice which though they imply some restriction yet call for a wide range of activity and outlook in contrast with the smaller ambit of a specialty in the narrow sense Of these main divisions the third is obviously the most limited but on several grounds it can claim to rank as something more comprehensive than the other specialties No sharp line can however be drawn between consulting practice and specialist practice Most general consultants whether medical or surgical are specialists in some branch of their practice and most specialists are consultants in the sense that their work largely comes to them through the recommendation of general practitioners with whom they act (or should act) in a consultative capacity

Success as a consulting physician or surgeon or specialist is hard to achieve except by the aid of appointments to hospitals particularly those with medical schools These posts are much sought after and the time of waiting for a vacancy may be long It follows then that the would be consultant since he can scarcely hope at first to keep himself on his professional earnings must either have private means or be prepared by teaching or in other ways to make ends meet Competition in this branch of practice is very keen Expenses are heavy and the young consultant or specialist may have to go through a long period of training and waiting before he makes an income but on the other hand success when it comes is liberally rewarded In the larger industrial towns of the North of England there are many general practitioner specialists who combine ordinary panel practice with much surgical or other special work in well equipped local hospitals which admit patients in different categories according to their means Though the fees are small compared with those earned by operating surgeons and specialists in London the work is by no means unremunerative

Additional degrees and diplomas are important factors in securing election to the visiting staff of a large hospital and a few remarks about them may be made here Beyond the qualifications which admit to the *Medical Register* most of the licensing bodies bestow higher titles after further tests A considerable number of those who have graduated M B at a university including many general practitioners proceed later to the M D When applying for the post of physician to a hospital it is always useful and may be obligatory to hold also the Membership of one of the three Royal Colleges of Physicians according to the part of the British Isles in which the hospital is situated So too the Fellowship of one of the three Royal Colleges of Surgeons should be obtained by those seeking surgical appointments and the degree of Master of Surgery is an added distinction There are also diplomas in a growing number of special branches of work—such as public health tropical medicine, ophthalmology laryngology radiology tuberculosis psychological medicine midwifery and anaesthesia—which are superfluous for most practitioners but may be useful or even indispensable for those who intend to devote themselves to one or other of these subjects

PROFESSIONAL ORGANIZATION

In no profession is a readiness to join hands for the common good more necessary than in medicine. Individuals and isolated groups are always at a disadvantage when they try to defend their interests against organized bodies, whether these are Government departments, local authorities, or commercial companies. In his daily work the competent doctor is well able to deal with the individual patient and the patient's friends, but he cannot stand up single-handed to outside organizations. Medical men and women must therefore bind themselves together, and the first step after qualification should be to become a member of the British Medical Association. Besides having behind him the machinery and the influence of a world-wide professional body, a young practitioner will find in the meetings of his local Division, and in the Annual Meetings of the Association, many opportunities for keeping abreast of new work and for friendly intercourse with colleagues. Another thing that no new graduate should fail to do is to join one of the societies which for a small yearly sum undertake individual legal defence of their members. The need for protection may arise out of the first case attended in hospital or in private practice.

The British Medical Association was founded in 1832 to advance the medical sciences and maintain the honour and interests of the profession; a note on its constitution and activities will be found at page 554. This great Association, with Branches throughout the British Empire and a membership of 37,000, acts for the profession as a whole and speaks in its name. The record of over a hundred years' work shows that vocational organization, wisely directed, can combine service for its members with service for the public. Every medical man and woman should try to take a share in some of the movements, scientific or social or political, with which the B.M.A. has identified itself. The Association alone provides the machinery whereby any doctor can exert influence in promoting the welfare of the profession by helping to solve the problems that face it.

NUMBERS OF THE PROFESSION

A Review of Fifty Years

In order to present a general view of the numerical strength of the medical profession during the past half-century we have extracted from the records and set down below in parallel columns the total number of names in the *Medical Register* on December 31 of each year, and the numbers added annually by registration between 1888 and 1937.

Numerical State of the Medical Register

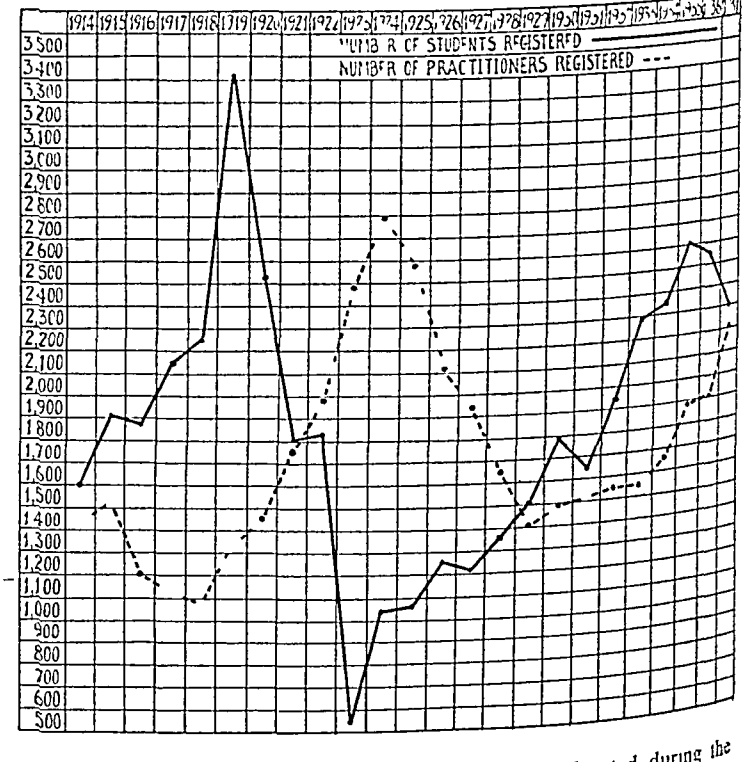
Year	Names added in Year	Total No on Dec 31	Year	Names added in Year	Total No on Dec 31
1888	1 184	27 939	1913	1 168	41 940
1889	1 305	28 348	1914	1 433	42 378
1890	1 266	29 163	1915	1 526	43 225
1891	1 345	29 555	1916	1 202	43 481
1892	1 513	30 590	1917	1 134	43 819
1893	1 579	31 644	1918	1 077	43 926
1894	1 426	32 637	1919	1 322	44 510
1895	1 446	33 691	1920	1 457	44 761
1896	1 385	34 478	1921	1 760	45 408
1897	1 230	34 642	1922	1 983	46 476
1898	1 210	35 057	1923	2 482	48 140
1899	1 351	35 836	1924	2 796	50 035
1900	1 345	36 355	1925	2 570	51 738
1901	1 318	36 912	1926	2 120	52 614
1902	1 275	37 232	1927	1 941	53 769
1903	1 233	37 878	1928	1 656	54 336
1904	1 168	38 492	1929	1 410	54 870
1905	1 240	39 060	1930	1 490	55 291
1906	1 197	39 529	1931	1 522	55 604
1907	1 221	39 827	1932	1 546	56 097
1908	1 137	40 257	1933	1 542	56 741
1909	1 143	39 818	1934	1 664	57 496
1910	1 062	40 483	1935	1 882	58 361
1911	1 042	40 913	1936	1 905	59 010
1912	1 157	41 439	1937	2 214	60 163

Proportion of Practitioners to Population

Year	Registered Practitioners	Population British Isles
1881	23 275	35 241 482
1891	29 555	38 104 975
1901	36 912	41 976 897
1911	40 913	45 370 530
1921	45 408	47 146,506
1931	55 604	48 959 485

These figures show a steady increase in the ratio of doctors to population, which was accelerated during the years immediately following the war. Making allowance for the large number of registered practitioners living abroad and for those no longer in practice, the proportion of doctors to population is a good deal more than one to every thousand.

Numbers of Medical Students and Practitioners Registering 1914 to 1937



The varying proportion of registered medical practitioners to population during the period under review is shown in the following table. This sets out the total population of the British Isles at each decennial census since 1881, and the number of names on the *Register* in the same year.

Registration of Students and Practitioners

The relation between the numbers of new students and those of newly qualified practitioners during recent years is shown in the chart on the preceding page compiled from returns published by the General Medical Council

Some further remarks on the numbers of medical students in recent years will be found in our introductory article on the profession of medicine

The chart shows that the number of practitioners registering in any one year corresponds more or less closely to the number of students registered five years previously the difference being accounted for by examinations and other obstacles For the last ten years there has been a fairly steady annual increase in the numbers of both students and practitioners becoming registered

The General Medical Council

The General Medical Council was established by the Medical Act 1858 in order that persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners Eighteen members of the Council are appointed by the Universities in the United Kingdom having medical faculties nine by the medical Corporations such as the Royal Colleges of Physicians and Surgeons five by His Majesty in Council and seven members are directly elected by members of the profession as a whole—a total of thirty nine To these are added three dentists who are members of the Dental Board and are appointed for dental business Although the eighteen members appointed by the universities and the five members appointed by His Majesty in Council may all be laymen only two laymen have so far been appointed the first of these was appointed by the Privy Council in 1926 and on his resignation in 1931 another was appointed in his place Both were members of His Majesty's Privy Council

The Council's offices are at 44 Hallam Street Portland Place London W 1 The offices of the Scottish and Irish Branch Councils are at 44 Queen Street Edinburgh 2 and 35 Dawson Street Dublin

The Council exists for the protection of the public and not of the profession Its principal functions are three First to keep the *Medical Register* secondly to see that the name of no person is entered thereon as qualified unless he has had an adequate professional education and to remove therefrom the names of qualified persons who are no longer entitled to public confidence and thirdly to provide for the publication of the *British Pharmacopoeia* It is the entry and retention of a name on the *Medical Register* and not the possession of a degree or diploma that constitutes a person a duly qualified or legally qualified practitioner of medicine

The Council has no power to make rules in regard to the medical curriculum or examinations but it can pass resolutions and make recommendations relating thereto and if any of these were ignored by the Licensing Bodies it would be open to the Council to make representations to the Privy Council which if it thought fit might order that the qualifications obtained from any such body should not be registrable

The name of any medical practitioner who has been convicted of a criminal offence or who is judged after due inquiry before the Council itself to have been guilty of infamous conduct in any professional respect may be erased from the *Medical Register*

The Medical Act prohibits attempts being made to impose restrictions as to any theory of medicine or surgery and once a practitioner has been trained and tested in the knowledge essential for public safety he may adopt any theory of medicine or surgery in which he honestly believes The Medical Acts do not prohibit the practice of medicine by unregistered persons but if they wilfully and falsely assume any title implying registration they are liable to prosecution In this respect the Medical Acts differ from the Midwives and the Dentists Acts, which entirely preclude the practice of midwifery or dentistry by unregistered persons Unregistered medical practitioners however are under certain disabilities for they cannot recover charges for medical or surgical attendance etc in a court of law they cannot hold an appointment as medical officer of health in public (including mental) hospitals or as a medical officer in the Military or Naval Services or in ships they cannot give any valid certificate which is required by any Act from a medical practitioner—for example a certificate of death and they cannot engage in insurance practice obtain dangerous drugs or attend cases of venereal disease

An account of the recommendations which the Council has drawn up in respect of the education of medical students here follows

Admission of Medical Students to Schools of Medicine

Any application to be registered on or after September 1 1938 as a medical student should be addressed to the dean or other appropriate authority of the school of medicine to which the applicant desires to be admitted Students will no longer as heretofore be registered by the General Medical Council on their admission to schools and it will rest with the authorities of schools and of licensing bodies to deal at their discretion without further reference to the Council with applications for registration

From November 1 1938—that is after the beginning of the first term of the academical year 1938–9—applications will be considered by authorities of schools and of licensing bodies in the light of the Resolutions of the Council in regard to Professional Education which come into operation on November 1 1938 and of the Recommendations of the Council in regard to the Registration of Medical Students incorporating Resolutions in regard to general education and preliminary scientific subjects which come into operation on the same date

The relevant provisions of the Recommendations which will supersede the Regulations of the Council in regard to the Registration of Medical Students (last revised in June 1934) are as follows

The Council recommend that subject to such exceptions as may from time to time be allowed by the authorities of Schools of Medicine and of Licensing Bodies every medical student before the commencement of the medical curriculum proper should be registered under the following conditions

1 Before registration as a medical student every applicant should furnish evidence that he has attained or will within three months attain the age of 18 years

2 Before registration as a medical student every applicant should be required to have passed (i) a recognized preliminary examination in general education (ii) an additional examination or additional examinations conducted or recognized by one of the licensing bodies

PRELIMINARY EXAMINATION IN GENERAL EDUCATION

3 The minimum standard of the preliminary examination in general education required of applicants should be that of a university matriculation or entrance examination in the faculties of arts or pure science If in other faculties the examination should be of the same standard and should include the subjects specified in section (1) of the following recommendation

4 (1) The Council have recognized as complying with the Recommendations the following University Examinations which admit to the Faculties of Arts or Pure Science or *subject to the condition specified below* to other Faculties the Matriculation Examinations of the Queen's University of Belfast the Universities of Dublin London Wales and the National University of Ireland the Previous Examination of the University of Cambridge Responsions at the University

of Oxford, and the Entrance or Preliminary Examination of the Scottish Universities

The condition specified in respect of faculties other than arts or pure science is that The certificate shall bear evidence that the candidate has passed on the matriculation or entrance standard in the following subjects (*a*) English (*b*) Mathematics Elementary (*c*) a language other than English (*d*) a fourth subject as defined in the regulations of the particular examination to be chosen from the subjoined list history geography botany physical science natural science Latin Greek French German or other language accepted by the university for the purpose of matriculation or entrance

(2) Subject to the condition specified in section (1) of this Recommendation the Council have recognized as complying with the Recommendations those of the examinations conducted by recognized authorities in Great Britain and Northern Ireland or in Eire which are accepted by any one or more of the Universities of Great Britain and Northern Ireland or of Eire under the conditions prescribed by them as to credits or grades as qualifying for entrance or matriculation When a School Certificate is presented the credits in the four required subjects should have been obtained at not more than two sittings

(3) The Council will continue to recognize as complying with the Recommendations certain examinations other than those which are mentioned in section (2) of this Recommendation Recognition will not be extended under this section to any examination unless the Council are satisfied (*a*) that in scope and standard it is equivalent to a recognized matriculation or entrance examination of a University of Great Britain and Northern Ireland or of Eire (*b*) that it fulfils the condition specified in section (1) of this Recommendation and (*c*) that the examination has been completed at not more than two sittings The examinations so recognized are the College of Preceptors (England) senior certificate (with credit) the Educational Institute of Scotland preliminary medical certificate Irish Royal Colleges of Physicians and Surgeons preliminary examination in general education

(4) Subject to the condition specified in section (1) of this Recommendation the Council will recognize as complying with the Recommendations such examinations of universities in British India in British Dominions other than Eire (with respect to which provision is made in the foregoing sections of this Recommendation) in British Colonies and in foreign countries as are accepted by any one or more of the Universities of Great Britain and Northern Ireland, or of Eire as qualifying for entrance or matriculation

ADDITIONAL EXAMINATION OR EXAMINATIONS

5 The subjects and scope of the additional examination or examinations which applicants should be required by the licensing bodies to have passed before registration as medical students are as follows (1) For all applicants, chemistry (theoretical and practical) the elementary principles of general and physical chemistry and of the chemical combination of elements including carbon (2) For all applicants, physics (theoretical and practical) the elementary mechanics of solids and fluids the elements of heat light sound electricity and magnetism (3) For applicants who have received their instruction in chemistry and physics before entering universities university colleges or medical schools one *or* two subjects of general education other than chemistry physics or biology at a standard higher than that of the recognized preliminary examination in general education

The standard of the additional examination in a subject or subjects of general education should be approximately that required in a subsidiary subject offered for the Higher School Certificate at the examinations specified in section (2) of the previous Recommendation

Note—It should be open to applicants to offer themselves for examination in the subject of biology either before or after they are registered as medical students

Professional Education

In the Resolutions in regard to Professional Education which come into operation on November 1, 1938, the General Medical Council recommends that the period of professional study, between the date of registration as a medical student and the date on which the student can present himself for the final examination for any diploma entitling its lawful possessor to registration as a qualified medical practitioner under the Medical Acts, should be a period of certified study during not less than five academic years But to meet the circumstances brought about by the dates at which sessions of the medical schools begin and end, the close of the fifth year may be reckoned as occurring at the expiration of fifty seven months from the date of registration In any case, the period of five years must be one of bona-fide study, and the General Medical Council recommends that in every course, and in the examinations, the following subjects should be included

(1) Elements of general biology including an introduction to embryology This course if the licensing bodies permit, may be taken before registration as a student and the examination may be passed immediately after registration

(2) Human anatomy and human physiology including elements of human embryology histology elements of cytology elements of genetics a subject which may be taken with biology the principles of general physiology, the chemistry and physics of bodily functions studied so far as possible in the human subject and elements of normal psychology

(3) Instruction in the following subjects illustrative of that given in anatomy and physiology and introductory to later studies given as arranged by the teachers of anatomy and physiology and of the clinical subjects throughout the second year The amount of time to be allotted to these subjects should be approximately one third of the total time available in that year

(i) Elements of the methods of clinical examination including physical signs the use of the stethoscope, ophthalmoscope, etc and the examination of the body fluids (with demonstrations on living subjects, normal and abnormal)

(ii) Normal reactions of the body to injury and infection as an introduction to general pathology and bacteriology

(iii) An introduction to pharmacology

(4) Medicine including regular instruction and demonstrations in applied anatomy and physiology instruction in methods of treatment including dietetics, therapeutics and prescribing, physiotherapy and principles of nursing and instruction in disease in infancy and childhood and child welfare acute infectious diseases tuberculosis industrial diseases psychology and mental disorder and deficiency diseases of the skin radiology in its application to medicine and the theory and practice of vaccination as branches of medicine The General Medical Council recommends that instruction in these branches of medicine should be directed to the attainment of sufficient knowledge to ensure familiarity with common conditions their recognition and treatment

(5) Surgery including practical instruction in surgical methods including physiotherapy practical instruction in minor operative surgery on the living, theoretical and practical instruction in the administration of anæsthetics instruction in operative surgery, regular instruction and demonstrations in applied anatomy and physiology, and instruction in disease in infancy and childhood, diseases of the eye and principles of refraction, diseases of the ear nose and throat, radiology in its application to surgery venereal diseases, orthopædics and dental diseases, as branches of surgery The General Medical Council recommends that instruction in these branches of surgery should be directed to the attainment of sufficient knowledge to ensure familiarity with common conditions, their recognition and treatment

(6) Midwifery, infant hygiene, and diseases of women including six months attendance on maternity hospital practice and on in patient and out patient gynæcological practice, during which two thirds of the hours of instruction are given to midwifery, including ante natal care and hygiene of infants Throughout the six months the student should receive practical instruction in the principles of ante natal and post natal care, the management of the puerperium, and the care of the new born infant

(7) Pathology and bacteriology including general and special pathology (functional and structural) and morbid anatomy clinical and chemical pathology general and clinical bacteriology, and immunology and immunization

(8) Pharmacology and materia medica including practical pharmacy

(9) Hygiene and public health

(10) Forensic medicine and its application to practice

(11) Legal and ethical obligations of registered medical practitioners The General Medical Council recommends that instruction should be given during the later stages of clinical

study by a person with practical knowledge of the subject in the obligations of practitioners under the National Health Insurance Acts and other Acts of Parliament and in the principles of medical ethics and that attention should be called to the Notices on these subjects issued by the Council

The first two years must be passed at a university or at a school of medicine recognized by any of the licensing bodies and the remainder must be devoted to clinical work at any public hospital or dispensary at home or abroad which is recognized by a licensing body

The General Medical Council recommends that of the period of certified study during not less than five academic years the first two years should be devoted to the study of the professional scientific subjects with an introduction to clinical methods on the lines indicated in the foregoing summary and the last three years should be devoted to the study of the clinical subjects together with the clinical application of the professional scientific subjects on the lines also indicated in the summary The Council adds that throughout the whole period of study the attention of the student should be directed to the importance of the measures by which normal health may be assessed and maintained and to the principles and practice of the prevention of disease

Special Considerations

The recommendations of the General Medical Council in respect of the education of those who desire to enter the medical profession have now been given in outline but before leaving this part of the subject the steps which the aspirant should take may be rehearsed in their due order

(1) Pass a recognized preliminary examination in general education

(2) Pass an additional examination or additional examinations conducted or recognized by a licensing body which includes the subjects of chemistry and physics and may further include one or two subjects of general education other than chemistry physics or biology

(3) Having attained the age of 18 or being within three months of the attainment of that age obtain admission to a university or to a medical school recognized by one of the licensing bodies and secure registration by the authorities of the School of Medicine to which he is admitted as a student commencing the medical curriculum proper

(4) Study for a minimum of five years certain prescribed subjects

(5) Meanwhile pass sundry intermediate examinations and at the end of the fifth year pass a qualifying examination which will entitle him to receive from a licensing body a qualification enabling him to obtain registration in the *Medical Register* whereby he receives legal authority to practise

The Minimum Period—It must be remembered that the period of five years is a minimum more is often required even by the man of good abilities and reasonable industry and some of the universities prescribe a longer period Besides these qualities a student to obtain a registrable qualification in the minimum period of five years or fifty seven months must have a considerable amount of good luck in other words, he must keep in good health through every term, and never fail at a single examination Thus for instance, before presenting himself for any examination he must be signed up for the subjects covered by that examination this means that his teachers have to certify that he has diligently attended the required number of lectures or classes in the subjects in question If however the student happens to be ill during the term when such lectures or classes are taking place he may miss enough of them to make it impossible for him to be signed up Then again, should he fail to satisfy the examiners at some examination, he cannot present himself for re-examination for at least three months This generally entails further consequences because apart from the student's success at the next stage in his career being imperilled by the need for restudying the subjects in which he has failed the licensing bodies usually insist upon a definite interval elapsing between one examination and the next Further many bodies have refused to recognize lectures and classes which have been attended before the student has passed the requisite examination in earlier subjects and the Council now recommends that the professional examinations in the professional scientific subjects studied in the first two years be passed before the minimum period of three years subsequent study be entered on, in other words no clinical study should count as such until these examinations have been successfully completed Failure at an examination may thus not only mean deferment of the date of examinations but deferment of the beginning of the student's study of certain subjects It is thus exceedingly easy for a student to fail to qualify in five years and as a fact the majority of students take longer

In speaking of the minimum period it is to be remembered also that that time is only sufficient to gain a registrable qualification such as a Bachelorship of Medicine or Surgery or the Diplomas of the Royal Colleges Those who wish to take a higher qualification—for instance, the F R C S Eng—must prolong their work for another year or more So too in some cases must those who desire to convert their Bachelorship into a Doctorate This may entail further formal examination but at some Universities the M D is obtainable on presentation of a thesis when the Bachelor has attained a certain age and has practised for a certain number of years However a student's career proper may be considered perhaps, to have ended when he obtains his first registrable qualification for while preparing himself for any further tests he can and usually does hold some junior appointment which more or less covers his expenses

EXAMINING BODIES IN PRELIMINARY GENERAL EDUCATION

The following is a list of the officers of the examining bodies in preliminary general education with the names of the examinations in parentheses

The Secretary Queen University of Belfast (Matriculation) Assistant Secretary Ministry of Education Belfast (Senior Certificate)
The Registrar The University Bristol (Matriculation School Certificate or Higher School Certificate)
The Registrary University Registry Cambridge (Previous)
The Secretary Cambridge Local Examinations Syndicate Building Cambridge (School or Higher School Certificate)
The Medical Registrar University of Dublin (Trinity College) Dublin (Matriculation)
The Secretary of the School Examinations King College Newcastle-upon-Tyne (Matriculation School or Higher School Certificate of the University of Durham)
The Registrar Irish Joint Board Royal College of Surgeons Dublin (Preliminary Examination)
The Registrar National University of Ireland 49 Merrion Square Dublin (Matriculation)
The Assistant Commissioner of the Department of Education 1 Hume Street Dublin (Leaving Certificate)
The Secretary of the Examination Council The University London W C 1 (Matriculation General or Higher School Certificate)
The Secretary Northern Universities Joint Matriculation Board 313 Oxford Road Manchester (Matriculation School or Higher School Certificate)
The Registrar University Registry Oxford (Responsions)
The Secretary Oxford and Cambridge School Examination Board Schools Examination Office Balliol College Oxford (School or Higher School Certificate)
The Secretary Oxford Local Examinations University Press Oxford (School or Higher School Certificate)
The Secretary College of Preceptors Bloomsbury Square London W C 1 (Senior Certificate at Credit Standard)
The Secretary Educational Institute of Scotland 47 Moray Place Edinburgh (Preliminary Medical Certificate)
The Secretary Scottish Education Department 14 Queen Street Edinburgh (Leaving Certificate)
The Secretary Scottish Universities Entrance Board 81 North Street St Andrews (Scottish Universities Entrance or Preliminary Examination)
The Registrar University of Wales Cathays Park Cardiff (Matriculation)
The Clerk Central Welsh Examination Board Cardiff (School or Higher School Certificate)

LICENSING BODIES

The following is a list of officers of licensing bodies and their addresses

UNIVERSITIES

ABERDEEN The Secretary of the Medical Faculty The University
BELFAST The Secretary Queen's University
BIRMINGHAM The Registrar The University
BRISTOL The Registrar The University
CAMBRIDGE The Registrary University Registry
DUBLIN The Medical Registrar The University Trinity College
The Registrar National University of Ireland 49 Merrion Square Dublin C 17
DURHAM The Dean of Medicine The Medical School Northumberland Road Newcastle upon-Tyne 1

EDINBURGH The Dean of the Faculty of Medicine The University
GLASGOW The Registrar The University W 2
LEEDS The Registrar The University
LIVERPOOL The Registrar The University
LONDON The Academic Registrar The University W C 1
MANCHESTER The Registrar The University
OXFORD The Registrar University Registry
ST ANDREWS The Secretary The University
SHEFFIELD The Registrar The University
WALES The Registrar The University Registry Cathays Park Cardiff

LICENSING CORPORATIONS

ENGLISH CONJOINT BOARD The Secretary 8 Queen Square London W C 1
SCOTTISH CONJOINT BOARD The Secretary 18 Nicolson Street Edinburgh 8
IRISH CONJOINT BOARD The Secretary Royal College of Surgeons in Ireland Dublin
APOTHECARIES SOCIETY OF LONDON The Registrar Blackfriars London E C 4
APOTHECARIES HALL OF IRELAND The Registrar 95 Merrion Square Dublin

SCHOOLS WHERE MEDICAL STUDY MAY BEGIN

The following is a list of officers of Schools of Medicine, elsewhere than in Faculties of Medicine in Universities outside London at which medical study may be commenced, and their addresses

DUBLIN The Secretary School of Medicine Royal College of Surgeons
EDINBURGH The Dean School of Medicine of the Royal Colleges Surgeons Hall
GLASGOW The Dean St Mungo's College
The Dean Anderson's College Medical School
LONDON Guy's Hospital The Dean of the Medical School S E 1
King's College The Dean of the Faculty of Medical Science Strand W C 2
London Hospital The Dean of the Medical College E 1
London (Royal Free Hospital) School of Medicine for Women The Dean 8 Hunter Street W C 1
Middlesex Hospital The Dean of the Medical School W 1
St Bartholomew's Hospital The Dean of the Medical College E C 1
St Mary's Hospital The Dean of the Medical School W 2
St Thomas's Hospital The Dean of the Medical School S E 1
University College The Dean of the Medical School W C 1

Universities in England and Wales

There are eleven universities in England and Wales, and some account of each of them follows They all have now fully developed medical faculties

UNIVERSITY OF OXFORD

Though the Oxford Faculty is the oldest in the kingdom, systematic university teaching for students of medicine only really began in 1883, when Burdon-Sanderson came to Oxford from University College, London, to be the first Waynflete Professor of Physiology From that date onwards there was a steady increase in the provisions for teaching and for the conduct of original investigation, the rate of this increase has in recent years been accelerated—first, by the opening of the Nuffield Institute for Medical Research, and, secondly, by Lord Nuffield's munificent further gift of £2,000,000 to the University for the benefit of the Medical School The first Nuffield Professors and their assistants are already at work, and the facilities for teaching and research, both in the pre-clinical and in the clinical departments of the school, are being considerably strengthened On the other hand it is perhaps necessary to emphasize two points In the first place Oxford does not wish to increase the number of its medical students, but to keep up their standard of quality In the second place it is not the intention of those who are planning the future that the average student should complete his clinical work in Oxford, possibly a few who are engaged in research may be given this opportunity when the Nuffield scheme is fully developed

The courses leading to the medical and surgical degrees of the University (B M, B Ch, D M, M Ch), as also that for the diploma in ophthalmology (D O), are open to both sexes Whereas, however, a student must be a member of the University and have taken the degree of B A before he can take the medical and surgical degrees, these restrictions do not apply to candidates for the diploma in ophthalmology

The number of medical students in residence in Oxford is about 240 and approximately the same number are engaged in clinical work for the Second B M in hospitals away from Oxford

Guidance for Medical Students

At school apart from acquiring knowledge the prospective medical student should train himself to think clearly and to write clearly he is also well advised to learn those languages, in particular German which will be of use to him in his future reading

Before he can become a member of the University, and thereby of the Medical School a student has to be accepted by a college or by one of the non collegiate bodies This normally involves the taking of a college entrance examination, but exemption may be gained on the result of a college scholarship examination or in other ways Correspondence on such matters should be addressed to the Head of the college concerned and not to the Dean of the Medical School

When a student has been accepted by a college he next has to pass or obtain exemption from, the University entrance examination Responsions, Latin is a compulsory subject in this or the exempting examination Entries for Responsions or claims for exemption should be made through the Head of the student's college

After passing Responsions or the equivalent the medical student normally takes the preliminary examinations in physics and chemistry and in biology These he can attempt, if his school authorities are willing before he comes into residence and it is an advantage to him so to do, provided such a course does not interfere with his general education These particular examinations satisfy simultaneously the preliminary requirements both of the University in respect of the B A degree in animal physiology and also of the General Medical Council in respect of medical qualification Questions about alternative courses and about entry for or exemption from these examinations should be addressed by the student to the authorities of his college, and not to the Dean of the Medical School

The first step taken after this is usually the passing of the examination in organic chemistry for First B M Exemption can only be claimed by those who have passed certain examinations in chemistry of the University A man who has passed the preliminary examinations before coming into residence normally takes organic chemistry in his first term, and thereafter prepares for the examinations in human anatomy and physiology for First B M which he will probably take in his sixth term, though there are alternative courses He must pass simultaneously in both anatomy and physiology, unless he has previously been placed in the first or second class in the Final Honours School of Animal Physiology in which case he is exempted from the physiology part of First B M Nothing else can exempt him from the examination in this subject, and there is no exemption at all from that in human anatomy

Practically every medical student attempts to obtain the B A degree by taking the Final Honours School of Animal Physiology for this course diverts him least from purely professional work and passing the preliminary examinations mentioned above allows him to enter for this final examination The special course in preparation for it lasts one year, and the examination may not be taken earlier than the eighth term of residence unless the student has special status If he enters for the examination later than his twelfth term of residence he is over standing for honours

The student who has passed his preliminary examinations before coming into residence should thus have passed the examinations for First B M and for the degree of B A by the end of his third year at the University

He must thereafter prepare for the examinations for Second B M The subjects are at present materia medica and pharmacology, pathology, forensic medicine and public health, medicine surgery, and midwifery, at a future date, however, the pathology will become general pathology and bacteriology, and special pathology will be included by title, as it is now by practice, in medicine, surgery, and midwifery The examinations in the three first mentioned subjects can be taken separately as soon as the necessary conditions are fulfilled or simultaneously with any of the other Second B M examinations, on the other hand, a student must pass simultaneously in the last three subjects The examination in these may not be taken, unless the candidate is already a registered medical practitioner until the eighteenth term from matriculation and the lapse of at least thirty three months from the date of passing the examinations for First B M

The whole of the work for Second B M may be done in recognized institutions away from Oxford—for example the London medical schools Alternatively, a student who has

the necessary qualifications may spend the first six months in Oxford and thereafter do a further twenty seven months work elsewhere In this second case the courses which he will take at Oxford will last from September to the following March and will include instruction in pharmacology general pathology and elementary medicine and surgery

Further details about the course for the qualifying degree of B M B Ch and also about the higher medical and surgical degrees are to be found in the current edition of *University of Oxford Examination Statutes* and in a pamphlet entitled Information Concerning the School of Medicine etc both of which can be obtained from the Clarendon Press Oxford College authorities and the Dean of the Medical School University Museum Oxford will also give any assistance that is within their power

College entrance scholarships open to would be medical students are advertised each summer in special numbers of the *University Gazette* which can be bought for a few pence through any bookseller In addition many valuable prizes scholarships and fellowships are awarded to medical students and graduates they include the Radcliffe Travelling Fellowship the oldest of such endowments for postgraduate travel and study which is awarded annually after examination by the Master and Fellows of University College Details about these prizes etc can be found in the current edition of the *Oxford University Calendar*

It is very difficult to give an estimate of the expense of that part of the course which is passed in Oxford as the cost varies very much with the different colleges Eighty pounds a term is perhaps the amount paid by the average student but many manage on less than this Once the B A degree has been taken university and college dues are less

UNIVERSITY OF CAMBRIDGE

The professional degrees given by this university are those of Bachelor of Medicine (M B) and Bachelor of Surgery (B Chir) (these degrees cannot be taken separately) and the higher degrees of Doctor of Medicine and Master of Surgery It also grants a diploma in medical radiology and electrology to medical practitioners not necessarily graduates of the university Information regarding this diploma will be found in a later section under the heading Radiology A candidate for the M B B Chir degrees must have passed the Previous Examination or some other examination accepted by the university as its equivalent under the new regulations He must reach an honours standard in a Tripos Naturally most students will take the Natural Sciences Tripos which qualifies him for the degree of B A The attainment of a sufficient standard in certain subjects in this Tripos will secure exemption from the corresponding tests in the M B course Members of Girton College and Newnham College are admitted to the examinations

Professional Examinations

An explanation of the changes in the medical curriculum at Cambridge which came into force in October 1934 was given in the *British Medical Journal* of July 7 1934 (p 26) To obtain the M B B Chir degrees candidates must have reached an honours standard in a Tripos and passed the First and Final Medical Examination

First M B—This comprises (1) general and inorganic chemistry (2) physics (3) elementary biology (4) organic chemistry The parts may be taken together or separately In either case the candidate before admission to examination must have passed or been exempted from the Previous Examination Certain exemptions from the First M B Examination are allowed the regulations may be obtained from the Registrary An examination in each part is held three times in the year

A candidate for the Final Examination must have (*a*) completed the First Examination (*b*) dissected the whole body adequately and thoroughly (*c*) attended an approved course and passed an examination in Pharmacology (*d*) attained the honours standard in some Tripos (*e*) attended an approved course and passed an examination in anatomy and (*f*) in physiology

Final M B—This is divided into two parts to neither of which the candidate is admitted until he has fulfilled the conditions previously mentioned A candidate for the first part which deals with the principles and practice of surgery (including special pathology) and midwifery and diseases peculiar to women must have completed five years of medical study and be signed up in these subjects and have completed two years and a half of hospital practice Before admission to the second part the candidate must have completed five years of medical study and be duly signed up in all subjects and have completed three years of hospital practice The examination is in the principles and practice of physic (including diseases of children mental diseases and medical jurisprudence) pathology (including hygiene and preventive medicine) and pharmacology (including therapeutics and toxicology) The Final M B examinations are held twice a year—in June and December

The Higher Degrees

The M D degree may be taken by a graduate of the University of eight years standing who has passed the final M B Examination after writing a thesis approved by the M D Degree Committee and keeping a further Act He may also be allowed or required to take an examination oral or written or both on the field of Medicine within which the subject of his thesis falls

A candidate for the M Chir degree who is an M A may be admitted to the examination after he has become legally qualified to practise surgery Other candidates may be admitted when two years have elapsed after they have completed the requirements for the B Chir degree and may be admitted to the M Chir degree after three years have elapsed since they were admitted to the B Chir degree The examination comprises pathology surgery surgical anatomy and surgical operations The tests are partly in writing partly oral and partly practical they include the writing of an extempore essay The examination is held in February in each year

FEES

In addition to college fees tutorial fees and the expense of living the following examination fees are payable First M B £5 5s tests in Pharmacology Physiology and Anatomy £1 1s Final Examination £12 12s For schedules referring to the examinations list of schools and hospitals recognized by the university and other information application should be made to the University Registrary Cambridge

UNIVERSITY OF LONDON

Under the regulations of the University of London the degrees obtainable in the Faculty of Medicine are those of Bachelor of Medicine and Bachelor of Surgery Master of Surgery in four branches Doctor of Medicine in six different branches Bachelor of Dental Surgery and Bachelor of Pharmacy The university has its own matriculation examination and it is most advisable that candidates should obtain and carefully study the booklets relating to it The matriculation examination is open to any person of either sex who has attained the age of 16 It is held in January June and September and lasts four days the first two take place both in London and in certain provincial centres the September examination is held in London only

In no circumstances is a degree granted to anyone in less than three years after the date at which he passed the matriculation examination or obtained registration in some other way All medical students must normally spend not less than five and a half years in professional study subsequent to matriculation of which the last three years must be spent at a school of advanced medical studies

Professional Examinations

M B B S—There are three examinations the last being subdivided They are held twice a year

The First Examination (held in July and December) covers inorganic chemistry general biology and physic there being two papers a practical test and a possible oral test in each subject The names of successful candidates are placed in alphabetical order

The Second Examination is held in March and July Candidates must have passed the First Examination at least eighteen months previously The subjects are anatomy and physiology the tests being written oral and practical

No candidate unless he is already a registered medical practitioner is admitted to Parts II and III of the M B B S

Examination within thirty six months of the date of his passing the Second Examination The subjects are divided into three parts Part I (which may be taken six months earlier than the remaining parts) consists of Pathology and Hygiene and Forensic Medicine, Part II of Medicine and Applied Pharmacology and Therapeutics, and Part III of Surgery and Obstetrics and Gynaecology Any part may be taken first at the option of the candidate or the parts may be taken together There is no separate examination held for honours but the names of successful candidates who have passed all parts of the examination at one time, are divided into an honours list and a pass list and a university medal may be awarded the candidate who has most distinguished himself in the whole examination Supplementary lists are issued of candidates who have passed in one part only

The Higher Degrees

M D—An examination for the M D is held twice yearly—in December and July Every candidate must have passed the examination for the M B B S He may present himself for examination in any one of the following branches (1) medicine (2) pathology, (3) mental diseases and psychology (4) midwifery and diseases of women, (5) hygiene (6) tropical medicine and if he wishes may pass also in another branch at a subsequent examination

Two years must elapse between acquiring the M B B S and sitting for the M D in any branch except that in the case of Branches I–IV a candidate who has obtained honours at the M B B S Examination may enter for the M D Examination after one year Candidates may also be admitted to the M D Examination (Branches I–VI) one year after taking the M B B S Examination on the grounds of exceptional experience in their subject Certificates of approved appointments are required for the M D (Branches I–IV) except in the case of candidates who have been engaged in professional practice for five years In each branch the scheme of examination is the same two papers on its special subject a paper on an allied subject—for example medicine in the case of Branch IV pathology in Branch I—an essay on one of two suggested topics with the special subject and a clinical or other practical test Both written and practical examinations must be passed, though exemption can be obtained from the former in exceptional circumstances In any branch of the M D Examination a gold medal of the value of £20 may be awarded

M S—The regulations with regard to the Mastership in Surgery are of a corresponding kind but there are four branches in which it may be obtained—general surgery, dental surgery, ophthalmology and laryngology, otology, and rhinology

FEES

For Matriculation 2½ guineas for each entry First Examination 6 guineas for each entry to the whole examination For re examination in one subject the fee is 2 guineas Second Examination 12 guineas for each entry to the whole examination M B B S Examination 15 guineas for each entry to the whole examination and 5 guineas for examination or re examination in any part M D and M S Examinations 20 guineas, and 10 guineas on re examination

Inquiries should be addressed to the Academic Registrar, the Senate House University of London W C 1

UNIVERSITY OF BIRMINGHAM

This university confers medical and surgical degrees—namely, M B, Ch B, M D Ch M and M D (State Medicine)—also degrees in dentistry (B D S and M D S), and Diplomas in Dentistry (L D S), and in Public Health (D P H) A degree of Ph D is also conferred for research study in medicine under special regulations Candidates must be graduates in medicine of a recognized university The M B Ch B candidate may also take in the earlier part of his medical curriculum courses leading to the ordinary B Sc degree in anatomy and physiology, or B Sc with honours The extra time required for either of these science degrees is one year The full course of study for the degrees of M B, Ch B extends over six years The Senate has power to accept courses of study and examinations passed at other recognized universities as exempting from the examinations in physics, chemistry, biology, and organic chemistry In the case of such students at least three years must be spent in attendance upon classes at the university

Students entering the Medical Faculty for the M B, Ch B degrees must have satisfied the entrance requirements—

(1) Of the Joint Board of the Universities of Manchester, Liverpool Leeds Sheffield, and Birmingham The regulations and the list of examinations accepted will be sent on application to the Secretary to the Board, Joint Matriculation Board, 315, Oxford Road Manchester

(2) A recognized pre registration examination in the subjects of chemistry physics, and biology—for example, the higher school certificate of the Joint Matriculation Board or a candidate may attend first year courses in the university, October to June (chemistry, physics, and biology)—that is, First M B Ch B The three subjects must be taken together on first entrance for the examination, but credit may be given for any two subjects the remaining subject being passed at a subsequent examination

Professional Examinations

The candidate for the M B Ch B degrees has four examinations to pass subsequent to passing the First M B, Ch B Examination or exemption therefrom In the Second, Third, and Final examinations the candidate must pass in all the prescribed subjects or undergo the whole examination again

The First M B deals with physics, chemistry, and biology (pre registration) The Second M B comprises anatomy and physiology and the student must pass in both simultaneously The Third M B comprises pathology and bacteriology taken as one complete subject The Fourth M B takes place at the end of the fifth year the subjects being forensic medicine toxicology, public health and therapeutics (inclusive of pharmacology and materia medica)

Final M B—This comprises medicine, surgery, midwifery and diseases of women ophthalmology and mental diseases The candidate, in addition to more ordinary certificates, must be prepared with a certificate of having acted as a post mortem clerk for three months and received special instruction in anaesthetics and clinical instruction in diseases peculiar to women, asylum ward work, ophthalmology children's diseases, venereal diseases ear and throat and skin diseases etc In respect to ophthalmology he must show that he has learnt retraction work

M D—An ordinary candidate for this degree must be an M B, Ch B of not less than one year's standing He presents an original thesis for approval, and then passes a general examination in the principles and practice of medicine From the latter the Board of Examiners may exempt a candidate whose thesis is of exceptional merit. The regulations respecting the Ch M are of the same general character Subject to certain requirements as to special research or other post graduate study graduates of other universities may obtain the M D and Ch M in the same way as holders of the Birmingham M B, Ch B

The degree of M D (State Medicine) is open to M B Ch B graduates of the university who possess also a diploma in public health or degree in sanitary science or public health recognized by the university The period of postgraduate study for this degree must occupy one year in the case of Birmingham M B, Ch B graduates, and two years in the case of graduates of other universities

The degree of Ph D is open to qualified medical practitioners under special conditions applicable in the Faculty of Medicine Under these regulations the necessary attendance and research during a period of two years may be carried out in the laboratories of the university or in associated hospitals

FEES

The fee for Matriculation is £2 (payable to the Joint Matriculation Board) £2 10s for First M B Examination (if taken in university) and £2 10s for each of the first four Professional Examinations, M B Ch B degree fee, £10, M D and Ch M Examinations £12 10s each For further particulars application should be made to the Dean the Medical School Edgbaston, or the Registrar, the University, Edgbaston, Birmingham

UNIVERSITY OF BRISTOL

In the Faculty of Medicine the following degrees are conferred Bachelor of Medicine and Bachelor of Surgery (M B and Ch B), Doctor of Medicine (M D), Master of Surgery (Ch M), Bachelor of Dental Surgery (B D S) and Master of Dental Surgery (M D S) There are also the

following diplomas diploma in public health (D P H)[1] diploma in dental surgery (L D S) and diploma in veterinary State medicine All candidates for degrees in medicine surgery and dentistry are required to reach matriculation standard in the school certificate examination or to pass such examination as may be regarded as equivalent by the Senate All courses degrees and diplomas are open to men and women alike

Conjoined Degrees of Bachelor of Medicine and Bachelor of Surgery—Candidates must be not less than 21 years of age and have pursued the courses prescribed by university regulations during not less than five years after passing the First Examination in chemistry and physics and entry upon professional study at a medical school of which three shall have been spent in the university and two of these three subsequent to passing the Second Examination All candidates for the degrees of M B Ch B are required to satisfy the examiners in the several subjects of three examinations

The First Examination—The subjects of examination are chemistry physics and biology This part of the curriculum shall extend over one year (Candidates who have passed an equivalent higher school certificate examination in these subjects will not be required to sit for the First Examination and will be regarded as having completed one year of study provided they can produce evidence of having reached an adequate standard in organic chemistry)

The Second Examination—The subjects of examination are Group I anatomy and physiology Group II elementary pharmacology and elementary pathology

The Final Examination—The subjects of examination are materia medica and pharmacy pharmacology pharmacotherapeutics and toxicology pathology and bacteriology (Section I) forensic medicine public health obstetrics (including diseases of women) surgery (systematic clinical practical and operative including ophthalmology and oto rhino-laryngology) medicine (systematic clinical and practical including mental diseases) (Section II) The subjects included in Section II may be taken in two groups—namely Group I surgery and obstetrics Group II medicine public health and forensic medicine Candidates may pass Sections I and II together or separately and the two groups of Section II may likewise be taken together or separately but no student can obtain honours who elects to take the two groups of Section II separately

Degree of Doctor of Medicine—Candidates must be Bachelors of the university of not less than two years standing as such and may elect either (1) to pass an examination in general medicine or (2) to pass an examination in State medicine or (3) to present a dissertation The candidate who elects to pass the examination in State medicine must hold a diploma in public health of some university or college and the candidate who elects to present a dissertation may be examined in the subject thereof

Degree of Master of Surgery—The degree may be taken in general surgery or in special subjects Candidates shall be Bachelors of the university who have practised for two years in an approved hospital (including the holding of an approved appointment for six months) and one of the two years shall have been spent in a hospital with a medical school attached They shall present a dissertation and pass an examination For general surgery the examination shall include a written examination in surgery a written examination in surgical anatomy and surgical pathology a clinical examination an oral examination and an examination in operative surgery For special subjects—that is ophthalmology or oto rhinolaryngology or gynaecology—the examination shall include a written examination in the anatomy physiology and pathology of the region of the body concerned (including in the case of ophthalmology physiological optics) and a written examination in general surgery together with a written oral and clinical examination in the particular branch of surgery concerned, as well as an examination in operative surgery of the region concerned

UNIVERSITY OF DURHAM

To its own undergraduates who may be of either sex this university grants the degrees of Bachelor of Medicine and Bachelor of Surgery (M B B S) and also grants the higher degrees of Doctor of Medicine (M D) Master of Surgery and Doctor of Surgery (M S and D Ch) Bachelor of Hygiene Doctor of Hygiene (B Hy and D Hy) and Bachelor of Dental Surgery and Master of Dental Surgery (B D S and M D S) it also grants diplomas in public health psychiatry and dental surgery The university accepts the Durham University School certificate examination (if a sufficient standard is obtained in certain specified subjects) for matriculation purposes but also accepts the tests of a considerable number of other educational bodies as a full or partial equivalent A list may be obtained on application In addition to satisfying the matriculation requirements of the university every student under regulations coming into force on November 1 1938 must pass the First (Pre Medical) Examination in inorganic organic and physical chemistry physics botany and zoology and be registered on the books of the General Medical Council The university requires that at least three years be spent in residence in the university in certain cases candidates may obtain exemption from the First and Second Examinations but the later professional examinations must be passed in the university

Professional Examinations

In addition to the First (Pre Medical) Examination there are three other professional examinations for the M B B S degrees The First (Pre Medical) Examination is held in June and December the Second and Third Examinations in March and June and the Final Examination in June and December The first (Pre Medical) deals with the subjects as above mentioned the second with anatomy and physiology the third with pathology bacteriology materia medica pharmacology and pharmacy medical jurisprudence and public health At the Final M B B S the candidate is examined in medicine including therapeutics and clinical medicine surgery and clinical surgery midwifery and diseases of women and children clinical and practical midwifery and gynaecology and clinically in psychological medicine diseases of the throat nose and ear diseases of the skin diseases of the eye and diseases of children

M D—This degree is only open to Bachelors of Medicine of the university They must be of at least two years standing and must comply with the regulations printed in the Prospectus of the Medical School King's College Newcastle upon-Tyne (formerly the University of Durham College of Medicine)

M S—Candidates for this degree must have been engaged in practice for at least two years subsequent to qualifying M B B S Durham The subjects of the examination are surgery systematic and clinical surgical anatomy and pathology and surgical operations

D Ch—The university grants also the degree of Doctor of Surgery Candidates for this degree must be registered medical practitioners not less than 25 years of age They must devote three years subsequent to obtaining a registrable qualification to the study of surgery and ancillary subjects one at least of the three years must be spent in the university The candidate must submit to the professor of surgery the course of study he proposes to follow and this course must be approved by the Board of the Faculty of Medicine

One year must be devoted mainly to work in the departments of anatomy physiology pathology and bacteriology and the candidate must submit evidence of having so worked Not less than six months of another year must be spent as a resident surgeon in a recognized teaching hospital and the rest of the year in the study of surgery in a recognized medical centre Not less than six months of one of the three years must be spent in surgical study abroad

BACHELOR OF HYGIENE AND THE D P H.

A period of not less than two years must elapse between the attainment by a candidate of a registrable degree or qualification in medicine surgery and midwifery and his admission to Part II of the examination for the degree of B Hy or for the D P H of the university as the case may be The curriculum extends over a period of not less than twelve calendar months of which not less than three consecutive calendar months shall be devoted to whole time study in the subjects of Part I (or an academic year of whole time study covering a period of not less than nine calendar months) subsequent to the attainment of a registrable degree or qualification Candidates for the B Hy must take out the curriculum for Part I of the exam

[1] At present in abeyance

mination at the University of Durham, but for the D P H may do so either at the university or at any medical school or institution recognized by the university The examination is divided into two parts Part I is written and oral, with a practical examination in bacteriology, and includes the subjects of bacteriology and parasitology (including immunology serology, medical entomology, etc) chemistry, physics physiology, and biochemistry in their application to environmental and personal hygiene and to the public health The subjects in Part II include the principles of hygiene, sanitation and public health epidemiology vital statistics, public health law and administration (including public medical services) sanitary construction and house planning, and public health administration, principles of genetics and mental hygiene This part of the examination is written and oral and includes practical examinations in infectious diseases food inspection, inspection of premises, dwelling houses factories workshops, schools etc

Candidates are not admitted to examination in either part until after they have completed the prescribed courses of instruction in the required subjects

DOCTOR OF HYGIENE

Candidates for the degree of Doctor of Hygiene must be Bachelors of Hygiene of the university of two years standing, and are required to satisfy the examiners that they have conducted original research in the subject of public health

DIPLOMA IN PSYCHIATRY

Candidates must be registered medical practitioners and, unless qualified before January 1 1911 must have attended, subsequent to passing their qualifying examinations, courses of instruction in (*a*) anatomy, (*b*) physiology, (*c*) pathology, (*d*) bacteriology, (*e*) psychology and experimental psychology, (*f*) clinical neurology (*g*) psychiatry, (*h*) clinical psychiatry The examination consists of two parts namely (1) anatomy physiology pathology and bacteriology (2) psychology and experimental psychology neurology, and psychiatry (systematic and clinical), and candidates may present themselves for the whole examination or for either part separately

FEES

The following fees are payable Matriculation, £2 Examinations First (Pre Medical) £2, Second and Third M B, B S, each £5, Final M B, B S £15 M D and M S each £5, B Hy and D P H £12 12s, D Psy, £10 10s and D Hy and D Ch, each £20 First Second and Third L D S each £3 10s and Final L D S £5 First Second and Third B D S each £5, Final B D S, £8, and M D S £5 For degrees and diplomas M B, B S, B Hy, and B D S, each £6 6s *plus* the sum of 10s if it is the initial degree taken in the university, M S and M D S each £6 6s M D D Ch, and D Hy, each £10, D P H, D Psy, and L D S each £3

Further information may be obtained from the Dean of Medicine, Medical School, Queen Victoria Road, Newcastle-upon-Tyne

UNIVERSITY OF LEEDS

The degrees granted in the Medical Faculty of this university are Bachelor of Medicine, Bachelor of Surgery (M B and Ch B), and Bachelor of Dental Surgery (B Ch D), Doctor of Medicine (M D), Master of Surgery (Ch M), and Master of Dental Surgery (M Ch D) Diplomas are awarded in public health, in psychological medicine, in dental surgery, and in nursing

Candidates for the M B must have attended courses of instruction approved by the university for not less than five years, two at least of such years having been passed in the university, and one year subsequent to the date of passing the first examination They must also have satisfied the requirements of the Northern Universities Joint Matriculation Board The normal requirement for entry is the possession of a School Certificate supplemented by a performance in the Higher School Certificate

Full information is contained in the pamphlet 'Qualifications for Entry upon a Degree Course,' which may be obtained on application to the Secretary to the Board, 315, Oxford Road Manchester, 13 Except in cases specially approved by the Senate candidates are required to present evidence of possessing a knowledge of mathematics at least equivalent to that of the Pass standard at a School Certificate Examination

Exemption from the examination may be granted to applicants holding certificates of having passed examinations of a standard deemed by the Matriculation Board to be at least equal to the Board's examination

Professional Examinations

The examinations for the M B, Ch B are

The First Examination—This consists of four parts (1) physics and inorganic chemistry, (2) organic and physical chemistry, (3) botany (4) zoology each of which may be taken separately, but candidates are not permitted to start their second year's work until Parts 1, 2, and 3 have been passed

The Second Examination—This consists of Part I materia medica and practical pharmacy, Part II, anatomy and physiology Candidates may pass each part separately

The Third Examination—This consists of pathology and bacteriology and pharmacology, and may not be taken before the end of the second clinical year

The Final Examination—The final examination consists of Part I, public health and forensic medicine, Part II, medicine surgery, obstetrics and gynaecology, and therapeutics Part I may be taken nine months after a candidate has passed the Third Examination Part II may not be taken before the end of the third clinical year or before the completion of the fifth year of medical study Part II may be taken before Part I

M D—Candidates for this degree must be bachelors of medicine and bachelors of surgery of the university and subsequently to having graduated must have completed two years of hospital practice or special study approved by the university or four years in the practice of their profession in one or other of its various branches, six months hospital practice or special study to count as the equivalent of one year's ordinary practice Any subject of the medical curriculum except surgery may be chosen for the examination but a thesis the title of which must previously receive the approval of the Board of the Faculty of Medicine, may be submitted and if it is adjudged to be of exceptional merit the candidate may be exempted from further examination

Ch M—The candidate for this degree must have been admitted to the M B Ch B of the university not less than a year previously, and during that time must have held for at least six months a surgical appointment in a public institution affording full opportunity for the study of practical surgery He must also have attended certain courses including one on pathology and bacteriology he is then examined in surgery in all its branches and in pathology and bacteriology

FEES

The fee for the examination for Matriculation is £2, and on readmission £2 or £2 2s 6d, for each examination for the M B, Ch B degree £6 and £6 on readmission, the Third and Final Examinations being regarded as one examination

The fees for the examinations for the M D and Ch M degrees are each £10 The fee for conferment of each of these degrees is £5

UNIVERSITY OF LIVERPOOL

This university, besides granting degrees in medicine and surgery (M B, Ch B, M D, Ch M, M Ch Orth), awards degrees in dental surgery and in veterinary science Diplomas are awarded in tropical medicine (D T M), tropical hygiene (D T H), public health (D P H), medical radiology and electrology (D M R E), also in dental surgery and in veterinary hygiene The degree of Doctor of Philosophy (Ph D) may also be taken in the Faculty of Medicine

Qualifications for Entry upon a Degree Course

Students who intend reading for a degree are required before beginning their courses, to have passed the examination or examinations for matriculation into the university or an examination or examinations recognized as exempting there from Qualification for entry upon a degree course will normally be based upon the performance of the candidate in the School Certificate and Higher School Certificate examinations conducted by the Joint Matriculation Board or by other recognized examining bodies The Joint Board is prepared to consider applications for exemption from the examination or examinations for matriculation into the university from persons who have passed equivalent

superior examinations Such applications should be addressed to the Secretary Joint Matriculation Board 315 Oxford Road Manchester 13

Professional Examinations

Candidates for the M B Ch B degrees have three examinations to pass the first including (1) chemistry (2) biology (zoology and botany) (3) physics

Second M B—This covers (1) anatomy (2) physiology including biochemistry and histology

Final M B—The subjects of the Final Examination are Part I—(*a*) pathology (*b*) pharmacology and general therapeutics Part II—(*a*) forensic medicine and toxicology (*b*) public health Part III—(*a*) obstetrics and gynaecology (*b*) surgery systematic clinical operative and practical including ophthalmology (*c*) medicine systematic and clinical including therapeutics mental diseases and diseases of children Candidates may take Parts I II and III separately provided that candidates may not present themselves for Part III until they have completed the sixth year of medical study and have passed the examinations in Parts I and II

M D—May be conferred on graduates (M B Ch B Liverpool) (i) on candidates of two years standing Such candidates shall be required to present a thesis certified to be the candidate's own work together with copies of published original papers upon Medical Science (if the candidate desires) The thesis shall embody the results of personal observations of original research either in some branch of medicine or in some science directly relative to medicine If the thesis is accepted by Faculty after report from the assessors the candidate shall present himself for an oral examination on the subject of the thesis (ii) on candidates of five years standing by examination in (*a*) medicine and (*b*) a selected branch of medicine

Ch M—May be conferred on graduates (M B Ch B Liverpool) after examination

M Ch Orth—May be conferred on graduates in Medicine of Liverpool or other approved university and graduates of a Faculty other than Medicine of Liverpool or other approved university who are Fellows of the Royal College of Surgeons of England Edinburgh or Ireland or of the American College of Surgeons

Other information concerning the diplomas of this university will be found on page 530

Fellowships, Scholarships, Exhibitions, and Prizes

The University awards Fellowships annually to students of distinguished merit as follows

(1) John Rankin Fellowships in anatomy two each of the value of £120 tenable for two years (2) Ethel Boyce Fellowship in gynaecology value £100 and tenable for one year (3) John W Garrett International Fellowship in bacteriology value £100 and tenable for one year (4) Robert Gee Fellowship in human anatomy value £100 and tenable for one year (5) Holt Fellowships in physiology and pathology two in number value £150 each and tenable for one year (6) Johnston Colonial Fellowship in biochemistry value £100 and tenable for one year (7) Thelwall Thomas Fellowship in surgical pathology value £150 and tenable for one year (8) Lady Jones Fellowship in orthopaedic surgery one tenable for one year value £200 offered every two years

There are in addition scholarships exhibitions and prizes open to medical students

Scholarships—The awards made each year to successful students total over £1 500 They include the following a University Scholarship of £50 awarded on the results of Part I of the Final M B Examinations a Ridgway Research Scholarship (£94) a T J Hughes Research Scholarship (£72) a Scholarship in mechanical dentistry of £20 two Lyon Jones Scholarships of the annual value of £19 each for two years awarded one on the results of the First M B Examination the other on the Second M B the Derby Exhibition of £15 the Clinical School Exhibition of £15 the Owen T Williams Prize the Torr Gold Medal in Anatomy John Rankin Exhibition in practical anatomy £23 the George Holt Medal in physiology the Kanthack Medal in pathology Mitchell Banks Medal in anatomy the Robert Gee Prize of £5 5s in children's diseases Mary Birrell Davies Memorial Scholarship (Women) £60 per annum for four years Robert Gee Entrance Scholarship (men) value of £42 10s per annum for four years Dental Operating Prizes (four) Orthodontia Prizes (two) Samuels Memorial Scholarships three at £27 each one Thomas H Bickerton Prize in anatomy Dr N E Roberts Prize in zymotic diseases Adami Prize in pathology Leith Murray Memorial Prize in obstetrics and gynaecology Rich Prize J Hill Abram Prize in pharmacology and general therapeutics J Hill Abram Prize in medicine A h s Prize in dental surgery value £2 2s Gilmour Medal and other entrance scholarships In addition a number of gold and silver medals have recently been instituted in the following subjects pharmacology surgery forensic medicine and toxicology public health medicine orthopaedic surgery obstetrics and gynaecology and laryngology and otology

FEES

Information as to the fees for the courses of instruction should be sought from the Dean of the Medical Faculty

VICTORIA UNIVERSITY OF MANCHESTER

This university grants the four ordinary degrees in medicine and surgery—M B and Ch B and M D and Ch M degrees and a diploma in dental surgery a diploma in public health a diploma in psychological medicine and a diploma in bacteriology Candidates for degree courses must pass the examinations prescribed by the Joint Matriculation Board and include the special subjects required by the Faculty of Medicine—namely English Mathematics Latin and Mechanics At least two years of the six years curriculum subsequent to the passing of the First M B examination must be taken at the University

Professional Examinations

M B Ch B—There are four examinations for these degrees They must be passed in proper order and before admission to them the candidate must be duly certified as having attended in the subjects involved The First M B is divided into Part I chemistry and physics Part II biology—(*a*) botany (*b*) zoology The parts may be taken separately or together At the Second M B the candidate is examined in anatomy (including histology) and physiology at the third in pathology bacteriology and pharmacology (including materia medica and practical pharmacy) The Final Examination is divided into two parts which may be taken separately Part I consists of (*a*) forensic medicine and toxicology and (*b*) hygiene and preventive medicine Part II consists of (*a*) medicine including dermatology diseases of children and mental diseases (*b*) surgery surgical pathology and diseases of the eye and of the ear nose and throat (*c*) obstetrics and gynaecology

M D—A candidate for this degree must be a Bachelor of Medicine of the university of at least one year's standing. He has a choice between presenting an original dissertation or undergoing a written (as well as a practical and clinical) examination in medicine a written and practical examination in pathology and one other subject selected by himself Notice of intention to present a thesis must be given to the Registrar by March 1

Ch M—A candidate must have held since becoming Ch B of the University and for not less than twelve months a post in a public institution affording opportunity for the study of the branch of surgery in which examination is desired The examination in Branch I comprises the general field of surgery Branch II obstetrics and gynaecology Branch III ophthalmology Branch IV otology laryngology and rhinology

B Sc and M Sc—The ordinary degree of B Sc in the Schools of Anatomy and Physiology may be obtained by students in medicine who in their third year of study for the degrees of M B Ch B complete the additional courses in these subjects prescribed for this degree The degree of B.Sc with Honours in Anatomy or Physiology may be obtained by students in medicine who after completing the third year of study for the degrees of M B Ch B devote the following year to the study of the subject of the Honours School Graduates in science of this university of not less than one year's standing from the date of their graduation as Bachelors may proceed to the degree of M Sc by the presentation of an approved thesis on some subject coming within the scope of the Faculty of Science

FEES

The following examination fees are payable Matriculation £2 on readmission £2 Each M B examination £8 8s on readmission £3 3s M D including the conferring of the

degree, £10 10s Ch M, £10 10s for the examination and £8 8s for conferment of degree Application for further information should be addressed to the Dean of the Medical School

UNIVERSITY OF SHEFFIELD

The degrees of this university (M B, Ch B, M D and Ch M, B D S and M D S), and the diploma of licentiate in dental surgery, are open to candidates of either sex Candidates for a degree must have matriculated in the university or have passed such other examination as may be recognized for this purpose The pre-registration examination may be passed either before or after entering the university

Professional Examinations

A candidate for the degrees of M B, Ch B must produce certificates that he will have attained the age of 22 years by the day of graduation, that he has pursued the courses of study required by the university regulations during not less than five and a half years subsequent to the date of his matriculation or exemption from matriculation, three of such years at least having been passed in the Faculty of Medicine of the University, one at least being subsequent to the passing of the Second Examination The following examinations must be passed in due order

First Examination—The subjects are chemistry, physics, and biology Candidates who have passed the Intermediate Examination of the Faculty of Pure Science in any or all of the subjects of the First M B Examination will on payment of the fee for the latter examination be deemed to have passed it when they have passed in such subjects as they did not take for the Intermediate B Sc Examination Candidates on presenting themselves for this examination are required to furnish certificates of having attended for not less than one year approved courses of instruction after matriculation in (1) chemistry, inorganic and organic, (2) physics, (3) biology, and of having passed or obtained exemption from the preliminary examination in chemistry and physics

Second Examination—The subjects are anatomy and physiology (Part I) Candidates must have passed the First Examination and must have attended (1) courses on anatomy, including lectures and practical anatomy during five terms, (2) courses on physiology, including lectures and practical physiology, during one year

Third Examination—The subjects are pathology and pharmacology, applied anatomy, and physiology (Part II) Candidates must have attended courses of instruction in pathology for five terms in pharmacology for three terms (and one term in pharmacy), in applied anatomy for four terms, and in physiology (Part II) for six terms

Final Examination—The subjects are Part I, forensic medicine and public health candidates must have attended courses for one term in each subject Part II medicine (including mental diseases, diseases of children, vaccination special pathology with morbid anatomy and clinical pathology) and therapeutics Part III, surgery (including the administration of anaesthetics, diseases of the ear nose, and throat, ophthalmology and surgical pathology) and obstetrics and gynaecology (including ante-natal and post natal practice and infant hygiene) Candidates for Parts II and III must have completed a minimum of five and a half years of study

M D—Candidates for the degree of Doctor of Medicine must have passed the examination for the degrees of M B, Ch B at least three years previously, must present a thesis embodying observations in some subject approved by the Professor of Medicine and must pass an examination in the principles and practice of medicine

Ch M—Candidates for the degree of Master of Surgery must have passed the examination for the degrees of M B, Ch B at least three years previously, and must, since taking the degrees of M B, Ch B, have held for not less than twelve months a surgical appointment in a public hospital or other public institution affording full opportunity for the study of practical surgery The subjects of examination are systematic clinical and operative surgery, surgical anatomy, surgical pathology, and bacteriology

Other information concerning this university will be found in the section devoted to Provincial Medical Schools

UNIVERSITY OF WALES

The Welsh National School of Medicine

The university grants degrees in Medicine and Surgery—Bachelor in Medicine and Bachelor in Surgery (M B, B Ch), Doctor in Medicine (M D), and Master in Surgery (M Ch)—and Diplomas in Public Health (D P H) and Tuberculous Diseases (T D D)

M B and B Ch Degrees—Candidates are required to pursue a course of study of not less than six academic years subsequent to their matriculation in the university They must hold an arts or science degree of the University of Wales, or of some other university approved for the purpose, but certain of the courses pursued for a B Sc or a B A degree may be counted as required for the medical degrees The courses for the M B, B Ch are divided into two sections The first includes Physics, Chemistry, Biology (Botany and Zoology) (Preliminary Subjects), Organic Chemistry (Subsidiary Subject), Human Anatomy and Physiology (Ancillary Subjects) Study of the preliminary subjects and of Organic Chemistry must extend over at least one academic year, study of Physiology and Human Anatomy must extend over at least two academic years, the first section of the course must occupy not less than three years The second section includes courses in Pharmacology Pathology and Bacteriology, Hygiene and Forensic Medicine Medicine Surgery, and Obstetrics and Gynaecology These courses cannot be commenced until the examinations of the first section have been completed Examinations in all subjects of the second section are held twice each year

M D Degree—Every candidate for the degree of *Doctor in Medicina* shall satisfy the examiners in an examination in clinical medicine and shall submit a thesis to the judgment of the university A candidate may present himself for the examination in clinical medicine during or subsequently to the second year after qualification for the degrees of *Baccalaureus in Medicina* and *Baccalaureus in Chirurgia* and may submit his thesis during or subsequently to the third year after qualification for those degrees The thesis shall embody the results of the candidate's personal observation or original research in some branch of medical knowledge or of some science directly relative to medicine, excepting a subject that is exclusively surgical The candidate shall indicate in what respects his thesis appears to him to advance medical knowledge or practice A candidate shall be required to submit himself to an oral or other examination on the subject matter of the thesis, provided always that in exceptional circumstances it shall be within the discretion of the university to exempt a candidate from such an examination

M Ch Degree—Every candidate for the degree of *Magister in Chirurgia* shall satisfy the examiners in an examination in surgery and shall submit a thesis to the judgment of the university A candidate may present himself for the examination in surgery during or subsequently to the second year after qualification for the degrees of *Baccalaureus in Medicina* and *Baccalaureus in Chirurgia* and may submit his thesis during or subsequently to the third year after qualification for those degrees The examination in Surgery shall consist of two parts Part I—(1) Surgical Anatomy, (2) Bacteriology and Surgical Pathology, Part II—(1) Surgery, (2) Clinical Surgery, (3) Operative Surgery No candidate shall be deemed to have passed in Part II unless he has satisfied the examiners in Part I of the examination The thesis shall embody the results of the candidate's personal observation or original research in some branch of surgical knowledge or of some science directly relative to surgery The candidate shall indicate in what respects his thesis appears to him to advance surgical knowledge or practice A candidate shall be required to submit himself to an oral or other examination on the subject matter of his thesis, provided always that in exceptional circumstances it shall be within the discretion of the university to exempt a candidate from such examination

Clinical Institutions—Clinical teaching is carried out in the Cardiff Royal Infirmary (484 beds) the Llandough Hospital (City of Cardiff) (345 beds) the City Lodge Hospital (City of Cardiff) (604 beds) the Cardiff City Mental Hospital (700 beds), the Cardiff City Isolation Hospital (230 beds), the Prince of Wales' Hospital (Orthopaedic) (132 beds), the Cefn Mably, Glan Ely and Sully Hospitals (Tuberculosis) (608 beds), the Lord Pontypridd Hospital (Acute Rheumatism of Children) (25 beds) These institutions are modern and well equipped and provide facilities for both in patient and out patient clinical instruction The Cardiff Royal Infirmary is the main teaching hospital It serves a district having a population of over

than half a million and during the year 1937 6234 patients were admitted to the wards and 40 530 patients treated in the out patient departments

Scholarships Free Studentships Prizes and Medals—Entrance Scholarships County Free Studentships and Scholarships are available Particulars of these are contained in a special prospectus which can be obtained on application An Isaac Roberts Scholarship in Science of the value of £50 per annum tenable for three years is awarded triennially on the results of the Entrance Scholarship Examination of the Cardiff College The Samuel Brothers Scholarship value £12 to £15 is awarded annually on the results of the work of the first year medical course at Cardiff College The Dr Price Prize value £20 is awarded annually on the results of the work of the first year of the medical course at the Cardiff College The Dr Howell Rees Scholarship value £17 10s is awarded triennially and is held in the Welsh National School of Medicine it is awarded on the results of the examinations in anatomy and physiology Numerous other prizes are awarded for proficiency in different subjects

Research Scholarships—A Catherine Buckton Scholarship of £60 for one year is offered periodically by the council of Aberdare Hall (one of the halls of residence for women students) to a woman who shall undertake to do postgraduate work The Mrs John Nixon Research Scholarship of £150 per annum is available for the promotion of research in medicine and medical pathology The Lord Merthyr Research Scholarship value £200 per annum is available for the promotion of research in cancer A Cecil Prosser Research Scholarship value £250 per annum is available for the promotion of research in tuberculosis The Ewen Maclean Research Scholarship value £150 per annum is available for the promotion of research into the factors which constitute and the conditions which vary resistance to disease especially as regards midwifery Inquiries should be addressed to the Secretary The Welsh National School of Medicine 10 The Parade Cardiff

English Medical Corporations

There are in England three medical corporations which grant licences to practise—the Royal College of Physicians of London the Royal College of Surgeons of England and the Society of Apothecaries of London The first two combine for certain purposes to form what is known as the Conjoint Board in England Details concerning this body its component Colleges, and the third licensing body here follow

THE CONJOINT BOARD

This body—the Examining Board in England—deals with the qualifications of all candidates for the Licence of the Royal College of Physicians of London and for the Membership of the Royal College of Surgeons of England It prescribes for them certain periods of study, and recommends those who pass the required examinations for the Licence and for the diploma of Member respectively The successful candidate is then entitled to register as L R C P Lond, M R C S Eng It performs the same task in connexion with diplomas in public health tropical medicine and hygiene ophthalmic medicine and surgery, psychological medicine, laryngology and otology medical radiology, anaesthetics and child health jointly issued by the two Colleges Under the present regulations every candidate for the L R C P and M R C S must (1) complete five years of professional study after passing a recognized preliminary examination and a recognized pre-medical examination in chemistry, physics and biology (2) comply with the regulations which may be had from the Secretary Examination Hall, Queen Square London W C 1 and (3) pass the two professional examinations of which particulars appear below

Regulations for the Conjoint Diplomas

The following is an outline of the present regulations for the L R C P Lond and M R C S Eng The full regulations and synopses and forms of certificate may be obtained from the Secretary

Pre Medical Examination

Students are required to pass a pre medical examination in chemistry physics and elementary biology conducted by the Conjoint Examining Board before commencing the five years curriculum of professional study or some other examination recognized by the Board—namely the examination in chemistry physics and biology for the degree in Medicine of any university recognized by the Board the higher school certificates of Oxford and Cambridge Universities and the Oxford and Cambridge Schools Examination Board the higher certificates of London Bristol and Durham Universities the Joint Matriculation Board of the Northern Universities or the Central Welsh Board higher certificate

A candidate may enter for the three subjects separately or may take the whole examination together He will be admitted to the examination on producing evidence of having passed the required preliminary examination in general education

The examination is partly written partly oral and partly practical A candidate rejected in one or more subjects of the examination will not be admitted to re examination until after the lapse of a period of not less than three months

Professional Examinations

There are two professional examinations called the First and Final Examinations

First Professional Examination—The subjects of this are Part I (*a*) Anatomy including histology and embryology (*b*) Physiology including biochemistry Part II Pharmacology and materia medica A candidate must have attended at a recognized Medical School courses of instruction in anatomy including embryology during five terms in the course of which he must have dissected the whole body courses of instruction in physiology including biochemistry and biophysics during five terms courses of instruction in pharmacology and materia medica A candidate may present himself for the two parts together or separately but he must take sections (*a*) and (*b*) of Part I together until he has passed in one or both sections a candidate will not be allowed to pass in one section unless he obtains at the same time at least half the number of marks required to pass in the other section Part II of the examination may be passed at any time before the candidate enters for the Final Professional Examination provided that the courses for admission to Part I have been completed A candidate who produces satisfactory evidence of having passed an examination in the subjects of Part I or either section of Part I and of Part II in the examination for the degree in Medicine conducted at a university recognized by the Board will be exempted from further examination in such subject or subjects

Final Professional Examination—The subjects of this are Part I Pathology (including morbid anatomy morbid histology and clinical pathology) and Bacteriology Part II Medicine including medical anatomy forensic medicine and public health Part III Surgery including surgical anatomy and the use of surgical appliances Part IV Midwifery and gynaecology The examination is partly written partly practical partly clinical and partly oral A candidate may take the several parts of the Final Examination separately or may take the whole examination together He will be required to produce the certificates prescribed by the regulations before being admitted to the respective parts of the examination No exemption is granted from any subject in the Final Examination

Fees

The fee for the *Pre medical Examination* is six guineas for re examination in Chemistry two guineas for re examination in Physics two guineas and for Biology two guineas The fee for the *First Professional Examination* is ten guineas for re examination after rejection in Section I six guineas for re examination after rejection in either part of Section I three guineas for re examination after rejection in Section II two guineas The fee for admission to Part I of the *Final Professional Examination* is four guineas for admission to Part II ten guineas Part III ten guineas Part IV six guineas and the re examination fees are respectively three guineas six guineas six guineas and five guineas

ROYAL COLLEGE OF PHYSICIANS

This College has three grades—its Licentiates its Members and its Fellows The Licence is now only issued through the Conjoint Board The Membership (examinations for which are held in January April July and

October) is only granted to those who have obtained the Licence or to those who are graduates of a recognized university, in any case they must be persons over 23 years of age Candidates are examined in pathology and the practice of physic, partly in writing and partly viva voce, they are also examined in French and German The languages are not compulsory, but credit is given to those who show a knowledge of them The fee for the Membership is £42, or in the case of a Licentiate £21 There is a fee of £10 10s, payable before entrance to the examination, which in the case of successful candidates is reckoned as part of the Membership fee The body of Fellows is maintained by election from among the Members

ROYAL COLLEGE OF SURGEONS

This College conducts examinations for the Membership and for the Fellowship The Members are admitted as stated in the section dealing with the Conjoint Board The Fellowship is granted after examination to persons at least 25 years of age who have been engaged in professional studies for six years There are two examinations for the Fellowship—the Primary in anatomy and physiology, held in the months of June and December, which may be passed after the third winter session, the Final held in the months of May and November, chiefly directed to surgery, which may be passed after six years of professional study Candidates must pass the Final Examination of the Examining Board in England and be admitted Members of the College before admission to the Second Examination for the Fellowship, except in the case of graduates in medicine and surgery of not less than four years' standing of universities recognized by the College for the purpose All candidates are required to have held for six consecutive months a responsible post in charge of general surgical patients in the wards of a general hospital recognized by the Council

Fees—At First Examination £8 8s (for re examination, £5 5s) At Second Examination £15 15s Admission fee £10 10s for members, £31 10s for non-members

SOCIETY OF APOTHECARIES

This Society confers a registrable diploma in medicine, surgery, and midwifery (Licentiate in Medicine and Surgery of the Society of Apothecaries, L M S S A), on those successful at the following examinations

Pre medical Examination—Chemistry and physics, and elementary biology

Primary Examination—This includes anatomy, physiology and histology, written, oral, and practical, and materia medica and pharmacy written and oral Candidates referred in anatomy or physiology will be required to produce evidence of further study before being admitted to re examination Candidates will be excused any or all of the subjects of the Pre medical and Primary Examination on producing evidence that they have passed the equivalent examinations before an examining body recognized by the Society

Final Examination—This is divided into three sections, which may be taken at separate examinations—namely S, M, and O S, Principles and practice of surgery, including surgical pathology, surgical anatomy, operative manipulation instruments and appliances, M, Principles and practice of medicine, including therapeutics, pharmacology, and prescriptions, general and medical pathology, bacteriology, and morbid histology, forensic medicine hygiene, theory and practice of vaccination and mental diseases O, Midwifery, gynaecology, diseases of newborn children obstetric instruments and appliances S, M and O are written, oral, and clinical There is no exemption from any subject of the Final Examination Candidates referred in S, M, or O will be required to produce evidence of further study before re examination

The fee for the Pre medical Examination is £5 5s for the Primary and Final, £26 5s, payable in three instalments The regulations and synopses relating to the several examinations, and other information may be obtained from the Registrar, The Society of Apothecaries Water Lane, Queen Victoria Street, E C 4 (telephone Central 1189)

MASTER OF MIDWIFERY

The Society in 1928 instituted a Mastery in Midwifery, and issues a diploma under this title denoting the possession of specialized knowledge of ante natal care, midwifery, and infant welfare and the public health aspects of these subjects The examinations take place in May and November and candidates are required to submit certificates, etc twenty one days before date of examination A severe test has been imposed so as to ensure a high standard of professional knowledge but the diploma is not registrable under the Medical Acts. Admission is open to all who have been for not less than three years in possession of a registrable medical qualification and who have had certain prescribed experience at recognized institutions concerned with obstetrics ante natal work, and infant welfare work Medical officers employed by a public health authority and having special duties connected with maternity and child welfare, are admitted to the examination on production of evidence to that effect The entrance fee for the examination is £10 10s and a further fee of £10 10s is payable by successful candidates *before admission* to the Mastery Copies of the regulations may be obtained from the Registrar at the address given in the preceding paragraph

British College of Obstetricians and Gynaecologists

One of the principal objects of the College is to encourage the study and practice of obstetrics and gynaecology, subjects which should be inseparably interwoven The College consists of Fellows and Members

Candidates for the Membership must have been entered on the British *Medical Register* for at least three years or be eligible for entry thereon Before being accepted for the examination they must produce evidence, satisfactory to the examination committee, of having held resident hospital appointments in general medicine or surgery and in obstetrics and gynaecology for the period laid down in the regulations (at present six months each) The examination consists of the presentation of case records and commentaries, two written papers, and an oral and clinical examination The Fellowship is granted to those Members who are judged to have advanced the science and art of obstetrics and gynaecology

The Fellowship and Membership include practically every teacher of obstetrics and gynaecology in Great Britain and the British Dominions Fellowship or Membership is now a necessary qualification for election to the staff of many obstetric and gynaecological hospitals, and it is anticipated that in time it will be essential for election to the staff of all such hospitals, consequently all intending to specialize in obstetrics and gynaecology should endeavour to obtain the Membership as soon as possible

For those practitioners who have had special post graduate experience in obstetrics, but whose experience and work do not allow of their admission to the Membership, the College grants a diploma (D C O G) Candidates for it must be entered on the British *Medical Register* They must produce evidence of resident post graduate experience in obstetrics as well as in general medicine or surgery Evidence of having regularly attended at ante natal, post natal, and infant welfare clinics and a satisfactory course in gynaecology is also required,

The D C O G is intended to indicate that the holder is a competent obstetrician and one who may be regarded as sufficiently capable to act in the capacity of consultant to local authorities in midwifery practice The examination does not, however, include gynaecology except in so far as it is directly associated with child bearing, and this diploma is not meant for those who aspire to hospital appointments with charge of gynaecological beds

The regulations governing the Membership and diploma may be obtained from the honorary secretary, British College of Obstetricians and Gynaecologists, 58, Queen Anne Street, London, W 1

SCOTLAND

THE UNIVERSITIES

There are in Scotland four universities each possessing a Faculty of Medicine and having the right to confer degrees which admit the holder to the *Medical Register* In essential points the regulations in their medical faculties for undergraduates are much alike so that a general account can be given of all of them together

The universities are those of St Andrews Glasgow Aberdeen, and Edinburgh The provision each of the cities in which these universities are situated makes for the education of medical students will be found in the section on Medical Schools in Scotland here it need merely be said that degrees in medicine from Scotland as a whole have always enjoyed a high repute

The degrees granted in medicine and surgery to candidates of either sex are four in number—Bachelor of Medicine (M B) Bachelor of Surgery (Ch B) Doctor of Medicine (M D) Master of Surgery (Ch M) The two former are not obtainable one apart from the other Besides these degrees a diploma in tropical medicine and *hygiene is obtainable from the University of Edinburgh as* also diplomas in psychiatry and medical radiology As for public health registrable degrees and diplomas in this subject are granted by the University of Glasgow while diplomas in public health may be obtained from the Universities of Edinburgh St Andrews and Aberdeen

The conditions for admission of graduating students of medicine are the same as those in the Faculties of Arts or Science Medical students are also required to pass a pre registration examination in chemistry and physics This is not enforced at Aberdeen or at St Andrews

Professional Education*

The regulations comply in all respects with the requirements and recommendations of the General Medical Council In respect of the various courses certificates must be obtained showing that the student has not only attended regularly but has duly performed the work of the class Out of the necessary five years of medical study not less than three (or in certain circumstances two) must be spent at the university whose degrees the student hopes to obtain and the balance at any place officially recognized for such purpose In each academic year there are two sessions—one lasting from the beginning of October to the middle of March and the other from the middle of April to the beginning of July

Professional Examinations

The distinctive feature of the Scottish curriculum is that though nominally there are only four examinations each of these may be, and habitually is split up by the student into sections Hence a student may complete some stage of his career during the course of nearly every session Thus by the end of the first winter session the student may pass in zoology† and chemistry‡ At the end of the first summer session he can finish with botany† and physics‡ and with anatomy and physiology at the end of the second Pathology and materia medica he may pass at the end of the third year and so on until the final examination in midwifery surgery and medicine and the corresponding clinical subjects at the end of the fifth year of study At each examination the candidate may pass with much distinction or with distinction — with merit in St Andrews—and a record is kept of the merit displayed so that when the time comes for the candidate to graduate one who has done well throughout can be declared as graduating with honours (In Glasgow Edinburgh and St Andrews a candidate may pass with distinction but there is no higher grade of much distinction) A further point in the system is that the student's own teachers commonly take some part in his examination

Of the four examinations the first deals with physics botany zoology and chemistry (inorganic and organic) the second with anatomy and physiology the third with materia medica therapeutics pathology and bacteriology the fourth with forensic medicine public health medicine surgery midwifery and gynaecology At Edinburgh the first two examinations are held three times a year except in chemistry and zoology in which subjects examinations are held only twice a year At St Andrews all four examinations are held twice a year and at Glasgow the first two are held twice a year and the third three times At Aberdeen degree examinations in all subjects are held twice a year

Exemption from the first professional examination may be obtained by candidates who have passed an arts science or medical degree examination in its subjects at any recognized university §

The Higher Degrees

It is open to those who are already M B Ch B to proceed either to the M D or the Ch M A candidate for the former must have been engaged for not less than one year in work in the medical wards of a hospital or in scientific research in a recognized laboratory or in the Naval or Military Medical Service or have been at least two years in general practice and must be at least 24 years of age A thesis on any subject not exclusively surgical must be submitted and the candidate is also examined in clinical medicine and, if desired (*or* in the case of Glasgow St Andrews and Aberdeen) in some one or other of its special departments The regulations for candidates for the Ch M are of a corresponding character a period of surgical work in a hospital or elsewhere being substituted for medical work and the thesis being on a surgical rather than a medical subject. An examination in surgical anatomy clinical surgery operative surgery and in some of the special departments of surgery is included

FEES

It is estimated that the class examination and other fees for the M B Ch B come altogether to about £265 the separate examination fees included in this calculation being as follows

	£	s	d
First Professional	9	9	0
Second Professional	7	7	0
Third Professional	6	6	0
Final	11	11	0

(At Glasgow the fees are respectively nine nine eight and seven guineas at St Andrews nine six nine nine respectively)

Re entry in any subject in which the candidate has failed entails a fresh payment of £1 1s (in St Andrews 15s for each subject in which he is re examined Candidates for the M D and Ch M pay £21 and on re-entry £5 5s

More detailed information with regard to the University of Edinburgh can be obtained from the *Medical Programme* price 6d (by post 7½d) which is published by Mr Thin 53 South Bridge Edinburgh or on application to the Dean of the Faculty of Medicine Information about Glasgow should be sought from the Registrar the University Glasgow With regard to Aberdeen application should be made to the Secretary of the University of Aberdeen In respect of St. Andrews information can be obtained either from the Secretary of the University or alternatively the Secretary of the United College St Andrews or the Secretary of University

*The medical curriculum in the Scottish universities is undergoing revision

† At St Andrews University botany and zoology may be taken at the end of the first winter term physics and chemistry at the end of the first year

‡ In the case of Glasgow these subjects—chemistry and physics—are transposed

§ This does not apply to the University of Aberdeen where the course in physics includes special instruction on the medical aspects of the subject Accordingly every student irrespective of whether he holds an arts or science pass in physics must take medical physics

College Dundee these being the two constituent colleges of the University of St Andrews

Finally, it should be mentioned that in connexion with all the Scottish universities there are valuable bursaries and scholarships some information as to which will be found in the article on Medical Schools

The Carnegie Trust

The following is a summary of the regulations made by the Carnegie Trust for the Universities of Scotland for assistance in the payment of class fees in the universities and extra-mural colleges of Scotland

Applicants must be over 16 years of age they must be of Scottish birth or extraction or have attended for two years, after the age of 14 at a school or institution under inspection of the Scottish Education Department Applicants so qualified who have been pupils of schools under the Scottish Education Department will be eligible for assistance in the payment of class fees if they have obtained the leaving certificate of the Department with a minimum, of three higher grade passes provided that it bears evidence of such preliminary education as is required by the universities for their graduating curricula, or that it has been supplemented by such passes either in the Scottish Universities Preliminary or other examination as will satisfy the above requirement of the universities before they begin their graduating curricula Where applicants have not been pupils of schools under the Scottish Education Department or where other good ground for not having obtained the leaving certificate can be shown, the Executive Committee has power to accept instead what it deems equivalent evidence of attainments provided that applicants will not be considered eligible who have not obtained three higher grade passes or who require to pass any further preliminary examination before they begin their graduating curricula No applicant in medicine is eligible for assistance until pre registration subjects have been passed at any centre where pre registration examinations are required

Applicants in the Faculties of Arts and Science must have had their course of study for each academic year approved by the University Adviser of Studies and all applicants must have passed the graduation examinations belonging to the previous stage of their curriculum before becoming eligible for assistance in the payment of fees of classes belonging to a further stage Beneficiaries must submit to the Executive Committee at the end of each session particulars as to their attendance and work any distinctions gained, and any graduation examination passed

The annual allowance towards payment of class fees offered to beneficiaries by the Trust in the Faculty of Medicine is £20 for four years in all £80 Any unexpended part of a grant will be carried forward to the succeeding year In combinations of Faculties the allowances available for beneficiaries are Arts and Medicine—two Arts grants of £9 and four Medicine grants of £20 in all £98, Science and Medicine—two Science grants of £18 and four Medicine grants of £20, in all £116

Applicants in writing for application forms (Carnegie Trust Merchants Hall 22, Hanover Street Edinburgh) must name the university and faculty in which they intend to study, and state whether they have previously obtained the benefits of the Trust Fully completed application forms must be lodged by new beneficiaries not later than October 20 for the winter session, and by former beneficiaries not later than October 25 Applications for the summer session must be lodged not later than May 10 Payments are made by means of fee coupons, and fees already paid are not refunded

THE SCOTTISH CORPORATIONS

There are three medical corporations in Scotland—the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Royal Faculty of Physicians and Surgeons of Glasgow Their licences an be separately obtained only by persons who are lready in possession of a recognized qualification—in surgery in the case of the College of Physicians, and in medicine in the case of the College of Surgeons and the Faculty of Physicians and Surgeons of Glasgow All others must submit to the examinations held by the Conjoint Board, which the three corporations have combined to form Details concerning this Board and its component Colleges follow The conditions on which their higher qualifications are granted will be found set forth separately in connexion with each corporation

The Conjoint Board in Scotland

This body has charge of all questions connected with candidates for the Conjoint Licences of the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Royal Faculty of Physicians and Surgeons of Glasgow Those finally approved by it are entitled to registration and to the initials denoting the Licences of the three bodies concerned—namely, L R C P Ed, L R C S Ed, and L R F P S Glas The Board requires all candidates to comply with the regulations of the General Medical Council It has an arts examination of its own, but is prepared to accept in its place any of the other educational tests approved by the General Medical Council All candidates must obtain registration with the General Medical Council

It is estimated that the total cost of lectures and fees for the Conjoint Licence is about £170 The separate examination fees are as follows First Second and Third Professional, £5 each, Final £15 On re entry for any of the first three examinations £3 and on re entry for the Final, £5 If the re entry is only in one or two subjects of the First, Second, or Third Examination the fees are smaller

Information concerning this Board should be sought either from Mr David Thomson, Solicitor 18 Nicolson Street Edinburgh or from Mr David Willox, Faculty Hall, 242 St. Vincent Street, Glasgow

Royal College of Physicians of Edinburgh

This College has three grades—Licentiateship, Membership, and Fellowship—all of which are open to men and women The regulations applying to candidates for the Licentiateship have already been generally indicated If desirous of receiving it apart from those of the other two corporations, they must be duly registered medical practitioners Candidates will be required to pass an examination corresponding to the medical part of the final examination of the Conjoint Board, and conditioned in the same way, and also an examination in materia medica The fee for examination is 15 guineas, a special examination being obtainable on due cause being shown, and on payment of 5 guineas extra Ordinary examinations take place monthly on the first Wednesday and Thursday, except in September and October

Candidates for the Membership must be either Licentiates of a British or Irish College of Physicians, or alternatively graduates of medicine of a university approved by the Council, and in either case not less than 24 years of age Candidates are examined in medicine and therapeutics, also on one or more departments of medicine specially professed, and approved by the Council, in which a high standard of proficiency will be expected The fee to be paid by a candidate for the Membership is £36 10s The examination is held quarterly, on the second Tuesday and following days of the months of January, April, July, and October, and application for admission to it must be made a month previous to the date at which it is proposed to appear

For the Fellowship the Candidate must have been a Member of the College for at least three years, and if accepted, pay fees, including £25 stamp duty, amounting altogether to £64 18s Further details can be obtained on application to the Secretary of the College

Royal College of Surgeons of Edinburgh

This College has two grades—its Licence and its Fellowship Licentiates may be of either sex, and for the Fellowship women are eligible also

Licence

As an original qualification the Licence is only granted after fulfilment of the regulations of the Scottish Conjoint Board but as an additional qualification it can be obtained by those already possessed of a registrable or equivalent qualification in medicine In this case the candidate has to pass a written oral and clinical examination in surgery and surgical anatomy and may be asked to operate on the dead body

The fee is £15 15s of which £10 10s is returned to unsuccessful candidates

Fellowship

Candidates for the Fellowship must be not less than 25 years of age and have been in the practice or study of their profession subsequent to qualification for at least two years and must hold either a surgical degree from a university recognized for that purpose by the College, or a registrable diploma obtained as the result of an examination which includes surgery as well as medicine and midwifery Candidates are examined in (*a*) the principles and practice of surgery including surgical anatomy, (*b*) clinical surgery and (*c*) one optional subject which they may choose from among the following surgical pathology and operative surgery ophthalmology laryngology otology and rhinology gynaecology, obstetric surgery, anatomy and dental surgery and pathology The examination is written oral, and clinical or practical A candidate who desires to be examined must give one month's notice After having passed the examination he must lodge with the Clerk to the College a petition asking that his name be placed before the College for election as a Fellow This petition must be signed by two Fellows as proposer and seconder who should be sufficiently acquainted with the candidate to vouch that he is in every way a suitable candidate for the Fellowship Examinations are held four times a year—January March July and September It is desirable that either the proposer or the seconder should be resident in Edinburgh Candidates are not allowed to appear more than three times at the examinations unless by express permission of the President's Council

The admission fee is £20 and after passing the examination the candidate shall pay the sum of £30 to the College funds In the case of Licentiates of the College £10 thereof shall be remitted in consideration of the fees they have already paid For further information application should be made to the Clerk of the College Mr David Thomson Solicitor Surgeons Hall 18 Nicolson Street Edinburgh from whom a copy of the *Laws Relating to the Fellowship by Examination* may be obtained

Royal Faculty of Physicians and Surgeons of Glasgow

The Royal Faculty of Physicians and Surgeons grants, after examination a Fellowship which is registrable by the General Medical Council as an additional qualification For the Fellowship *qua* physician or the Fellowship *qua* surgeon the candidate must pass in medicine or surgery as the primary subject and an additional subject cognate with medicine or surgery respectively must also be taken at the same examination Candidates are required to be approved by the Council before admission to the examination Successful candidates are later balloted for election by the Faculty and, if elected are duly admitted *qua* physician or *qua* surgeon The fee for admission to the Fellowship is £50 or for Licentiates of the Faculty £40 Examinations are held quarterly

The Faculty grants after examination a single licence Candidates for admission to the examination for the single licence must produce satisfactory evidence that they are in possession of a medical qualification registrable in the British *Medical Register*

The regulations respecting the Fellowship together with the dates of the Examinations may be obtained on application to the Secretary Royal Faculty of Physicians and Surgeons 242, St Vincent Street, Glasgow, C.2

IRELAND

MEDICAL REGISTRATION IN EIRE

The Medical Practitioners Act 1927 (Irish Free State) provided for the establishment of a medical Registration Council for the Irish Free State The main functions of the Council are (1) to keep a register of medical practitioners who may desire to practise permanently or temporarily in the Irish Free State, and (2) to exercise disciplinary power with regard to all medical practitioners who are on the *Register* and engaged in practice in the Irish Free State The first schedule of the Act contains the agreement between Great Britain the Irish Free State, and Northern Ireland This agreement provides for the nomination of a member of the General Medical Council formerly made for Ireland by His Majesty on the advice of the Privy Council to be made henceforth by His Majesty in Council on the recommendation of the Governor of Northern Ireland The nominations of members of the General Medical Council by universities and medical corporations in Ireland and the election of a member of the General Medical Council by registered medical practitioners in Ireland will be in all respects the same as heretofore The constitution of the General Medical Council and of the several Branch Councils as formerly existing under the Medical Acts, and the powers of holding qualifying examinations and granting diplomas for the purpose of registration in the general *Register* formerly vested in certain universities and medical corporations in Ireland are not affected by the establishment of the Irish Free State or of Northern Ireland and for the purpose of the preparation and keeping of the general *Register* the General Medical Council and the Branch Council for Ireland have the same powers and jurisdictions under the Medical Acts as they exercised formerly The agreement provides also that any person who is or shall be registered in the general *Register* shall be entitled on the payment of a prescribed fee to be registered in the *Irish Free State Register* but this fee is not payable by any person who on the date of the establishment of the *Irish Free State Medical Register* is registered on the general *Register* Then follow provisions with regard to the erasure from the *Register* of the name of a person on account of misconduct

The *Irish Free State Medical Register* was established on May 26 1928 this being the date appointed by the Medical Registration Council The *Register* on establishment contained the name of every medical practitioner who was registered in the general *Medical Register* immediately before May 26 1928 and who either was then resident in the Free State according to his address as stated in the general *Register* or was living outside the Free State and applied to the Council within one month before May 26 1928 to be registered No fee for registration was charged in such cases

For registration in the *Irish Free State Medical Register* subsequent to its establishment a fee is required together with a prescribed form of application A person is eligible for registration if he is at the time of application registered in the general *Medical Register* or if he possesses the requisite qualifying diploma granted by the colleges or bodies in the Free State as set out in the Act Candidates for medical appointments made under the Appointments Commission must be registered in the *Irish Free State Medical Register* Application for further information may be made to the Registrar Medical Registration Council, Room 35 Upper Fitzwilliam Street, Dublin

THE IRISH UNIVERSITIES

There are three universities in Ireland each with a medical faculty These are in Eire the University of Dublin (usually known as Trinity College Dublin) and the National University of Ireland and, in Northern Ireland, the Queen's University of Belfast.

and other licensing bodies "A particular feature of the school is that, by limiting the number of admissions to thirty students a year, they are in constant and intimate contact with the staff throughout the clinical period The "firms" have no more than five clerks or dressers, and each student has the care of not less than six beds The policy of the School is to concentrate on undergraduate teaching Every student during the course of his clinical studies is appointed to the offices of medical clerk or surgical dresser in medicine, surgery, midwifery, and gynaecology for six months each in pathology for three months and in the special departments for seven months In addition to the clinical appointments, each student attends the courses of systematic lectures demonstrations, and tutorial classes held in all subjects of the curriculum In the School there are departments devoted to bacteriology clinical pathology, biochemistry, materia medica public health, operative surgery as well as laboratories for research By reason of the abundance and variety of the material available for investigation, the Institute of Pathology offers peculiar advantages to students in this branch of medicine The Library has ample accommodation, and contains over 4 000 volumes The Pathological Museum is organized in two sections one devoted to specimens illustrating general conditions, the other consisting of the Lockyer Collection, one of the finest collections of gynaecological and obstetrical specimens in the country

The hospital contains 300 beds Of this number ninety-three are allocated to medical cases ninety-two to surgical, and forty one to obstetric and gynaecological The remainder are distributed between the special departments There are special departments for diseases of ear, nose, and throat, the eye, the skin, for children, for mental disorders and psychological medicine, for orthopaedic surgery and massage, for x-ray, electrical, and light treatment, for dental surgery, and for tuberculous and diabetic cases In addition to the number of beds set apart for diseases peculiar to women and for midwifery cases, the hospital serves an extensive and thickly populated district in gynaecological and obstetric work The last department to be opened is the fracture clinic It is held daily at 9 a m, and one of the two honorary officers in charge is always in attendance The radiology department has been provided with new accommodation and has been completely re equipped with the most modern apparatus at a cost of over £10 000 In-patients numbered 4,947 last year, and the out patient department dealt with 33,226 new cases Out-patient attendances totalled 161,434

The Students Club provides for the athletic, recreational, and social life of the students by means of an 8-acre sports ground with facilities for football cricket hockey, tennis and badminton by common rooms restaurant etc and by sections of the club designed for a particular purpose, such as the debating society and the dramatic society The new permanent brick-built pavilion erected at a cost of £5 000, is equipped with every modern convenience including thermostatic control to the showers and an oak over floor for dancing in the large tea room

Appointments—The number of resident appointments as compared with the number of students in the School is exceptionally large and students of reasonable ability and industry can usually be certain of obtaining one or more The resident appointments to which election is made every six months number 27 in every year During the time an appointment is held the officer receives a salary and he is provided with free board and accommodation in the Residency of the hospital In addition to the foregoing two non resident officers and a number of clinical assistants are appointed annually Higher appointments—Annual election is made to the posts of resident medical officer (£400) resident casualty officer (£200) medical registrars (two £150 each) surgical registrars (two £150 each) obstetric registrar (£100) registrar to the ear nose and throat departments (£100) and a cancer and radium registrar (£100) The holders of these posts are eligible for election for a second year

Scholarships—The following are offered annually (*a*) For students beginning medical studies three scholarships each of the value of £65 (*b*) For students beginning clinical studies one University Scholarship of the value of £120, in pathology one University Scholarship, value £120 and one Open Scholarship, value £75 in anatomy and physiology An "Epsom College" Scholarship (£100) is awarded periodically on the nomination of the Head Master and a Cranleigh Scholarship on similar conditions In addition there are a number of exhibitions (value, first year £225 second year £275) A studentship in pathology after qualification, tenable for two years during first year Diploma in Bacteriology may be taken

Prizes—(1) The Llewellyn Prize (£25) and the Llewellyn Certificate of Merit (with £10) for highest distinction through out final course of studies (2) Williams Travers Prize £15 midwifery and gynaecology (3) Pereira Prize, £5 5s, clinical commentary (4) T H Green Prize £5 5s clinical commentary (5) Clinical Surgery Prize £3 3s (6) Clinical Medicine Prize, £3 3s (7) John H Morgan Prize £10 (8) Dr H W C Vines Prize in Pathology £5 (9) Steadman Prize in Pathology £2 2s (10) Dr Russell Reynolds Prize in Radiology £5 (11) The Governors Clinical Gold Medal (12) Class Prizes of £2 2s each in Hygiene and Public Health, Ophthalmology Oto laryngology Psychological Medicine Midwifery, Practical Midwifery, Gynaecology, and Pharmacology and Therapeutics

Fees—The fees are as follows Entrance fee £10 10s, annual fee 38 guineas Annual subscription to Students' Club, £4 4s

Male students only are admitted

Further information may be obtained on application to Eric A Crook, M Ch F R C S Dean of the Medical School, Charing Cross Hospital, London W C 2

Guy's Hospital

The hospital contains 691 beds in constant occupation, of which 621 are available for teaching There are special wards for the reception of cases of diseases of women and for cases of difficult labour, and beds are also allotted to the ear, nose, and throat department, the departments of orthopaedics, ophthalmology, psychological medicine, neurology, and dermatology, the department for the treatment of diseases of the genito urinary system, and the children's department, there are also some special beds for the treatment of venereal diseases

The residential college fronts the east gate of the hospital, providing accommodation for resident students This contains a dining hall, smoking room, reading room, a library of general literature, and a gymnasium for the use of the residents and members of the Clubs Union The athletic ground at Honor Oak Park is reached from the hospital in fifteen minutes The Gordon Museum of Pathology, the Wills Library, the departments of chemistry, physics, biology, anatomy, physiology, pathology, and pharmacology, and the school buildings in general, all of which have been built or reconstructed in recent years, afford opportunities for a liberal education and provide the full curriculum for all medical degrees and diplomas Ample accommodation is provided for research Special classes are held for the first and second examinations for medical degrees of the University of London, for the first and final F R C S Eng examinations, and for the Diploma in Anaesthetics Special teaching is also provided to meet the requirements of the Universities of London, Oxford, and Cambridge in general pathology and pharmacology

Appointments—All appointments are made according to the merits of the candidates, as determined by a committee of the medical staff Sixteen out-patient officers, eight house physicians, eight house surgeons sixteen assistant house surgeons, two ophthalmic house surgeons two house surgeons in the genito urinary department two house surgeons in the orthopaedic department two house-physicians (children's department) two house physicians (dermatological and neurological) four house surgeons in the ear nose, and throat department nine resident obstetric assistants, and twenty four assistant house physicians are appointed annually The house physicians and house surgeons, obstetric residents, ophthalmic orthopaedic, genito urinary, and ear nose and throat house-surgeons hold office for six months each and receive free board and lodging in the college Every student is provided

with rooms and commons in the hospital during the period of his take in as senior dresser In addition to the clerkships and dressership in the medical and surgical wards students are appointed to the posts of dresser or clerk in the special departments of ophthalmology ear nose and throat gynaecology diseases of children diseases of the nervous system dermatology actinotherapeutics anaesthetics orthopaedics vaccine tuberculosis genito urinary and venereal disease clinical assistantships in the various special departments are open to postgraduates

Scholarships Prizes etc—The following scholarships in Arts and Science are awarded A Open Junior Scholarships (1) An Arts Scholarship of the value of £100 (2) a Science Scholarship of the value of £100 these are awarded annually in April (3) A War Memorial Scholarship of the value of £200 awarded alternately in Arts and Science This scholarship is open every other year the next award will be made in April 1940 (in Arts) B Confined Scholarship in Science A Junior Science Scholarship of the value of £100 is offered for competition annually to candidates who have attended the preliminary science classes at this school This scholarship is awarded on the results of the first M B London Examination held in July For the Arts Scholarship candidates must be under 19 years of age on August 1 of the year of the competition and for the Open Junior Science Scholarship candidates must be under 20 years of age on August 1 of the year of the competition A confined scholarship is also awarded to a boy who has received his general education at Epsom College C University Entrance Scholarships (1) A War Memorial Scholarship entitling the holder to free medical education for three years (2) an exhibition of the value of £60 both of these are awarded annually in June or July Candidates will be examined in two of the following subjects at their option (1) anatomy and embryology (2) physiology (3) pathology including bacteriology (4) organic chemistry The examination is held in common with the Medical School of St Thomas's Hospital and the Medical College of St Bartholomew's Hospital *Prizes* Junior prizes for general proficiency £20 £15 £10 Hilton Prize for dissection £5 Michael Harris Prize for anatomy £10 Sands Cox Scholarship for physiology £15 for three years (awarded triennially) Wooldridge Memorial Prize for physiology £10 Beaney Prize for pathology £34 Treasurer's Medal and Prize in medicine Treasurer's Medal and Prize in surgery Golding Bird Gold Medal and Scholarship for bacteriology (£29) Golding Bird Gold Medal and Prize (£29) in obstetrics and gynaecology, Charles Oldham Prize in neurological aspects of ophthalmology (£30) Charles Oldham Prize in ophthalmology (£30) the Charles Forster Prize Edgcumbe Prize (books to the value of £3 10s) awarded annually to the student who is placed *proxime accessit* for the Confined Junior Science Scholarship and the Leonard Lubbock Prize in Clinical Pathology (£10) are awarded annually after competitive examination Two scholarships each of the value of £50 have been instituted to enable students to work for the London University B Sc Special Examination (anatomy or physiology) for one year after passing the Second M B Examination Part II During the period of study for the B Sc degree the ordinary tuition fees are waived *Studentships* The following studentships are open to graduates from this school (1) Gull Studentship in pathology of the value of £250 per annum (2) Beaney Scholarship in materia medica of the value of about £60 per annum (3) Anderson Demonstratorship in clinical chemistry value £60 per annum (4) Arthur Durham Travelling Scholarship of £150 awarded triennially (5) Griffiths Demonstratorship in pathology of the value of £320 per annum (6) Hilda and Ronald Poulton Fellowship value £150 per annum (7) Adrian Stokes Fellowship in pathology and bacteriology value £200 awarded biennially (8) Fripp Memorial Fellowship value £300 per annum

An annual composition fee is paid by all students until a registrable qualification is obtained Further information may be obtained from the Dean of the Medical School Guy's Hospital London Bridge, S E 1

King's College Hospital

The New Medical School at Denmark Hill opened in July 1933 contains the museum, research laboratory research rooms common rooms lecture rooms refectory and two squash rackets courts Provision is made for all the subjects of the medical curriculum The hospital was opened in 1913, and is easily reached from all parts of London In the education at the hospital a special feature has always been the individual attention given to each student The studies are co-ordinated under the direction of senior members of the honorary staff assisted by medical surgical, obstetric and pathological tutors

The Hall of Residence for members of the medical school is situated on Champion Hill Both the Hall and the athletic ground are within ten minutes walk of the school

The Clubs and Societies Union combines athletics music and other societies connected with the school and provides also the common rooms

Appointments—Thirty one resident medical and surgical appointments are made during each year as well as dressers and clerks in the wards out patient departments post mortem rooms and special departments Each of the special departments has clinical assistants There are eight registrars and four tutors all of whom receive salaries

Scholarships etc—At entrance Science Scholarship £100 At commencement of Final Studies Anatomy and Physiology Scholarship £100 Pathology Scholarship £100 two Raymond Gooch Scholarships each £105 two Burney Yeo Scholarships each £105 (for Oxford and Cambridge students) Seamen Scholarships £50 a year Epsom College Scholarship £100 Senior Scholarship £40 Todd Prize Tanner Prize Chevne Prize Legg Prize Ware Prize Ferrier Prize in Neurology Class Prizes and Medals

Fees—The inclusive fee of £130 covers entrance and tuition fees and subscriptions to the clubs and societies

Dental School—This school was opened in October 1923 and in conjunction with King's College provides complete courses for dental degrees and diplomas

The calendar of the school can be obtained on application to the Dean John B Hunter M C M Chir F R C S or to the Secretary of the Medical School S C Ranner M A. King's College Hospital Denmark Hill S E 5

The London Hospital

The London Hospital serves the East End of London and with 885 beds is the largest voluntary hospital in England Students have the choice of five medical and five surgical firms Each firm consists of two physicians or surgeons a registrar, a house physician or house surgeon about fifty beds and seven clinical clerks or dressers The number of students admitted each year is limited so as to ensure that every student shall have an average of seven or eight beds allotted to him when acting as a clerk or dresser The out patient department deals with a hundred thousand new patients per annum, and is extensively used for teaching Three wards devoted to maternity and gynaecological cases the district served by the hospital and the neighbouring County Council maternity centre for East London afford exceptional opportunities for gaining experience in the practice of midwifery The size of the hospital necessitates a large number of resident medical officers Every year seventy resident house physicians and house surgeons and eighty salaried non resident clinical assistants are appointed As the school is relatively small the chances of a student gaining some of these appointments are considerable The honorary visiting staff numbers over fifty All take their part in teaching The work of the hospital never stops, and at the London a student can gain a wealth of clinical experience and obtain a variety of clinical teaching which cannot be surpassed

The Medical College is attached to the hospital and is staffed by professors of anatomy physiology, bacteriology chemical pathology morbid anatomy and medicine of the University of London Special courses in anatomy and physiology for the Primary F R C S and advanced courses in surgery for the Final F R C S examination and in medicine for the M D and M R C P examinations are held twice a year

Scholarships and Prizes—The following is a list of scholarships and prizes —At entrance Price Scholarship in science £100 Two open scholarships each of the value of £100 A Scholarship open to students of Oxford and Cambridge Universities £100 anatomy and physiology Epsom Scholarship free medical education After entrance Buxton Prize in

anatomy and physiology, £40 Letheby Prizes in organic chemistry and chemical pathology, £25 H L B Hiking Prize in clinical obstetrics and gynaecology £25 Duckworth Nelson Prize in practical medicine and surgery £10 Hutchinson Prize in clinical surgery £60 Treves Prize in clinical surgery £20 Sutton Prize in pathology £20 Sir Andrew Clark Prize in clinical medicine and pathology £14, T A M Ross (*prov acc*) Prize in clinical medicine and pathology £10 10s, Anderson Prizes in elementary clinical medicine £20 Dressers Prizes £20 the F N Charrington Prizes in practical anatomy £25 Arnold Thompson Prize in medical and surgical diseases of children £15 Liddle Prize, £120, Francis Farmer Entrance Scholarship in biology chemistry, and physics, £25 Harold Fink Prize in dental surgery, £8 8s The London Prize in dental prosthesis, £6 6s Six class examination prizes of the value of £3 3s to £5 5s are offered for competition at the end of the courses of lectures in the dental curricula Funds to the value of over £113 000 permit of financial assistance being given to students and graduates engaged in medical research

The Medical College contains a modern museum of pathology and a library provided with all the current medical periodicals in charge of a full time librarian There is also an Athenaeum Club and dining hall a gymnasium a fives court and two squash courts in the students hostel The athletic ground of 13 acres at Hale End is within easy distance of the hospital Although situated in the East End the hospital is only twenty minutes from Charing Cross and Baker Street There is accommodation for seventy five students in the students hostel

Further details may be obtained from the Dean Dr A E Clark Kennedy F R C P, physician to the hospital, who is always pleased to meet students wishing to see the hospital and college Application for admission should be made to the Dean Turner Street, London E 1

The Middlesex Hospital

The school and hospital are in Mortimer Street, W 1, close to Oxford Circus, Goodge Street, and Great Portland Street stations There are a gymnasium, squash rackets court, common rooms, and restaurant within the hospital precincts, and an athletic ground within easy reach The hospital contains 602 beds, including a wing containing beds for patients suffering from cancer There are special wards for maternity and gynaecological cases, for neurological cases, for cases of venereal disease, for diseases of children and of the skin and eye, for ear, nose, and throat cases, and for dental cases The hospital has been entirely rebuilt, and includes a new house for resident officers

The medical school, which includes the Bland-Sutton Institute of Pathology, the S A Courtauld Institute of Biochemistry, the Barnato Joel Laboratories, and the Ferens Institute of Otology, is completely equipped for teaching the entire medical curriculum, including the pre-medical subjects, chemistry, physics, and biology The Bland-Sutton Institute, under the direction of the Professor of Pathology, contains large pathological laboratories, and smaller rooms for original investigation, as well as a pathological and anatomical museum Bacteriological and microscopical examinations of material from the wards, operating theatres, and out-patient departments are carried out in the laboratories, and senior students are eligible for clerkships in connexion with this work Junior assistants in the pathological and bacteriological laboratories are elected annually from recently qualified students Every facility is given for original research The Courtauld Institute of Biochemistry is under the charge of the Professor of Biochemistry, and contains teaching and research laboratories in addition to those devoted to the routine chemical pathological work of the hospital The Barnato-Joel Laboratories offer unrivalled opportunities for the study of cancer in both its clinical and its pathological aspects

Appointments.—Thirty-seven resident appointments are open annually for competition among students of the hospital Three casualty medical and two casualty surgical officers and four resident officers to the special departments are appointed annually Ten house surgeons are appointed every year at intervals, after examination eight house physicians are also appointed annually at similar intervals An obstetric and gynaecological house surgeon is appointed every six months, and two orthopaedic house surgeons and one senior and two junior resident assistant anaesthetists are appointed annually A dental house surgeon is appointed every eight months Eleven registrars each at a salary of £300 per annum, are appointed annually, and one half time dental registrar at £150 In the out patient departments and wards the appointments are clerk and dresser to the physicians and surgeons to out patients, clerk or dresser to the department for diseases of the skin and nerves, for diseases of women for diseases of the ear nose, and throat, for diseases of the eye, and to the departments for orthopaedics and for odontology Extern midwifery clerks and post mortem clerks are also appointed, every student secures six months' experience in midwifery and gynaecology without leaving London The appointments are so arranged that every student may during his course hold all the out patient and in patient clerkships and dresserships Non resident qualified clinical assistants are appointed to the medical and surgical departments and also to the following departments neurology, ophthalmology, otology odontology children and electrotherapeutics

Scholarships.—There are two open Entrance Scholarships value £100 each Two scholarships, of the value of £100 each, for students of the Universities of Oxford and Cambridge who have completed the curriculum for, or passed the examinations in anatomy and physiology Students joining the school in the previous April are eligible In addition there are two scholarships, value £100 each open to students of the school when they have passed in anatomy and physiology The Freer Lucas Scholarship is annually awarded on the nomination of the Head Master to a pupil of Epsom College who has passed the first examination for medical degrees (Preliminary Scientific Examination) There are numerous other valuable scholarships prizes, and exhibitions open to students of the hospital, including the Broderip Scholarships value £60 and £40 Lyell Gold Medal and Scholarship, value £55 5s, Freeman Scholarship, value £30, John Murray Gold Medal and Scholarship, value £25, Hetley Clinical Prize, value £25 James Kingston Fowler Prize, value £15 15s Leopold Hudson Prize, value 11 guineas, and the Colin Mackenzie Prize, value 10 guineas

The rebuilding of the hospital has been completed

Fees.—(*a*) Entrance fee 25 guineas, payable on joining the medical school Pre medical students For one year or less, £21 (*b*) Students who have completed the Preliminary Science course Five annual fees of £45 The annual fee for further attendance at the medical school, if a registrable qualification has not been obtained is £23 (*c*) Oxford and Cambridge and other students who have completed the Intermediate course entrance fee, 15 guineas, three annual fees of £45, further annual fees as above These fees are inclusive and cover the cost of instruction in vaccination fevers etc and also the subscription to the amalgamated clubs and hospital journal

Further information may be obtained from the Dean or the School Secretary

St Bartholomew's Hospital

This institution fills one side of Smithfield and Giltspur Street, covering the greater part of a large island of ground separated practically from all other buildings, it is on the edge of the City, and easily reached from all parts of London The hospital contains 775 beds Extensive buildings, opened in July, 1907, occupy part of the ground acquired from the old Bluecoat School, and these materially enhance the attractions of the hospital as a place of medical study The old medical school buildings have at their side a very large building, which includes quarters for the resident staff, and an out patient department and accommodation for special departments During the year 1909 a second block of new buildings was completed These form the pathological department, and include, in addition to an extensive post mortem room, large and well-equipped laboratories for clinical pathology, pathological histology, bacteriology, and chemical pathology A new block of surgical wards and five operation theatres (one attached to each surgical unit), with accommodation for 250 patients, was opened in June, 1930 A similar new block of medical wards, erected on the site of the old South Block, was opened in

July 1937 One of the old blocks previously used for surgical cases has been reconverted for the housing of an enlarged gynaecological and obstetrical unit, with separate operation theatres attached sixty obstetrical beds have been provided The Students Union Athletic Ground, seventeen acres in extent is situated on the Foxbury Estate at Chislehurst and is easily accessible from the hospital

The Medical College has recently purchased the site and buildings in Charterhouse Square (five minutes walk from the hospital) formerly occupied by the Merchant Taylors School and the whole of the pre clinical departments have now been transferred there Various athletic amenities including squash rackets courts, are available on this new site

Special classes are held for students preparing for the Preliminary Scientific and other examinations for the M B M D of the Universities of Oxford Cambridge and London and for the higher surgical degrees at the same universities including the M Ch Oxon, M Chir Cantab M S Lond and F R C S Eng

Clinical Units—Special clinical units have been established in medicine and surgery each under the charge of a professor and director who devotes the whole of his time to the purpose of hospital practice teaching and research In each unit there are an assistant director and four assistants for whom special laboratory accommodation has been provided The appointments of clerks and dressers in these departments are open to all students and so far as possible arrangements are made for all students to study in these units during a part of their clinical course

Appointments—Clinical clerks to the physicians and to the physician accoucheur and dressers to the surgeons and in the casualty department are chosen from the students clerks and dressers are also selected from the students to attend in the out patient rooms in the special departments (ophthalmic orthopaedic gynaecological children's laryngological aural dermatological venereal electrical and dental) and in the post mortem room Chief assistants and clinical assistants are selected from qualified men appointed yearly to help in the general medical surgical and in special departments Ten house physicians and ten house surgeons are appointed annually During their first six months of office they act as junior house physicians and house surgeons and receive a salary of £80 a year During their second six months they become senior house physicians and house surgeons and are provided with rooms by the hospital authorities and receive a salary of £80 a year Five casualty house physicians and five casualty house surgeons are appointed every three months A resident midwifery assistant an ophthalmic house surgeon a house surgeon to the skin and venereal department and a house surgeon for diseases of the throat nose and ear are appointed every six months and are provided with rooms and receive a salary of £80 a year Three resident administrators of anaesthetics are appointed—the senior for one year at a salary of £150 and two juniors for six months with a salary at the rate of £80 per annum—and all are provided with board and rooms An extern midwifery assistant is appointed every three months and receives a salary of £80 a year In the selection of men for these posts preference is given to those who hold the medical degrees of Oxford Cambridge, or London

Scholarships—Seven Entrance Scholarships and Exhibitions are awarded annually The subjects of examination and conditions of eligibility for these scholarships are (1) and (2) one scholarship entitling the holder to free undergraduate medical education for a period of three years and one exhibition value £60 in any two of the following subjects human anatomy and embryology physiology pathology (including bacteriology) biochemistry Candidates must have completed their examinations in anatomy and physiology in a British school or university outside the London metropolitan area (3) One scholarship value £100 in the three following subjects chemistry, physics biology limited to students under 21 years of age who have not entered on the medical or surgical practice of any London medical school (4) An entrance scholarship in arts of the value of £100 in mathematics Latin or Greek or French or German a second language or chemistry or physics (5) The Jeaffreson Exhibition in the same subjects as No 4 of the value of £50 Candidates for Nos 4 and 5 must be under 19 years of age (6) Helen Cave Memorial Scholarship awarded after open competition to sons of registered medical practitioners value about £200 conditions obtainable from the Dean (7) The Shuter Scholarship value £50 in anatomy and physiology is confined to Cambridge graduates The total value of the scholarships and prizes is about £1 900 annually

Further information and a handbook can be obtained on application to the Dean of the Medical College St. Bartholomew's Hospital E C 1

St George's Hospital

This School is at Hyde Park Corner and is carried on in connexion with St. George's Hospital an institution having a service of 436 beds of which 100 are at the convalescent hospital at Wimbledon It provides for the instruction of its students in the preliminary and intermediate subjects of the curriculum at King's College in the Strand The school at Hyde Park Corner is devoted entirely to the teaching of clinical subjects great attention being paid by the members of the staff to individual teaching A number of special courses are given in which the requirements of university and all other examinations receive careful attention

The St George's Hospital Club consists of an amalgamation club, with smoking and luncheon rooms on the hospital premises and other students clubs with an athletic ground at Wimbledon Students have the advantage of a well filled library of medical and scientific books A register of accredited apartments and a list of medical men and others willing to receive St George's men as boarders may be seen on application to the Dean

Appointments—Eight casualty officers ten house surgeons and ten house physicians are appointed annually They are provided with board and lodging in the hospital and receive honoraria of £40 per annum In addition the following appointments are open to all qualified students of the hospital assistant resident physician at £250 per annum two surgical chief assistants at £200 per annum medical officer to the Atkinson Morley Convalescent Hospital at £300 per annum two medical registrarships at £100 per annum medical officer to the biochemical department at £100 per annum assistant curatorship of the museum £100 per annum obstetric assistantship resident at £100 per annum the post of resident anaesthetist at £100 per annum

Scholarships—The following Entrance Scholarships and Exhibitions in anatomy and physiology and in general pathology are awarded in July to candidates who have passed the second M B London or corresponding examination Senior William Brown Exhibition of the value of £120 Junior William Brown Exhibition of the value of £80 Anne Selina Fernee Scholarships (two) of the value of £80 each Anne Selina Fernee Exhibitions (two) of the value of £60 Devitt Pendlebury Scholarships of the value of £50 and Exhibitions each of the value of £40 and up to four in number Other prizes to the value of £200 are awarded annually to the students of the hospital

Fees—For the course of clinical study in the fourth and subsequent years entrance fee £10 10s annual composition fee £42 No entrance fee is payable by St George's students who have studied at King's College

Further information may be obtained from the Dean of the Medical School.

St Mary's Hospital

St Mary's is exceptional in its situation for while it is adjacent to a large poor district in which it serves some 300 000 persons one tenth of whom (on an average) pass through the hospital annually for treatment of one kind or another it is nevertheless so near to Kensington Gardens and one of the best residential districts of London that it offers to the medical student the unusual possibility of living in close touch with his work without a wearisome journey in an overcrowded train or tube As a direct outcome of this social life among students is closer than is possible where the members of a school live scattered in many parts of London and its suburbs

Approximately £250 000 has been spent in rebuilding the medical school and laboratories upon a site adjoining the hospital The new buildings were formally opened by his late Majesty King George V, accompanied by

Queen Mary Apart from the laboratories, class rooms, and theatres for all the subjects in the curriculum, they include a library, restaurant, students' club, billiard room, full-sized swimming bath, squash rackets court, gymnasium, boxing ring, and an underground garage for fifty cars

The principle underlying the clinical teaching is to encourage the student, under supervision, to carry out for himself the various methods of clinical investigation and treatment This is secured by the provision of a very large number of appointments, and by developing the system of clinical clerkships and assistantships Large classes are avoided whenever possible and the intimate association between staff and student has been reinforced by the institution of Clinical Units St 'Mary's is one of the three medical schools in London to enjoy the great advantages in teaching and research which these units confer The clinical material is exceptional A new block has recently been added containing two operating theatres and 75 beds Owing to affiliation with adjacent hospitals, more than 1,000 beds are now available for teaching There are lying-in beds at St Mary's, with upwards of 500 confinements yearly, and in addition to the instruction thus obtained each student is sent (without further fee) to Queen Charlotte's Hospital as part of his training in midwifery

Students especially interested in pathology and bacteriology have singular advantages at St Mary's The institute comprises seven special departments, the whole being under the personal direction of Sir Almroth Wright Two Research Studentships of £200 each are awarded annually

From three to five Entrance Scholarships are awarded annually by nomination Full particulars may be obtained from the School Secretary, St Mary's Hospital, Paddington, W 2 Numerous appointments are open to newly qualified members of the medical school, including seventeen salaried posts with salaries varying up to £750 per annum

The Old Merchant Taylors ground (13 acres) has been acquired, being on sand, it remains dry throughout the winter

St Thomas's Hospital

The Hospital and Medical School are situated along the Albert Embankment between Westminster and Lambeth Bridges The buildings form one of the most striking architectural features of London, opposite the Houses of Parliament, with Lambeth Palace and the beautiful grounds adjoining immediately to the east

The hospital consists of eight linked-up pavilions, the Medical School buildings being separated from the hospital by a quadrangle, they comprise a magnificent Department of Anatomy with its own lecture theatre, museums, research laboratory, and x-ray department, the School of Physiology, named after Sir Charles Sherrington, O M, completely equipped for teaching and research, a newly rebuilt Department of Chemistry with special facilities for research, Physics and Biology Laboratories - The school buildings contain also the library and reading room, which overlook the river and contain approximately 8,000 volumes, also an excellent supply of periodical literature adapted to the needs of medical students and research workers The Museum, named after Professor S G Shattock, is also situated in the School, it contains nearly 5,000 preparations In the west wing are the Pathological Institute and the Photographic Department The post mortem room was entirely rebuilt in 1932, it is a model of its kind, with a large demonstration amphitheatre which is perfectly adapted for teaching purposes and for the intimate study of morbid pathology

The complete curriculum is provided for students can join the Medical School directly after passing the requisite examination in general education and proceed at once to the study of the first M B pre medical subjects which are taught by experienced professors and lecturers with the assistance of full time demonstrators Most students, particularly those entering for the first M B pre medical examination enter in October, but the clinical studies are arranged in three monthly periods, and students can join at any time of the year for clinical studies Classes for the Primary F R C S are held before each examination these classes are held in conjunction with St Bartholomew's and Guy's, three to four weeks special teaching being arranged by each of the three Schools in turn Instruction in the psychology of the normal is given during the later periods of pre clinical studies Classes in pharmacology and materia medica and pharmacy cover the requirements of all the examining bodies

Clinical Studies—The hospital contains 640 beds, in addition it has 30 beds (with teaching facilities over a further 150) at the Pyrford Orthopaedic Hospital, and 22 beds at the St Thomas's Babies' Hostel in Lambeth During 1935 the number of patients admitted into the hospital was 11 814, during the same period 99 341 out-patients were treated In the Maternity Department 2 238 women attended, 643 were admitted into the special maternity ward and 383 were delivered in the district Casualties to the number of 147 213 attendances were dealt with during the same period In addition to the 692 beds actually controlled by the hospital, students have the advantage of a close liaison with Lambeth Hospital, where demonstrations of rare and advanced cases, such as are seldom seen in the wards of a general hospital, are arranged at regular and frequent intervals by the superintendent The obstetric training of students is supplemented by an arrangement with St James's Hospital, Balham, whereby throughout the year two students at a time spend a fortnight in residence at St James's Hospital, where they follow and take part in, the maternity work of the hospital Clinical teaching of medicine and surgery is carried out daily throughout the year in the wards and out patient departments From the day that a student enters on his clinical studies he comes into direct responsible contact with patients Every student acts as clerk in the post mortem room and in the pathological laboratories The Medical Unit, through which every student passes for a period of three months, provides a very thorough grounding in clinical medicine and clinical biochemistry the in patient clerking being afterwards completed under the ae is of a different medical firm In addition to three months' dressing in the casualty department at the outset of his clinical studies every student becomes for six months a dresser to one of the surgeons of the hospital, during this period he receives instruction in anaesthetics Great stress is laid on the teaching of pathology, which proceeds *pari passu* with the clinical appointments held by the student throughout the curriculum The special maternity ward in the hospital gives the student scope for elementary obstetric training before he takes his turn of duty on the district where again he works under close supervision All the special departments are available for the teaching of students, special attention is given to ante natal instruction and the teaching of the diseases of children, a department through which every student passes The laboratories and reading room in the units building are open day and night for those who wish to avail themselves of these facilities A special Tuberculosis Department in the hospital forms a part of the Lambeth scheme for the treatment of patients The Venereal Disease Department is part of the L C C scheme The clinical material in the hospital is placed wholly at the disposal of undergraduate students with the exception of a small class held twice yearly for the Final F R C S Examination, postgraduate clinical students are not accepted Special tutorial classes in all subjects are held before all the final examinations of the Universities and Conjoint Board

St Thomas's House—the Amalgamated Students Clubs' premises immediately opposite the hospital—was opened in 1927, it has all club amenities, with two squash rackets courts, a miniature rifle range, and ample garage accommodation The hostel in the same building has accommodation with all modern comforts for 50 resident students There is a hard tennis court in the Medical School quadrangle and the beautiful sports ground at Chiswick provides for all field games

Appointments—After qualification the following appointments are open to students twenty five clinical assistantships to the various special departments are appointed every three months Eight resident casualty officers and anaesthetists, seven house physicians and nine house surgeons are appointed every six months Nine chief assistants (unpaid) to the special departments and nine non resident registrars (medical, surgical, obstetric, and ophthalmic) at a salary

of £250 hold appointments renewable yearly A resident anaesthetist (salary £200) a resident assistant physician and a resident assistant surgeon (salary £225 per annum) are appointed annually Assistants in the medical and surgical units (salary £450 to £600) hold appointments with a maximum tenure of four years Three assistants in the Department of Pathology hold appointments at a salary of £450 to £600 a year

Scholarships and Prizes—At this School there are the following Entrance Scholarships Two in Natural Science, of the value of £150 and £60 respectively the University Scholarship of £100 in any two of the following anatomy physiology pathology chemistry also the Hector Mackenzie University Exhibition of the value of £60 The value of all Entrance Scholarships is taken out in Tuition Fees The money value and subjects of examination of the remainder are as follows (*a*) William Tite Scholarship for second year students £25 (*b*) and (*c*) Musgrove Scholarship or (alternatively) Peacock Scholarship each for third year students and tenable for two years £35 each (*d*) Mead Medal medicine pathology and hygiene (*e*) Wainwright Prize medicine (*f*) Toller Prize medicine (*g*) Cheselden Medal surgery and anatomy, (*h*) Clutton Memorial Medal in Clinical Surgery biennial (*i*) Beaney Scholarship £50 biennially surgery and surgical pathology (*j*) Solly Medal and Prize biennial reports of cases (*k*) Sutton Sams Prize biennial reports of cases (*l*) Bristowe Medal pathology and morbid anatomy (*m*) Hadden Prize pathology and morbid anatomy (*n*) Grainger Testimonial Prize £31 10s anatomy and physiology (*o*) Louis Jenner Research Scholarship tenable for two years £60 annually pathology Anderson Scholarship and Perkins Fellowship research Myers Exhibition and Planck Prize in Psychological Medicine and others the result of special donations and bequests are available during the academic year

University College Hospital

The school which forms part of the corporation of University College Hospital is in immediate proximity to the hospital in University Street and opposite University College It comprises departments of medicine surgery midwifery and gynaecology pathology including morbid anatomy chemical pathology biochemistry and bacteriology cardiography forensic medicine mental physiology and mental diseases dental surgery practical pharmacy and other departments for the study of special diseases such as those of the eye, skin ear and throat venereal diseases and for instruction in anaesthetics electrotherapeutics and skiagraphy The hospital and school have acquired the National Dental Hospital and College as their dental departments thus providing every facility for the study of dental subjects The Royal Ear Hospital has also been amalgamated as the Ear Nose and Throat Department and a new hospital for in- and out patients close to University College Hospital It contains 41 beds including eight private wards for patients of limited means

The school thus provides the final course of study for the degrees of the Universities of Oxford Cambridge, London Durham, and other British universities and for the diplomas of the Royal Colleges of Physicians and Surgeons in medicine and in dental surgery Each department is also equipped for more advanced work, and provides facilities for research

Clinical units in medicine surgery and obstetric medicine are in operation The whole time directors of the units are concerned with the organization of the teaching generally, but the honorary staff is responsible for the largest share of the teaching in the wards and out patient department of the hospital The hospital has 617 beds including eighty five in the obstetric hospital and seventy-seven in the new private patients wing

The new buildings of the obstetric hospital of eighty-five beds (rendered possible by the Rockefeller benefaction) the new Residents House (with accommodation for thirty three residents and students) the extension of the Nurses Home and the new research laboratories for the Medical School are now finished and in full occupation Among the most recent developments are the following (1) The new Private Patients Wing with seventy seven beds, all of which are in single rooms with the exception of two four-bed wards This wing has the very latest medical equipment together with all possible devices for the comfort of patients (2) An entirely new and up to date x ray diagnostic department (3) New ante natal gynaecological and child welfare out patient departments The opportunity has been taken to transfer the present children's out patient department to the new extension thus securing the obvious advantage of easier co operation

A Students Hostel adjoins the Medical School Large airy and handsomely furnished bed sitting rooms each fitted with hot and cold running water are available

Appointments—The qualified appointments in addition to a number of posts as house physicians and house surgeons and obstetric assistants include the appointments of resident medical officer medical registrars surgical registrars obstetric registrar Harker Smith radium registrar ophthalmic registrar casualty medical officers casualty surgical officers assistants in ear nose and throat skin and venereal diseases departments and house anaesthetists

Scholarships—The following scholarships and prizes are open to competition Two Goldsmid Entrance Scholarships entitling the holder to the final course of medical study one Goldsmid Entrance Exhibition entitling the holder to a reduction by £80 of the fees due for the full course of final medical study and a Filliter Entrance Scholarship in pathology entitling the holder to a reduction by £52 10s of the fees due for the full course of final medical study The examination for these scholarships is in any two of the following subjects anatomy physiology general pathology and biochemistry The examination for 1939 will be held as follows Monday July 17 10 a.m. to 1 p.m anatomy 2 p.m. to 5 p.m physiology Tuesday July 18 10 a.m to 1 p.m biochemistry 2 p.m to 5 p.m general pathology Candidates for the Filliter Scholarship need take pathology alone Radcliffe Crocker Travelling Scholarship in dermatology for one year value about £280 the Graham Scholarship in pathology of a sum not exceeding £400 per annum Leslie Pearce Gould Research Scholarships in surgery for one year value about £260 the *Bilton Pollard Fellowship of the annual value of £650* per annum the Atkinson Morley Scholarship of £45 a year for three years awarded after examination in the theory and practice of surgery the Atchison Scholarship of £55 a year for two years for general proficiency in medical studies the Magrath Clinical Scholarship value about £160 Ferriere Scholarship value £25 the Filliter Exhibition in pathology of £30 the Percival Alleyn Prize for the advancement of surgery by research value about £500 and awarded every three years the Graham Gold Medal for research work four Fellowes Medals in clinical medicine Liston Medals in clinical surgery the Bruce Medal in pathology and surgery two Tuke Medals in pathology the Erichsen Prize for practical surgery and the Roberts and Suckling Prizes in obstetrics and gynaecology

Fees—*Inclusive fee to cover complete clinical course £45* per annum for three years Oxford and Cambridge students who have completed their course in pathology £40 per annum for three years There are no extras as these fees include courses of instruction in pharmacy vaccination and fevers and life subscription to the Medical Society or Women's Medical Club

Particulars of general and special courses can be obtained on application to the Dean University College Hospital Medical School University Street W C 1

Westminster Hospital

The new school officially opened in May by the Earl of Athlone and for some months in full activity is situated in Horseferry Road On an adjoining site the new hospital is rapidly approaching completion for the present clinical instruction continues at the hospital in Broad Sanctuary, opposite Westminster Abbey The education of students in the preliminary and intermediate subjects of the University of London is provided at King's College Strand, and University College The new buildings incorporate the latest advances in medical science The number of in patients averages 5 000 and out patients upwards of 30 000 annually and the hospital and school afford ample facilities for instruction in all branches of medicine and surgery Every student must perform the duties of out patient dresser for three months, and afterwards hold the office of in patient dresser for three

months He is also required to serve two terms of three months each as medical clinical clerk to the in-patient physician, and one term as gynaecological clinical clerk Pathological clerks are appointed every three months to assist in the post-mortem room No student is eligible as an in-patient dresser or clinical clerk until he has completed his examination in anatomy and physiology Clerks and dressers in the special departments of hospital practice are periodically appointed

An annexe devoted to radium therapy and research, containing twenty-two beds, is attached to the hospital

The athletic ground is situated at Tooting, and can be reached in twenty minutes from the hospital

Appointments—A medical registrar and an assistant medical registrar at a salary of £250 and £150 and three surgical registrars at a salary of £250 are appointed annually, and an obstetric registrar with a salary of £50 plus £50 for tutorial fees A senior resident and casualty officer, salary £104 per annum and board, appointed for six months may be extended for a further period of six months A medical registrar to the children (Wander scholar) salary £250 is appointed for one year Three house-physicians three house surgeons, three assistant house physicians three assistant house surgeons, and a resident obstetric assistant are appointed after examination and are provided with rooms commons and salary of £52 per annum except the assistant house-physicians and the assistant house surgeons who are provided with commons only The assistant house physicians after three months' service, become house physicians for a further period of six months and the assistant house-surgeons after three months' service, become house surgeons for a further period of six months One house anaesthetist is appointed for six months, non resident salary £100 per annum Clinical assistants to the assistant physicians and assistant surgeons and to the officers in charge of special departments, are appointed from among the qualified students

Scholarships—The following open scholarships are offered for competition during the year 1938–9 In the winter session two scholarships in anatomy and physiology, £75 each In the spring two scholarships in anatomy and physiology £75 each In May an examination in English Essay, Chemistry, and Physics is held on the results of which four Entrance Scholarships to the value of £75 each are awarded

During the period of study the following prizes may be competed for Sturges Prize in Clinical Medicine (Reports on Cases) Chadwick Clinical Surgery Prize (Reports on Cases), Chadwick Prize (Medicine and Surgery) Frederic Bird Medal and Prize Abrahams Prize (Clinical Pathology) Hanbury Prize in Diseases of Children Sturges Class Prize in Bacteriology, Class Prize in Midwifery Diseases of Women Medicine Pathology, Forensic Medicine Public Health and Surgery

Fees—The annual composition fee is 40 guineas An entrance fee is payable by all students—namely, primary and intermediate students, £13 13s students entering for the final subjects only, £8 8s These fees are subject to alteration from time to time as the School of Medicine may direct

Further information and a prospectus can be obtained on application to the Dean at the Westminster Hospital Medical School, 17, Horseferry Road S W 1

London (Royal Free Hospital) School of Medicine for Women

The school is situated at 8, Hunter Street, Brunswick Square, W C 1, close to the Royal Free Hospital It is, like all the other London schools which have so far been mentioned, one of the constituent schools of the University of London The laboratories are extensive and well lighted, and are fully equipped for the examination courses of the University of London and the Royal Colleges of Physicians and Surgeons Research laboratories are attached to all departments A large, well-equipped library, common room, Union Room, and refectory are provided for the use of students Resident accommodation for sixty-five students is provided in students chambers connected with the school

The Royal Free Hospital, Gray's Inn Road, W C 1, has 327 beds, of which twenty-four are for private patients The obstetrical and gynaecological unit controls sixty-eight beds A large maternity district is served from the unit with a separate maternity hostel in the Essex Road, Islington There are separate departments for diseases of the eye, ear, and skin, children and infant welfare, venereal diseases, orthopaedic surgery, massage, light, electrical and x-ray work, dentistry, and casualty

Students attend the practice of one of the fever hospitals of the London County Council and receive special instruction in psychological medicine at Horton Hospital, Epsom they are also admitted to the practice of a number of special hospitals, and hold clerkships and dresserships at the Elizabeth Garrett Anderson Hospital, the Royal Cancer Hospital the Hospital for Sick Children, Great Ormond Street, the National Hospital for Nervous Diseases, the South London Hospital, the Central London Ophthalmic Hospital and the Royal Ophthalmic Hospital The work of the school includes preparation for the Primary Fellowship examination

Appointments—Qualified students of the school can obtain appointments as house physicians and house surgeons obstetric assistants, surgical gynaecological, and medical registrars, assistant pathologists assistant anaesthetists medical electrician, skiagrapher, and clinical assistants and demonstrators in various subjects

Scholarships—The Isabel Thorne and A M Bird Entrance Scholarships, value £30 a year for six years the St Dunstan's Medical Exhibition value £60 a year for three years which may be extended to five years, the Alfred Langton Scholarship of £35 a year for two years the Flora Murray Bursary of £50, the Mabel Sharman Crawford Scholarship, value £20 a year for four years and the Emma Beilby Bursary of £55 a year, are offered for competition in each year The Sir Owen Roberts Memorial Scholarship and the MacIntyre Evans Scholarship each of the value of £75 a year for four years, the Mrs George M Smith Scholarship of the value of £50 a year for three years which may be extended to five years, the Dr Margaret Todd Scholarship of the value of £37 10s a year for four years, and the Sarah Holborn Scholarship of the value of £20 a year for three years, which may be extended to five years are awarded in alternate years The School Jubilee Bursary of £50 a year for three years is offered every third year The Fanny Butler Scholarship of £16 a year for four years is awarded every fourth year The Bostock Scholarship, value £90 a year for five years, is awarded by the University of London on the recommendation of the Reid Trustees and the School Council on the result of an examination held in May every fifth year The Lieutenant Edmund Lewis and Lieutenant Alan Lewis Memorial Scholarship, of the value of £25 a year for four years is awarded every fourth year The A M Bird Clinical Scholarship of £30 a year for three years the John Byron Bursary of £20 a year for two years, the Julia Ann Hornblower Cock Prize of £60, the Helen Prideaux Prize of £60 the Mabel Webb and A M Bird Research Scholarship of £200 for one year the A M Bird Postgraduate Scholarship of £200 for one year, together with other scholarships and prizes are offered on sundry conditions The Dr Edith Pechey Phipson Post graduate Scholarship of £95 is awarded annually Altogether the school offers annually £2,050 in scholarships Missionary societies offer scholarships on certain conditions to assist women who wish to work in the Mission Field

Fees—For the full course of study £50 per annum throughout the course

The Students Union exists to promote corporate action of the students on matters of common interest, to promote and maintain athletic and other clubs and to issue a school magazine All students are required to become members of the Union

Further information can be obtained from the Warden and Secretary

King's College

The Medical Faculty at this College of the University of London gives instruction in the subjects of medical science for all the usual pre-medical and intermediate examinations in medicine, surgery, and dentistry For final studies students proceed to one of the associated hospitals—King's College, Charing Cross, St George's, Westminster—whose ample facilities, including over 1,000 beds, are available for clinical work

The Medical Faculty of the College provides a general university education in touch with other faculties, classes

of which medical students are permitted to attend There are many college societies clubs and functions in which students of all faculties have opportunity of meeting each other The College has a large athletic ground at Mitcham with a new and well equipped pavilion

The first year subjects are taught in the large departments of the Faculty of Science Within the last few years there has been complete remodelling of the second and third year medical departments at a cost of £70 000 This has comprised a new Department of Anatomy and reorganization with considerable extension of the Department of Physiology

Scholarships—The scholarships include (1) Two Warneford Entrance Scholarships each £30 for four years subjects—divinity the writing of an English essay and three other subjects selected from mathematics classics and science (2) One Sambrook Entrance Scholarship of £30 for three years subjects of examination selected from mathematics classics and science One Warneford Scholarship awarded at end of first year Subjects as for First M B together with divinity (3) Worsley £100 paid in five annual instalments The holders of the preceding awards must proceed to King's College Hospital (4) Rabbeth Scholarships value £30 and £15 in July for the best student of the first year (5) Daniell Scholarship £40 (6) The Layton and Berridge Studentships each £150 and £100 per annum respectively and (7) numerous prizes

Full information as to admission fees and scholarships can be obtained from the Dean of the Faculty of Medical Science, King's College Strand W C 2

University College

This institution, one of the principal component parts of the University of London possesses a Faculty of Medical Sciences whose work covers all the subjects included in the group commonly known as the preliminary medical sciences—namely, physics, chemistry botany and zoology and also the intermediate medical sciences—namely anatomy (including embryology and histology) physiology biochemistry and pharmacology The anatomy building provided by the munificent gift of the Rockefeller Foundation of New York was opened on May 31 1923, by His Majesty King George V This building forms part of the block which includes physiology and pharmacology A new building has recently been added for the department of zoology, for the endowment and equipment of which the Rockefeller Foundation has made another generous benefaction Research work is undertaken in all the above named departments The College undertakes the education of students in all the subjects mentioned leaving them free to complete their education in the strictly professional subjects—medicine surgery and the like—at any one of the recognized schools of advanced medical studies The work is somewhat differently arranged, according to whether the student has in view the degrees of the University of London or the diplomas of the Royal Colleges In either case the whole work to be done is divided into courses devised to meet the requirements of different examinations and students can join the College for any of them Women students are admitted to all courses on the same terms as men The general arrangements for the benefit of students include membership of the Union Society or the Women's Union Society with use of the College gymnasium and the athletic grounds There is also a collegiate residence for about sixty seven men students at Ealing and for one hundred and seventy-two women students in Malet Street

Scholarships—The scholarships and exhibitions obtainable include the Bucknill Scholarship value 200 guineas in chemistry physics botany and zoology (the successful student must complete his work at University College Hospital Medical School)—the examination includes an English essay two Entrance Exhibitions in the same subjects each of the value of £30 a year for two years a Faculty of Medical Sciences Entrance Scholarship value £45 a year for two years the Bayliss Starling Memorial Scholarship (physiology and/or biochemistry) £130 the Ferriere Scholarship £25 tenable for three years at University College Hospital Medical School and two scholarships total value £100 awarded annually to enable medical students to proceed to the B Sc (special) degree in Anatomy or Physiology

Fees—The fees for the courses covering the work of the First Examination for medical degrees of the University of London and both parts of the Second Examination and for the corresponding examinations held by the Conjoint Board in England amount to 118 guineas These fees do not cover tuition for more than a stated period

A handbook specially relating to this faculty may be obtained on application to the Secretary of University College Gower Street London W C 1

West London Hospital Medical School

The West London Hospital Medical School is the youngest of the medical schools in London having started as recently as October 1937 Hitherto the hospital had been a centre for postgraduate study for some forty years and its Postgraduate College was the leading institution of its kind in London until the formation three years ago of the British Postgraduate Medical School at Hammersmith The West London Postgraduate College did not wish to enter into competition with its publicly controlled neighbour and after consultation with the University of London it was decided that its facilities could be most usefully employed as a medical school to which the admission of women should be a prime consideration Steps were accordingly taken to obtain recognition for this purpose from the universities and other examining bodies and the School has now been recognized as a clinical school for students reading for the medical degrees of the Universities of Oxford Cambridge and London and for the diplomas of the Conjoint Board and the Society of Apothecaries Recognition for students of other universities is sought when required and has never been refused So far as the University of London is concerned the School has not yet been admitted to the full privileges of a "School of the University but it is hoped that this further recognition may be granted in the near future At present the students come under the purview of the Council for External Students but this makes no difference to the course of study the regulations for internal and external students in medicine are identical

The hospital contains 239 beds and admits some 4 500 patients every year The out patient department is exceptionally large and deals with over 43 000 new cases each year while the annual attendances exceed a quarter of a million All the special departments are provided for but the hospital has recently established special clinics for the treatment of injuries and for rheumatic diseases being the first general hospital in London to do so

It is proposed to admit some twenty four students annually making a total of approximately seventy two for the three years clinical course All students must have passed their Second M B Examination (Anatomy and Physiology) or its equivalent before admission The School is open to men as well as women but preference is given to women and all students except in very special circumstances will be required to read for one of the university degrees At the present moment the total number of undergraduate students is fifteen but until the full complement has been reached a restricted number of postgraduates will be admitted These have access to all the clinics but do not hold any regular appointments and do not therefore interfere with the work of the undergraduates

The School has leased from the hospital two adjacent and intercommunicating houses on the hospital property (1 and 3 Wolverton Gardens) Here are situated the offices students cloakrooms library and certain other rooms not yet definitely allocated of which some will form the nucleus of a students club At the present there is no residential hostel but there is ample accommodation in the immediate neighbourhood which is largely residential in character It is hoped to provide some sort of restaurant facilities in the near future but in the meantime the Hammersmith Road can supply eating houses to suit all tastes and purses

Appointments—Resident appointments will be available to students of the School on qualification and a fair proportion of these will be open to women Senior appointments will

also be given to students of the School when suitable candidates are available

Fees—For the present the fees have been fixed at £50 per annum payable quarterly in advance The question of an entrance fee is under consideration As the School has no endowments it is not yet possible to offer any scholarships

THE PROVINCES

There are in England and Wales not counting London, ten medical schools, each supplying instruction in the full medical curriculum Accounts of them here follow In several cases information is appended about hospitals other than those directly connected with the school in question, such hospitals, officially and unofficially, play a part in the education which the students of the school receive, and in any case serve as places of additional or postgraduate study

Oxford and Cambridge

At both Oxford and Cambridge there are medical schools which furnish unsurpassed opportunities for obtaining a good knowledge of the preliminary sciences and of anatomy, physiology, and pathology The laboratories are excellently furnished, and the teaching staffs most distinguished Both schools provide a full medical curriculum, and there is no essential reason why the student should not complete his career at either of them, but this is not commonly done and is never, in the ordinary way, advised by the university medical authorities The local hospitals—the Radcliffe Infirmary at Oxford and Addenbrooke's Hospital at Cambridge—though well equipped, are comparatively small Students are therefore encouraged, as soon as they have completed the earlier examinations and taken a degree in arts, to join one of the London medical schools, and thus spend the time of their preparation for the final examinations in a city where the opportunities for gaining clinical knowledge are greater and more varied A considerable proportion of Oxford and Cambridge medical students take the London Conjoint diplomas before graduating in medicine and surgery at their own university The experience gained by holding resident hospital appointments is naturally of much advantage when sitting for the Final M B examination

Birmingham

The school in this city is carried on by the Medical Faculty of the University of Birmingham, its students having an adequate number of good laboratories, classrooms, and other necessaries devoted to their use by the university The clinical work is done at the Birmingham United Hospital (General and Queen's Hospitals), which are amalgamated for the purpose Together they have upwards of 800 beds for medical, surgical, and special cases, with an array of special departments of all kinds, including one for lying-in women (about 13,000 in-patients and 90,000 out-patients) Clinical instruction is given in the wards and out-patient and special departments daily, and formal clinical lectures are delivered weekly throughout the session Special tutorial classes are also held alike for the degrees of Birmingham and other universities, and for the diplomas of corporations Students attend the Children's Hospital, Maternity Hospital, and Fevers and Mental Hospitals for instruction in special subjects

The Birmingham United Hospital—The practices of the General Hospital and the Queen's Hospital are amalgamated for the purpose of clinical instruction, which is carried on under the direction of the Board of Clinical Studies They present an almost unrivalled field for clinical work, possessing more than 800 beds, treating annually about 14 000 in-patients and 90,000 out-patients, and as students spend part of their curriculum in each hospital, they have every opportunity of acquiring a varied, full, and practical knowledge of their professional work The curriculum is adapted in the first place to meet the needs of the students of the Birmingham University proceeding to the M B, Ch B degrees, but it is also well adapted to the requirements of students preparing for the examinations of all other universities and licensing bodies The advantages that the combined hospitals offer to students do not cease with graduation, for there is probably no city in which students after qualification have a larger number of resident posts open to them

Resident posts are also available at the Children's Hospital, the City General Hospitals, the City Public Assistance Institutions, the Birmingham Mental Hospitals and Mental Deficiency Act Institutions, the City Infectious Diseases Hospitals, the Birmingham General and Branch Dispensaries, the Birmingham and Midland Eye Hospital, the Royal Cripples Hospital, the Ear and Throat Hospital, the Maternity Hospital, the Women's Hospital, at St Chad's Hospital Edgbaston, and at the Birmingham and Midland Hospital for Nervous Diseases Besides positions in institutions in the City of Birmingham there are numerous resident salaried appointments in the hospitals in the immediate vicinity which are open to the students of the Birmingham Medical School Appointments are also open to medical practitioners in the Naval Military, Air Force, and Indian and Colonial Medical Services

Scholarships and Prizes—There are numerous money and other awards for students of sufficient merit, among them being the following Frank Fletcher and Catherine Fletcher Scholarships (not less than two per annum) tenable for five years, each of the annual value of £100 awarded on higher school certificate examination of the Joint Matriculation Board, the Walter Myers Travelling Studentship of £300, offered each alternate year for research work and tenable abroad, the Sands Cox Scholarship of £42 (an entrance scholarship in the Faculty of Medicine awarded on higher school certificate examination of the Joint Matriculation Board (July)) four Queen's Scholarships of £10 10s each, awarded annually at the second (Part II), third, fourth, and final university examinations respectively, one or more Sydenham Scholarships allotted on entrance to students who are the sons of deceased medical men, the Ingleby Scholarships (two) of £10 for proficiency in midwifery and diseases of women, the Arthur Foxwell Memorial Gold Medal (clinical medicine), the Sampson Gamgee Memorial Medal for surgery (Final M B), the Russell Memorial Prize (for examination in nervous diseases final year), the Priestly Smith Prize in ophthalmology, value about £6 (awarded in the final examination), the Peter Thomson Prize in anatomy (value about £6) for students in their third university year, the Bertram Windle Prize (value about £10) for special work in anatomy, and the John Barritt Melson Gold Medal in Physiology for students in their third university year The Leith Newman Prize in Pathology (Medical) (value £10) is awarded annually on students class Leith Newman work and professional examination, and a prize (value £5) under similar conditions for dental students There is also a scholarship of £37 10s 0d for students proceeding to a degree in dental surgery Board of Clinical Studies Prizes are awarded annually as follows Senior Medical Prize, gold medal, Senior Surgical Prize gold medal, Midwifery Prize, gold medal Junior Medical Prize, silver medal, Junior Surgical Prize, silver medal

Fees—The composition fee for university classes is £106 6s. This covers all the work required for the degrees of Birmingham and some other universities and for the ordinary qualifications of licensing corporations but not the additional courses required for the Fellowship of the Royal College of Surgeons of England the diploma and degrees of the university in State medicine, and some other special work The total cost for the six years' curriculum including hospital and examination fees, is £246 0s 6d (If first year science subjects are excluded, £208 15s 6d)

Other information should be sought from the Registrar, The University, Edgbaston, Birmingham

Bristol

The school is carried on by the Faculty of Medicine of the University, and provides full instruction for all its degrees and for the diploma in dental surgery

Clinical Instruction—The allied hospitals (Bristol Royal Infirmary and Bristol General Hospital) have between them more than 700 beds and extensive out patient departments, special clinics for diseases of women and children, including ante-natal and post natal work, also for

eye ear nose and throat and skin diseases in addition to large and well equipped departments for dental work and large outdoor maternity departments At each of these institutions there are well arranged pathological museums post mortem rooms and laboratories for morbid anatomy There are also laboratories for work in clinical pathology bacteriology and biochemistry in which special instruction is given in these subjects Departments are provided and well equipped for radiology radiotherapy actinotherapy electrotherapy and massage with all forms of physiotherapy These hospitals include a National Radium Centre The students of the school also attend the City and County Mental Hospital the Ham Green Hospital for instruction in fevers and tuberculosis the practice of the Royal Hospital for Sick Children and Women containing 120 beds, and that of the Bristol Eye Hospital with eighty two beds In addition by the kind permission of the Health Committee of the Bristol City Council students may attend the clinical practice at Southmead Hospital and may complete under certain conditions their practical work in obstetrics at that institution which has 510 beds The Orthopaedic Hospital at Winford Stoke Park Colony for Mental Defectives and Winsley Sanatorium are also available

Appointments—(1) Undergraduate Medical clerkships surgical dresserships also ophthalmic obstetric pathological dermatological ear nose and throat clerkships are tenable at the Bristol Royal Infirmary and the Bristol General Hospital In these institutions the dressers reside in rotation free of charge Clerkships are tenable at the Children's Hospital (2) Postgraduate at the Bristol Royal Infirmary four house surgeons one casualty house surgeon three house physicians one resident obstetric officer one gynaecological and dermatological house surgeon one ear nose and throat house surgeon one assistant house surgeon (who also acts in the ophthalmic department) one dental house surgeon and one unpaid assistant (usually a resident student) to the senior resident medical officer All these appointments are for six months Salary in each case at the rate of £60 per annum with board apartments and laundry except the casualty house surgeon and the dental house surgeon who receive £80 per annum In each case the salary is increased by £40 per annum if the officer is re elected for another six months From the resident medical officers a senior resident medical officer is appointed at a salary of £200 per annum Clinical assistantships in all departments are open to senior qualified practitioners At the Bristol General Hospital senior resident medical officer £200 per annum casualty house surgeon £100 per annum two house physicians £80 per annum three house surgeons £80 per annum resident obstetric officer £80 per annum house surgeon to special departments £80 per annum All the £80 appointments carry a salary of £100 for residents who have previously held another of them the dental house surgeon (non resident) £300 per annum All these appointments are for six months except that of senior resident medical officer which is for two years Clinical assistantships in the out patient departments are also available

Scholarships—The following are among the scholarships and other awards open to students of the school The Miriam Badock of the value of £120 and the H H Wills Science Scholarships open to boys proceeding from Clifton College the Harold Greenwood Memorial Scholarship of the value of £20 open to boys who have received instruction at State provided schools in Clevedon (or elsewhere in Somerset) and subsequently at secondary schools in Somerset or Bristol the Dulverton Scholarship (£100 a year for three years) has been assigned to the Medical Faculty for the year 1938 the Ashworth Hallett Scholarship value £40 open to women only two Martyn Memorial Pathological Scholarships of £10 each the Tibbits Memorial Prize value 7 guineas for proficiency in practical surgery the Committees Gold and Silver Medals for fifth or sixth year students for general proficiency the Augustin Prichard Prize value about 6 guineas for proficiency in anatomy the Henry Clark Prize value 11 guineas for proficiency in obstetrics and gynaecology the Crosby Leonard Prize value 6 guineas for proficiency in surgery the Suple Surgical Prize a gold medal and 7 guineas the Suple Medical Prize a gold medal and 7 guineas the Henry Marshall Prize value £12 for dressers the H M Clarke Scholarship value £15 for proficiency in surgery the Royal Infirmary Faculty Prize value £20 for general proficiency the Sanders Scholarship value £22 10s for general proficiency the Barrett Roue Scholarship for proficiency in diseases of the eye ear nose and throat value £24 open to men only Lady Haberfield Scholarship value about 25 guineas Bristol and Bath City Scholarships and the Scholarships offered by the counties of Gloucestershire Somerset Wilts Dorset etc are tenable in the university

One or more Fellowships of not less than £100 per annum are allocated by the Colston Research Society for medical research A Beaverbrook Fellowship tenable for three years is open to all members of the university holding a medical qualification University graduate scholarships are open to graduates of not more than one year's standing The Michael Hiatt Baker Scholarship of the value of £200 per annum open to a graduate from New Zealand may be held in the medical faculty The Markham Skerritt Memorial Prize is awarded every three years to that member of the university not a member of the medical board who in the opinion of that board has published the best original work during the three years The Paul Bush Gold Medal is awarded in alternate years to the best resident medical officer at the Bristol Royal Infirmary

Fees—The fee for all the courses required for the medical curriculum including hospital practice is 220 guineas paid by annual instalments

Further information as to scholarships courses and fees can be obtained from the Dean of the Faculty of Medicine or the Registrar of the University Bristol

UNIVERSITY OF DURHAM

The Medical School, King's College, Newcastle upon-Tyne

(Formerly the University of Durham College of Medicine)

The former University of Durham College of Medicine has become the Medical School King's College in the neighbouring city of Newcastle-upon Tyne and constitutes the Medical School of the Faculty of Medicine of the University of Durham At the beginning of the Winter Session (October 1938) the activities of the Medical School will be resumed in new premises adjacent to the Royal Victoria Infirmary as well as in close proximity to the main buildings of King's College where the students of other faculties attend Its classes and lectures are arranged to meet the requirements of the university in all the degrees granted by the university in the Faculty of Medicine and also those of the other examining bodies Hospital practice is carried out at the Royal Victoria Infirmary, a general hospital containing more than 700 beds where there are facilities for the study of the various special subjects Students do their practical midwifery at the Princess Mary Maternity Hospital which contains ninety beds and has an annual indoor and outdoor attendance on 3 000 cases In the Medical School itself there is a gymnasium and a set of rooms for the separate use of the students

The Newcastle upon Tyne Dental Hospital and Sutherland Dental School is a component part of the dental department in the Medical School The dental hospital erected within the grounds of the Royal Victoria Infirmary and equipped on the best modern lines was opened in 1931 and it is possible to undertake here the whole of the dental curriculum (that is systematic lectures dental and general hospital practice, together with mechanical pupilage) The Dental Board of the United Kingdom recognizes the school for the purpose of granting its bursaries to students who are able to comply with the conditions laid down by the Board

Postgraduate Instruction—A comprehensive series of postgraduate courses are arranged to enable practitioners to take advantage of the facilities for laboratory work and clinical study afforded by the College the Royal Victoria Infirmary and other associated hospitals and in order to meet the varied requirements of practitioners there are general and special courses in the winter and summer sessions as well as an intensive course in the summer vacation in addition there are other postgraduate courses for panel practitioners which are held by special arrangement with the Ministry of

Health and other bodies Courses of instruction are given for the B Hy and D P H

Students Union—A Students' Union furnished at a cost of over £54 000, is in daily use Separate accommodation (non residential) is provided for men and women students

Appointments—Assistants in the pathological department, eye department, throat and ear department and department for skin diseases, are elected periodically Clinical clerks and dressers are appointed every three months Resident appointments at the Infirmary are made every six months, and each year medical and surgical registrars (who also act as tutors) are appointed from candidates who have previously held resident appointments at any recognized hospital These latter posts afford an excellent opportunity for postgraduate study, not only at the Infirmary but also in the departments of anatomy, physiology, pathology, and bacteriology of the College

Scholarships—University of Durham Entrance Scholarship £25 a year for four years Pears Entrance Scholarship £40 a year for three years (awarded every third year), Heath Entrance Scholarship (from Kepier Grammar School) £60 (renewable), Province of Durham Masonic (Entrance) Scholarship, £60 (renewable), Heath Scholarship for surgery £200 available every second year, Rutherford Morison Surgical Scholarship, £180, available every third year

The following scholarships are tenable for one year—namely Tulloch Scholarship for elementary biology and organic chemistry, £20, Dickinson Scholarship for medicine, surgery, midwifery, and pathology, £20, Charlton Scholarship for medicine, £25, Gibb Scholarship for pathology, £28 Luke Armstrong Scholarship for B Hy and D P H (Part I) examination in bacteriology, £25, Stephen Scott Scholarships for anatomy and physiology, two of £50 each, Philipson Scholarships for highest marks in Final M B, B S examination two of £45 each Goyder Memorial Scholarship for clinical medicine and clinical surgery, interest on £325, Hamilton Drummond Memorial Scholarship, in aid of research in clinical surgery, about £50 Macpherson Prize for diabetes or Bright's disease, £15, Gibson Prize for midwifery and diseases of women and children £10 Turnbull Prize and silver medal for surface anatomy, Outterson Wood Prize for psychological medicine £10 Sewell Memorial Prize and silver medal for clinical pathology, Sir Thomas Oliver Prize and silver medal for the physiology of food and nutrition, and Ranken Lyle Prize and silver medal for clinical midwifery Approved applicants may obtain special grants for surgical research from the Stephen Scott Research Fund and Heath Surgical Research Fund for research in asthma, etc, from the William Dodds Research Fund, and for research in dental science from the Parker Brewis Dental Research Scholarship Fund

Fees—For systematic, practical, and clinical instruction under the new regulations the fees will be approximately on the following bases M B B S £230 B D S £225 and L D S £185, including in each of the latter cases the fee for pupilage in dental mechanics The fees as stated include £35 for the First Year Pre medical course In addition there are incidental fees for the Students' Union, library, board during residence at maternity hospital, etc amounting to about £50 during the period at the College Other information should be sought from the Dean of Medicine the Medical School, King's College, Queen Victoria Road, Newcastle upon-Tyne

Leeds

The School of Medicine—which is open to both male and female students—in this city forms the teaching centre of the Medical Faculty of the University of Leeds, and is situated in immediate proximity to the General Infirmary, where students sufficiently advanced receive their clinical instruction The main buildings, opened in 1894, contain excellent dissecting rooms, well-arranged laboratories for physiology, lecture theatres, and classrooms In addition, there is a well-equipped library and reading room and a museum of anatomy The comfort of the students is secured by means of common-rooms and a refectory Extensions of the medical school buildings were opened in October, 1930 The Algernon Firth Institute of athology, which was opened in April, 1933, houses the epartments of Pathology and Bacteriology, and Experimental Pathology and Cancer Research, including the Charles Brotherton Pathological Museum The General Infirmary has 673 beds, and includes ophthalmic and children's wards, a large out patient department, and the Ida and Robert Arthington Semi convalescent Hospitals, Cookridge The West Riding Mental Hospital at Wakefield is available for the study of mental diseases Students also attend the practice of the Hospital for Women and the Leeds Maternity Hospital, and may attend also at the Leeds Public Dispensary

Appointments—Physicians clerks and surgical dressers are appointed every six months, clerks in the children's department, orthopædic dressers ophthalmic and aural dressers, gynæcological ward clerks maternity clerks, assistant physicians clerk, dermatological clerks, assistant surgeons dressers, dressers in the casualty rooms, junior and senior post mortem clerks, laboratory assistants and dressers in the venereal clinic every three months After graduation a considerable number of resident and other appointments become available in the Leeds General Infirmary Leeds Public Dispensary, Hospital for Women and Children West Riding Mental Hospital, etc, occupying periods of from six to twelve months at rates varying from £20 to £150 per annum

Scholarships—The university awards annually on the results of the first examination a scholarship in the form of free admission to the lectures and classes given in the School of Medicine The university also awards a scholarship on the results of the second examination in the form of free admission to the clinical teaching of the Infirmary

Fees—The approximate cost of medical education to a student in this university is estimated at £370, plus, of course the expenses of living during the five and a half years covered by the curriculum The composition fee for the course for the first, second, third and final examinations and for the clinical work at the Infirmary, is £242 The composition and clinical fee for those who have passed the second examination is £153

Further information can be obtained from the Academic Sub-Dean or Clinical Sub-Dean School of Medicine, Leeds

Liverpool

The Medical Faculty is part of the university, and all the laboratories and other rooms are well equipped for the instruction of students proceeding to medical degrees and diplomas, and are situated close to one another Clinical instruction is provided at the following hospitals the Royal Liverpool United Hospital (Liverpool Royal Infirmary, the David Lewis Northern Hospital, the Liverpool Royal Southern Hospital, the Liverpool Stanley Hospital), the Royal Liverpool Children's Hospital, the Women's Hospital, the Liverpool Maternity Hospital, the Eye, Ear, and Throat Infirmary, St Paul's Eye Hospital, and certain municipal hospitals

Manchester

The staff of the Medical School in this city constitutes the Medical Faculty of the Victoria University, all the arrangements for the instruction of students, both in their earlier and their later studies, being of an elaborate nature The clinical work of the undergraduates is done chiefly in connexion with the Royal Infirmary, an institution which itself contains 586 beds and has associated with it a large convalescent home (136 beds) and a Central Branch Hospital (five beds). The courses in mental diseases are taken in the County Mental Hospitals at Prestwich and Macclesfield Instruction in practical gynæcology and midwifery is given at the Royal Infirmary and the St Mary's Hospitals

Clinical Work—The Royal Eye Hospital, the Hospital for Diseases of the Skin, the Manchester Northern Hospital for Women and Children, the well known Hospitals for Children at Pendlebury and St Mary's Hospitals for Women and Children, the Manchester Hospital for Diseases of the Ear, Monsall Fever Hospital, the Christie Cancer Hospital and Holt Radium Institute, the Hospital for Consumption and Diseases of the Throat and Chest, the Ancoats Hospital, the Salford Royal Hospital, and the Hospital for Babies all make arrangements for the instruction of students

Appointments—The following are among the appointments open to past and present students of this school in connexion

with its arrangements for clinical tuition two pathological registrars at £100 and £50 per annum one medical registrar at £150 a cardiographic registrar at £150 a director of the clinical laboratory at £400 and two assistants at £350 and £300 four chief assistants to medical units each at £300 four chief assistants to surgical units £250 chief assistant to neurosurgical service £350 chief assistant to orthopaedic department £250 clinical tutor to orthopaedics £35 medical registrar to out patient department £150 assistant surgical officers aural department at £35 seven anaesthetists from £75 to £125 each three anaesthetists at central branch £25 to £100 one resident medical officer one year £200 one resident clinical pathologist £100 one resident surgical officer one year £200 senior house surgeon for central branch £150 one resident casualty officer £150 one resident medical officer at the Convalescent Hospital at Cheadle £250 two assistant medical officers to radiological department £400 and £200 medical officers physiotherapeutic department £150 assistant medical officer £100 chief assistant gynaecological department £70 assistant to the dermatological department £35 two medical officers out patient department each £105 sixteen assistant surgical officers to dental department £35 four technical assistants for laboratory work £200 clinical assistant to aural out patient department, £35 sixteen house surgeons and eight house physicians appointed during the year for periods of six months at a salary of £50 per annum Resident officers are appointed to the gynaecological the eye and the ear and throat departments every three months Clinical clerks and surgical dressers are appointed to the various departments of the hospital every three months Non resident clinical assistantships for qualified medical men and women tenable for six months at an honorarium of £35

Entrance and other Scholarships—The following are among the scholarships obtainable by students of the school Rogers and Seaton Scholarships in Arts (in alternate years) £40 per annum tenable for two years Three Hulme Scholarships, tenable for three years of £35 one being awarded annually for proficiency in subjects of general education Two James Gaskill Scholarships of £35 tenable for two years one being awarded annually for proficiency in the branches of mechanics and chemistry A Dora Muir Scholarship £30 per annum tenable for three years and open to the competition of women students only This is awarded triennially Sir J P Kay Shuttleworth Scholarship, £30 per annum tenable for three years awarded triennially open to the competition of scholars from Sedbergh School Giggleswick School and Burnley Grammar School subjects—mathematics chemistry and mechanics Dreschfeld Memorial Scholarship, value £20 tenable for two years and awarded triennially on the result of the Entrance Examination John Russell Medical Entrance Scholarship awarded annually value £45 Two Dauntesey Junior Medical Scholarships value £50 each tenable for one year for candidates who have not commenced the second year of study leading to a medical qualification subjects—chemistry physics botany and zoology One Dauntesey Senior Medical Scholarship £50 for one year awarded on results of Second M B Examination Two Entrance Scholarships in medicine value 160 guineas awarded annually for proficiency in arts or science respectively Tom Jones Exhibition in anatomy £25 offered annually A Robert Platt Physiological Scholarship of £90 tenable for one year A Leech Fellowship of £100 for original research after graduation A Graduate Research Scholarship in medicine value £70 tenable for one year awarded annually for proficiency shown at Final M B Examination Two Dumville Surgical Prizes each value £15 awarded annually at graduation The Tom Jones Memorial Surgical Fellowship value £105 tenable for one year usually awarded annually The Turner Medical Prizes value 10 guineas each awarded annually for proficiency in certain subjects of the Final M B Ch B Examination The John Henry Agnew Prize of £30 awarded annually for proficiency in the diseases of children The Ashby Memorial Scholarship tenable for one year (£100) for research in the diseases of children offered triennially Sidney Renshaw Prizes in physiology offered annually (£10 and £20) Wild prize in pharmacology (£10) The John Henry Agnew Fellowship in diseases of children £120 offered triennially Eliza Marple Holt Postgraduate Medical Scholarship for Women £60 for one year offered biennially The details and regulations of the Dickinson Scholarships—(1) for anatomy (2) for pathology (3) Research Scholarship in surgery and (4) Travelling Scholarship in medicine—may be obtained from the Secretary to the Trustees The Morrison Watson Fellowship for research in anatomy is offered annually value £150 also the Sheridan Delepine Fellowship in preventive medicine value £300 is offered biennially The Sam Gamble Scholarships—the trustees are prepared to award four scholarships of not more than £40 per annum to women students who have passed the First M B Examination the conditions can be obtained from the Registrar The Knight Fellowship of £150 offered triennially for the encouragement of the study of factors concerned in the development of the symptoms of mental disturbance—open to competition of graduates of this or any approved university Pilkington Fellowship in Cancer Research £300 for one year

Fees—The composition fee for the university course in medicine is 114 guineas payable in four instalments of 28½ guineas but this sum does not include the fee to cover the work required for the First M B Examination This is £42 payable in one sum Hospital fees are additional and usually amount to about 90 guineas

A prospectus and further information about the school and scholarships may be obtained from the Registrar

Sheffield

In this city the Medical School is one of the departments of the university, being conducted and controlled by its Medical Faculty and occupying practically the entire north wing of the quadrangle of the university buildings overlooking Weston Park The laboratories and lecture rooms connected with the subjects of the first and second examinations—namely chemistry physics biology anatomy and physiology—are both as regards structural arrangement and scientific equipment, on the most modern and complete lines

For students of pathology and bacteriology there are laboratories replete with everything necessary for the most advanced work and a large pathological museum which is open daily In addition there is a large library and reading room There are a number of recreation athletic and other societies all under the management of an annually elected students representative council and large and comfortable common rooms for both men and women students Thanks to the generosity of Alderman J G Graves there is a new and well equipped Union building in close proximity to the university which affords ample facilities for the various student social activities

There is ample hostel accommodation for both men and women students In the university and in the Union buildings there are refectories open to all students of the school A university journal is published each term and the Medical School also publishes a journal The ordinary clinical work of the school is done at the Royal Infirmary and Royal Hospital which have amalgamated for the purpose of clinical instruction, and provide over 800 beds for medical surgical and special cases including diseases of the eye

In addition the Royal Infirmary has special departments for the treatment of diseases of the skin and ear with beds assigned to them whilst at the Royal Hospital there are special out patient departments for diseases of the throat ear and skin orthopaedics and mental diseases The medical and surgical staffs attend daily and give clinical instruction in the wards and out-patient rooms Instruction in the practical administration of anaesthetics is given at either institution by the anaesthetists and the post mortem examinations at both institutions are in charge of the Professor of Pathology and afford ample material for study of this subject Students are able to attend the practice of the Jessop Hospital for Diseases of Women and the Hospital for Sick Children while special courses on fevers are given at the City Fever Hospital and on mental diseases at the South Yorkshire Mental Hospital

Appointments—The following appointments are open to all students who have passed their examinations in anatomy and physiology (1) casualty dresserships (2) surgical dresserships (3) medical clerkships (4) pathological clerkships (5) ophthalmic clerkships (6) clerk to the skin department etc These appointments are made for three months commencing on the first day of October January April and July

Scholarships—Entrance Medical Scholarship covering cost of tuition fees for a degree course in the Faculty of Medicine open to both sexes Six Edgar Allen Scholarships of £100 a

year for three years may be held by students taking the degree course in medicine Two Town Trustees Scholarships, each of the value of £50 a year tenable for three years, for boys or girls who have been educated in a Sheffield secondary school for a period of not less than two years immediately preceding the examination Four Town Trustees Scholarships value £50 a year for boys or girls under 19 years of age educated in any school in Sheffield secondary or otherwise Town Trustees Fellowship value £75 tenable for one year Mechanics Institute Scholarship value £50 (with remission of fees) tenable for one year, and renewable for a second year The Frederick Clifford Scholarship value about £50 tenable for two years Kaye Scholarship value £60 for proficiency in anatomy and physiology Gold and bronze medals are also awarded for proficiency in various subjects

Fees—Students in the Faculty taking their complete medical course in the university pay an inclusive composition fee of £42 for each of the first five years and £28 for the sixth year The composition fees for the dental courses are as follows for B D S first and third years £80 second fourth, and fifth years £30 for L D S first and second years £80, third and fourth years, £30 The fees for special courses taken separately can be ascertained by inquiry of the Dean

The Welsh National School of Medicine

The next session opens on October 4 All classes are open to both men and women students Particulars relating to the admission of students can be obtained on application to the Provost, or to the Secretary, The Welsh National School of Medicine, the Parade, Cardiff (See further details under University of Wales (p 498))

SCOTLAND

As will be gathered from the following paragraphs, the facilities for acquiring a medical education in Scotland are very ample, whether the student be proceeding to a university degree or to a diploma To the descriptions of the different Scottish medical centres is in some cases added an account of hospitals which either play an official part in the education given to students as yet unqualified, or offer valuable opportunities for postgraduation work

Aberdeen

The school is conducted by the Faculty of Medicine This comprises twelve chairs, from which instruction is given in all the main branches of medical science—namely, biology, physics, chemistry, anatomy, physiology, materia medica, pathology, bacteriology, surgery, medicine, and midwifery Courses of instruction in forensic medicine, public health and infectious diseases, tropical medicine, medical ethics, psychopathology, tuberculosis, and clinical methods are conducted by lecturers appointed by the University Court Special opportunities for practical instruction are afforded in the laboratories and museums attached to the departments For students commencing study in October, 1938, and afterwards the curriculum extends over five years and two terms (in all, seventeen terms) Every student during his final year will require to reside for a period of four months in a residence on the joint hospitals site

Clinical instruction is obtained in the Royal Infirmary, the Royal Mental Hospital, the Sick Children's Hospital, the City Fever Hospital, the General Dispensary, Maternity, and Vaccine Institution, and the Ophthalmic Institution Courses of practical instruction are given in diseases of children at the Sick Children's Hospital, in fevers at the City Fever Hospital, in mental diseases at the Royal Mental Hospital, in diseases of the ear, nose, and throat at the Infirmary and Dispensary, in diseases of the eye at the Infirmary and Eye Institution, in venereal diseases and diseases of the skin at the Royal Infirmary

The degrees granted in medicine are Doctor of Medicine (M D) Master of Surgery (Ch M), Bachelor of Medicine and Bachelor of Surgery (M B, Ch B) A diploma in public health is conferred after examination on graduates in medicine of any university of the United Kingdom The degree of Ph D is also granted in this faculty

Fees—An inclusive fee of 127 guineas is payable for instruction within the university and the fee for the degrees of M B, Ch B is 33 guineas The total cost, including hospital fees class and matriculation fees, and degree fees, is about £250

There are numerous bursaries scholarships, and fellowships in the Faculty of Medicine The bursaries range in value from £10 to £45 per annum and are tenable for periods of from one to five years The Scholarships and Fellowships are mostly tenable for two years and vary in value up to £260 per annum

Edinburgh

There are two Schools of Medicine the School of the University, and the School of Medicine of the Royal Colleges of Physicians and Surgeons of Edinburgh

THE UNIVERSITY SCHOOL—This school, in addition to other resources of the university, has the following means of affording practical instruction Royal Botanic Garden, Herbarium, and Museum, zoological laboratory and museum of science and art, physical laboratory, chemical laboratories, dissecting room, bone room, and anatomical museum, physiological laboratory, medical jurisprudence laboratories, John Usher Institute of Public Health, materia medica museum and laboratory, post mortem department of the Royal Infirmary and University Pathological and Bacteriological Laboratory, tutorial classes of practice of physic, of clinical medicine and clinical surgery, surgery, and midwifery, and the practice of certain other hospitals

Fees—The sessional fee for chemistry anatomy lectures physiology, pathology materia medica surgery, medicine and midwifery is £6 6s each Physics, botany zoology, forensic medicine, and public health £5 5s Practical zoology practical anatomy (summer), morbid anatomy, practical materia medica, mental diseases practical pathology, clinical midwifery, and medical entomology and parasitology, £4 4s Experimental physiology, diseases of tropical climates practical botany, histology, child life and health, operative surgery clinical surgery (per term), and clinical medicine (per term) £3 3s Practical anatomy (winter) £6 16s 6d Practical chemistry, £4 14s 6d, chemical physiology surgical pathology and infectious diseases £1 11s 6d Tuberculosis diseases of the eye, diseases of the larynx, ear and nose diseases of the skin and venereal diseases, £2 12s 6d Advanced bacteriology £7 17s 6d Clinical gynaecology, regional anatomy, and applied anatomy, £2 2s

Scholarships—There are many funds for the assistance of students by means of bursaries, scholarships, exhibitions and money awards from the beginning to the end of their undergraduate career In addition there are funds which help those who have taken a first degree in medicine and surgery to continue at work as research students The value of these awards and the conditions attaching to them, are so varied that those interested should consult the prospectus of the school itself

THE SCHOOL OF MEDICINE OF THE ROYAL COLLEGES—This school is composed of Lecturers licensed by the Royal College of Physicians and the Royal College of Surgeons and in most cases also recognized by the University of Edinburgh through their *licentia docendi*, for the sake of convenience they lecture in separate buildings near to the Royal Infirmary, but form a single body governed by a Board elected by the Royal Colleges of Physicians and Surgeons and by the Lecturers This Board, with the assistance of the standing committees of the school, supervises the whole management and especially the maintenance of the efficiency and discipline of the school

The buildings at present utilized for the purposes of lecturing are the following (1) Surgeons Hall Nicolson Street (2) New School, Bristo Street (3) Dental Hospital Chambers Street Clinical classes are held in the Royal Infirmary Royal Maternity Hospital, and other institutions The teaching is similar to that of the Scottish universities and the students receive similar certificates at the close of each session There courses on the special subjects are also conducted by teachers specially qualified in each branch The fees payable for class

and other instruction and including the sums payable before admission to the examinations of the Conjoint Board for the Triple Qualification amount to about £200 The Calendar giving full information regarding classes and fees can be obtained (price 1s. post free) on application to the Dean of the School Surgeons Hall Edinburgh

Glasgow

The whole course of study required for graduation (M B, Ch B) at the University of Glasgow can be taken here Besides ample provision for lectures there is practical and clinical work at the hospitals and practical courses are conducted in the laboratories of the following departments pathology public health pharmacology physiology, surgery anatomy chemistry zoology physics and botany, the Botanic Garden and the Hunterian Museum are also open to students Well equipped buildings have been provided for zoology practical anatomy and operative surgery, as well as for pathology The classrooms and laboratories for the departments of botany physics physiology, pharmacology materia medica, medical jurisprudence and public health are also of recent erection and are elaborately equipped In addition to the regius chairs and the chair of pathology at the university there are the chairs of medicine surgery obstetrics and pathology at the Royal Infirmary and a number of university lectureships in clinical medicine clinical surgery venereal diseases laryngology dermatology otology, psychological medicine tuberculosis pathological biochemistry and medical radiology have been founded there Other chairs have been founded at the university in bacteriology organic chemistry physiological chemistry applied physics public health paediatrics and ophthalmology There are also lectureships on the surgical and medical diseases of children and on medical radiology The university in short has made great and successful efforts to extend and improve the accommodation of the medical departments, to strengthen the teaching staff and to encourage postgraduation and research work A diploma in public health is now also granted Three very extensive general hospitals in the city afford exceptional opportunities for clinical instruction—namely the Western Infirmary (600 beds) near the university to which the Regius Professors are attached, the Royal Infirmary (824 beds) and the Victoria Infirmary (380 beds) while the Royal Mental Hospital, Gartnavel (500 beds) the Royal Hospital for Sick Children (320 cots), the Royal Maternity and Women's Hospital (114 beds) the Glasgow Eye Infirmary (100 beds) the Ophthalmic Institution (35 beds) the fever hospitals at *Belvidere* (680 beds), *Ruchill* (540 beds) and Mearnskirk, and other institutions afford facilities for the practical study of special branches The large general hospitals of the town council are now also available for clinical instruction in medicine and surgery Information regarding postgraduate study will be found at page 529

Bursaries—Bursaries confined to the Medical Faculty amount in annual value to about £1 250 while bursaries in any faculty, amounting to about the same annual sum may be held by students of medicine a number of both sets being open to women Postgraduate scholarships approximate in value to £3 500 per annum

The following bursaries are open for competition to students entering on their first session of attendance in the Faculty of Medicine Davidson Bursary annual value £40 tenable for four years for students who propose before entering the Faculty of Medicine to take the degree of B Sc in pure science including in their curricula anatomy and physiology Highland Society (Glasgow) Bursaries annual value £25 each tenable for five years for students of Highland descent open to women two bursaries vacant each year Logan Bursary annual value £25 tenable for four years open to women Robina Eckford MacBrayne Scholarship annual value £50 tenable for three years Marshall Bursary annual value £24 tenable for four years Merchants House Bursary annual value £35 tenable for four years open to women John Oliphant Bursary annual value £35 tenable for six years James A Paterson Bursaries three each year of the annual value of £30 £25 and £15 respectively each tenable for four years students entering their second session are also eligible open to women examination in mathematics and natural philosophy

Candidates for the bursaries mentioned above must take the university general bursary competition which is held each year in the month of June

In addition the following bursaries scholarships and prizes are open to students prosecuting their studies in the Faculty of Medicine Arbroath Bursary annual value £35 tenable for three years is awarded by the Senate on the recommendation of the Faculty of Medicine to the student who is of the highest merit among the candidates as shown by their class records and their performances in the First and Second Professional Examinations Arthur Bursary annual value £20 tenable for three years awarded to the *woman* candidate who takes the highest place at the First Professional Examination Bell Bursaries annual value £50 each tenable for the duration of the course for students who have gone through the curriculum in arts tenable also in theology or law Brisbane Bursary annual value £50 tenable for four years candidates must be under 22 years of age and must have taken the degree of M A John Buchanan Bursary £80 for two years awarded at the beginning of the third year on the results of the First Professional Examination plus a modern language taken in the general bursary competition William Gardiner Bursary annual value £18 tenable for two years awarded on the results of the First and Second Professional Examinations in the subjects of physiology chemistry and physics Dr Thomas Gibson Bursary annual value £50 tenable for four years open to medical students entering on their second winter who are preparing for service as medical missionaries Johnston Bursaries annual value £25 each tenable for three years for eminence in the work and examinations of the first and second years of the curriculum Lorimer Bursaries (six) value £20 each tenable for one year are awarded to the best students in each of the following classes botany zoology physics chemistry anatomy physiology Macarthur Bursary of the annual value of £20 and tenable for two years for students entering on their fourth session of medical study Mactarlane Bursary annual value £40 tenable for three years for students who have attended the first session of their professional study in the university examination in elementary anatomy elementary chemistry and botany Mackinnon Bursary value £31 tenable for one year open to medical students of either sex who have attended one of the courses of lectures on insanity in the university examination in that subject John Monteith Bursary annual value £21 tenable for two years is awarded annually to the student who gains the highest number of marks in the subjects of anatomy and physiology at the professional examinations held during the previous year Rainy Bursary annual value £50 tenable for two years for students entering on their third session of medical study awarded to the candidate whose aggregate of marks in the subjects of anatomy and physiology of the Second Professional Examination and in chemistry botany and zoology of the First Professional Examination is the highest A and B Stewart Postgraduate Bursaries annual value £50 each, tenable for the duration of the course for *students who have gone through the arts curriculum* Walton Bursary annual value £40 tenable for four years the Earl of Sandwich has the right of appointing to the bursary one of two students nominated by the Senate Weir Bursary value £25 tenable for one year awarded on the results of the Second and Third Professional Examinations Barbour Scholarship in anatomy or physiology annual value £250 tenable for two years Joseph Coats Memorial Scholarship value £85 tenable for one year for research in pathology may be held concurrently with the Perman Memorial Scholarship (q v) Faulds Fellowship annual value £250 tenable for three years for medical research. Foulis Memorial Scholarship in pathology value £50 Hall Tutorial Fellowships approximately £250 for one year Four McCunn Medical Research Scholarships value £200 each, tenable for one year Perman Memorial Scholarship value £85 tenable for one year for research in pathology may be held concurrently with the Joseph Coats Memorial Scholarship (q v) Henderson Research Scholarship of about £250 per annum for research in mental diseases Hutchison Research Scholarship of the annual value of £110 for research in certain subjects of the medical curriculum Reid Stewart Postgraduate Bursary £200 for one year for special study and research renewable Mary Margaret Isabel Ure Scholarship of the annual value of about £300 for research in cancer or tuberculosis or other branch of study approved by the Faculty of Medicine John Reid Prize of £25 for the best original research conducted in one or more of the hospitals or scientific laboratories in

Glasgow, bearing on any department of medical science History of Medicine Prize, of about £50, for the best essay on some subject in the history of the science or practice of medicine other than a subject of recent development in some limited branch thereof Harry Stewart Hutchison Prize value £50 for original research work relating to children The Junior Arnott Prize of about £15 the Senior Arnott Prize of £25 Three Bellahouston Gold Medals The Brunton Memorial Prize of about £20 The Macewen Medal in surgery The Captain H S Ranken V C Memorial Prize of £5 The Straits Settlements Gold Medal The West of Scotland R A M C Memorial Prize of about £15 Asher Asher Memorial Gold Medal awarded annually in connexion with the class on diseases of the throat and nose Macfarlane Prizes of £10 each in each of the classes of medicine Macleod Medal, awarded annually to the most distinguished student, man or woman in the class of systematic surgery taught by the Regius Professor Struthers Gold Medal awarded in anatomy for the best original research or for the best special dissection or preparation or series of dissections or preparations

The Carnegie Trust for the Universities of Scotland is empowered to pay the whole or part of the university ordinary class fees of students of Scottish birth or extraction under conditions given in the University Calendar Scholarships and Fellowships are offered by the Carnegie Trust in science and medicine for postgraduation study

Fees—The matriculation fee for each year is £2 12s 6d In most cases the fee for each university class is £6 6s but in some cases it is £4 4s For hospital attendance at the Western Infirmary students pay £12 12s for a perpetual ticket, or £1 11s 6d for a single term ticket with an additional fee of £5 5s for each winter and £2 12s 6d per term for each clinical course The fees are the same at the Royal Infirmary The university fees for the four professional examinations total £34 13s For the whole curriculum the fees for matriculation class attendance, hospital attendance, and professional examinations amount to about £250

For further information apply to the Registrar, Glasgow University

ST MUNGO'S COLLEGE—This is the Medical School of the Royal Infirmary, which is the largest general hospital in Glasgow The Infirmary is situated in Cathedral Square, Castle Street, and has car communication with every part of the city St Mungo's College is in the Infirmary grounds, and affords full courses in all the subjects of the medical curriculum, and in all the medical subjects of the dental curriculum The Infirmary has (in addition to the ophthalmic department) 794 beds—554 for surgical and 240 for medical cases There are special beds and wards for diseases of women, of the throat, nose, and ear, burns, and septic cases The number of in-patients treated last year was 18,154, while 120,461 were treated in the out-patient department In addition to the large medical and surgical departments, there are departments for special diseases—namely, diseases of women, of the throat and nose, of the ear, of the eye, of the skin, and of the teeth There is also a fully equipped electrical pavilion, with the latest and most improved apparatus for diagnosis and treatment

Appointments—Six house physicians and eight house-surgeons who must be fully qualified are appointed every six months, and board in the hospital free of charge Clerks and dressers are appointed by the physicians and surgeons As many cases of acute diseases and accidents of a varied character are received these appointments are very valuable

Fees—The fees for all the lectures practical classes, and hospital attendance necessary for candidates for the diplomas of the English or Scottish Colleges of Physicians and Surgeons amount to about £120 The classes are open to male and female students

A syllabus of classes can be obtained on application to the Secretary to the Medical Faculty, St Mungo's College, 86, Castle Street

THE ANDERSON COLLEGE OF MEDICINE—This school provides education in the subjects of the curriculum for both medical and dental students The school buildings are situated in Dumbarton Road, immediately to the west of the University and Western Infirmary The hospital practice and clinical lectures are provided in the Western or Royal Infirmary, pathology in the Western or Royal Infirmary, vaccination and dispensary practice in the Western or Royal Infirmary Dispensary These classes are recognized by all the licensing corporations in the United Kingdom, also by the Universities of London, Glasgow, and Edinburgh (the latter two under certain conditions stated in the School Calendar)

Fees—The fees for the lectures and practical work required by ordinary students range between 2 and 6 guineas a class The Carnegie Trust pays the fees of students at Anderson College on conditions regarding which particulars may be obtained from the Secretary, Carnegie Trust Offices, Edinburgh

A Calendar will be sent on receipt of a postcard by the Secretary to the Medical Faculty the Anderson College of Medicine Glasgow, W 1, who will forward any further information which may be desired

The Royal Samaritan Hospital for Women, Glasgow has 190 beds, of which thirty are for paying patients of limited means, and offers excellent facilities for clinical instruction in the diseases peculiar to women Lectures and clinical demonstrations are given by members of the surgical staff There is a complete course each university term for university students and one course in the summer term for college students A postgraduate course is held during the summer months and a series of demonstrations for general practitioners is carried out in the winter The hospital is represented on the Board of the Glasgow Postgraduate Medical Association, formed for co ordinating postgraduate medical teaching The Royal Samaritan lectureship in gynaecology is a university lectureship associated with the hospital

St Andrews and Dundee

The medical departments in these two teaching centres cater specially for students proceeding to the degrees of the University of St Andrews, but admit other students as well In the former city the United College provides education in all subjects for the first two years In Dundee, University College provides for the needs of students from the beginning to the end of the five years' curriculum Its buildings are modern, and contain fully equipped laboratories The clinical work of the school is facilitated by various institutions

The class fees are from £6 6s to £5 12s 6d for systematic classes, and from £4 14s 6d to £4 4s for practical classes The hospital ticket is £1 8s for three months, £4 4s a year, or perpetual £13 6s 8d in one sum The inclusive or composition fee for the curriculum is £182 In connexion with both institutions there are bursaries and scholarships of considerable value which are awarded after competitive examination Information as to these can be obtained from the Secretary of the University of St Andrews Information regarding the clinical facilities may be obtained from the Dean of the Medical Faculty, Medical School, Dundee

CLINICAL WORK

Good opportunities for clinical work are afforded by the Dundee Royal Infirmary and Maryfield Hospital the instruction given therein being recognized for purposes of graduation by all the Scottish Universities the University of Cambridge the University of London, the National University of Ireland, and by the Royal Colleges of England and Scotland

IRELAND

There is a choice of six schools for those pursuing their medical studies in Ireland For clinical instruction the choice is equally wide and varied, though the hospitals themselves are comparatively small Some account of the schools follows

Dublin

SCHOOL OF PHYSIC

The School is in Trinity College, Dublin, and is carried on under the auspices of the University of Dublin The four King's Professors of Medicine (Physiology, Practice of Medicine, Materia Medica and Midwifery) and the Professor of Anatomy appointed by the Board

Clinical instruction is given at Sir Patrick Dun's Hospital and the instruction given at sixteen other metropolitan hospitals and asylums is recognized by the Board of Trinity College

THE SCHOOLS OF SURGERY

These are schools carried on in Dublin under the supervision and control of the Council of the Royal College of Surgeons They are formed of the college's own school combined with two famous old medical schools—Carmichael and Ledwich they are attached to the college by charter The buildings contain spacious dissecting rooms special pathological bacteriological and chemical laboratories Advantage can be taken of the lectures and instruction afforded by students otherwise unconnected with the college

Prizes—Among the prizes annually awarded are The Barker Anatomical Prize (£26 2s) the Carmichael Scholarship (£15) the Mayne Scholarship (£8) the Gold Medal in surgery the Stoney Memorial Gold Medal in anatomy the H Macnaughton Jones Gold Medal for midwifery and gynaecology the Captain Mackey Miles Memorial Prize class prizes accompanied by silver medals will also be given in each subject

A prospectus can be obtained post free on application to the Registrar Royal College of Surgeons Dublin

UNIVERSITY COLLEGE DUBLIN

This is one of the constituent colleges of the National University of Ireland The arrangements for the teaching of medical students from beginning to end of the curriculum are adequate Applications for information may be addressed to the Secretary and Bursar University College Dublin

CLINICAL TEACHING IN DUBLIN

Two other important obstetric and gynaecological hospitals in Dublin are the Coombe Lying in Hospital and the National Maternity Hospital During the year 1934 the number of cases dealt with in the Coombe Lying in Hospital were as follows intern maternity department total admissions 1,504 total deliveries in hospital 1 254 extern maternity 1 491 deliveries gynaecological department, admissions 517 Attendance at pre natal clinic baby and general dispensaries 12 000 cases yearly The practice of these hospitals is attended by large numbers of students postgraduates and nurses, who come from all parts of the world

There are numerous well arranged hospitals in and around the city and almost all of these are recognized for teaching purposes by the Conjoint Board of Ireland the University of Dublin the National University of Ireland and by like bodies elsewhere in the British Isles Among them are the Mater Misericordiae Hospital with 345 beds Dr Steevens Hospital at Kingsbridge with 150 Meath Hospital and County Dublin Infirmary with 160 Mercer's Hospital with 120 the Royal City of Dublin Hospital with 124 the Adelaide Hospital with 160 the Royal Victoria Eye and Ear Hospital with 100 Sir Patrick Dun's Hospital which has a direct connexion with the School of Physic with 129 beds and the combined institutions formed by the Hardwicke Fever Hospital the Richmond Surgical Hospital and the Whitworth Medical Hospital with an aggregate of 330 beds Other hospitals are the Children's Hospital Temple Street with 125 beds the National Children's Hospital with 53 beds St Ultan's Infants Hospital with 52 beds St Mary's Orthopaedic Hospital at Cappagh with 236 beds and St. Anne's Skin and Cancer Hospital with 60 beds

As for the famous Dublin medical institution known as the Rotunda Hospital this practically consists of two distinct hospitals and it is believed to be the largest combined maternity and gynaecological hospital in the British Isles There are pre natal and paediatric departments as well as a thoroughly equipped pathological laboratory biochemical laboratory and x ray department It possesses residential quarters for students accommodating over fifty and taken as a whole offers exceptional opportunities for study both to ordinary students and to medical graduates of any nationality During the year ending October 31 1934 there were 3 173 maternity admissions Including patients treated in their homes the Rotunda dealt with 5,372 cases during the year of which 4 688 were delivered In the gynaecological department there were 687 admissions of which 333 were operated upon The attendances at the out-patient department totalled 20 736 Extensive alterations and additions to the hospital are being undertaken

The National Maternity Hospital is now housed in new buildings This hospital is of the most modern and up-to-date type both in lay out and in equipment. It contains many novel and original features and much of the equipment and furniture has been specially designed It is run entirely on electricity no other fuel being used At present it consists of accommodation for some eighty five patients, together with all central services and excellent accommodation for students and staff This new building was opened for the admission of patients on January 1 1933 The old hospital has been abandoned and is being demolished to make room for the building of the final wing of the new hospital to accommodate sixty-five additional beds. During the year 1934 the hospital dealt with 2,367 maternity cases of which 2,019 were delivered In the gynaecological department 351 patients were admitted The attendances at the out patient department were 7 852 Clinical instruction is given daily

Belfast

The Medical School is part of the Faculty of Medicine of Queen's University Belfast, and provides a complete medical curriculum for all purposes The laboratories in the departments of bacteriology biochemistry biology chemistry, physiology pathology public health, anatomy, physics and materia medica are all excellent and there is a students union which gives students the advantages of dining rooms reading rooms a library and various recreation rooms Women are eligible as students Clinical instruction is given at the Royal Victoria Hospital which was rebuilt a few years ago and has 500 beds of which 64 are in the Royal Maternity Hospital and the Mater Infirmorum Hospital which has 150 beds Other hospitals open to the students of the university are the Ulster Hospital for Women and Children the Hospital for Sick Children the Ophthalmic Hospital the Benn Ulster Eye Ear and Throat Hospital the Union Infirmary and Fever Hospital the Fever Hospital, Purdysburn the District Lunatic Asylum the Samaritan Hospital the Forster Green Hospital for Diseases of the Chest and the Belfast Hospital for Skin Diseases

Scholarships—(1) Eight of the value of £40 each are assigned as Entrance Scholarships in the Faculties of Arts, Science and Medicine tenable for one year (2) fourteen Professional Scholarships value from £15 to £40 each (3) one Hutchinson Stewart Scholarship £12 in mental diseases (4) one Mackay Wilson Travelling Scholarship £100 awarded triennially (next award 1939) (5) Isabella Tod Memorial Scholarship tenable for three years awarded triennially to a woman student (6) Magrath Clinical Scholarship awarded annually value about £112 (7) two Musgrave Studentships of £200 in physiology and pathology There is also a post-graduate research fund open to all graduates of not more than three years standing Gold medals are awarded at the M D examination

Fees—The cost of the curriculum intended for students proceeding to the degrees of the Queen's University of Belfast is approximately £230 This includes examination fees and a perpetual ticket for attendance at the Royal Victoria Hospital or the Mater Infirmorum Hospital and fees for the special hospitals The course for the Conjoint Board costs about the same amount

The Regulations of the Medical Faculty containing full information can be obtained on application to the Bursar Queen's University Belfast price 4d by post 6d

University College, Cork

This institution, formerly known as Queen's College, Cork is one of the constituent colleges of the National University It holds examinations for all the faculties of that university, in addition to continuing the work which it has hitherto performed—namely that of providing education adapted to the needs of medical students at all stages of their

career Its first aim is to fit students for the degrees of the National University, but students proceeding to the examinations of the Conjoint Board of England, Scotland, or Ireland, the Society of Apothecaries of London or the Apothecaries Hall of Ireland, or London University, can arrange the courses of lectures which they attend, and the order in which they attend them, to meet the requirements of those bodies Certificates of attendance at the college courses are also accepted by the University of Cambridge Clinical instruction is given at the North and South Infirmaries (each 100 beds) and at the Cork Union Hospital (1 200 beds) Students can also attend the Mercy Hospital (130 beds), the County and City of Cork Lying in Hospital, the Hospital for Diseases of Women and Children, the Fever Hospital, the Ophthalmic and Aural Hospital, and the Eglinton Lunatic Asylum The session extends from October to June

Scholarships—About £2 500 is available annually for scholarships in the college Particulars as to each of them can be obtained on application to the Registrar

Fees—The fees for the lectures and hospital attendances required by the National University of Ireland course, including examination fees come to about £200

Further information can be found in the Calendar, or obtained on application to the Registrar

University College, Galway

This institution is one of the constituent colleges of the National University of Ireland, and includes Faculties of Art, Science, Law, Celtic, Engineering, Commerce, and Medicine The college buildings are well lighted and well ventilated, and contain dissecting rooms, an anatomical theatre, and laboratories for the study of physiology, chemistry, physics, and other departments of medical science For pathology and chemistry new laboratories are now provided It has good grounds surrounding it, and there are many arrangements, such as a library, a college union, and an athletic union, for the benefit of those belonging to the Medical Faculty, as well as for students in other departments of the college The clinical teaching, which is recognized as qualifying not only for the degrees of the National University but for those of the London University and the diplomas of the various colleges in the three kingdoms, is carried on at the Galway Central Hospital and the Galway Tuberculosis Hospital

The Galway Central Hospital is a general hospital, and at the two hospitals students have ample opportunities of studying zymotic and chronic diseases The Central Hospital has a special ward for diseases of children Each year the governing body offers about £2 500 and the County Councils of Connaught offer about £3 500 in scholarships These scholarships are tenable in any faculty Additional information regarding these scholarships can be obtained on application to the Registrar and to the Secretaries of the Connaught County Council

CLINICAL HOSPITALS IN ENGLAND

Many hospitals in Great Britain and Ireland, though not connected with any medical school, open their doors either to those who have yet to be qualified, to those who are doing postgraduation work, or to both The facilities they offer for gaining practical clinical experience are very great, and should not be overlooked Their honorary staffs commonly make a point of giving such instruction as opportunity offers, and at those situated in the larger towns there are often appointments as clinical assistants to be obtained In addition, they all have to offer, at shorter or longer intervals, appointments for resident medical officers, house-physicians, and house surgeons These are usually paid offices, which may be held for periods varying from six months to a year, or even longer Some of those [illegible]ted in the great medical centres in the provin[illegible]n Scotland and Ireland, have already been m[illegible] speaking of the medical schools in these localities, but it should be added that there are many other provincial hospitals where admirable work is done, and at which much valuable experience can be gained by both senior and junior students, and by those already qualified

Cases in point are the Royal Infirmary, Bradford, the Royal Sussex County Hospital, Brighton the Royal United Hospital Bath, the Worcester General Infirmary, the Kent and Canterbury Hospital the Derbyshire Royal Infirmary, South Devon and East Cornwall Hospital Plymouth, the Royal Albert Hospital and Eye Hospital Devonport, the Royal Devon and Exeter Hospital, the West of England Eye Infirmary, Exeter, the Gloucestershire Royal Infirmary and Eye Institution, the Royal Infirmary, Leicester, the County Hospital Lincoln, the General Hospital Northampton the Norfolk and Norwich Hospital, the General Hospital, Nottingham, the Royal Portsmouth Hospital, the Royal Berks Hospital Reading, the Royal South Hants and Southampton Hospital, the Staffordshire General Infirmary, Stafford, the North Staffordshire Royal Infirmary at Stoke-on Trent the Royal Hants County Hospital, Winchester, the Wolverhampton and Staffordshire General Hospital, the County Hospital York, and the Coventry and Warwickshire Hospital

London Clinical Hospitals

As for the hospitals in the metropolis, so many of these take a share in the giving of clinical instruction that it is worth while to classify them

Children's Hospitals—There are at least seven of these the leader among them being the Hospital for Sick Children Great Ormond Street which has 268 beds There are also the Princess Elizabeth of York Hospital for Children, Shadwell, with 136, the Queen's Hospital for Children Bethnal Green, with 134, the Victoria Hospital for Children Chelsea, with 130, the Belgrave Hospital for Children, which has a considerable out patient department and in patient accommodation for 74 children the Paddington Green Children's Hospital, and the Evelina Hospital for Sick Children Southwark Bridge Road, with 76 beds The largest and the oldest of the hospitals for both women and children is the Royal Waterloo Hospital for Children and Women, Waterloo Road, S E 1

Hospitals for Women—Queen Charlotte's Maternity Hospital Marylebone Road with 100 beds and a residential college for medical students and practitioners, specializes in the teaching of midwifery The first section of the new Queen Charlotte's Hospital in Goldhawk Road Hammersmith an isolation block of 30 beds for cases of puerperal fever and puerperal pyrexia, was opened in July, 1930 The Bernhard Baron Research Laboratories, immediately adjoining the isolation block, were opened towards the end of 1930 and are fully equipped and staffed The City of London Maternity Hospital and Midwifery Training School, City Road, E.C.1, was founded in 1750 and has kept pace with the advancement in medical and nursing science There are 71 beds (8 private) The training of pupil midwives has always been an important feature of the hospital's work There are the following special departments ante natal clinics, remedial exercises clinic, post natal clinic, and dental clinic, child welfare clinic, sunlight and radiant heat clinics A two or four weeks resident midwifery course is available for male medical students, and occasional week end (non resident) post graduate courses for general practitioners The Samaritan Hospital for Women, Marylebone Road, admits qualified practitioners as clinical assistants to both the in patient and the out patient departments, demonstrations are given daily in both departments, the fees—payable in advance—being £3 3s. for three months full particulars may be obtained from the secretary In addition may be mentioned the Hospital for Women, Soho Square, whose teaching is confined to post graduates in limited numbers the Chelsea Hospital for Women Arthur Street Chelsea, and the Elizabeth Garrett Anderson Hospital for Women in Euston Road the latter being in the nature of a general hospital so far as concerns the class of case treated

Eye Hospitals—The largest of these is the Royal London Ophthalmic Hospital (Moorfields) City Road, E.C.1, 200 beds 4,388 in patients, 64 799 out patients in 1936 At this hospital two complete courses of instruction are given during the year —October to February, and March to July—comprising the following subjects (1) anatomy (including histology and embryology), (2) physiology (3) optics (including physiolo-

optics) (4) refraction (5) methods of examination and the use of the ophthalmoscope (6) pathology and bacteriology (7) *ophthalmic medicine and surgery* (8) ophthalmoscopic conditions (9) operative surgery (10) practical pathology (11) practical bacteriology (12) radiology (13) physiotherapy (including ultra violet light diathermy and ionization) (14) orthoptic training (15) contact glasses (16) slit lamp microscopy Registered medical practitioners and medical students are eligible under certain conditions for the posts of chief clinical assistant clinical assistant and junior assistant There are also a number of salaried posts an annual Clinical Research Scholarship of £50 and a biennial Gifford Edmunds Prize of £100 Clinical work begins each morning at 9 and operations at 10 o clock The course of instruction is specially adapted to meet the requirements of those reading for the D O M S and similar diplomas and degrees in ophthalmology The Out patient Department Medical School and Laboratories have been rebuilt and enlarged Further particulars may be obtained from the Dean of the Medical School

Other eye hospitals are the Royal Westminster Ophthalmic Hospital now rebuilt on a new site in Broad Street High Holborn and containing 84 beds the Royal Eye Hospital Southwark and the Central London Ophthalmic Hospital Judd Street W C 1 each with about 40 beds and the Western Ophthalmic Hospital with 35 beds including ten single bed wards At the Royal Eye Hospital special classes are held in May and October to meet the requirements of students pre paring for the D O M S and similar examinations Clinical classes in medical ophthalmology are held for candidates for the M R C P examinations A course suitable for general practitioners is held in April under the auspices of the Fellow ship of Medicine The pathological and bacteriological depart ments are available to ophthalmic surgeons and institutions desiring reports on specimens cases of interest being dealt with without charge A research scholarship in ophthalmology to the value of 100 guineas per annum is awarded yearly

Fever Hospitals—The London County Council has under its control a number of institutions in and around London for the treatment of the more serious zymotic disorders it makes special arrangements for the instruction of students in this subject and grants certificates at the end of the courses The fees for medical undergraduate and postgraduate instruc tion at the L C C hospitals for infectious diseases including small pox are as follows Course in diagnosis and treatment of fevers three guineas for two months course Course in clinical practice and hospital administration (for candidates for the D P H) three and a half guineas for twenty four demonstrations and four guineas for thirty demonstrations Course in diagnosis and treatment of small pox (in cases in which a fee is payable) one guinea for three demonstrations Detailed information should be sought from the Medical Officer of Health Special Hospitals Division London County Council County Hall S E 1

Chest Hospitals—The largest of these is the Brompton Hos pital for Consumption which has 333 beds and a large sana torium at Frimley with 150 beds There is also the City of London Hospital for Diseases of the Chest Victoria Park, with 185 beds and the Royal Hospital for Diseases of the Chest, City Road with 85 beds now amalgamated with the Royal Northern Hospital Holloway Road

Nose Throat and Ear Hospitals—The institutions which confine their work to disorders of the throat nose and ear all make special arrangements for the benefit of senior and postgraduate students They are the Metropolitan Ear Nose and Throat Hospital Fitzroy Square the Royal Ear Hos pital Huntley Street W C 1 (now the Ear Nose, and Throat Department of University College Hospital) the Central London Throat Nose and Ear Hospital Gray s Inn Road and the Golden Square Throat Nose and Ear Hospital near Piccadilly Circus W 1—the last- which possesses 101 beds being the largest of the four institutions

Miscellaneous Special Hospitals—Among these are the Bethlem Royal Hospital recently transferred from Kenning ton to Monks Orchard Eden Park Beckenham Kent, which (like the Maudsley Hospital) confines its work to the treatment of mental diseases and includes a department for nervous and early mental disorders the Royal National Orthopaedic Hospital Great Portland Street St Peter s Hospital for Stone and Urinary Diseases Henrietta Street Covent Garden St Mark s Hospital City Road which devotes itself to the treatment of diseases of the rectum in cluding cancer and fistula St Paul s Hospital Endell Street Holborn W C 2 where continuous postgraduate work in genito urinary disease is carried on with cystoscopy sessions three days a week and two regular postgraduate courses are held each year the National Hospital for Diseases of the Heart in Westmoreland Street W 1 St John s Hospital for Diseases of the Skin in Leicester Square the Hospital for Diseases of the Skin 71 Blackfriars Road S E 1, the National Hospital Queen Square W C 1 an institution possessing 200 beds for neurological cases and a world wide reputation the West End Hospital for Nervous Diseases 73 Welbeck Street W 1 and the Maida Vale Hospital for Nervous Diseases founded in 1866 and renamed on more than one occasion

Detailed information as to the teaching arrangements of all these institutions may be obtained on application to their secretaries

Women in Medicine

The regulations of the General Medical Council and of the various universities and colleges set out in previous sections apply to women as to men

Examinations

Women are admitted to all the medical examinations of the following qualifying bodies all the universities of Great Britain and Ireland, the Royal College of Physicians of London, the Royal College of Surgeons of England the Society of Apothecaries of London and the Conjoint Boards of the Colleges in Scotland and in Ireland In addition women are eligible for election as Fellows of the Royal College of Physicians of London the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh and the British College of Obstetricians and Gynaecologists

Medical Education

In this country at the present time co education is the general rule Most of the schools of the London hospitals have, however, so far shown themselves more con servative in this respect than the rest of the country

In England the colleges connected with the universities of Birmingham Bristol Cardiff Durham, Leeds Liver pool Manchester, Newcastle and Sheffield admit women students as well as men whilst in Scotland the universities of Aberdeen, St Andrews, Edinburgh and Glasgow also admit women In Ireland all universities and colleges are open to them

In London the schools open to medical women students are the London School of Medicine for Women and the West London Hospital and to a modified extent University College Hospital and King s College Hospital

At the present time it will be seen that the only co education hospitals in London are University College and King s College The number of women entrants is re stricted but they are given excellent opportunities whilst students, and also, in fair proportion, are given oppor tunities of postgraduate experience as residents, house surgeons, house physicians, and obstetrical assistants

Number of Women Students

Returns made to the University Grants Committee show that the total number of full time women medical and dental students attending university institutions in England Scotland and Wales during recent years were

	1925 6	1927 8	1929 30	1931 2	1933-4	1935 6
England	1 059	862	842	910	1 046	1 185
Wales	30	30	19	40	54	62
Scotland	313	254	275	322	425	500
Total	1 402	1 146	1 136	1 272	1 525	1 747

The corresponding total number of full time male students of medicine, including dentistry, was 11,176 in 1935–6

The London (Royal Free Hospital) School of Medicine for Women

The London (Royal Free Hospital) School was started for the training of women in medicine in the days before there were any co-education facilities for them, and it still remains by far the largest school for women In addition to the clinical work at the Royal Free Hospital, which at present has upwards of 330 beds, arrangements are made for students of the school to obtain clinical instruction at the National Hospital for Nervous Diseases, Queen Square, the Royal London Ophthalmic Hospital, Moorfields the Great Ormond Street Hospital for Children, the Elizabeth Garrett Anderson Hospital, the South London Hospital for Women, the Cancer Hospital, the Central London Ophthalmic Hospital, and certain hospitals administered by the L C C Its importance for women in medicine can hardly be overestimated, not merely because it was the pioneer which made the way possible, but also because it is still the only general hospital in Britain which offers all its postgraduate appointments, higher and lower, to open competition by women as well as men, thus giving unique opportunity of gaining experience Not only are all the resident appointments at the Royal Free Hospital, of which there are twenty-seven yearly, eligible for women, but, in addition, higher posts may be obtained in all the various branches of a general hospital, from those of registrar and anaesthetist to those of visiting physician or surgeon and those in charge of special departments There is a special unit in gynaecology under a woman professor and entirely staffed by medical women This policy has so far not been fully adopted in its entirety by any other hospital It may be of interest to note in this connexion that the Royal Free Hospital has many women on its general committee and weekly board of management, and that the chairman of the latter is, at present, a woman

Openings for Medical Women

There are at the present time the names of over six thousand medical women on the *Medical Register* There is an increasing demand by the public for the services of women doctors, and the profession of medicine with its many and varied branches offers ample opportunity for a useful career

Opportunities at Home

Since the number of men and women qualifying has reached normal standards, medical women find no difficulty in obtaining house appointments in the recognized teaching hospitals and in non-teaching hospitals, hospitals for women and children, sanatoria, etc The reorganization of hospitals under local authorities has resulted in the creation of a number of new resident appointments, senior and junior, intended to be held by medical women

General Practice—There are good openings as assistants or better still as assistants with a view to admission as partners in general practice Medical women also do very well when starting in new districts and there is considerable scope for them in midwifery work

Specialist and Consulting Practice—The number of women doing specialist and consultative practice grows rapidly There is no branch of medicine in which it is not possible for a patient to consult a medical woman Women so specializing equip themselves by obtaining the highest essential qualifications and it is hoped that the time is not far distant when many more women will hold positions on the honorary staffs of all hospitals Already medical women are on the honorary staff of the Royal Free Hospital London and of general hospitals in a number of provincial cities In London Edinburgh Glasgow Manchester Bristol and Brighton there are hospitals staffed entirely by medical women doing very fine work and meeting a real need the latest to be opened being the Marie Curie Hospital in London for the treatment of cancer by radium Research work also provides interesting openings as for example in dealing with the special problems concerning cancer nutrition puerperal morbidity and mortality, statistical work etc and for some of these research scholarships and grants are available

Teaching Posts—Women hold professorships and lectureships at various universities

Industrial Medicine—In this branch there is some interesting work available, and it is undergoing considerable development at the present time Several women already hold such posts

Administrative Work—A certain number of these important posts are admirably filled by medical women At the Ministry of Health the department for maternity and child welfare is staffed by medical women Medical women also hold administrative posts under the Home Office the Board of Education the Boards of Control of both England and Scotland the Post Office etc

The Public Health Service—This service provides numerous openings for medical women It has many departments, and its rapid growth in recent years has provided much interesting work in preventive medicine Senior departmental posts are frequently held by medical women and several occupy posts as medical officers of health For maternity and child welfare work women have been found to be peculiarly suited but, by a curious economic limitation married women who would appear to be the most suitable of all, have been, by many public authorities excluded from service A change of attitude however appears now to be taking place, as was evidenced by the decision of the London County Council to withdraw its ban against the employment of married medical women in its Public Health Service

Medical Inspection etc—Under the Board of Education there are women serving as medical advisers and school medical inspectors The London County Council and other important councils in the country have medical women on their permanent medical staffs in both the senior and the junior grades The London County Council has two of its senior women appointed to serve as district medical inspectors. In addition they have a large number of women medical inspectors of school children, and also women are serving as experts in the departments dealing with mental deficiency, tuberculosis, and venereal disease Some medical women also serve as examiners of the candidates entering the public services, as, for example, the civil service The services of medical women are extensively enlisted by public authorities in dealing with employees of their own sex In several instances women serve as assistant medical officers to prisons The services of medical women are also enlisted as lecturers and examiners on first aid, home nursing, health, and infant care

Opportunities Abroad

Colonial Office—To those to whom oversea service appeals it offers the possibility of useful, interesting and adequately paid work At present there are posts for women in Malaya, and East and West Africa The work is almost entirely hospital and maternity and child welfare work there have been one or two specialist appointments, such as bacteriologists and more may follow Women have, so far, only been appointed to the lower grade posts, but their pay is the same as that of the men in similar grades When placed on the permanent staff they are eligible for pension

Egypt—Appointments in the Kitchener Memorial Hospital Cairo, which forms part of the Clinical Faculty of the University of Cairo are held by women Appointments in certain dispensaries are open to medical women There are also posts held under the education authority, chiefly school medical inspection

India—See note on the Women's Medical Service for India on page 525

Mission Field—Missionary societies offer employment to medical women chiefly in India China, and the Near East, where their services are urgently needed There is a wide field of opportunity abroad for those with the missionary spirit and who are fitted for very hard work under conditions which may be difficult (see special article on Medical Missionaries at page 549

Public Activities

Medical women are frequently appointed to serve on Royal Commissions and Government Committees dealing with medical subjects, and are also requested by them to give evidence of an expert medical nature

Medical women have always shown considerable interest in medico-political affairs, and take an active part in the

work of the British Medical Association and with the various other societies dealing with medicine as it affects the community in general With this end in view they also have a Medical Women's Federation which enables them to voice a collective expression of opinion This might otherwise be difficult to ascertain, as women are so widely scattered, as regards both their geographical distribution and their varied activities This collective opinion of medical women has been found of great assistance by the British Medical Association and other allied societies with which it works in cordial co operation and by whom it is frequently approached both for information and also as a convenient means of approaching medical women as a whole

It may be added with regard to contributions to medical literature, that this is a branch of work in which women are more and more taking their share and scientific and other works are frequently published by them

WOMEN'S MEDICAL SERVICE FOR INDIA

Among careers open to medical women abroad the Women's Medical Service for India deserves honourable mention This Service is open to fully qualified medical women of British or Indian nationality and with the present amount of Government subsidy the number of medical officers is limited to forty four

Medical women proceeding to India to join the Women's Medical Service receive a sufficient sum for a first class passage to India On landing they are posted to one of the larger women's hospitals to gain Indian experience and to learn the language For a further period they are appointed to act temporarily for medical women on furlough They are then definitely appointed to the charge of hospitals Private practice is allowed provided it does not interfere with official duties The only exception is in administrative or educational posts when an allowance in lieu of practice is given The amount obtained from practice varies according to the station but in most cases it forms a fair addition to the salary, varying from £150 to £1 000 a year

Excellent opportunities for surgery—especially gynaecological—are found in the Women's Medical Service In the future opportunities are likely to open in connexion with maternity and child welfare Rates of pay are as follows

Years of Service	Oversea Allowance per Mensem	Salary per Mensem	English Equivalent per Annum
1 to 3	Rs 100	Rs 450	£495
4 to 6	Rs 100	Rs 500	£540
7 to 9	Rs 100	Rs 550	£585
10 to 12	Rs 100	Rs 600	£630
13 to 15	Rs 150	Rs 650	£720
16 to 18	Rs 150	Rs 700	£765
19 to 21	Rs 150	Rs 750	£810
22 to 24	Rs 150	Rs 800	£855
Over 24	Rs 150	Rs 850	£900

* At rupee value 1s 6d

Furnished quarters are provided representing an additional Rs 150 per mensem

The cost of living in India is much higher than formerly but it should be possible for a medical woman (with house provided) to meet actual household expenses for about Rs 350 per mensem leaving the remainder of her salary for dress and personal expenses To this must be added the necessary saving to meet additional expenses for furlough and leave spent in the hills

Leave on average pay is earned at the rate of two elevenths of the period spent on duty

Study leave is granted to the extent of twelve months in the total service and will not be granted more than twice in the course of an officer's service During study leave an officer draws half average pay with a study allowance at the rate of 12s a day during the course of study Officers of European domicile are entitled to four free return first class passages from a port in India to a port outside India in their whole service The first passage is not granted until after the expiry of four years approved service and thereafter passages may be granted at intervals of not less than four years There is a Provident Fund to which members of the Service contribute 10 per cent of their pay The Service contributes another 10 per cent which accumulates at interest and is repaid on retirement

Admission to the Service is made by selection in India and England preference being given to those with Indian experience Vacancies are few Candidates in the United Kingdom should apply to the Medical Adviser Countess of Dufferin's Fund c/o The High Commissioner for India India House Aldwych London W C 2 Candidates in India should apply to the Chief Medical Officer Women's Medical Service Countess of Dufferin's Fund Simla and Delhi

Postgraduate Study

Postgraduate students may be divided into general practitioners desirous of refresher courses, usually covering a wide field within a relatively short period of time to bring their knowledge up to date those who wish for instruction in special subjects with a view to obtaining one of the special diplomas or of preparing for some higher examination perhaps with a view to promotion in one or other of the medical services or if already general practitioners of adding some form of specialism to their work and visitors whether from the oversea Empire or from foreign countries who wish to pursue intensive studies in special subjects or to familiarize themselves with the methods of practice in Great Britain Further mention may be made of medical members of the Defence Services who for reasons similar to these constitute an important section of postgraduate students, and of other students, largely from Australia New Zealand India and Egypt, who having completed the ordinary medical curriculum wish to pursue their studies further before returning to their own countries

It is clear that London with the large and varied amount of material available and with its wealth of professional skill and teaching power offers ample opportunity for the supply of all these needs There have for many years been teaching centres in London which have done and are still doing admirable work but they are widely scattered and their efforts are limited Two hospitals—the West London Hospital at Hammersmith and the Prince of Wales's General Hospital at Tottenham—have postgraduate schools attached to them Their efforts are valuable and praiseworthy but they cater mainly for practitioners whose practices are within a relatively short distance of the schools The general practitioner may also perhaps find a refresher course at the hospital at which he was trained held during a vacation and other courses are organized from time to time at some of the London hospitals general or special The Fellowship of Medicine, too, arranges definite courses of study at individual hospitals and at its office—generously placed at its disposal by the Royal Society of Medicine at 1, Wimpole Street W 1—a list of hospitals special and general, to which medical graduates may resort with or without fee, is kept, and the names of the teachers at each hospital are available Such information is also available at the House of the British Medical Association

More unified systematized and comprehensive provision, however, is now established at the British Postgraduate Medical School in Ducane Road Hammersmith It is more than fifteen years since a committee, presided over by the Earl of Athlone reported that there should be a school attached to a hospital centrally situated in London devoted solely to postgraduate medicine as a school of the university The school under the auspices of the University of London and of the London County Council, was opened by King George V in 1935

At that time the chairman of the Governing Body was the late Sir Austen Chamberlain He has been succeeded in that office by Sir John Caulcutt The School is recognized as a constituent college of the University of London and the London County Council has reorganized its hospital to adapt it for its enlarged purposes It has been

extended and fitted with the most modern equipment The Dean of the School is Colonel Proctor, a distinguished body of professors and readers in several departments of medicine has been appointed The school suffers from some disadvantages It is somewhat remote from the university quarter, and access to it is not very convenient Wood Lane and East Acton are its nearest railway approaches The facilities it offers to students are not yet as well known as they should be Nevertheless, although it has not yet achieved the imperial role, or the even wider reputation, which King George wished for it in his speech at the opening, the school is the most important postgraduate centre of a general kind in Great Britain, and is steadily attracting to itself a wider clientele It is organized in four major departments—medicine, surgery, obstetrics and gynaecology, and pathology a fifth department—radiology—is now in being, and a sixth—anaesthetics—is being developed In all these departments there is abundant opportunity and material for instruction of the highest type and with differing objectives No special courses or coaching classes are held for particular examinations, but the general work provided is of a suitable standard for those working for them A good deal of research is carried on, and the relatively few students of a senior standard who are attracted to research problems are invited to interest themselves in and to participate in investigating work of this kind

A very important development of postgraduate study facilities has taken place during the past year By arrangement with the Ministry of Health such facilities are now afforded for a considerable number of insurance practitioners Under this plan for 1938 over 800 places are available in England and about 100 in Wales and 250 in Scotland In England over 400 practitioners are to be accommodated in London, and a number varying from twenty to eighty in Oxford, Cambridge, the other English universities with medical faculties, and in Nottingham, severally The conditions governing grants from the Ministry to a practitioner attending such a course are (1) that five years have elapsed since the date of his first registrable qualification, (2) that he has not less than 300 (or in a rural practice 150) insured persons on his list, (3) that no grant will be made to a practitioner more than once in five years A grant covers the following items (1) a fee for the course but not exceeding five guineas unless specially sanctioned, (2) travelling expenses, (3) subsistence expenses incurred, not exceeding five pounds a week if the practitioner sleeps away from home, or one pound in other cases, (4) a sum not exceeding eight guineas a week, where necessary, for a whole-time locumtenent During the first year of this arrangement there were about three times as many applicants as there were places available The courses are regarded generally as satisfactory, but there have been some criticisms which are being noted for future guidance

With regard to special fields of work there has been a steady increase in the demand for postgraduate instruction in the psychological aspects of medicine, and this is certain to continue An important impetus in this direction has been given by the revision of the regulations for the University of London diploma in psychological medicine In the scope of its diploma are now included mental retardation and delinquency, and also the psychoneuroses Systematic attempts to provide instruction in these fields are being made by at least three bodies There are courses held at the Maudsley Hospital Courses in mental deficiency are held once or twice yearly organized by the Central Association for Mental Welfare in conjunction with the University of London and with the London School of Hygiene and Tropical Medicine The Tavistock Clinic (formerly the Institute of Medical Psychology) holds from time to time short courses of lectures for the general practitioner, and has both short and long systematized courses The long course in psychotherapeutic theory and method now covers two years work, and is open to a limited number of practitioners only They are expected to give a minimum of twelve hours (on three days) in the week The first year's work is intended to cover the ground for those desirous of practising psychotherapy, while the full course is meant for those intending to specialize in the subject The clinic now has admirable premises at Malet Place, W.C., and such teaching as that indicated has been effectively developed there and has become very extensive and important The course covers the requirements for the appropriate parts of the university diploma

Instruction in all branches of preventive and of tropical medicine is now available at the London School of Hygiene and Tropical Medicine, at the corner of Keppel Street and Gower Street This institution was opened in 1929, and has established itself as a most valuable school of the University of London in the faculties of medicine and science Here are university chairs in public health, bacteriology, biochemistry, epidemiology, helminthology, medical protozoology, medical entomology, and medical industrial psychology

The principal courses of study are for the university diplomas in public health, in bacteriology, in industrial psychology, and for the Diploma in Tropical Medicine and Hygiene of the English Conjoint Board Special courses of instruction are also arranged in other subjects The course of study for the diploma in public health comprises full preparation for both parts of the diploma examination and includes instruction in infectious disease and hospital management, and two important studies which have recently been established—namely, physiology as applied to hygiene and industry, and medical industrial psychology It should be noted that new rules relating to this diploma have been made by the General Medical Council and come into force on October 1, 1938 In consequence of these alterations and as the result of experience the course of instruction in public health has been remodelled, and it now includes special lectures and practical work in regard to mental deficiency The course of study for the diploma in tropical medicine and hygiene is also taken in two parts Clinical demonstrations are afforded at the Hospital for Tropical Diseases, close by, and at other centres With the incorporation in this school of the Ross Institute the studies in tropical hygiene received a new impetus and direction, and the London School of Tropical Medicine may now be said to represent the confluence of three movements that of the scheme for a central school of hygiene recommended by the Athlone Committee in 1921, that of Sir Patrick Manson and the Seamen's Hospital Society from 1899, and that of Sir Ronald Ross and his Institute at Putney

In the provinces the Universities of Oxford, Cambridge, Birmingham, Bristol, Liverpool, Manchester, Sheffield, and Durham (at the College of Medicine, Newcastle on Tyne) have organized courses of postgraduate work and instruction Liverpool University has established a regular course for ship surgeons on similar lines to that already mentioned in London Edinburgh receives graduates from many schools in the Dominions as well as in this country In Glasgow and in Aberdeen courses are available, and, in relation with the University of St Andrews, courses are given by the James Mackenzie Institute for Clinical Research At many of these centres the teaching is provided by whole-time intensive courses, by part time courses, and by means of clinical assistantships The Joint Tuberculosis Council has provided nomadic courses in its own special subject, and several Divisions of the British Medical Association are now organizing post graduate courses in their own locality

British Postgraduate Medical School

The British Postgraduate Medical School was incorporated by Royal Charter on July 10, 1931 It was opened by H.M. King George V, accompanied by H.M. the Queen on May 13, 1935, in the presence of a distinguished gathering It has been recognized as a school of the

University of London and is managed by a governing body, under the chairmanship of Sir John Caulcutt The governing body is made up of representatives from the various departments of State interested in medical education, together with representatives of the Royal Colleges the Society of Apothecaries the University of London the London County Council and certain co opted members

The School is associated with Hammersmith Hospital, one of the London County Council general hospitals This is a modern hospital which has been enlarged to meet the requirements of the School The original accommodation was 388 beds, and it has been extended to 534 beds by the erection of an entirely new ward block Two additional operation theatres of the latest design have been constructed and in addition the old operation theatre, used by Sir Robert Jones during the war, has been brought up to date and is now in use as the gynaecological operation theatre A suite of new wards and accompanying labour rooms and nursery constitute the maternity department, and is in accordance with the latest requirements for the segregation of cases and the avoidance of infection

Each ward throughout the hospital has attached to it, in addition to the ordinary beds, single bedded side wards and a clinical laboratory There have been constructed in addition special laboratories for electrocardiographic and basal metabolism observations The kitchens have been reconstructed and a dietitian appointed A large new block has been constructed to house the out patient department on its ground floor, and a modern and up to date radiology department on the first and second floors This department provides for both diagnostic procedures and for deep therapy It is in all respects of the very latest design and equipment

The School itself is housed in a block mainly devoted to administration and pathology The medical and surgical and gynaecological departments are housed in a separate block providing clinical laboratories and rooms for senior members of the staff The existing school block includes two lecture theatres for the use of the School These lecture theatres are provided with an episcope capable of projecting large pathological specimens a microprojector of a new and improved design, and a cinematograph The lecture theatres seat up to 100 students and have attached to them a suite of rooms for the use of the lecturer and accommodation of cases There is a reference library, which is noteworthy for the large number of periodicals available for reference These include all the important English periodicals and a selection of the more important journals published in Europe, America and the Dominions

The pathology department has all its laboratories in the School building On the ground floor are provided laboratories for morbid histology and for biochemistry On this floor is also situated the post mortem department On the first floor is accommodation for the professors and readers, museum library, and the laboratories devoted to clinical pathology The top floor is entirely occupied by the bacteriological department and the accommodation for experimental pathology The equipment throughout these laboratories is entirely new and of modern design

The staff of the School is organized in three divisions First is the permanent whole time staff The second is the consultant staff having regular visiting days and available for emergency calls This consulting staff is mainly occupied in the treatment of patients and only takes a secondary part in tuition It has been necessitated by the fact that the School has no special departments, it being the intention of the governing body that the special hospitals already existing in London should be utilized for postgraduate students who require such instruction The third division of the staff is the visiting staff who conduct special courses in different groups of disease and take part in the general teaching of the School It is hoped to include in this staff the leading teachers and authorities available in London and the provinces, and as opportunity offers from other parts of the world

The permanent whole time staff is divided into four departments—medicine surgery, obstetrics and gynaecology, and pathology Each department is under the guidance of a director, who is a professor appointed by the University of London He is assisted by a reader or readers also appointed by the University and a varying number of assistants appointed by the governing body In addition each department has a resident staff

The School provides refresher courses of an intensive character for general practitioners under the N H I scheme These courses last for a fortnight and thirty such courses will probably be held during the next year

The most important part of the tuition is, however the instruction provided for medical graduates from all parts of the world who desire to extend their knowledge in medicine surgery or midwifery and for students of pathology who desire to do advanced work In this respect the School is attempting to provide something entirely different from the work usually associated up to date with postgraduate schools previous postgraduate instruction has consisted almost entirely of courses and lectures covering a set syllabus Although this will form part of the instruction provided at the School the real postgraduate instruction at Hammersmith consists in providing the students with a large amount of clinical material and encouraging them to work at it, under the tuition of well qualified instructors All the assistants of the School have special experience in some department of their subject, and if the student is particularly interested in that department he is attached to that particular assistant He is allotted cases and a definite amount of time is set apart which he can devote to the examination of these cases He receives every assistance and such tuition as meets his personal requirements The classes are broken up into small groups with this object and the work from the outset is almost entirely clinical

From time to time definite clinical lectures carefully prepared, are given either in the School theatres or in the clinical theatres The students attend regular pathological conferences and radiological conferences, and conferences and discussions between the different departments The department of pathology takes part in the clinical work of the School, and provides regular demonstrations to the students on laboratory procedures In this way it is hoped that the students of the School will acquire a more scientific and expert approach to the problems of clinical medicine and surgery and by attendance at the various conferences will be brought in touch with the latest advances and benefit by hearing the critical discussions on the diagnosis and treatment

The students also attend the out patient departments which are purely consultative in character In the out-patient department of obstetrics special attention is being devoted to ante natal and post natal work, and the prevention of maternal mortality

The department of pathology provides instruction for students in advanced pathology in any of the three departments It also provides accommodation for research work in pathology and for students desiring to work for the Ph D In addition to the weekly demonstrations on laboratory procedures lectures on The Place of the Laboratory in Clinical Medicine are provided at regular intervals A course for the Diploma in Clinical Pathology will commence on October 1

The radiology department provides clinical instruction for students taking a diploma in radiology and post-graduates who desire further instruction in radiology can be accommodated in limited numbers

The fees for the ordinary hospital practice including tuition are 6 guineas for one month and 3 guineas for each subsequent month The fee for the fortnight refresher courses is 5 guineas

The British Postgraduate Medical School is situated in Ducane Road Shepherd's Bush W 12 and can be reached by rail to Wood Lane station (Central London Railway) or by No 7 bus to Acton Vale Information as to fees for other courses of study and further details can be obtained from the Dean

Fellowship of Medicine and Postgraduate Medical Association

The Fellowship of Medicine arranges regular courses in general medicine and surgery, including special departments, each lasting from one to four weeks Courses in diseases of children, diseases of the chest, heart, nervous system, dermatology, gynaecology and obstetrics, plastic surgery, proctology, psychological medicine, physical therapy, rheumatism, urology, and practical anaesthetic tuition are given from time to time at the special hospitals in association with the Fellowship of Medicine Evening clinical and pathological courses for the M R C P (four times a year) and F R C S (Primary and Final) (twice a year) are arranged also Week end and evening courses are arranged in many subjects A panel of teachers is always available for clinical teaching, by arrangement with the Fellowship Lectures and demonstrations are arranged periodically The office of the Fellowship is, by kind permission of the Royal Society of Medicine, at No 1, Wimpole Street, W 1 (telephone Langham 4266) The secretary is in attendance daily from 10 a m to 5 30 p m (Saturday 10 a m to 12 30 p m) The annual subscription for membership of the Fellowship of Medicine and Postgraduate Medical Association is £1 1s, which includes the *Postgraduate Medical Journal* published monthly Courses, lectures, and demonstrations are open only to members

Radium Institute and Mount Vernon Hospital

The working scheme between the London Radium Institute in Riding House Street and the Mount Vernon Hospital at Northwood for the establishment of a Postgraduate School of Radiotherapy continues in operation The union of these two bodies is now complete, though for the time being the work of both will go on as hitherto, the resources of one body supplementing those of the other The Dean will be pleased to see prospective students by appointment Applications for information may be addressed to the Secretary of the Radium Institute and Mount Vernon Hospital (Mr T A Garner) at the School, Riding House Street, London, W 1

North-East London Postgraduate College

The headquarters of this postgraduate school are situated at the Prince of Wales's General Hospital, Tottenham, N 15, in the midst of this densely populated North London district It contains 238 beds, and is within a few minutes' walk of South Tottenham Station on the London, Midland and Scottish Railway, and Seven Sisters and Tottenham Hale Stations on the London and North-Eastern Railway It is readily accessible by electric tram from Manor House and Hackney, and from Dalston, Edmonton, and other parts of North London The North Middlesex Hospital, Edmonton, N 18, with upwards of 1,000 beds, has, under a recent arrangement, taken part in the clinical teaching

The college is in association with the Fellowship of Medicine and Postgraduate Medical Association, and is recognized by the Admiralty and India Office for the purpose of study leave, and by the University of London as a place for advanced study for the M D and M S degrees the course of practical teaching of bacteriology is approved by the University of Cambridge for its D P H, and there are ample arrangements for the convenience of men who are thus working or who, being in active practice are desirous of getting themselves into touch with modern methods The hospital affords excellent facilities for medical practitioners who wish to take part for a time in general hospital work or to obtain special instruction in the several branches of medicine and surgery Throughout the sessions into which the year's work is divided clinics lectures, and demonstrations are given Operations are performed every afternoon except Saturday Special vacation or intensive courses are held at intervals The winter session opens about the middle of September for clinical teaching

Fees—For the hospital practice in general medicine or surgery the fee is 5 guineas for three months or 2 guineas for one month Provided there is accommodation in the special departments the fees are eye department 3 guineas, gynaecological department 5 guineas ear, nose and throat department 5 guineas for three months All departments—the fee is 3 guineas for one month 6 guineas for three months 10 guineas for a year and 15 guineas for a perpetual ticket Courses in practical anaesthetics are not included in the above and a fee of £4 4s per month is charged for this work For special tuition in any subject the fees are arranged with the member of the staff concerned in consultation with the Dean

Additional information can be obtained from the Dean of the Postgraduate College, at the Prince of Wales's Hospital.

West End Hospital for Nervous Diseases

The annual out-patient attendance is between 38,000 and 40,000 at the out-patient department, Welbeck Street W 1 The in-patient department, Outer Circle, Gloucester Gate, Regent's Park, provides 76 beds, including 25 cots for children, and is fully equipped with pathological x-ray, and other special departments

The clinical and teaching facilities of the hospital fulfil the requirements of the examining bodies for the Diploma in Psychological Medicine, and for the London M D Part III Attendance on the general practice of the hospital is open to postgraduates There are opportunities for personal examination of cases In addition systematic courses of instruction in neurology and in related subjects are held throughout the year Special courses are given for the D P M and for the M R C P Tuition for senior undergraduates is also arranged

The courses of instruction in neurology consist of out patient demonstrations ward rounds in the in patient department, and lecture demonstrations by the physicians and surgeons, clinical demonstrations of psychological cases are given by members of the psychiatric department and the child guidance unit, also pathological discussions There are also some demonstrations on the neurological aspects of such related subjects as radiology ophthalmology, orthopaedics physical medicine, and oto rhino-laryngology A department of clinical research has been founded, and any qualified person desirous of working in this department should apply to the director The Savill Memorial Prize (value £15 and medal) is offered biennially for competition amongst postgraduate students of the hospital Honorary clinical assistantships are available in the out patient department and application for these should be made to the House Governor to whom application should also be made for particulars of the courses of instruction

Manchester Postgraduate Facilities

Courses in preparation for the diplomas in psychological medicine, in public health, and bacteriology are arranged There are facilities also for obtaining a certificate in venereal diseases A limited number of clinical assistantships at the discretion of the hospitals are offered in the medical, surgical, and special departments of the Manchester Royal Infirmary, the Ancoats Hospital, and certain special hospitals for one, two, or three months, or longer A clinical assistantship at the Radium Institute for three months is offered Clinical teaching for postgraduates is given each Thursday during university terms by the honorary staff of Ancoats Hospital, no fee charged

Postgraduate Courses at Bristol

The University of Bristol provides courses of postgraduate study for practitioners Details of set courses at the Royal Infirmary and General Hospital are announced locally In addition, practitioners may become clinical assistants in medicine, surgery, or special subjects for periods of a month or more

Daily Postgraduate Study.—For those who are able to devote several hours each day to hospital practice the university offers special facilities for postgraduate work. Qualified medical practitioners may be appointed as clinical assistants for a period of one or more months. They may act as assistants if times permit in more than one department and in any of the hospitals during their period of study. They will be entitled to the use of the clinical laboratories and medical library and have the right to attend in all departments including operations postgraduate and ordinary clinical demonstrations and post mortem examinations.

All inquiries and applications for admission should be addressed to the Director of Postgraduate Studies (Clinical Section) Department of Medicine University of Bristol.

Postgraduate Courses at Newcastle

The following postgraduate courses can be taken at the Medical School, King's College, Newcastle upon Tyne, formerly the University of Durham College of Medicine (University of Durham).

1. General courses in clinical medicine surgery and pathology at the Royal Victoria Infirmary meeting once weekly for ten weeks. One course will be held from October to December and one from April to June.

2. Special courses of clinical instruction meeting once weekly for ten weeks in the following subjects: gynaecology diseases of the eye diseases of the throat nose and ear diseases of the skin venereal diseases neurology. Special courses in midwifery will be held at the Princess Mary Maternity Hospital.

3. An intensive course of fourteen days' duration in the summer vacation.

4. In addition to the regular postgraduate courses practitioners may attend the ordinary medical and surgical practice of the Royal Victoria Infirmary and also at the Princess Mary Maternity Hospital for specified periods.

5. Classes are held at the Newcastle General Hospital for clinical instruction in medicine and surgery or lecture demonstrations every Sunday morning during term. There is no fee and all medical practitioners are invited to attend.

6. General and special courses in dental surgery are provided in the Dental Department.

7. Courses for panel practitioners are also held by special arrangement with the Ministry of Health and other bodies.

Postgraduate Study in Cardiff

Certain courses of postgraduate study are given during the year, and facilities may be offered to graduates in medicine and other duly qualified persons to carry out research work in the different departments of the Medical School. Research Scholarships are available ranging in value from £150 to £250 per annum. Further information regarding these is given under the heading Research Scholarships in the article on the University of Wales (p. 499).

Edinburgh Postgraduate Courses

In connexion with the University and Royal Colleges postgraduate courses are arranged every year, from about the middle of July to about the middle of September, comprising (*a*) a course in obstetrics and gynaecology, held from July 11 to July 29, (*b*) a general practitioner course, (*c*) a general surgical course. Courses (*b*) and (*c*) extend for four weeks from August 15 to September 10. Similar courses are arranged each year.

The course in obstetrics and gynaecology includes instruction in clinical midwifery and clinical gynaecology, obstetrical and gynaecological anatomy physiology and pathology antenatal and post natal clinics and the care of the newborn infant etc.

The general practitioners' course includes lecture demonstrations and where possible, practical instruction on medical anatomy medical sideroom work examination of the blood *x* ray and electrical therapy morbid anatomy and post mortem examination clinical instruction in medicine, surgery gynaecology child life and health diseases of the skin and infectious diseases, instruction in the diseases and methods of examination of the nervous circulatory, respiratory alimentary and renal systems and in diseases of the ductless glands.

The general surgical course includes lecture demonstrations on surgical anatomy surgical pathology and surgical *x* ray diagnosis clinical instruction in surgery at the Royal Infirmary and Royal Hospital for Sick Children clinical instruction in venereal diseases surgical out patients surgical and gynaecological operations and special instruction in abdominal genito urinary and other branches of surgery.

A course on internal medicine to be given from October 17 to December 10 has also been arranged. There will be four hours co ordinated teaching daily throughout the course. Diseases of the various systems will be dealt with during successive weeks—for example the first week will be devoted to cardiology 10 a.m. methods of diagnosis 11 a.m. clinics on cardiac cases 12 noon ward work 2 p.m. correlated demonstrations on clinical pathology radiology etc. 4 p.m. physiology of the circulation 7 p.m. ward work. The graduates will be apportioned for ward work to the eight physicians on the staff of the Royal Infirmary. The attendance will be limited to thirty two.

A series of clinical discussions open to all graduates is arranged on subjects of general interest. Among the special courses also arranged at various times of the year are: examination of the blood diseases of the ear nose and throat ophthalmoscopy venereal diseases *x* ray physics and electrotechnics tuberculosis ultra violet radiations and their uses the interpretation and significance of modern diagnostic methods surgical pathology clinical surgery (including radiology) clinical medicine (including radiology and child life and health) neurological surgery treatment of fractures neurological surgery orthopaedic surgery endocrinology diseases of the nervous system modern methods of anaesthesia.

Particulars regarding the courses dates of commencing fees etc. may be had on application to the Honorary Secretary Postgraduate Courses in Medicine University New Buildings Edinburgh.

Postgraduate Medical Teaching in Glasgow

Organized postgraduate medical teaching is available in Glasgow under the auspices of the Postgraduate Medical Association. This association represents practically all the teaching institutions in Glasgow and its business is managed by a board elected periodically. The chairman of the board is Professor Archibald Young.

During the winter months there is a series of weekly demonstrations and lectures specially designed for local practitioners. During the spring and summer months whole time medical and surgical courses for general practitioners are conducted. The forenoons are occupied with general medicine and surgical diagnosis and minor surgery in the Royal the Western and the Victoria Infirmaries. In the afternoon special subjects are dealt with in the special hospitals and in the special departments of the general hospitals two subjects being considered each afternoon.

Special courses are held from time to time and arrangements have been made whereby a limited number of graduates may become attached to wards or out patient departments nominally as clinical assistants for definite periods throughout the year. Clinical assistants work under the direct supervision of the physician or surgeon in charge and carry out such detailed investigations as directed.

Further information may be had on application to Dr James Carslaw Secretary Postgraduate Medical Association, 9 Woodside Terrace Glasgow C.3.

Tropical Medicine

There are large and important Schools of Tropical Medicine in London and Liverpool, and the Colonial Office expects all nominees for the Colonial Medical Service to pass through one or other of the two schools mentioned before their appointments are confirmed and commercial firms engaged in tropical enterprise commonly demand from medical applicants for employment corresponding evidence of special knowledge. Information with regard to these schools and diplomas and degrees is given in the paragraphs printed below. The University of London alone gives a degree (M.D.) in Tropical Medicine, and this, being an internal degree can only be taken by

students who are medical graduates of that university Diplomas in Tropical Medicine or Hygiene are granted by the universities of Edinburgh and Liverpool, and by the Conjoint Board of the Royal College of Physicians of London and the Royal College of Surgeons of England

Diplomas and Degrees

LONDON UNIVERSITY.—Tropical medicine is one of the six branches in which the M D degree may be obtained Candidates must normally have taken the M B B S degrees not less than two years previously and must subsequently have attended a course of one academic year in tropical medicine at an approved school, or must have practised for two years in a region where tropical diseases prevail In exceptional circumstances candidates may enter for the M D examination one year after taking the M B, B S degrees

THE CONJOINT BOARD IN ENGLAND.—This body grants a diploma in tropical medicine and hygiene to candidates after an examination held in the months of January April, and July The hospitals and laboratories recognized for this diploma are the London School of Hygiene and Tropical Medicine the Royal Army Medical College, the Liverpool School of Tropical Medicine the School of Tropical Medicine Calcutta, and the Usher Institute Edinburgh Particulars and conditions of admission to these examinations fees, etc may be obtained from the Secretary Examination Hall, Queen Square, London W C 1

UNIVERSITY OF LIVERPOOL.—A diploma in tropical medicine is given by this university to candidates possessing a recognized medical qualification who have attended the courses provided by the Liverpool School of Tropical Medicine and who have passed the examination held thrice yearly by the university examiners The subjects of examination are (*a*) tropical medicine, including aetiology symptoms, diagnosis, and treatment of tropical diseases, (*b*) pathology and bacteriology, (*c*) parasitology and entomology Fee for the course £21 A diploma in tropical hygiene (D T H), open to the holders of the D T M has also been established The examination is held twice yearly by the university examiners The subjects of examination are tropical hygiene (including sanitary engineering vital statistics and epidemiology and applied parasitology and entomology) practical sanitation bacteriology, chemistry (including meteorology and climatology) Fee for the course £12 16s Further information can be obtained from the Dean of the Faculty of Medicine, University of Liverpool

UNIVERSITY OF EDINBURGH.—Candidates for the diploma in tropical medicine and hygiene granted by the University of Edinburgh must be graduates in medicine and surgery of that university, or hold corresponding degrees or qualifications registrable with the General Medical Council of Great Britain or of such other universities or medical schools as may be recognized for the purpose by the University Court The course of instruction which commences in October, extends over two terms The examinations (Part I and Part II) are written, oral, and practical and are held at the end of the courses Candidates on the first occasion of presenting themselves for examination in either part, are required to appear for all the subjects of that part Those who fail to pass the entire examination in either part within a period of twelve months after the first appearance are required to reappear for all the subjects The university is included in the list of institutions whose courses of instruction in tropical medicine may be taken by officers on appointment to the Colonial Medical Services or during study leave Full particulars can be obtained from the Dean of the Faculty of Medicine, Edinburgh

SCHOOLS

London School of Hygiene and Tropical Medicine (University of London)

(INCORPORATING THE ROSS INSTITUTE)

The courses of study in all branches of the work of the School will recommence in the autumn in the premises in Keppel Street (Gower Street), the gift of the Rockefeller Foundation which have excellent laboratories and research rooms a fine lecture theatre and classrooms, library, and museum

The course of instruction for the diploma of the Conjoint Board in tropical medicine and hygiene is divided into two parts Part I (three months) and Part II (two months) The examinations by the Conjoint Board will follow closely upon the end of the corresponding course of study This course is recognized by the University of London as a course for associate students

The dates of the courses for the session 1938-9 are Part I.—September 27 to December 16 1938, January 3 to March 24, 1939, April 3 to June 23 1939 Part II.—January 16 to March 17, 1939, April 17 to June 16 1939

The course of instruction under Part I includes clinical demonstrations applied pathology and medical zoology Part II comprises instruction in tropical hygiene, including in relation to hygiene, bacteriology and vital and medical statistics and additional clinical demonstrations

Various short courses of instruction are also provided and special arrangements are made in the case of students who are unable to attend at the beginning of a course

The instruction in the division of clinical tropical medicine is given by the medical staff of the Hospital for Tropical Diseases and by visiting lecturers

A whole time course of study for the diploma in public health begins on September 26, and will extend over a period of nine months It is arranged in compliance with the requirements of the General Medical Council, and students taking the course will be able to proceed to the academic diploma in public health of London University The curriculum has been planned on very practical lines and includes, in addition to work with medical officers of health in two selected areas, a large number of visits to places of public health interest A series of special lectures given by eminent authorities, is open to members of the medical profession as well as to students of the school The London County Council the City of London and various other bodies have placed their resources at the disposal of the school for teaching purposes

Full time attendance is essential for Part I of the D P H course (September-December), but candidates selected for certain appointments in the London County Council's special hospitals will be admitted to Part II of the course as part time students

The course of study for the University of London diploma in bacteriology covers a period of one academic year beginning in October Special three monthly courses will be given in epidemiology and vital statistics Courses are arranged in psychology and physiology applied to industry

Inquiries with regard to all the above mentioned courses should be addressed to the Secretary, London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, London, W C 1

University of Edinburgh

A course of instruction for the diploma comprising a primary and a secondary course, is given during the autumn and spring terms (October to March) and includes tropical hygiene bacteriology entomology, and parasitology diseases of tropical climates (systematic and clinical) tuberculosis and venereal diseases The university is included in the list of institutions whose courses of instruction in tropical medicine may be taken by officers on appointment to the Colonial Medical Services or during study leave Full particulars can be obtained from the Dean of the Faculty of Medicine

Liverpool School of Tropical Medicine

This school is affiliated with the University of Liverpool The university grants diplomas in tropical medicine (D T M) and in tropical hygiene (D T H)

Two full courses of instruction, each lasting about eleven weeks are given every year for the D T M, commencing respectively September 29 1938, and January 5, 1939, and two courses for the D T H, beginning on January 10 and April 20 1939 The D T H can only be taken by those who have obtained the D T M Students who do not desire to take the diploma examinations held by the university at the end of each term are given a certificate if attendance has been satisfactory

Fees.—(1) For the D T M course, 20 guineas for the D T H course 10 guineas (2) For the diploma examinations 5 guineas An extra charge of one guinea is made for the use of a microscope if required

The laboratories of the school adjoin the university and the tropical ward of the Royal Infirmary The dimensions of the building are 162 feet in maximum length by 84 feet

in width In addition to the basement in which are accommodated the photographic department and large storage rooms there are four floors The ground floor has (1) lecture theatre with accommodation for about seventy students (2) library (3) a spacious museum with preparation room adjoining The first floor has twelve rooms in which are housed the departments of tropical medicine tropical hygiene and entomology The second floor has the main class laboratory 69 feet by 58 feet excellently lighted and three other rooms devoted to the department of parasitology The third floor has a large research laboratory and two research rooms. On the roof is an insectarium a mosquito proof house and other accommodation

Since its foundation the school has dispatched to the Tropics thirty two scientific expeditions many of the workers having been taken from among its students The work done by the staff has been published in twenty four special memoirs in the *Annals of Tropical Medicine and Parasitology* issued by the school and in numerous articles in the scientific press

The school also has a laboratory in the Tropics the Sir Alfred Lewis Jones Tropical Laboratory in Sierra Leone which was opened on January 10 1922 and is staffed by the school. Further information may be obtained from the Laboratory Secretary School of Tropical Medicine Pembroke Place, Liverpool 3

Psychological Medicine

Medical men recently qualified or whose experience with mental cases has been slight are not infrequently at a loss when confronted with mental illness They feel most assured when such illness is clearly the outcome of some definite bodily derangement either as its accompaniment or its sequel for they realize that its successful treatment will depend upon the recognition of the underlying malady In this connexion one calls to mind the great diversity of delirious states short or prolonged induced by cerebral contusion, by bacterial invasion by poisons from without or toxins from within the system, the neurological complications of syphilitic infections—for example meningovascular syphilis and syphilitic encephalitis generally known as general paralysis of the insane the sequelae of encephalitis lethargica the psychological concomitants of Graves's disease myxoedema pernicious anaemia the symptomatic epilepsies cardiovascular disease and many more In such cases no therapy directed towards the superficial symptoms alone can ultimately prove of avail it must be radical, attacking the seat of the disease

Mental illnesses of this nature do not bulk largely in the statistics of mental hospitals whose numbers are of course swollen by the preponderance of those afflicted with chronic maladies, such as dementia praecox, the paraphrenias, and recurrent manic depressive episodes These psychoses may well be of organic derivation, but their treatment by interference with organic processes (for example, hypoglycaemic shock), though occasionally successful does not rest upon any sure scientific foundation Hence, in the main treatment is along social lines, consisting as it does of measures to prevent deterioration to re establish contact' with life by promoting suitable interests and correcting maladjustments Eventually it may be hoped, scientific therapy will replace social therapy in these disorders

Often enough mental illness is no inevitable accompaniment or aftermath of bodily disease even though such exists but may arise accidentally as it were as a by-product, produced by psychological repercussions, the stirring up of fears and anxieties disappointments and animosities with which the illness has become inextricably interwoven Such cases abound in practice as hypochondrias and hysterical and other psychoneurotic states Their understanding is only to be attained by the discovery of the obscure satisfaction their illness affords such patients and as in the pure psychoneuroses, knowledge of the psychological structure of the reaction is a *sine qua non* of a scientific therapy Constitutional tendencies doubtless provide the soil for the production of both psychoses and psychoneuroses and may be of such a kind as to be clearly recognizable as congenital mental defectiveness A knowledge of psychological medicine to be requisite must embrace an understanding of the mental maladaptations met with in these three great groups A practical acquaintance with all of them will prevent many diagnostic and therapeutic errors

All too often a patient meets with some calamity, with all its attendant distasteful publicity which a knowledge of the practical aspects of mental disease might well have obviated The treatment of psychotics is the province of the psychiatrist but their early recognition is of supreme importance and a working knowledge of such states will afford to the practitioner the means of their detection at a stage when curative measures are most likely to meet with success Sufferers from one or other of the functional nervous disorders are innumerable, and too many of them pass from doctor to doctor unassuaged The intervention of the specialist may be necessary in the treatment of the severer forms of hysteria and neurosis but many practitioners have now acquired a sufficient knowledge of such states to be able to carry out a thorough and effective system of treatment themselves

Mental deficiency cannot escape detection in its extremer forms but numerous higher grade defectives many of whom are a menace to the community by reason of their criminal propensities escape recognition and especially must the student who proposes to take up a career in the school medical service or in the prison service make sure that he is thoroughly grounded in this subject

It is generally assumed that the mental expert is equally well acquainted with each of these departments of psychological medicine—the psychoses the psychoneuroses and mental deficiency This however is seldom the case In the past there has been too rigid a specialization largely the outcome of administrative requirements Recently, owing to the establishment of mental out patient clinics and the coming into force of the Mental Treatment Act which gave sanction to the admission of voluntary patients into public mental hospitals the psychiatrist's experience has been considerably enlarged and his province has been still further widened where the authorities have elected to place the selfsame physician in charge of both the psychiatric and the mental deficiency units It is to be hoped that this process of co ordination will continue and that it will eventually embrace the systematic psychological examination of prisoners or better still of accused persons awaiting trial

However that may be the medical student intending to devote himself to psychiatry will be well advised to neglect no opportunity of furthering his acquaintance with every branch of psychological medicine

Mental Hospital Appointments

Those who take up psychiatry as a career work as medical officers of public or private mental hospitals or similar institutions Except in the larger institutions, such as those under the control of the London County Council where a number of the medical officers are allowed to live out if married the medical staff are resident officers having board lodging etc either in the hospital itself or a residence in the grounds Junior assistant medical officers receive about £300 to £450 per annum and senior assistant medical officers about £500 to £700 in both cases with board lodging laundry etc, in addition if married the board etc is commuted for cash As the mental hospitals are under local control the salaries vary much in different mental hospitals Medical superintendents whose pay commonly ranges between £800 and £1 500 per annum, are provided with a house in the grounds of the hospital, and draw various allowances

Since the passing of the Asylums Officers Superannuation Act of 1909, doctors on the established staff of a public (county or borough) mental hospital, by paying 1s contributions 3 per cent of the value of their appointments, may retire at the age of 55 (provided that they have completed twenty years service) on a pension computed at the rate of one-fiftieth of their salary and emoluments for each completed year of service but inasmuch as the benefits of this Act are restricted to the public mental hospitals and are foregone on transfer to private or chartered mental hospitals, and the provision for widows is inadequate and uncertain, less inducement is offered than might be to joining the service

Appointments to the public mental hospitals are made by the visiting committees Promotion tends to be slow and uncertain The higher positions are not always advertised but in recent years there has been a general improvement in the conditions of service

Mental hospitals are fast developing an atmosphere approximating more closely to that of the general hospitals Whilst routine, administrative and clerical, necessarily bulks largely in mental hospital duties, there is ample material, time and scope for purely medical work and research and there is no branch of medicine in which research is more needed

Instruction in Mental Disorder

Though at the present time the instruction given to the student is scarcely adequate to supply the knowledge of mental disorder requisite for the needs of the general practitioner, the facilities for the study of psychological medicine in the general hospitals are now much greater than in former years Thus many of the teaching hospitals have out-patient departments for the treatment of mental cases, and in some of these hospitals special lectures are given in psychopathology These facilities need not be utilized by the student, however, and the compulsory part of the unreformed curriculum is generally confined to formal lectures and a few attendances at some mental hospital Here the student is apt to see mainly the advanced states of mental disease, and is likely to gain the impression that mental disorder is necessarily related to segregation and custody We would therefore impress upon him the importance of attending the out-patient department for mental disorders, where he will be able to observe the mild and early cases such as he will hereafter meet with in general practice

At Guy's and at the Middlesex Hospital a small number of beds are allocated for the treatment of patients suffering from mental disorder, and we learn that in St George's Hospital when rebuilt, some fifty beds will be provided for cases which will include psychotic patients as well as those who suffer from psychoneurotic ailments This is a bold and enlightened policy, and one which will certainly prove of inestimable benefit, for quite apart from therapeutic advantages it will enable the student to gain true insight into the relation between mental disorder and medicine as a whole and he will realize that it is a form of illness to be studied with other diseases and to be treated along similar lines

In London postgraduate courses of instruction of a comprehensive kind are given at the Maudsley Hospital Denmark Hill, and at the National Hospital, Queen Square, courses are arranged to meet the requirements for the diploma in psychological medicine in regard to nervous diseases Besides its ordinary postgraduate teaching in neurology the West End Hospital for Diseases of the Nervous System holds courses on common disturbances of the nervous system, and provides instruction in neurology for the D P M Courses in mental deficiency are arranged by the University of London There are also postgraduate courses at the various universities which grant diplomas of psychological medicine or of psychiatry

There are various facilities for instruction in psychotherapy and for the study of the psychoneuroses The Institute of Medical Psychology in London has systematic courses of instruction dealing especially with the minor forms of mental disorder which are not usually met with in the mental hospitals At the London Child Guidance Clinic fellowships are open to medical graduates who hold a diploma in psychological medicine An opportunity of acquiring clinical knowledge of all varieties of mental disorder is afforded at Hill End Hospital and Clinic St Albans where two house physicians are appointed for a period of six months at £165 per annum and if desired for a further six months at £200 per annum The Tavistock Clinic annual course may be attended at the same time

Diplomas

Those who are taking up psychiatry as a career will find it essential to obtain a diploma in psychological medicine Such a diploma is not at present compulsory for a permanent position on the staff of all mental hospitals but it will probably become so in course of time, just as it is now essential to obtain the D P H if a career in public health is contemplated Psychiatry is one of the branches of medicine which candidates for the M D Degree of the Universities of London and Edinburgh can take up and in addition, diplomas in psychological medicine (D P M), to which reference has been made, can be obtained from the Universities of London, Edinburgh Durham, Leeds, Manchester, Dublin, and the National University of Ireland, and from the Conjoint Board in England The requirements for a diploma differ to some extent in the various universities and colleges

UNIVERSITY OF LONDON (D P M)

The diploma awarded by the University of London certifies that the candidate has passed the examination in psychological medicine with special knowledge of one or other of the two branches, either psychiatry or mental deficiency special provision being made for this in Part B of the examination The examination consists of two parts, A and B Part A must be passed before Part B is taken It is held twice in each year—Part A in March and October and Part B in April and November Part A consists of anatomy, histology, and physiology of the nervous system (one paper and a practical examination), and psychology (one paper and an oral examination) Part B consists of neurology (one paper and a clinical and an oral examination) and psychological medicine (two papers and a clinical and an oral examination Paper I tests the candidate's general knowledge of both mental diseases (psychiatry) and mental deficiency, and Paper II is a special one consisting of two separate alternative sections the first section relating to mental disease (psychiatry), and the second section to mental deficiency) A copy of the Regulations and of the Syllabus of Study will be sent on application to the University Extension Registrar University of London The Senate House, W C 1

CONJOINT BOARD IN ENGLAND (D P M, R C P AND S ENG)

Both parts of the examination are held in June and December The examination comprises the following subjects, with special regard to their relation to psychological and general medicine —Part I (*a*) anatomy (macroscopic and microscopic) and physiology of the nervous system, (*b*) psychology Part II (*a*) clinical neurology and neuropathology, (*b*) psychological medicine, including psychoneuroses and mental deficiency and their legal relationships The examination will be written and oral in Part I, and written oral, and clinical in Part II No special certificates of study are required for Part I, but before entering for Part II candidates must produce certificates of (*a*) having attended clinical instruction for at least two months at a recognized hospital for nervous diseases or in the department for nervous diseases of a recognized general hospital, (*b*) having held a resident or whole time appointment at an institution for mental diseases where clinical instruction is given, recognized for the purpose, for a period of six months, or having attended clinical instruction in psychological medicine at a recognized institution during twelve months Further particulars may be obtained from the Secretary, Examination Hall, 8-11, Queen Square, London W C 1

UNIVERSITY OF EDINBURGH (DIPL PSYCH)

Candidates for the diploma must have held subsequent to graduation (*a*) a resident appointment for one year in a hospital for mental disorders approved by the Faculty of (*b*) a six months' appointment as above, and six months practical study of nervous diseases in a special or general hospital approved by the Faculty The examination co

prises —Part I (1) anatomy of the nervous system (2) physiology of the nervous system (3) psychology Part II (1) neuropathology (2) psychiatry and clinical psychiatry (3) clinical neurology Further particulars may be obtained from the Dean of the Faculty of Medicine the University of Edinburgh

UNIVERSITY OF LEEDS (D P M)

The examination is in three parts and is written oral and practical Subjects of examination —Part I (1) the development anatomy and histology (human and comparative) of the nervous system (2) the physiology of the nervous system and of the organs of special sense (3) general psychology Part II (4) the pathology of the nervous system Part III (5) clinical psychiatry (6) experimental and morbid psychology (7) (*a*) clinical neurology (*b*) mental hospital administration (*c*) medico legal aspects of insanity Candidates in order to pass must satisfy the examiners in the practical and clinical parts of the examination in Parts II and III respectively They may present themselves for the three parts of the examination separately or at the same time provided that no candidate shall be allowed to pass in Part II unless he has already passed in Part I or in Part III unless he has already passed in Parts I and II Evidence must be produced by candidates as to attendance of approved courses of instruction before they submit themselves to Part I of the examination Particulars may be obtained from the Academic Sub Dean School of Medicine Leeds

UNIVERSITY OF MANCHESTER (D P M)

The examination is in two parts Before presenting themselves for either part of the examination candidates must produce evidence of having attended subsequent to qualification, certain approved courses of instruction particulars of which may be found in the prospectus of postgraduate courses and must also have resided for at least six months in a Mental Hospital The course of study extends over a period of three university terms two of which must be taken in the university the remaining term may be taken at the university or at some approved institution The subjects of examination are — Part I (1) a written and practical examination on the development anatomy (human and comparative) and physiology of the nervous system (2) a written and practical examination in psychology (theoretical and experimental) Part II (1) a written and practical examination in pathology in relation to the nervous system (2) a written clinical and oral examination in psychological medicine (3) a clinical and oral examination in clinical neurology For further information application should be made to the Dean of the Medical School the University Manchester

UNIVERSITY OF DURHAM (D PSY)

The examination for the Diploma in Psychiatry consists of two parts Part I anatomy physiology pathology and bacteriology Part II psychology and experimental psychology neurology and psychiatry (systematic and clinical) and candidates may present themselves for the whole examination or for either part separately Particulars of the courses of instruction may be had on application to the Dean of Medicine the Medical School Kings College Queen Victoria Road, Newcastle upon Tyne

UNIVERSITY OF DUBLIN DIPLOMA

A postgraduate diploma in psychological medicine is granted to registered medical practitioners who have held a resident medical appointment at a recognized institution for the treatment of mental diseases for twelve months or who have held such an appointment for six months and have attended clinical instruction at an approved institution for six months and who have, in addition attended the requisite courses of instruction in anatomy physiology psychology pathology neurology and psychiatry and who have passed both parts of the examination for the diploma

The regulations for the diploma and particulars of the special courses of instruction may be obtained from the Registrar of the School of Physic Trinity College Dublin

NATIONAL UNIVERSITY OF IRELAND (D P M)

The National University of Ireland grants a diploma in psychological medicine Application should be made to the Registrars of the Constituent Colleges—University College Dublin University College Cork and University College, Galway—for all information as to courses etc

CONJOINT BOARD IN IRELAND (D P M)

There are two examinations in connexion with the diploma in psychological medicine Part I consists of (*a*) anatomy and physiology of the nervous system (*b*) psychology Part II (*a*) neurology including clinical and pathological neurology (*b*) psychiatry or psychological medicine including its legal relationships Fees £6 6s for each part.

Courses of Instruction

MAUDSLEY HOSPITAL LONDON

A course of instruction for the Diploma in Psychological Medicine is given annually at the Maudsley Hospital Denmark Hill from January to May inclusive the details of the last course being as follows The course consisted of two parts In the first part lectures on the anatomy of the nervous system were given by Professor Le Gros Clark with practical instruction by Dr Alfred Meyer A course of lectures on the physiology of the nervous system with demonstrations in physiological psychology was given by Professor F Golla a series of lectures on biochemistry in relation to the nervous system by Dr S A Mann on applied psychology by Dr H Yellowlees on theoretical and practical psychology by Dr J M Blackburn and on the practical application of intelligence tests by Dr C J C Earl For the second part of the course lectures on the general principles of psychiatry with a series of clinical demonstrations on the same subject were given by Professor Mapother on psychopathology and the principles of psychotherapy by Dr Bernard Hart on general treatment by Dr T Tennent on laboratory methods by Dr Mann and demonstrations on the pathology of the central nervous system by Dr Meyer Dr Tredgold lectured on mental deficiency Dr M Creak on mental abnormalities of children Dr East on crime and insanity and Sir Hubert Bond on the legal relationships of insanity Dr S Nevin gave instruction on clinical neurology at the Hospital for Nervous Diseases Maida Vale and Mr L H Savin on eye changes as applied to psychiatry Dr Eliot Slater gave a series of demonstrations on the psychoneuroses and affective disorders During the course a series of clinical demonstrations were arranged at the various London county mental hospitals and institutions for mental defectives The fee for the whole course (Part I and Part II) was 15 guineas or for either part separately 10 guineas for one single series of lectures in Part I the fee was 4 guineas and in Part II 2 guineas Inquiries as to lectures etc should be addressed to Protes or Golla Honorary Director of the Medical School Maudsley Hospital Denmark Hill S E 5 and as to clinical facilities to Professor Mapother the Medical Superintendent of the Hospital

BETHLEM ROYAL HOSPITAL

The Bethlem Hospital is situated at Monks Orchard Eden Park Beckenham Kent where every facility is available for the clinical study of nervous and mental disorder The classification of patients is a prominent feature in the administration of the hospital and treatment in all its modern and specialized aspects can be carried out at the Lord Wakefield of Hythe Treatment and Research Laboratories Two courses of lectures and practical instruction for the Diploma in Psychological Medicine are given each year in spring and autumn These are of an intensive character one commencing in September and completed in early December and the other commencing in the middle of January and completed in the middle of April Each course consists of two parts Part A includes lectures and demonstrations on the anatomy histology and physiology of the nervous system with lectures on psychology and demonstrations in experimental psychology Part B comprises lectures and clinical demonstrations in psychology including lectures and demonstrations in the morbid anatomy of the nervous system a series of lectures with clinical demonstrations on different branches of psychological medicine and lectures with clinical demonstrations on mental deficiency Entrants for the course who pay a composition fee of 15 guineas may if due notice is given attend either Part A or Part B of one course and postpone the other part until the next session An entrant who wishes to attend one part only pays a fee of 10 guineas An entrant who takes the complete course can attend the general clinical practice of the hospital on payment of 5 guineas for six months or 10 guineas for one year but an entrant who does not take either part of the course and desires to attend the clinical practice of the hospital must pay a fee of 5 guineas for each three months of attendance To enable postgraduates to obtain special

experience in this branch of medicine clinical assistants are appointed from time to time Further particulars may be obtained from the Physician Superintendent, Monks Orchard, Eden Park Beckenham Kent

NATIONAL HOSPITAL QUEEN SQUARE

Special courses for the Diploma in Psychological Medicine are not held at the National Hospital, Queen Square, London W C 1 but lectures are given which cover all the work necessary for the more organic side of the examination—namely, anatomy physiology and pathology of the nervous system and clinical neurology

THE TAVISTOCK CLINIC

The course of training arranged by the Tavistock Clinic (The Institute of Medical Psychology), Malet Place, W C 1, covers the whole field of the psychoneuroses Postgraduate courses of lectures in psychotherapeutic theory and method are given These consist of a six weeks intensive course of lectures and case discussions followed by a systematic course of lectures given twice a week throughout the year, which may be attended by any qualified medical practitioner The year s clinical course is arranged for those who wish to practise psycho therapy, and are prepared to give a minimum of twelve hours a week (attending on three days) The course is limited in membership The full course of the Clinic designed for those who wish to specialize in psychotherapy is a two-year course, application for the second year s course being made by those who have completed the year s clinical course

For the purposes of the University of London postgraduate diploma in psychological medicine, the Clinic provides facilities for the practice in psychoneuroses and early psychoses and in mental retardation and delinquency required under Regulation 3, Section II (*d*) and (*e*), for this diploma

A series of ten lectures on child psychology takes place on Thursdays in the spring and is intended especially for school medical officers of health, members of the maternity and child welfare group of the medical officers of health and others interested in work with children A course of twenty lectures on psycho-physical adaptation, for general practitioners and others will be given in the spring of 1939 and a fortnight s intensive course of lectures on the psychoneuroses will be given early in July each year A week-end course on marital problems will be held on October 1 and 2 while other week-end courses will be arranged as required

THE INSTITUTE OF PSYCHO ANALYSIS

The course of training arranged by the Institute of Psycho-Analysis (London Clinic of Psycho Analysis), 96, Gloucester Place W 1 offers medical students and practitioners the opportunity of acquiring such knowledge of psycho analysis as will qualify them to practise it The curriculum extends over a minimum of four years.

The Public Health Medical Services

The Ministry of Health for England and Wales is a central authority to secure the adoption and effective administration of measures conducive to the health of the people, and to promote research work and the proper training of persons for health services

For the purpose of local public health administration the whole of England and Wales is divided into counties, county boroughs, boroughs and urban and rural sanitary districts The administrative county of London, exclusive of the City of London, is divided into twenty eight metropolitan boroughs

The public health medical services for Great Britain embrace between three and four thousand medical men and women who give whole-time services, and, in addition a large number who give part-time services Barely one half of the medical officers of health of England and Wales are whole time officials but it is certain that their number will be considerably increased in the future, for the Ministry of Health is favourable to whole tim services, and certain provisions of the Local Government Act of 1929 will assist in this connexion Medical officers for these services are appointed by the Ministry of Health for England, and the Boards of Health for Scotland and Wales , and by the many local public health authorities

The Medical Services of the Central Authority

The medical work of the Ministry of Health has been organized under the control of a Chief Medical Officer It is subdivided into seven sections, with a senior medical officer at the head of each About a hundred and twenty medical officers are employed, of whom rather more than one-half are regional and deputy regional medical officers employed for certain duties under the Health Insurance Acts Briefly, the sections deal with environmental hygiene, epidemiology, and international health , maternity and child welfare , tuberculosis and venereal diseases , the supervision of the food supplies , sanitary administration in relation to in fectious diseases national health insurance , and the school medical service Vacancies on the staff are advertised from time to time in the medical journals, and appointments are made by the Minister on the recommendations of a Selection Committee These are Civil Service appointments, subject to the usual conditions as to pension, holidays, etc Medical officers are also employed for similar services by the Welsh Board of Health (Cardiff) and the Department of Health for Scotland (Edinburgh)

The Medical Services of the Local Authorities

These appointments include medical officers of health, tuberculosis medical officers, maternity and child welfare medical officers, venereal diseases medical officers, and school medical officers—who work in the health interests of the school child By the larger local public health authorities assistant medical officers are also appointed, and these posts often serve as stepping stones to the higher offices as vacancies, which are required to b advertised, occur

Medical Officers of Health

The duties of the medical officer of health are to inform himself upon all influences affecting, or threatening to affect, injuriously the public health within his district, to advise his sanitary authority upon all matters relating to health , and to perform all the duties imposed upon him by statutes, by-laws, and regulations He must prepare and submit to his local authority special and annual reports , give immediate information to the Ministry of Health of any serious outbreak of disease, and forward weekly returns of notified cases of infectious disease Subject to the instruction of his sanitary authority, he must direct or superintend the work of sanitary inspection

No person is qualified to be appointed or reappointed as a medical officer of health of any district or combina tion of districts unless, in addition to the qualifications prescribed by any statute, he is also registered in the *Medical Register* as the holder of a Diploma in Pub Health, Sanitary Science, or State Medicine The appoint ment of a medical officer of health is made subject to the approval of the Minister of Health A whole time medical officer of health of a county borough or urba and rural district in England and Wales, a part of whose salary is contributed by the Exchequer, shall not be appointed for a limited period, and shall not be removed from his office except by or with the consent of the Minister of Health

The local authorities must provide for the superannua tion of their officers The scheme requires that if officer is incapacitated by ill-health after ten years o

service or if he has reached 65 years of age he is entitled to superannuation Such superannuation is to be on the following scale after ten years service 10/60 of the average salary which he received during the last five years of employment after eleven years 11/60 and so on up to a maximum of 40/60 after forty years of service The scheme however fails to make due allowance in computing service for purposes of superannuation for the more advanced age as compared with other officials at which the medical officer of health can enter the public service In these two respects the position reached falls short of that for which the British Medical Association has been working for some years

School Medical Officers

School medical officers are appointed by local education authorities Primarily their duty is to detect among the children attending the public elementary schools any physical or mental defect which may retard education and to inform the parents of its existence Most approved schemes of medical inspection include arrangements which facilitate the task of parents in obtaining for their children the necessary treatment check the results of this treatment and keep each defective child under skilled observation both at home and at school until it has passed altogether out of the education authorities hands Indeed, it is now the practice for the education authorities themselves to provide for certain ameliorative work notably the prescription of glasses where necessary dental treatment the removal of adenoids and tonsils and treatment in connexion with certain communicable diseases of the skin and some physical and mental defects The general effect of all schemes alike is to make the inspection imposed by law of benefit not merely to the individual child but to the community at large, by preventing the development of conditions which lead to the existence of inefficient citizens among the adult population The work is so related to that of medical officers of health that, generally the senior school medical officer fills both appointments his work when necessary being supplemented by that of whole or part time assistants A diploma in public health is almost always required of those entering the school medical service of local education authorities

Tuberculosis Medical Officers

A tuberculosis medical officer is an officer with special training and experience in tuberculosis work, and of a suitable age and attainments to command general confidence In England such officers are appointed by county councils and county borough councils and their duties are to carry out the work of diagnosis of tuberculosis to advise as to treatment and to take charge of the work of tuberculosis dispensaries and sanatoria where these are in operation The work under tuberculosis schemes is co ordinated with the general public health work of local authorities, and so the medical officer of health is often appointed as the chief tuberculosis officer even when a special tuberculosis officer is on the staff of the local authority The arrangements in Scotland are very similar In Wales tuberculosis work is carried out under the aegis of the Welsh National Memorial Association, upon which the constituent local authorities are represented and the powers of appointment of tuberculosis officers are vested in the Association

Maternity and Child Welfare Medical Officers

Any local public health authority, however small may make arrangements for maternity and child welfare work within its area although very generally the smaller local authorities are provided for in county council schemes but the Minister of Health may transfer the administration of the maternity and child welfare work of an area to the local education authority where this would conduce to more efficiency For the schemes of the smaller local authorities the services of a part-time medical officer are obtained when the medical officer of health does not himself undertake the duties but for the larger schemes special whole time appointments are made The maternity and child welfare medical officer is responsible for the work at the centres provided and for directing the home visitations and these activities are closely co ordinated with the other branches of public health work directed by the medical officer of health

Much of this work was commenced in different parts of the country by voluntary organizations some of it still remains in their hands but is now fairly closely linked up with the public health local authority and the tendency is for the whole of it to be undertaken by the local authorities A large number of women medical officers have been appointed to the e posts

Venereal Diseases Officers

Schemes for the diagnosis and treatment of venereal diseases are provided and administered by county councils and county borough councils In some cases the officer is on the whole time public health staff and in others he is a part time official Special knowledge and practical experience in the treatment of venereal diseases are required The officer appointed for either whole time or part time service works at one or more clinics and also gives instruction and assistance in the treatment of venereal diseases to general practitioners who if they desire to obtain experience are allowed to attend the clinics

Remuneration in the Public Health Service

In order to ensure that public health authorities may obtain skilled and highly trained medical officers it is essential that such officers should receive salaries commensurate with their attainments bearing a reasonable relationship to the time and money expended in fitting them for their important and responsible duties and comparing well with the income which might be secured in other lines of medical work With this end in view the British Medical Association and the Society of Medical Officers of Health prepared a scale of minimum commencing salaries for whole time public health medical officers

The scale which was put into operation in 1925, was attended with a large measure of success There were however, certain aspects of it which were not entirely satisfactory For instance it was not retrospective and did not, therefore apply to medical officers who had been appointed prior to the date on which it came into force, and it contained no provision for specified increments in salary

As the result of a series of conferences between representatives of the various Associations of Local Authorities, the British Medical Association and the Society of Medical Officers of Health under the chairmanship of Lord Askwith, a Memorandum of Recommendations in regard to salaries of public health medical officers was drawn up and came into force in June 1930 This Memorandum was published in our *Supplement* on July 27 1929 Copies of the Memorandum may be obtained from the Secretary of the Association It has been adopted by the Representative Body and has been accepted by the representatives of the following bodies representing local authorities

The Association of Municipal Corporations
The Urban District Councils Association
The Rural District Councils Association
The London County Council
The Association of Education Committees
The Mental Hospitals Association
The Metropolitan Boroughs Standing Joint Committee

Practically all the local authorities of England and Wales are now applying this memorandum The advertisements of local authorities who are not prepared to put into effect the whole of the recommendations are not accepted by the *British Medical Journal* which in this matter has the co operation of the *Lancet* and the *Medical Officer*

The great advantage of the Memorandum is that it embodies a general agreement as to salaries and conditions of service and is not merely a scale of salaries It is retrospective, and will therefore benefit officers appointed before it came into force It provides stated increments for practically all medical officials except whole-time chief, deputy and chief assistant medical officers of health, who, as chief medical officials may, it is presumed, depend that the commencing salaries mentioned in the agreement will be increased for meritorious work and years of service, and it contains a very valuable provision by which questions of difficulty can be referred to an advisory committee

The British Medical Association represents the profession on the advisory committee, putting the point of view of the public health officers in the discussion of the cases of those who are receiving remuneration less than that laid down in the scale

For the right class of practitioner with leanings in the direction of public health work the service offers an attractive career but it must be recognized that there are comparatively few posts which carry high salaries

Curriculum for the Diploma in Public Health

The following revised Regulations and Rules of the General Medical Council for Diplomas or Degrees in Public Health come into force on October 1, 1938

1 A period of not less than two years shall elapse between the attainment by a candidate of a qualification in medicine, surgery, and midwifery and the grant of a diploma or degree in sanitary science, public health or State medicine

2 The curriculum for a diploma or degree in sanitary science public health or State medicine shall extend over a period of not less than (*a*) twelve calendar months of which not less than three consecutive calendar months shall be devoted to the whole-time study of the subjects comprised in Rule 3 *or* (*b*) an academic year of whole-time study covering a period of not less than nine calendar months, subsequent to the attainment of a medical qualification

3 Every candidate shall produce evidence of satisfactory and regular attendance on a course lasting not less than 280 hours at an institution approved by the licensing body granting the diploma or degree during which he shall have received (*a*) theoretical and practical instruction in bacteriology and parasitology (including immunology serology, and medical entomology) in relation to the public health, (*b*) instruction in the application of the principles of physiology and biochemistry to environmental and personal hygiene and to the public health (*c*) instruction in the application of the principles of chemistry and physics to environmental and personal hygiene and to the public health, including the methods of examination and purification of water and sewage, the composition and various forms of adulteration of the more common foods the nature (and methods of estimation) of pollution of the atmosphere and methods of disinfection and disinfestation

4 Every candidate shall produce evidence of satisfactory and regular attendance on a course lasting not less than 160 hours at an institution approved by the licensing body granting the diploma or degree during which he shall have received instruction in the following subjects (*a*) the principles of hygiene sanitation and public health (*b*) epidemiology and vital statistics (including statistical method) (*c*) public health law and administration (including social insurance public medical services and hospital administration) (*d*) industrial hygiene and the welfare of industrial workers, (*e*) house planning and sanitary construction (*f*) the principles of genetics (*g*) mental hygiene

5 Every candidate shall produce evidence that he has attended satisfactorily and regularly for three months on the clinical practice of a hospital for infectious diseases approved by the licensing body granting the diploma or degree

6 Every candidate shall produce evidence that he has during a period of not less than six months been engaged in acquiring a practical knowledge of the duties, routine and special of public health administration under the supervision of a medical officer of health who shall certify that the candidate has received from this officer or other competent officer during not less than three hours on each of sixty working days practical instruction in these duties, including those of (*a*) maternity and infant welfare service, (*b*) health services for young children and children of school age, (*c*) venereal diseases service, (*d*) tuberculosis service, (*e*) industrial hygiene, (*f*) hospital services (*g*) mental health services (*h*) inspection and control of food, including meat and milk *Note*—Instruction in the matters specified under the foregoing heads (*a*) to (*h*) should include attendance at the centres clinics, institutions and premises concerned

Certificates of having received the prescribed instruction in public health administration must be given by a medical officer of health who devotes his whole time to public health work of an area approved by the licensing body granting the diploma or degree

7 The examination for the diploma or degree shall be divided into two parts, Part I and Part II each of which shall extend over not less than two days, and shall be conducted by examiners specially qualified A candidate must pass Part I before being admitted to examination for Part II, and in both parts a candidate must pass in all the specified subjects at one time

8 The examination for Part I shall include written and oral examinations in the subjects comprised in Rule 3 together with a practical laboratory examination in the subjects specified in Rule 3 (*a*) Candidates shall not be admitted to examination for Part I until after they have completed the prescribed courses of instruction in the subjects thereof

9 The examination for Part II shall include the subjects referred to in Rules 4 5 and 6 The examination shall be written and oral, and shall include clinical examinations in infectious diseases, and practical examinations in food inspection and inspection of premises, including dwellings, factories workshops, and schools Candidates shall not be admitted to examination for Part II until after they have completed the prescribed courses of instruction in the subjects thereof

Note—The observance of these Rules does not prevent any licensing body granting the degree or diploma, or any institution approved by such Body, from requiring a larger number of hours than those specified to be spent in the study of prescribed subjects, or requiring instruction to have been given in subjects additional to those prescribed Indeed, the use in Rules 8 and 9 of the word 'include' implies that knowledge of other subjects may be tested as part of the examination The duties of local authorities and their medical officers are constantly being extended by legislation and modern scientific research is making available in new directions knowledge of the greatest importance to medical officers of health and to other medical officers engaged in public health work

Training and Examining Centres for Public Health Qualifications

Degrees in Sanitary Science, Hygiene, or Public Health are conferred, in England, by the Universities of London Durham, Liverpool, and Birmingham, in Scotland, by the Universities of Glasgow and Edinburgh, and in Eire by the National University of Ireland In most cases these degrees are conferred only upon medical graduates of the universities granting them

Whereas the requirements of the General Medical Council for the Diploma of Public Health are strictly conformed to, these requirements are extended, as a rule as to both the period and the scope of special studies demanded, before Degrees in Sanitary Science are granted

Most universities in Great Britain and Ireland grant a D P H and provide for the necessary training The Irish English and Scottish Conjoint Boards and the Irish Colleges also grant these diplomas The School of Physic of Trinity College, Dublin, was the first body in the British Isles to arrange for courses of instruction and for a Diploma in Public Health At Cambridge the teaching

and training courses for the D P H were terminated at the end of 1931

In London the postgraduate teaching and training in public health is provided mainly at one centre—the London School of Hygiene and Tropical Medicine (University of London), the only other training centre which offers such facilities is the Royal Institute of Public Health, Queen Square Bloomsbury W C 1

The course of study for the D P H provided by the London School of Hygiene and Tropical Medicine (Keppel Street Gower Street London W C 1) which is a school of the University of London covers a period of nine calendar months in the case of whole time students and is designed so that students can proceed to the academic diploma of the University of London A uniform date of entry is essential in a course of this nature and students must commence work at the beginning of the autumn term The session opens on September 26 Full time attendance is essential for Part I of the course (September–December) but candidates selected for certain appointments in the London County Council's special hospitals will be admitted to Part II of the course as part time students Examinations in Parts I and II of the Academic Diploma in Public Health of the University of London are held—Part I in January and June and Part II in July September and January The School undertakes research work in preventive medicine and members of the public health services have a common room placed at their disposal and are invited to attend staff and special lectures

The University of Liverpool grants a Diploma in Public Health to medical practitioners eligible under the rules drawn up by the General Medical Council The course of study for the diploma extends over a period of not less than twelve calendar months (or an academic year of whole time study covering a period of not less than nine calendar months) subsequent to the attainment of a medical qualification The examinations for Part I are held annually in March and June and for Part II in June and October On the recommendation of the examiners the diploma may be awarded with a mark of distinction in the case of candidates who reach a required standard. All particulars regarding courses of study examinations and fees can be obtained on application to the Dean of the Faculty of Medicine

The University of Manchester has a well equipped department of bacteriology and preventive medicine where candidates preparing for the examinations of the various university and examining boards for the Diploma in Public Health can obtain instruction It also prepares candidates for the Diploma in Bacteriology granted by the university Full particulars can be obtained from the Dean of the Medical School the University, Manchester

The University of Wales grants a Diploma in Public Health under conditions which comply with the requirements of the General Medical Council Examinations are held twice yearly for Part I in December and April and for Part II in January and October Candidates must hold an approved medical qualification and have taken the courses of study for the diploma at the Welsh National School of Medicine a constituent School of the University The whole time courses for Part I begin in mid September and finish in December an examination for this part following immediately Part II courses commence in January and continue until the end of September The courses for Part II are so arranged as to permit of part time study The Institute of Preventive Medicine situated in Cardiff is equipped with laboratories for teaching and research in public health and a library is provided for the use of students The Public Health Departments of the City of Cardiff and the County of Glamorgan and the Joint Public Health Laboratories provided by these authorities which are accommodated in the Institute form the centres of practical instruction their medical officers of health bacteriologists and chemists being lecturers in the department of preventive medicine of the school In the public health departments of Cardiff and Glamorgan a limited number of salaried half time posts are open to medical men and women who are studying for Part II of the diploma in the Welsh National School of Medicine Applications for such appointments should be made to the respective medical officers of health Further particulars may be obtained from the Secretary the Welsh National School of Medicine 10 The Parade Cardiff

The University of Edinburgh grants a Diploma in Public Health The course which extends over an academical year of nine months full time study can be commenced in October only and provision is made by the university for instruction in all the subjects Candidates for the diploma must be graduate in medicine and surgery of the University of Edinburgh or must hold recognized degrees or medical qualifications The course for the diploma is divided into two parts for each of which examinations are held twice annually In each part the candidate must pass in all the specified subjects at one examination The diploma cannot be awarded until after the lapse of at least two years from the date of obtaining a recognized medical qualification

The University of Glasgow confers the B Sc (P H) and the D P H and conducts complete qualifying courses for both at its Institute of Hygiene and for administrative work in the Public Health Department of the city The course for the diploma is divided into two parts and admission to the examination is contingent upon the candidate having complied with the following conditions which apply also to the Edinburgh D P H

PART I.—(*a*) Completion subsequent to obtaining a registrable medical qualification of the course of instruction prescribed for Part I

PART II.—(*b*) Completion subject to obtaining a registrable qualification of the course of instruction prescribed for Part II (*c*) a lapse of two years after obtaining a registrable qualification (*d*) previous passing of examination in all subjects of Part I

Qualifications in Tropical Medicine and Hygiene

The University of London grants a degree (M D in Tropical Medicine) to its medical graduates A course of training is normally required extending over at least one academic year

The Services

ROYAL NAVAL MEDICAL SERVICE

The Royal Naval Medical Service offers to well-qualified medical men a satisfactory career with good opportunities for the practice of their profession and for specialization in many subjects good pay and the prospects of promotion to the higher ranks with an adequate pension on retirement

Entrance is on a short service basis for an initial period of three years to be extended to five years at the discretion of the Admiralty Officers leaving the Service at the end of three years are eligible for a gratuity of £400 while those who leave at the end of five years receive £1 000

On appointment new entrants undergo an initial course during which they receive instruction in the naval aspects of medicine and the organization and administration of the Naval Medical Service This is followed by a period of service at one of the principal naval barracks or hospitals and is succeeded by various periods of service at home or abroad afloat or ashore as required

General medical and specialist courses of duration varying from three to six months are arranged and this postgraduate instruction is supplemented by the promotion course referred to under Promotion below

Officers may be transferred to the Permanent List at the discretion of the Admiralty during the year in which they attain four years seniority as surgeon lieutenant A gratuity of £1 000 (less income tax) is paid but the officer is required to render a minimum of twenty five years service in order to qualify for full pension including seniority granted if any in respect of civil hospital time With regard to the latter ante date of seniority of not more than one year may be allowed in respect of whole time or resident appointments in civil hospitals held prior to entry to the Royal Naval Medical Service The ante date counts for seniority and eligibility for increase of pay and if the officer is transferred to the Permanent List it counts also as service for the purposes of promotion and retired pay or gratuity on retirement

Opportunities are afforded for officers to specialize during the course of their career and the number of specialist posts carrying additional emoluments is over eighty five

Candidates should preferably be between the ages of 24 and 28

MEDICAL OFFICERS FULL PAY MARRIAGE ALLOWANCE AND RETIRED PAY

(Annual Amounts calculated to nearest £)

	Full pay of Single Officers and Married Officers under 30 (See Note *(a)*)	Full pay of Married Officers over 30 (See Note *(b)*)	Maximum Pension for Officers over 40	Retires at Age of
	£	£	£	
Surgeon Lieutenant on entry	438	522		
After 3 years	478	562		
Surgeon Lieutenant Commander on promotion	541	624	40	45
After 3 years	575	657		
Surgeon Commander on promotion	706	788		
After 3 years	773	855		
6	840	922		
9	906	989	543	55
12	964	1 046		
15	1 022	1 104		
Surgeon Captain on promotion	1 037	1 138		
After 3 years	1 119	1 220		
6	1 201	1 302	815	57
9	1 284	1 384		
Surgeon Rear Admiral*	1 734	1 734	915	60
Surgeon Vice Admiral (Medical Director General of Navy)	2 263	2 263	1 082	On vacating office

Notes.—*(a)* Lodging allowance at the rate of £80 per annum is payable when service accommodation is not provided As a general rule lodging allowance will not be payable concurrently with marriage allowance *(b)* Children's allowances are paid in addition at the following rates 2s a day for first child 1s a day for each subsequent child

PROMOTION

Promotion to surgeon lieutenant commander and surgeon commander is automatic, subject to the necessary minimum of sea time being served and to satisfactory reports Surgeon lieutenant-commanders undergo a five months course of instruction followed by an examination as a result of which accelerated promotion to surgeon commander can be gained In the higher ranks promotion is strictly by selection The total number of surgeon captains and officers above that rank is forty one Every permanent officer becomes eligible for selection for a higher post after eight years' service as surgeon commander, and promotion usually takes place after eleven to twelve years service in that rank

Provision allowance and lodging allowance are paid when victualling and accommodation are not provided

The extra allowances alluded to in the above table are not to be looked upon as very exceptional About a quarter of the medical officers of the Navy are drawing extra allowances

GRATUITIES

When officers are permitted to withdraw instead of receiving pension gratuities are payable on the following scale

	£
Over 10 and under 15 years service	500
15 18	1 800
18 years service	2 700

ALLOWANCES

(a) In addition to marriage allowance (which is included in full pay of married officers—see table above) children's allowance and lodging allowance the following allowances are also payable

When in charge of hospitals and sick quarters	10s and 5s a day
Specialist allowances	5s a day
Senior medical officers in flagships	5s and 2s 6d a day
Provision allowance when victualling is not provided	£47 per annum at present

(b) Married officers over 30 appointed on shore at home for periods over three months will receive a removal allowance

(c) Married officers over 30 employed on shore abroad will receive free passages for their wives and families

UNEMPLOYED AND HALF PAY

In the case of surgeon lieutenants lieutenant commanders and commanders a distinction is drawn between officers awaiting employment and holding themselves at the disposal of the Admiralty, and those who are unemployed at their own request or in consequence of misconduct In the former case officers will receive unemployed pay as follows

		Daily rate £ s. d.
For the first six months	Full pay of rank and seniority (without allowances)	
For the next six months	Lieutenants	13 7
	Lieutenant Commander	1 0 4
	Commanders	1 4 11

And thereafter half pay varying between 6s 9d and 23s 6d a day according to rank and seniority In the latter case officers will receive half pay at the rates indicated above

In actual practice half pay and unemployed pay are very seldom applicable to Medical Officers below the rank of surgeon captain

Applications—No examination for entry is held but candidates will be required to present themselves before a Selection Board of the Admiralty, presided over by the Medical Director General of the Navy, Admiralty London to whom application should be made for further details

General—The cost of living in a Naval mess afloat or ashore is very moderate, and does not as a general rule exceed £10 a month

Naval Dental Service

Candidates for this Service must be below the age of 28 registered under the Medical or Dental Acts and possess a registrable qualification in dental surgery Particulars including the rates of pay and allowances also withdrawal gratuities and retired pay can be had from the Medical Director General of the Navy Admiralty S W 1

ROYAL ARMY MEDICAL CORPS

The Royal Army Medical Corps offers to well qualified medical men a satisfactory career, with good opportunities for the practice of their profession and specialization in many subjects, good pay and prospects of promotion to the higher ranks with an adequate pension on retirement

The appointment of officers to the R A M C is, in the first instance, by means of a short-service commission for a period of five years In the fourth year of service an officer is given the choice of retiring with a gratuity of £1,000 at the end of five years service or of applying for a permanent commission in either the Royal Army Medical Corps or the Indian Medical Service In the reorganized service, introduced as a result of the recommendation of the Warren Fisher Committee, the prospect of promotion to the higher ranks necessarily depends upon a rigid control of entry into the permanent service It is not possible on this account to say exactly what proportion of officers who now enter the Corps will be eligible for permanent commissions, but in all probability about 50 per cent will have the opportunity of doing so Those retiring with a gratuity after five years' service are liable to be called up for duty in the event of a national emergency arising during the twelve years following their retirement

New entrants are commissioned in the rank of lieutenant, and the first three months of their service are on probation, during which time they undergo a course at the Royal Army Medical College, London, in hygiene, tropical medicine, entomology, etc, in addition to their military training at the Royal Army Medical Corps Depot at Aldershot A grant of £50 is made for the purchase of uniform

Secondment for Civil Posts

An entrant who is holding or who is about to hold at the time of entrance an approved whole time appointment at a recognized civil hospital may be seconded while holding such appointment up to a maximum period of twelve months A candidate who has held such an appointment within six months of entry may be granted an ante date up to two months in respect of the period the appointment was held

The period of secondment or ante date will not reckon in diminution of the period of five years which he is required to serve on a short service commission but on completing one year of actual service in the R A M C the period of secondment or ante-date will count for seniority If appointed to a permanent commission the period of secondment or ante date counts as service for promotion to the rank of major increases of pay in the ranks of captain and major and retirement on retired pay or with gratuity

Promotion

Promotion to captain is after one year's commissioned service on full pay If appointed to a permanent commission promotion to the rank of major is on completion of ten years commissioned service Promotion to the ranks of lieutenant colonel and colonel is by selection to fill vacancies within the establishment which is designed to allow promotion to those ranks on the average after seventeen and twenty five years service respectively

Professional Opportunity

The possibilities for good work are very great There is scope for original research in tropical diseases in preventive medicine and in bacteriology as well as in the large clinical field open to the specialist in medicine surgery gynaecology diseases of the ear nose and throat ophthalmology and venereal diseases Child welfare is also undertaken systematically by officers of the R A M C

Young officers having special qualifications or experience in particular branches of medicine or surgery can if found sufficiently expert be graded as Physician Otologist Gynaecologist Surgeon Ophthalmologist Pathologist Radiologist Hygienist Dermatologist and Anaesthetist They would then be eligible to fill specialist appointments which carry additional pay

Foreign Service Postgraduate Study

The tour of foreign service in India Burma and Egypt is five years in Gibraltar and Malta four years and in other stations three years but in the case of those officers retiring on a gratuity after five years service arrangements would be made for them to return to England at public expense by the end of that period

A permanent commissioned officer between his sixth and tenth year of service undergoes a course of postgraduate study at the Royal Army Medical College and the London hospitals of five months duration followed by a course of study of a special subject selected by himself provided he has shown special aptitude in the postgraduate course or during his previous service During this course of study he *remains on full pay and the fees for the course are paid by* the State When qualified in his special subject the officer up to and including the rank of lieutenant colonel becomes entitled to specialist pay at 4s 6d per day when holding a specialist appointment.

Pay and Allowances Retired Pay etc

The present rates of pay and allowances and retired pay are given in the following tables In addition an officer at home below the rank of colonel in charge of a hospital of fifty beds or more receives charge pay at the rate of 2s a day There are also available specialist appointments which carry with them an additional rate of pay of 4s 6d a day

Rank	Pay (per annum) approx.	Allowances (Home Rates) approx.	
		Married	Single
	£	£	£
Lieutenant	362	198	134
Captain	447	237	134
Captain after 6 years service	496	237	134
Captain after 8 years service	535	237	134
Major	621	240	173
Major after 13 years service	703	240	173
Major after 16 years service	747	240	173
Major after 18 years service	827	240	173
Major after 22 years service	891	240	173
Lieutenant-Colonel	949	240	202
Lieutenant-Colonel after 3 years service as such	1 031	240	202
Colonel	1 156	277	227
Major-General	1 510	433	383

Pay in India is appreciably higher than that at home

General—The pay of officers even in the lowest rank is ample to enable them to be independent and the expenses of R A M C messes are kept under strict supervision so that all tendency to extravagance may be checked and junior officers prevented from finding difficulty in living on their pay

Retired pay consists of two parts (*a*) a service element based on the officer's total service (*b*) a rank element for the substantive rank from which the officer retires An officer with less than twenty complete years service will not be eligible to retire voluntarily on service retired pay

The following are the maximum current rates of retired pay

Rank	Yearly Rate of Retired Pay	Compulsory Retiring Age
	£	
Major	407.5	55
Lieutenant-Colonel	547	55
Colonel	729	57
Major-General	950	60
Lieutenant-General	1 120	60 (or on completion of tenure)

Gratuities

A short service officer not appointed to a permanent commission may retire with a gratuity of £1 000 after five years service as a medical officer Such an officer is liable during the twelve years following retirement to be recalled to service at a time of national emergency Officers holding permanent commissions with less than twenty years service as medical officers may be permitted to retire with gratuities in accordance with the following scale

With less than 10 years service as a medical officer	£1 000
After 10 years service as a medical officer	£1 500
After 15 years service as a medical officer	£2 500
After 18 years service as a medical officer	£3,500

Applications—Entry takes place twice yearly at the beginning of May and November The regulations for admission giving full details can be obtained from the Under Secretary of State (A M D 1) War Office Whitehall London S W 1 and should be carefully studied A personal interview with a representative of the Director General Army Medical Services is readily obtainable

MEDICAL BRANCH OF THE ROYAL AIR FORCE

The Air Council attaches great importance to attracting into the service the best type of medical man since on the capacity of the Medical Branch depends in a peculiar degree the safety and efficiency of the Air Force The duties of a medical officer in the Air Force include not only the prevention and treatment of those ordinary diseases to which the personnel of any fighting service are liable but the special study of the mental and physical stresses imposed on the airman in diverse circumstances and climates—a new branch of medicine which still provides considerable scope for research

With the Air Force now increasing enormously the prospects offered by the study of the special medical aspects of aviation are greatly enhanced while there should be available many more opportunities for gaining experience and for employment in specialist and general medical work and in administrative posts

As promotion to the higher ranks of the Service is by selection and as a certain proportion of the higher ranks are reserved for purely professional as opposed to administrative appointments it will be seen that there are excellent prospects for the young medical officer who exhibits ability and energy in his professional work The work to be done therefore has a high professional interest combined with good rates of pay and allowances so that a career is offered to those who are selected for permanent commissions which should prove both attractive and interesting The life is one which is certain to appeal to the man of wide outlook who desires opportunities for

travel, sport, and games, and can find interest and enjoyment in aviation His duties will, as a matter of course, give him flying experience as a passenger, which is necessary for the proper study of the medical problems of aviation and for gaining first-hand knowledge of the conditions under which his comrades serve He may also, if he wishes, learn to fly when this can be done without interference with his duties

COMMISSIONS

The establishment consists partly of permanent and partly of short-service officers and an officer on entry is granted a short-service commission for a period of three years on the active list (which may be extended to five years) and of four years in the Reserve of Air Force Officers Selections for permanent commissions are made from officers holding short-service commissions who are considered to be suitable and who desire a life career in the Service Those who are not selected are transferred to the Reserve at the expiration of their period of service on the active list

But the short service commission with its gratuity after three or five years is in itself an attraction to many entrants who desire to enlarge their experience and outlook from the point of view of subsequently entering private practice and who on entry have not made up their minds to the adoption of a permanent career in the Service

For certain purposes medical officers may be allowed to count as service their time spent in approved whole time post-graduate appointments in civil hospitals under certain well-defined and generous conditions

At about five years service all permanent officers who are judged suitable will be given the opportunity to take a course of specialist study towards the expense of which an allowance is made The period allowed will vary with the subject of study but usually about nine months will be available to each officer during which full pay and allowances will be issued Their subsequent career will normally be as follows Approximately three quarters of the employment of squadron leaders and senior flight lieutenants is in specialist posts though these are not generally of a full time specialist character On reaching the rank of wing commander the policy is to allow a proportion of officers to become permanent specialists and to be employed continuously throughout the remainder of their career in full-time specialist posts In addition there are a number of hygiene posts in the rank of wing commander open to specialists in that subject, thus further increasing the proportion of specialist posts open to officers In the rank of group captain, apart from the posts already mentioned as available for the permanent specialist, employment is nearly equally divided between posts in charge of a large hospital and headquarter administrative posts This statement indicates the position as regards specialist employment as at present foreseen

New entrants into the Royal Air Force Medical Branch are commissioned as Flying Officers (Medical), and are eligible for promotion to the rank of Flight Lieutenant (Medical) after one year's service on full pay Accelerated promotion to the rank of Squadron Leader may be granted at any time after eight years service to officers qualified to hold specialist appointments, those officers who are not so qualified will be eligible for promotion to this rank after ten years total service Promotion within establishment to the ranks of Wing Commander and above is by selection The number of permanent commissions granted yearly is regulated with a view to all suitable permanent officers being promoted to Wing Commanders and of a substantial proportion of Wing Commanders being promoted to Group Captains

There is no competitive examination on entry, candidates, who must be under 28 years of age (as a temporary measure applications will be considered from candidates up to 31 years of age) are interviewed by a Board presided over by the Director of Medical Services, Royal Air Force, before acceptance Each candidate must produce 1 Birth certificate 2 Medical registration certificate 3 A declaration containing the following information (*a*) age and place of birth (*b*) that he is a British subject, the son of British subjects, and of pure European descent, (*c*) that he is ready to engage for general service at home or abroad as required, (*d*) the qualifications he is possessed of and what medical or other appointments he has held (if any), (*e*) that he is willing to fly as a passenger whenever called upon to do so

Each candidate is required before acceptance to pass a medical examination to ensure that he labours under no constitutional or mental disease or weakness or any imperfection or disability which may interfere with the efficient discharge of the duties of a medical officer in any climate in peace or war

On appointment entrants undergo an initial course of three months during which they are given instruction in the special medical aspects of aviation hygiene and tropical medicine the organization and administration of the Royal Air Force, and the general and special duties to be performed by officers in the Medical Branch

UNIFORM AND EQUIPMENT LEAVE

An allowance of £50 towards the cost of uniform is normally made on joining Subject to the exigencies of the service, officers at home are allowed ordinary leave up to sixty one days in a year, officers abroad may accumulate leave up to ninety one days which may be taken on return home Full pay is granted for ordinary and accumulated leave

EMOLUMENTS

The emoluments of medical officers of the Royal Air Force are given in outline below The rates of pay are fixed on an inclusive basis and the fact that specialist pay and charge pay are not payable as separate emoluments was taken into account when the rates were fixed

In addition to pay officers receive quarters (with fuel and light) rations, and attendance or, if these are not available in kind they are given cash allowances in lieu as shown in the table The rates and general scheme of allowances are subject to review as circumstances may require Married officers who have attained the age of 30 years or reached the rank of Squadron Leader receive either married quarters or allowances at the married rates

Rank	Pay (per annum)	Allowances (per annum) (Present Home Rate)	
		Married	Single
	£	£	£
Flying Officer	395	198	125
Flight Lieutenant	429	237	125
Ditto after 2 years as such	462	237	125
Ditto after 4 years as such	496	237	164
Squadron Leader	645	240	164
Ditto after 2 years as such	709	240	164
Ditto after 4 years as such	742	240	164
Ditto, after 6 years as such	809	240	193
Wing Commander	909	240	193
Ditto after 2 years as such	943	240	193
Ditto after 4 years as such	1 040	313	254
Group Captain	1 156	370	315
Air Commodore	1 320	433	376
Air Vice Marshal	1 652		

Special allowances are applicable at stations abroad

RETIRED PAY AND GRATUITIES

The minimum period of service qualifying for retirement on retired pay is twenty years The maximum rates of retired pay and the compulsory retiring ages for the several ranks are

Rank	Yearly Rate of Retired Pay	Compulsory Retiring Age
	£ s	
Air Vice Marshal	914 10	60
Air Commodore	860 0	59
Group Captain	814 10	57
Wing Commander	543 0	55
Squadron Leader	452 10	55

A permanent officer allowed to retire before having qualified for retired pay may be granted a gratuity, namely

After 5 but less than 10 years commissioned service	£1 000
After 10 but less than 15 years commissioned service	£1 500
With 15 or more than 15 years commissioned service	£2,)

Short-service officers who complete their full period of service on the active list will normally be granted gratuities as follows on transfer to the Reserve

After 3 completed years	£[illegible]
After 5 completed years	£1 000

These gratuities will not be payable to officers granted permanent commissions but their service on a short service commission will count towards retired pay

DISABILITY AWARDS WIDOWS PENSIONS ETC

Permanent medical officers invalided from the Royal Air Force are eligible for retired pay or gratuity however short their service may have been If the disability in consequence of which they are invalided is attributable to the conditions of their service and is assessed at 20 per cent or more they receive an addition varying according to the degree of disablement to the retired pay or gratuity for which they may be eligible Provision is also made in the regulations for pension to the widow and allowances to children or dependants of a deceased officer

GENERAL

The pay of officers even in the lowest rank is ample to enable them to be independent and the expenses of Air Force messes are strictly limited in order to check all tendency to extravagance and to prevent even the most junior officer from finding difficulty in living on his pay The regulated limit of the daily rate of messing is 5s and the average rate at present charged at home stations is 3s 6d Subscriptions and the cost of mess entertainments are charged according to an officer's rate of pay and an unmarried officer taking his full share in the life of the mess should not incur a mess bill of more than £10 a month (6s 8d a day) This sum would include a wine bill of £1 a month (an actual average figure) but would not include goods such as tobacco bought through the mess

INDIAN MEDICAL SERVICE

The Indian Medical Service offers a permanent career with wide opportunities of medical experience including clinical preventive specialist, and research work Admission of European doctors to the Service is by selection and nomination by the Secretary of State for India and inquiries should be addressed to the Secretary, Military Department, India Office Whitehall S W 1

Candidates should be under 32 years of age and must possess a qualification registered in Great Britain and Northern Ireland under the Medical Acts in force, or an Indian medical qualification recognized under Section 11 (1) of the Indian Medical Council Act 1933, and registered in British India under one of the Provincial Medical Acts Officers are appointed in the rank of Lieutenant and are normally promoted to Captain on completion of one year's full pay service

COMMISSIONS AND APPOINTMENTS

All European officers are appointed to *permanent* commissions but they may retire voluntarily with a gratuity of £1 000 after six years service or £2,500 after twelve years service In such cases officers are provided with free passages to the United Kingdom

Although the Service is primarily a Military Service 142 posts under the civil administration are specifically reserved for officers of the Indian Medical Service (Civil) European officers are appointed to 115 of these and are eligible together with Indians for appointment to 24 of the remainder These posts include civil surgeoncies which provide for the medical needs of civil officers and for general medical administration, specialist appointments as physicians surgeons and gynaecologists etc at civil hospitals research posts and professorships at important medical schools Officers are not normally eligible for transfer to civil employment until they have done at least one year's service in India Except in the case of officers who are specially selected for certain appointments transfers to civil employment are not usually made until the completion of four or five years service in India

In addition to the above rates various allowances are admissible for a large number of special appointments on both the military and the civil side which may be held by members of the Indian Medical Service Special rates of pay are also attached to numerous administrative appointments

RATES OF PAY

Year of Service	Rank	Basic Pay Rs per mensem	Oversea Pay £ per month	Total £ per annum
1	Lieutenant	450	15	585
2	Captain	500	25	750
3		5 0	25	795
4		550	25	795
5		600	25	840
6		600	30	900
7		700	30	990
8		700	30	990
9		700	35	1 050
10		700	35	1 050
11	Major	800	35	1 140
12		800	40	1,200
13		800	40	1,200
14		800	40	1 200
15		800	40	1,200
16		900	40	1 335
17		950	40	1 335
18		950	40	1 335
19		1 100	40	1 470
20		1 100	40	1 470
21	Lieutenant Colonel	1 300	40	1 695
22		1 350	40	1 695
23		1 350	40	1 695
24		1,400	40	1 830
25		1,400	40	1 830

NOTE—(1) The rupee is at present stabilized at a rate equivalent to 1s. 6d of Lieutenant-Colonel before completion of the rate of Rs 1,200 per mensem (basic) *plus*

(3) Sterling oversea pay is admissible only in the case of officers who at the date of their appointment to the Indian Medical Service had their domicile elsewhere than in Asia.

ANTE DATES IN COMMISSION

Candidates possessing certain higher medical qualifications may be granted an ante-date of one year in their commissions and candidates possessing a D P H receive an ante-date of six months An officer who has held an approved whole time appointment in a civil hospital is also eligible for an ante date equivalent to the period of his appointment but not exceeding one year Persons holding or about to hold such appointments may be seconded in those posts for a period not exceeding one year The maximum period of ante-date or ante-date and secondment combined is limited to eighteen months An officer granted an ante-date of twelve months is promoted Captain on arrival in India

Periods of ante-date or secondment count as commissioned service for the purposes of increments of pay promotion and retired pay but not for gratuity

OUTFIT ALLOWANCE PRIVATE PRACTICE

Officers on appointment will receive an allowance of £75 towards the cost of outfit

With the exception of administrative officers military or civil and officers holding certain special appointments officers are not debarred from taking private practice so long as it does not interfere with their proper duties

LEAVE

Leave can be taken at reasonable intervals and adequate rates of leave pay are provided Extra leave (known as study leave) which may not exceed twelve months in all during an officers service may be granted to officers desirous of pursuing special courses of study of a postgraduate nature During such leave study allowance at present fixed at the rate of 12s a day in the United Kingdom £1 a day on the Continent of Europe and £1 10s a day in the United States of America and Canada is granted to an officer in addition to ordinary rates of leave pay

PENSIONS

The rates of pension are as follows

	Per annum £ s
After 17 years service for pension	372 0
18 "	400 0
19	428 0
20 "	465 0
21	502 0
22 "	539 0
23 " "	576 0
24 " "	614 0
25	651 0
26 " " "	697 10
27	744 0

There are additional pensions ranging from £65 to £350 per annum for officers who have held administrative appointments as Colonels or Major Generals Officers who elect to remain in civil employment after seventeen years service will not be promoted above the rank of Lieutenant-Colonel but will be eligible for higher pensions

PASSAGES

An officer on appointment is provided with free passage to India The families of officers who are married prior to the date of the officers embarkation on first appointment will also be provided with free passage to India subject to the payment of messing charges Officers of non-Asiatic domicile and their families are also eligible for passage concessions under which they are granted a certain number of return passages home for themselves and their wives and children at Government expense during their service

INSTRUCTION PRIOR TO EMBARKATION

Officers are required to undergo courses of instruction at the Royal Army Medical College and at Aldershot, lasting approximately three months prior to their embarkation for India on first appointment Information as to the rates of pay admissible during this period and subsequently up to arrival in India is contained in the memorandum referred to below

A detailed memorandum regarding these appointments and forms of application may be obtained from the Under-Secretary of State for India Military Department, India Office, London, S W 1

The Army Dental Corps

The corps is administered by the Director General, Army Medical Services The regulations for admission to the Army Dental Corps should be obtained from the Under Secretary of State War Office, and carefully studied

LOCAL GOVERNMENT HOSPITAL SERVICES

The growth of the local government hospital during the last few years has brought into existence not only greatly extended and modernized hospital provision for the public but new medical staffs in the employment of local authorities and also new teaching facilities, of which many medical schools have taken advantage In London alone, for example, the general and special hospitals of the County Council employ a staff of 400 medical officers and over 250 consultants, and seventeen of the hospitals are linked with the medical schools for teaching purposes The Royal College of Surgeons some time ago recognized sixteen of the general hospitals of the L C C for the purpose of qualification for admission to the final examination for the Fellowship The same hospitals have since been recognized by the Examining Board in England set up by the Royal Colleges for the purpose of the regulations for obtaining the diploma in anaesthetics (D A, R C P and S Eng) Eighteen of the Council s hospitals have been granted recognition by the British College of Obstetricians and Gynaecologists as establishments at which the medical staff may qualify for candidature for the diplomas or membership of the College

"Appropriated" Hospitals

These local government hospitals have in most cases arisen by a metamorphosis from the old Poor Law infirmaries Altogether 109 hospitals, containing a total of 57,318 beds, have been "appropriated" from the Poor Law as general hospitals under public health powers (besides seventy-four hospitals for other public health purposes) Of this number thirty eight belong to the London County Council forty-nine to county boroughs in England and twenty-two to county councils Instead of being as formerly under the control of boards of guardians and other minor authorities, they are administered by county and county borough councils No longer are they regarded merely as institutions for the reception of the chronic sick they have assumed the curative and research functions of the voluntary hospital Under the more progressive authorities the old institutions have become unrecognizable, with, in the general hospital, new receiving wards, out-patient departments, more and better maternity accommodation, modernized operating theatres and sanitary annexes, the provision and extension of nurses' homes and central kitchens, and, at the special hospitals, isolation blocks, additional accommodation for patients and staff, and various reconstruction and improvement schemes

At the end of 1937 there were in England 122 institutions or hospitals under the Public Health Acts and 406 public assistance institutions or hospitals, as compared with 62 and 528 respectively in 1931 Of the total beds the numbers have changed from 36,000 public health and 85,500 public assistance in 1931 to 60,000 public health and 64,000 public assistance, and the time should not be far distant when the majority of the beds in local authorities hospitals will be provided under public health powers The total of in-patient admissions to both types of hospital in 1937 was 781,191, an increase of over 50,000 on the year before and out patient attendances—largely for continuation treatment of patients previously admitted to the wards—numbered 1,921,769, a gain on the year of nearly 250,000 An indication of the increasing volume of treatment provided for acute conditions at these hospitals is to be found in the fact that the total of major surgical operations under general anaesthetics increased to close upon 131,000 last year

The differentiation between the voluntary and the municipal hospital every year becomes less definite, and thus the need becomes greater for their co operation By one of the sections of the Local Government Act, 1929, which brought about all this municipal development, the local authority is instructed to consult with the voluntary hospitals and their professional staffs with regard to the extension of hospital accommodation In some areas this has been done, and the range of subjects for consultation has been enlarged witness the splendid example of Manchester, where the first Joint Hospitals Advisory Board was set up in 1935, of Liverpool, where a Joint Advisory Committee was formed in 1936, and of Oxford and district, where a similar movement has taken place In the area of the West Riding County Council, where new hospital accommodation to the extent of 1,250 beds is being provided, with the proposed building of two new local authority hospitals, one between Doncaster and Barnsley and the other to the north of Leeds and Bradford, the county council is co-operating with the governing bodies of voluntary hospitals for the provision of specialized forms of treatment Again, the Bristol City Council has approved a scheme whereby teams of specialists in medicine and surgery will be available for the hospitals under control of its health committee, and the scheme is being worked in association with the committees of the two principal voluntary hospitals

Altogether the municipal or county hospital is assuming an important place in the hospital picture The change in administration has coincided with a change in public sentiment The institutions which were disliked and dreaded by the poor while they remained Poor Law infirmaries, and were generally disregarded by the medical profession also, have now become popular, and their popularity extends beyond the class of persons they were originally intended to benefit

The London County Council Services

The London County Council is the largest of the local authorities in respect of the hospital accommodation it controls and the medical staff which it employs Under the Local Government Act it took over a total of seventy-six hospitals and institutions These included twenty-eight general hospitals, the largest of which is Lambeth with accommodation for 1,300 patients eight of the others have accommodation for over 700 During the present year the remaining six public health institutions under the administration of the Council have been transferred from

public assistance establishments and with the appropriation of these institutions the Council has completed its task first entered upon in 1929 of removing its hospital service from the ambit of the Poor Law Each of these six institutions adjoins a hospital of the same name and in five of the six cases the medical superintendents of the attached hospitals receive an additional allowance as medical and administrative heads of the institutions

The total cost of maintenance of the various hospital services of the L C C is some four and a half millions a year of which nearly three millions is spent on the general hospitals The total bed accommodation in the hospitals and allocated institutions on transfer was 41 164 but this included nearly 10 000 beds in institutions the majority of which could not be regarded as suitable for the proper treatment of sick persons A great deal of structural work and readaptation was put in hand with the result that a net increase of more than 1 400 beds has been provided

There were admitted to these hospitals a large number of acute cases, both medical and surgical but there is of course this difference between them and the voluntary hospitals that the latter can select their patients and reject whom they please whereas the rate supported institutions must be prepared to admit any sick poor person who applies provided that in the opinion of the medical superintendent such a patient is suitable for admission The chronic sick poor are gradually being concentrated in twelve other institutions which unlike the rest are for the present, for administrative reasons not under the Public Health Acts

So far as maternity and child welfare services are concerned the City Corporation and the Metropolitan Borough Councils are the responsible authorities but the London County Council has maternity beds in its general hospitals, and in several hospitals a fully equipped maternity and gynaecological block One third of the births in London take place in Council hospitals The accessory medical services under the Council are also important these include pathological laboratories, x ray units and a large ambulance organization In addition to smaller units the Council has five pathological laboratories each of which serves a group of institutions attached to the municipal service These five are at Lambeth Highgate, Lewisham Mile End, and Kensington Arrangements have been made whereby postgraduate students of the London School of Hygiene and Tropical Medicine may obtain experience of the technical and administrative methods adopted in these laboratories—experience of a kind very difficult to obtain in the ordinary way

The story of the London hospitals is repeated in some of the large hospitals over the metropolitan border The North Middlesex County Hospital at Edmonton for example which was appropriated as a public health hospital in 1936 admits over forty patients every day a larger number than in any other hospital, voluntary or municipal, in the metropolitan area Three-fourths of the cases are acute a good index of this being the 6 000 operations a year It has a whole time medical staff of seventeen and a visiting medical staff of twelve

Provincial Hospitals

The same general provisions hold good in various degrees of other progressive cities The *Hospitals Year Book* 1938, gives particulars of about seventy general and children s hospitals in provincial cities administered by the local authorities The average bed accommodation in these hospitals is over 600 the whole time medical staff numbers 400 and the part time staff about 500 Birmingham has under its council four general hospitals two infectious diseases hospitals two maternity homes two babies hospitals four convalescent homes, and four sanatoria with nearly one hundred medical staff, whole- or part time Newcastle upon-Tyne has a hospital accommodating 750 with a staff of twenty five Hospitals remaining under the Poor Law have also their whole and part time staff Smithdown Road Liverpool with 1 200 beds has ten whole time and eleven part time officers

In Manchester a great scheme of reorganization of the consultant medical and surgical services has been brought about at the three general hospitals controlled by the city council—namely Crumpsall (1 438 beds) Withington (1 179) Booth Hall (760) The first two are general hospitals for adults and the third a general hospital for children All three were formerly Poor Law establishments Under the new arrangements which have been made in order to overcome the previous inadequacy of specialists in number and in the number of their visits there are or are to be forty one consultant appointments with a total of ninety five attendances per week The new salary bill will be £12 500 per annum representing about 50s per specialist s attendance Under the joint hospital advisory board for Manchester already mentioned it is hoped to co-ordinate the activities of all the hospitals, voluntary and municipal

Facilities for Instruction

A great amount and variety of clinical material is contained in these hospitals and many of them are used for undergraduate and postgraduate teaching In London some useful discussion has taken place between the London County Council and the representati es of the voluntary hospitals At several of the general hospitals under the old board of guardians arrangements for instruction were made, but these have been much extended since the hospitals came under Council control Teaching in obstetrics is afforded in seven of the Council s hospitals Facilities are also afforded at the Council s pathological laboratories to postgraduate students in order that they may obtain experience in technical and administrative methods As an example of the amount of material which may be afforded by a Council hospital St James s Wandsworth may be cited, where there is a clinic of fifty beds always occupied with serious fracture cases Eight of the hospitals have psychiatric out patient clinics In a number of the general hospitals units have been established for branches of medical and surgical work of such specialized nature that it is not economical or convenient to provide it at every hospital Out patient treatment is now given at twenty five hospitals

The postgraduate school at Hammersmith Hospital the result of a partnership between the Government the University of London and the London County Council was opened in May, 1935 A full account of its work will be found in the section on Postgraduate Study at p 926 The County Council has provided at Hammersmith a radiological department which serves as a consultative centre for the whole of the hospital service where cases can be sent from other hospitals for expert opinion on diagnosis and treatment Arrangements are made at this school for postgraduate courses for insurance practitioners The arrangements for 1938 are for over 800 doctors to take the course at this school and at provincial medical schools and next year it is hoped to make the number 2,000

It may be added that the clinical material in municipal hospitals is not only vast in amount but includes a great deal with which it is very important that the young practitioner should be familiar and which is not much represented in the teaching hospitals In a recent report to the L C C it is mentioned that the type of case treated in the general hospitals is altering and there is a continually increasing amount of acute and operative work to be carried out.

Medical Staffing

The policy pursued by the London County Council and other authorities is to provide a whole time medical service and to have a permanent staff at each general

hospital The grades of officers are medical superintendents, deputy medical superintendents, senior assistant medical officers, assistant medical officers, and house-physicians and surgeons (resident), and part-time clinical assistants (non resident)

The medical superintendent is required to be a man of high qualifications in at least one branch of medicine, as well as a good administrator and first class technician In addition to the medical superintendent one or more whole-time medical officers with special qualifications in medicine, surgery, or obstetrics, are appointed Preference is given to officers holding the higher medical qualifications, M R C P or M D in the case of physicians F R C S or M S in the case of surgeons These are graded as senior assistants and at the larger hospitals one of them ranks as deputy medical superintendent Deputy medical superintendents are employed as a rule only at hospitals with over 600 beds of which there are sixteen among the London County Council general hospitals These officers at institutions with over 750 beds are described as of Grade I while those at hospitals of from 600 to 750 beds are of Grade II Senior assistant medical officers are also graded according to the size of the hospital they serve The appointments to these posts are given to qualified medical practitioners of at least one year's standing in their profession who have held a residential post for at least six months in a general hospital Those who seek assistant medical officer ships at the special hospitals will find general hospital experience desirable although the lack of it does not debar otherwise suitable candidates The engagements of assistant medical officers of Grade I are limited to four years, terminable at any time by a month's notice on either side and the first year of service is on probation Should the officer's name be on the promotion list at the end of his four-years term, he may remain beyond the period of the original engagement and at an increased salary Assistant medical officers of Grade II are on a yearly engagement but this has been found unsatisfactory to the Council, because of the need for frequent appointments and because officers leave at a time when, having learnt the ways of the hospitals they are most useful It is proposed to renew such appointments for a second year The junior appointments are those of resident house-physicians and surgeons and part time clinical assistants These officers consist of recently qualified men and women who are appointed for limited periods generally six months, and need not have had previous hospital experience The six-months period may be extended for further similar periods up to a maximum of two years provided that not more than twelve months is spent in one hospital

Scale of Salaries

Medical superintendents in London receive as a maximum between £900 and £1 650 per annum including an unfurnished house or quarters valued at £100 a year for superannuation purposes and the rates on which are paid by the Council The salary scales are

General Hospitals	£900 to £1 550
Convalescent Hospitals	£900 to £1 100
Fever Hospitals	£900 to £1 450
Tuberculosis Institutions	£900 to £1 200
Children's Hospitals	£950 to £1 650

Of the general hospitals only two of the smallest in the London County Council area have a commencing salary of £900 at the other end of the scale two have commencing salaries of £1 300 One condition made is that the appointment is to the Council's hospital service not to an individual hospital and appointment to the service includes liability, if called upon to take part in consultations or perform operations at another hospital although if this happens frequently, on account of the special skill or experience of the officer concerned a claim for extra remuneration may be considered Further in addition to their ordinary remuneration as medical superintendents the chief medical officers of the infectious hospitals service and of the children's institutions and surgical tuberculosis service receive an allowance at the rate of £200 a year and the chief medical officer of the medical tuberculosis service who is also a medical superintendent of a hospital an additional allowance at the rate of £125

The scale of salaries for other officers subject to certain conditions in the different hospitals is as follows

Medical Appointments	Remuneration*		
	Minimum	Increase	Maximum
	£	£	£
Deputy medical superintendent (Grade I)	650	50	800
(Grade II)	600	30	750
Senior assistant medical officers (Grade I)	550	25	650
(Grade II)	500	25	600
Assistant medical officers	350	25	475
(yearly engagement)	250	—	—
House physicians and house surgeons	£120 (resident)		
Clinical assistants (non resident)	£150 (non resident) and no emoluments, but meals when on duty		

* Exclusive of the emoluments of board lodging and washing valued at £150 per annum in each case

In the country generally medical superintendents of Poor Law infirmaries are paid from £600 a year upwards to £1 600 with emoluments, deputy medical superintendents, from £450 to £750, with similar emoluments, and resident assistant medical officers from £200 to £450, with full board

Residence, Leave, and Pensions

Generally speaking all assistant medical officers in London are required to be resident If in any case the question of an assistant medical officer being non resident should arise the primary consideration is the interests of the service Lately the London County Council in order to enable male members of its senior staff to marry and remain in the Council's service has made alternative scales of salary for staff provided only with unfurnished quarters as distinct from board lodging, and laundry The scales are deputy medical superintendents Grade I, £700—£50—£850 a year, Grade II £650—£30—£800, senior assistant medical officers Grade I £600—£25—£700 Grade II, £550—£25—£650 Non resident medical officers who are receiving the allowances in lieu of residential emoluments pay for any meals taken at the hospital Permission to live out is granted only if the accommodation is required or can be utilized for some other purpose

Two years ago in consequence of difficulties in recruiting a suitable medical staff for the positions of assistant medical officer (£350—£25—£425) for hospitals for infectious diseases the Council decided that where necessary these positions should be filled by the second class of assistant medical officers (£250), on the understanding that after not less than six months they should be transferred to the higher grade Even this has not brought in a sufficient supply and it is now proposed to seek candidates from those who in January of each year, complete Part I of the course for the D P H These men would have been qualified for at least a year and held residential posts This new grade of "junior assistant medical officers special hospitals service," will have a salary of £150 a year with residential emoluments and during their twelve months service will be helped in their public health career and able to prepare for Part II of the D P H

Liberal annual leave, with pay, and sick leave, with pay for a reasonable period are allowed by the L C C Leave is also granted for study purposes, not only to officers who are following a university course but to those who are undertaking other courses of study or research work The house physicians and surgeons are not regarded as employed in a whole time capacity and reasonable off duty periods for study are allowed Clinical assistants attend six sessions of four hours' duration each week Assistant medical officers also are allowed to improve their qualifications, and leave of absence not exceeding six weeks in any one year may be granted with rates of pay varying in accordance with the service of the officer Occasional daily leave for attending a course of instruction for a medical degree or diploma is granted with full pay These concessions however are subject to the condition that the officer shall continue for a certain period in the service of the Council

Whole time permanent appointments are pensionable under the Council's superannuation and provident scheme which provides for a pension and lump sum payment after the necessary qualifying period of service Pensions are also payable to officers on the fund who break down in health after not less than ten years' service Officers resigning have their contributions returned to them and death benefits are also paid in respect of officers of five years service or more Marriage is no longer a bar to the employment of full women doctors by the Council, but a difficulty arises

resident appointments owing to lack of married quarters and therefore all women members of the hospital medical staff including the mental hospital service are excluded from the scope of the concession with the exception of part time consultants and specialists

Consultant and Specialist Services

Under the new scheme, which came into operation in 1933 the general hospitals have been divided into seven groups on a geographical basis and the special hospitals and public assistance institutions in the area linked up with them, so that consultants and specialists who were previously engaged chiefly for individual hospitals whether at annual salaries or at a fixed charge for visits are now appointed to the service and utilized as required for the groups of hospitals The salaries for the part time consultants and specialists are generally £125 a year for one session a week and £75 a year for each additional session, a session to be approximately of 2½ hours duration Full time consulting physicians and surgeons receive £1 200 a year, rising by increments of £50 to £1,500 a year with no emoluments The full time radiologists receive £900 a year, rising by increments of £50 to £1,100 Consulting urologists are paid on a visit basis—two and a half guineas per visit The appointment of part time consultants and specialists is subject to annual review The experiment of engaging part time obstetricians and gynaecologists for duty at selected hospitals has proved satisfactory and the scheme has been extended to eight of the hospitals

Method of Entrance to the Service

Many provincial areas have now highly developed schemes providing for the employment of many medical men and women of high qualifications at salaries of from £450 to £800 per annum, and in addition large numbers of junior officers at salaries of from £200 upwards are employed These posts offer to all grades remarkable facilities, which should appeal to those who desire to gain experience and at the same time wish to adopt for a period the institutional life It is a service in which the original appointment and any subsequent promotion depend upon merit and in which vacancies in the higher grades are filled so far as possible from the existing staff with no barrier preventing transference from one grade to a higher Vacancies are usually advertised in the medical journals

The opportunities of the Local Government Hospital Service to those whose career will be spent in general or consultant practice as well as to those who expect to spend their lives in the public health service scarcely need to be stressed One point which the final year student or the newly qualified practitioner will do well to bear in mind is that some authorities in offering appointments insist upon candidates possessing previous resident hospital experience Such a requirement may not arise for some years but the medical man or woman who has gone direct to serve as locumtenent or assistant may find himself or herself cut off from certain avenues of work through having neglected to take resident experience immediately after qualification We are informed that it is almost the rule for the young medical woman to take a residential post, but the young medical man often forgoes this experience It is certainly deplorable that a competent man should through ignorance on qualification, deprive himself of the opportunity of following his bent in later years

It has to be borne in mind, however that the attractiveness and opportunity of a post under the new public assistance authorities notwithstanding the effect of the Act of 1929 in assimilating the Poor Law to other public health services, are affected not a little by the policy adopted by the local authority concerned In the more progressive areas there is a high degree of differentiation in treatment between the sick and mentally afflicted on the one hand and the purely pauper class on the other—that is to say between the hospital and the public assistance institution formerly called the workhouse The tendency in such areas has been to develop the hospital services on lines approximating to those obtaining in the voluntary hospitals

In addition to the hospital appointments of the character mentioned, the Local Government Service offers numerous other (part time) posts such as those of public assistance medical officer and public vaccinator, which are commonly held by private practitioners Domiciliary work in the public assistance medical service has been found as the result of a recent inquiry, to be in many areas very inadequately recompensed and in localities where unemployment is rife and increasing numbers of people are resorting to public assistance the work is becoming more onerous An assurance has been given by the Ministry of Health that where such increase of work is definitely proven the local authority will be encouraged by the Ministry to listen to the plea for an increase of remuneration

Enough has been said to show what variety of medical service whole time and part time institutional and domiciliary, the Local Government Service offers on the one hand to the ambitious who desire experience and, on the other hand to those who seek a secure position, with superannuation at the end

PRISON MEDICAL SERVICE

Appointments to the prison medical staff are made by the Secretary of State for Home Affairs on the recommendation of the Prison Commissioners Application for such appointments should be made on a special form which can be obtained from the Secretary (Staff Branch) Prison Commission Home Office London S W 1

In the smaller prisons the post is usually a part time one held by a local practitioner but in the larger prisons the members of the medical staff are required to devote their whole time to the service In the case of those required to give their whole time to the service the appointments are in the first instance as medical officers Class II and from the seniors of this rank the medical officers Class I are selected as vacancies occur

Largely as a result of action taken by the British Medical Association the salaries and conditions of prison medical officers have been improved, and now are Medical Officer Class II £525 rising by annual increments of £25 to £800 (with an allowance of £50 p a within the scale to holders of the diploma of psychological medicine) medical officer Class I £800, rising by annual increments of £30 to £1,000 Unfurnished quarters are provided, or an allowance in lieu is made

There are seventeen medical officers Class II twelve medical officers Class I and twenty seven part time medical officers The service is a small one and therefore vacancies are comparatively rare and the rate of promotion varies The work offers exceptional opportunities for research in criminal psychology, forensic psychiatry and mental deficiency

Medical Practice Over-seas

The following section of the Educational Number includes the articles that formerly appeared under the headings Medical Practice in British Dominions and Foreign Countries 'The Colonial Medical Service' and Medical Missionaries The section on Women in Medicine,' which includes articles on openings abroad and on the Women's Medical Service for India will be found at page 523

REGISTRATION

British Dominions and Foreign Countries

Medical Acts have now been passed in almost all places forming part of the British Empire beyond the seas, and registers of duly qualified practitioners are consequently maintained To these registers medical men educated in the United Kingdom are generally admissible merely on payment of a registration fee, provided they produce evidence that they are of good repute and are either registered or eligible for registration in the United Kingdom, as the local requirement may be The only exception to this statement that need be made relates to the Dominion of Canada Each of its provinces acts in medical matters as an independent State The result has been that reciprocity of practice has in the past been established between this country and each of the provinces of Canada except British Columbia, where certain obstacles were never overcome It has, however, to be recorded that reciprocity no longer exists with Saskatchewan, New Brunswick, Ontario, and Quebec We would advise any medical man proposing to practise in Canada first to communicate with the Provincial Registrar, stating what degrees or diplomas he holds, and asking for information as to the precise steps he must take in order to obtain admission to the Provincial Register The Licence of the Dominion Council, which can only be obtained after examination, entitles its holder to registration in any of the provinces of Canada, though in regard to Quebec there is a proviso that he must have been registered in the province five years prior to the application for the recognition of the Dominion Licence In order to sit for the examination for the Dominion Licence it is necessary to obtain either a licence from one of the provinces (this can be obtained from one of those with whom reciprocity has been established), or a certificate from a Provincial Council that the requirements of that Council in regard to preliminary education, matriculation, medical curriculum, and graduation have been complied with

Italy and Japan are the only two foreign States with which medical reciprocity has been established, though there are other countries which grant a limited recognition to British qualifications Generally speaking, in Continental countries (with the exception of the kingdom of Italy) a British medical man desiring to exercise his profession therein must pass practically the same examinations as those imposed on natives of the country In France naturalization is now required also The same observation applies to all foreign States in the South American continent Each of the United States of North America has its own laws and regulations governing medical practice, and all of them require the holder of a British qualification to submit to an examination A number of the States, including New York, Illinois, Michigan, and Indiana, require naturalization

The Chinese National Health Administration has issued a notice, for guidance of foreign medical practitioners, to the effect that they should obtain licences to practise from the Administration, and their bona fides must be guaranteed by their consular authorities, they should learn Chinese, and should apply to the Permanent Chinese Delegation of the League of Nations at Geneva before setting out for China

COLONIAL MEDICAL SERVICE

A large number of medical appointments in the Colonies and Dependencies administered under the direction of the Secretary of State for the Colonies form a single Colonial Medical Service These scheduled appointments are in

(*a*) *Tropical Africa* comprising on the east side Kenya Nyasaland the Tanganyika Territory Uganda Somaliland Zanzibar and Northern Rhodesia on the west side Nigeria the Gold Coast Sierra Leone and the Gambia

(*b*) *Eastern Colonies and Protectorates* Ceylon Hong Kong, the Straits Settlements, and the Malay States

(*c*) *West Indian Colonies* Jamaica Bahamas Barbados Bermuda Windward Islands Leeward Islands, Trinidad, with British Guiana and British Honduras

(*d*) *Western Pacific* Fiji Gilbert and Ellice Islands Colony and the British Solomon Islands Protectorate

(*e*) *Mediterranean* Malta, Cyprus, and Gibraltar

(*f*) *Middle East* Palestine

(*g*) *Various Islands* Mauritius Seychelles, Falkland Islands, and St Helena

The Colonial Government Medical Departments employ about 700 European medical officers, including about thirty women They also employ a large number of qualified Asiatic and African medical officers, who are appointed locally, trained nursing sisters and health visitors, most of whom are European, and large numbers of subordinate personnel, sanitary inspectors, medical assistants, and dressers, most of whom are natives of the areas in which they serve

An officer of the Colonial Medical Service has opportunities for the practice of his profession in general medicine and surgery as well as in the special branch of tropical medicine On joining a Medical Department his duties include medical, surgical, and public health work He may be posted to an outlying or bush station, where he will be responsible for all the medical activities in connexion therewith, or he may be attached for duty in one of the large hospitals Every encouragement will be given to him to pursue any specialist work in which he may be interested Great importance will be attached to a candidate's postgraduate experience, as in the outlying districts he will frequently be called upon to deal with emergencies without being able to seek the advice and assistance of his colleagues

Vacancies

Vacancies for medical officers may occur at any time of the year and are dealt with as circumstances require Fifty three vacancies were filled in 1936 and forty seven in 1937 In normal circumstances vacancies occur most frequently in tropical Africa and Malaya In the West Indian Colonies Ceylon, and Mauritius the junior posts are practically always filled by the appointment of qualified local candidates, in Malta all posts are so filled The vacancies for which candidates are selected from outside the Service are generally those for ordinary medical officers Appointments for specialists are almost invariably reserved for officers who are already in the Service and who have shown outstanding merit in a particular branch of medicine or surgery

Under normal conditions a few vacancies may be expected annually, usually in West Africa and Malaya for lady medical officers

Qualifications and Training

Candidates must be fully qualified and British subjects under 35 years of age preference is given to candidates who are under 30 and to those who have held hospital or public health appointments, or who have special knowledge of anaesthetics radiology, surgery medicine, ophthalmology gynaecology and midwifery, diseases of the ear, nose and throat, venereal diseases etc In the case of lady medical officers experience in maternity and child welfare work is almost invariably essential

Selected candidates are normally required to undergo a course of instruction in tropical medicine and hygiene at the London School of Hygiene and Tropical Medicine the Liverpool School of Tropical Medicine or Edinburgh University before taking up their appointments The cost of tuition and the diploma examination fees if the candidate is successful, are paid by the Government, together with an allowance of £25 a month during the period of instruction If an officer has not taken a course of instruction in tropical medicine prior to appointment he is usually required to take one during his first leave of absence and to obtain a satisfactory certificate before he can be confirmed in his appointment

Emoluments

When considering the scales of salary offered in the Colonial Medical Services candidates are particularly advised to study the information provided relating to general conditions of service. It will often be found that the actual value of an appointment is considerably greater than is indicated by the salary alone. For example all scheduled appointments are pensionable in most Dependencies free quarters (or allowances in lieu) are provided and in almost all free medical attendance. The cost of passages from the United Kingdom is normally paid on first appointment both for the officer and if he is married for his wife and family. Passages are also, generally speaking, provided at Government expense when an officer proceeds on leave for himself and his wife and a measure of assistance is given towards the cost of passages for his children. In those Colonies in which income tax is payable the rates are generally on a much lower level than income tax rates in the United Kingdom. At the same time the cost of living in the Dependency concerned should be taken into account in order to obtain a true comparison and it is suggested that candidates might usefully consult the handbook *Information as to the Conditions and Cost of Living in the Colonial Empire* which is published by the Stationery Office (price 3s. 6d.).

The following are some examples of present salaries:

Dependency	Appointment	Salary
East Africa	Medical or Health Officer	£600 p.a. for 2 years rising by £30 annually to £840 then by £40 annually to £1,000 subject to efficiency bar at £840
	Senior Medical Officer	Rising to £1,100
	Specialist appointments	Ranging from £1,000 to £1,150
Kenya, Uganda, Tanganyika	Director of Medical Services	£1,600
	Deputy Director of Medical Services	£1,200
Nyasaland, Zanzibar, Northern Rhodesia	Director of Medical Services	£1,300
West Africa	Medical Officer	£660 p.a. for 3 years £690 p.a. rising by £30 annually to £840 then by £40 annually to £1,000 subject to efficiency bar at £840
Nigeria	Director of Medical Services	£2,000
	Deputy Director of Medical Services and Deputy Director of Health Services	£1,700
Gold Coast	Director of Medical Services	£1,800
	Deputy Director of Medical Services and Deputy Director of Health Services	£1,600
Sierra Leone, Gambia	Director of Medical Services	£1,600
	Senior Medical Officer	£1,200 plus £1,000 staff pay
Malaya	Medical Officer	£700 p.a. rising to £770 during first 3 years then £805 rising by £35 annually to £1,120 with efficiency bar at £840
	Director of Medical Services (Straits Settlements)	£1,800
	Deputy Director of Medical Services (Straits Settlements)	£1,540
	Other special appointments	Ranging from £1,190 to £1,540
Hong Kong	Medical Officer	£760 p.a. for 2 years then £760 rising by £30 annually to £940 then £1,000 rising by £50 annually to £1,100 with efficiency bar at £940. After third year a non-pensionable residential allowance of £300 p.a. is payable
	Director of Medical Services	£1,600
	Deputy Director of Medical Services	£1,300
West Indies: Jamaica	Senior Medical Officer	£700–£800
	Medical Superintendent Lunatic Asylum	£750–£850
	Bacteriologist	£700–£900
	Assistant Director of Medical Services (Health)	£800–£1,000
	Director of Medical Services	£1,000–£1,200
Bahamas	Chief Medical Officer	£800
Barbados	Chief Medical Officer	£1,000
Bermuda	Director of Medical and Health Department	£1,600
Windward Islands	Senior Medical Officer Grenada	£700
	Senior Medical Officer St Lucia	£650
	Senior Medical Officer St Vincent	£700
West Indies (cont.)	Resident Medical Superintendent Antigua	£600
Leeward Islands	Senior Medical Officer St Kitts-Nevis	£600
	Chief Medical Officer Dominica	£700–£750
Trinidad	Senior Medical Officer	£700–£900
	Government Bacteriologist, Medical Superintendent, Mental Hospital, Senior [illegible]	£1,000 each
	Deputy Director of Medical Services	£1,100 each
	Director of Medical Services	£1,300
British Guiana	Bacteriologist	£800
	Medical Superintendent Mental Hospital	£1,000
	Resident Surgeon	£1,100
	Director of Medical Services	£1,400
British Honduras	Medical Officer	£600 p.a. rising by £35 annually to £850
	Senior Medical Officer	£1,000

Salaries of superscale posts are at present under revision.

† In addition to salary non-pensionable children's allowances are payable under certain conditions at rates from $30 to $70 a month for the first child and $20 to $50 a month for the second child.

General Conditions of Service

PROBATION

Officers are normally appointed to the Colonial Medical Service on probation in the first instance usually for two or three years and officers whose service has been satisfactory during this period are confirmed in their appointments.

ACTING AND OTHER ALLOWANCES

An officer appointed to act in a higher post in the absence of the substantive holder of that post is usually granted an allowance in recognition of the additional responsibilities which he thereby assumes. Travelling and transport allowances are granted under the regulations of each dependency to officers who are required to travel on duty and generous provision is made to assist by means of advances officers who wish to purchase motor cars which will be of use to them in the performance of their duties.

QUARTERS

In East and West Africa and in certain other appointments free quarters with heavy furniture are provided or allowances are paid in lieu. In Ceylon and Malaya Government quarters for which officers are required to pay rent are normally provided. In the smaller Dependencies Government quarters are not usually available.

PRIVATE PRACTICE

No officer of the Colonial Medical Service is entitled as of right to private practice the Service being envisaged as essentially a Service of whole time officials whose primary duty is to the State. The conditions if any under which officers are permitted to engage in private or consulting practice and to receive fees from members of the public are determined by local regulations framed in accordance with the circumstances of the various Dependencies and approved by the Secretary of State.

PROMOTION AND TRANSFER

Senior appointments are usually filled by promotion and officers are considered by the Secretary of State for any vacancy for which they may be suitable and qualified whether the vacancy arises in the particular Dependency in which they may be serving at the time or elsewhere. An officer of the Colonial Medical Service may be transferred at the discretion of the Secretary of State to any post which in the Secretary of State's opinion is not of less value (due regard being had to climate and other circumstances) than that which he already holds.

LEAVE

Officers are as a general rule eligible for vacation leave with full salary together with leave for the normal period occupied

by the voyages between the Dependency and the United Kingdom after a tour of resident service which within specified limits is at the discretion of the Governor Leave is in most cases calculated on the basis of a fixed number of days in respect of each completed month of resident service In addition to vacation leave provision is made for sick leave which is usually granted with full salary up to a maximum of six months and if necessary with half salary for a further period of six months

PASSAGES

On First Appointment—Free passages from the United Kingdom on first appointment are usually granted for officers and if they are married for their wives and children provided that the permission of the Government is obtained if required for the officer's wife and family to proceed to the Dependency concerned but the maximum number of passages paid for from public funds is limited to five There are however variations from this practice in certain Dependencies

On Leave—Free passages for officers and for their wives are normally granted once each way in respect of each tour but there are certain exceptions to this practice In all Dependencies except the West Indian Colonies Seychelles and West Africa assistance can under varying conditions be obtained towards the cost of passages for children

PENSIONS OF COLONIAL MEDICAL SERVICE

Pensions are granted under local laws the provisions of which vary in detail The minimum period of service necessary to qualify for a pension is ten years If an officer retires after less than ten years service a gratuity may be granted The normal rate of pension is 1/600 of the final pensionable emoluments for each completed month of service, but there are certain variations from this rule—for example, in the West Indian Islands where the fraction is 1/720 and in Malaya where the pension is calculated at 180/720 of the final pensionable emoluments for the first ten years of service plus 1/720 for each completed additional month

In some Dependencies an officer may elect within a specified period to be paid on retirement a reduced pension equal to three-quarters of the full pension he has earned, together with a gratuity equal to ten times the amount of the reduction In some other Colonies—for example in West Africa—this form of award is compulsory while in the case of the Bahamas Barbados Bermuda Ceylon and Jamaica there is no provision for the payment of a gratuity in lieu of a proportion of the pension The normal retiring age is 55 except in the Bahamas Barbados Bermuda and Jamaica where it is 60 But officers may in most Colonies be called upon to retire with the approval of the Secretary of State or may elect to retire voluntarily at the age of 50

The arrangements for the grant of pensions provide generally speaking for the award to officers who are transferred from one Dependency to another in the course of their Colonial service of total pensions or approximately the same amount as would have been awarded if all their service had been in their last Dependency and if they had drawn their final pensionable emoluments throughout their service

A medical officer serving in East Africa (except Northern Rhodesia) or West Africa is at the end of nine years service (of which not less than six years have been residential), permitted if his service and conduct have been satisfactory to retire with a gratuity of £1 000 or at the end of twelve years service (of which not less than eight years have been residential) with a gratuity of £1 250 All claims to pension are forfeited on the receipt of such a gratuity

WIDOWS AND ORPHANS PENSIONS

In many Dependencies officers whether married or not are required to contribute to local schemes which provide for the payment of pensions to widows and orphans Contributions vary but are generally 4 per cent of salary The schemes are subsidized by the Colonial Governments concerned and the pensions are based upon actuarial tables

SOURCES OF INFORMATION

Further information as to the staffs the climate and local conditions will be found in the Dominions Office and Colonial Office List which may be consulted in most public libraries Leaflets concerning nearly all the tropical dependencies are issued for the use of intending settlers and others by the Oversea Settlement Department Caxton House Tothill Street London S W 1 Information about general conditions in Malaya is obtainable from the Malayan Information Agency 57 Trafalgar Square London W C 2

Applications for appointment to the Colonial Medical Service should be addressed to the Director of Recruitment (Colonial Service) Colonial Office 8 Buckingham Gate London S W 1, who will furnish without charge a memorandum containing full information regarding the Service

SOUTHERN RHODESIA MEDICAL SERVICE

The Government of Southern Rhodesia maintains a medical and public health service which at present consists of eleven full-time appointments, twenty five Government medical officers (nineteen in Grade II and six in Grade I) who, in addition to their Government duties supply in whole or in part the general practitioner service in all areas except the two larger towns, and thirteen medical officers who receive subsidies of from £250 to £360 a year Most of the latter class of medical officers are mine medical officers or medical missionaries who undertake light Government duties

On appointment Government medical officers are posted to Grade II the salary scale for which is £600 rising by increments of £25 to £750 per annum Promotion is made as vacancies occur to Grade I, with a salary of £750 rising by increments of £25 to £900 Government medical officers are allowed private practice unless they are posted to Salisbury or Bulawayo, when they receive an allowance instead The Government duties include supervision of the local Government hospitals, visitation and supervision of native clinics in the district medico legal duties and the medical supervision of jails police camps and Government stations The category of full-time officers includes appointments ranging from Assistant Medical Officer in the mental hospital with a commencing salary of £600 plus £130 in lieu of private practice to the Medical Director and the Chief Health Officer with salaries of £1,750 each Leave is granted at the rate of one-eighth of service and may be accumulated to six months full pay leave at one time Study leave for special purposes may also be granted The retiring age is 60 years, and there is a pension scheme

Appointments are made in Great Britain by the High Commissioner for Southern Rhodesia Rhodesia House 429 Strand, London, W C 2, who will supply further details on request

SUDAN MEDICAL SERVICE

The Sudan Medical Service is responsible for carrying out civil medical work and public health duties in the Sudan, and for the health of the Sudan Defence Force

The staff consists of a director three assistant directors (Hygiene and Public Health Hospitals, Laboratory Services) a senior physician and a senior surgeon to the Khartum Civil Hospital, a Government gynaecologist and obstetrician and a Government ophthalmologist a medical officer of health Khartum Province, and a number of British senior medical inspectors and "medical inspectors" whose pay commences at £720 and rises, subject to the recommendation of the director by five biennial increases to £1,080 and after thirteen years service to £1,200 The senior medical inspectors are eligible by selection for the senior posts All medical inspectors are appointed in the first place on probation for two years and if at the end of that time they are accepted for permanent service under the Sudan Government the first increase of pay is subject to their passing an examination in Arabic

In addition to this staff the Service includes Sudanese medical officers who have been trained at the school of medicine at Khartum, and Sudanese assistant medical officers who have been given a purely practical training in one of the larger hospitals in the Sudan

Among the attractions of the Service are the variety of work met with among the many different races in the Sudan, leave of ninety days generally granted every year after the first eighteen months of service, and special leave, which may be given for some definite purpose The terms of the Pension and Provident Fund are detailed in a pamphlet Information for Candidates of the Sudan Medical Service Private practice is allowed, but is limited to a

of the larger towns and may be carried on so long as it does not interfere in any way with official duties These duties include acting as consultant to the principal hospitals and the supervision of medical and public health work the inspection of schools the examination of candidates for Government service and pension and the training of assistant medical officers and Sudanese sanitary officers and overseers The Khartum medical school is staffed mainly by members of the Sudan Medical Service who receive additional remuneration for their work as teachers A registrar of the medical school who receives £250 a year extra pay is also selected from the Service

Inquiries for further information should be made to the Deans of the principal medical schools and to Dr H C Squires C M G 93 Harley Street London W 1

COMMERCIAL APPOINTMENTS OVER-SEAS

Many mining and oil companies plantations and other commercial undertakings employ medical officers overseas The conditions of service vary greatly some of the appointments are permanent while others are for a short term of years

Medical practitioners who contemplate accepting posts of this nature should scrutinize carefully the form of agreement which they are asked to sign in order that they may know exactly their terms and conditions of service For their guidance the Association has prepared a model form of agreement and an explanatory memorandum which may be obtained on application to the Secretary

MEDICAL MISSIONARIES

Missionary societies are in constant need of qualified men and women to fill vacancies as they occur in their hospitals and also to enable them to take advantage of fresh openings To those suitably endowed the mission field offers unique opportunities for interesting work and the development of native medical schools as training institutions in connexion with some of the larger mission hospitals affords excellent scope for valuable work to medical men and women who are qualified to teach It is not usually expected that medical missionaries should take a position such as would otherwise be occupied by an ordained clergyman or minister but it is essential that they should be prepared to exert their influence in any hospital to which they may be sent so that a Christian atmosphere may be maintained and the work of evangelization be carried on through the ministry of healing

As for scientific and other qualifications for the work medical missionaries, in addition to being physically capable of sustaining a life which makes a great demand upon their strength, should be thoroughly well trained physicians and surgeons It is very desirable that they should have held a resident appointment at a general hospital and have a good knowledge of practical surgery gynaecology tropical medicine and the treatment of eye diseases Useful information can be obtained from the Secretaries of the various Missionary Societies or from Wm C Bentall, O B E F R C S Ed Honorary Secretary Medical Advisory Board on Medical Missions to the Conference of Missionary Societies in Great Britain and Ireland, Rhosilli, Best Beech Hill Wadhurst Sussex or Edinburgh House, 2 Eaton Gate, London, S W 1

SPECIAL DIPLOMAS

Information about the regulations for the various Diplomas in Tropical Medicine in Psychological Medicine and in Public Health is given in the appropriate sections of this Educational Number at pages 530–3 and 536 Further details in regard to the D P H and the D T M will be found in the late Sir Andrew Balfour's *Guide to the Regulations Courses and Examinations for Qualifications in Public Health and Tropical Medicine* published by the British Medical Association, Tavistock Square W C 1 at the price of 3s

It should perhaps be noted here that of the various diplomas in special subjects granted by licensing bodies only those in Public Health and Sanitary Science and State Medicine are at present admissible for entry in the official *Medical Register* though other special diplomas may of course, be included among the particulars of qualifications set out in the *Medical Directory*

As stated at page 498 a Diploma in Tuberculous Diseases is granted by the University of Wales to qualified medical practitioners new regulations for this diploma are now in force

Diplomas in Medical Radiology

Diplomas in Medical Radiology are granted by the Universities of Cambridge Edinburgh Liverpool, and London Cambridge however will discontinue the granting of this diploma after 1941

The Cambridge Diploma—A Diploma in Medical Radiology and Electrology is granted by the University of Cambridge The primary object is to provide adequate training in a branch of medical work which is becoming increasingly important and difficult and which is outside the ordinary medical curriculum Before admission to any course for the diploma a candidate shall produce evidence that he holds a medical qualification approved by the committee and also satisfy the committee that he has had sufficient postgraduate clinical experience The next course which begins on October 4 1938 occupies nine months The first four months which can be spent either in Cambridge or in London are occupied with (*a*) lectures and practical work in physics in preparation for the examination for Part I in February (*b*) an introductory course of clinical instruction in radiology and electrology (*c*) a course of instruction in pathology in relation to radiology and electrology The next three months must be spent in London and are occupied with (*a*) lectures and demonstration in radiology and electrology (including radium therapy) at the British Institute of Radiology (*b*) clinical instruction in the radiological department of a hospital approved by the committee During the final two months of the course a candidate must hold a clinical clerkship or similar appointment in the radiological department of a hospital approved by the committee This part of the course may be done in London or elsewhere The examination for Part II will be held in July

Further particulars as to courses and examinations may be obtained from G Stead M A Secretary for the Diploma Cavendish Laboratory Cambridge or the General Secretary British Institute of Radiology 32 Welbeck Street W 1 Completed application forms must be sent to the Secretary for the Diploma at Cambridge by September 15

Cambridge University has decided to discontinue the granting of the Diploma after 1941 The last course will begin in October 1940

The Edinburgh Diploma—Candidates for the diploma must be graduates in medicine and surgery of the University of Edinburgh or hold corresponding degrees or qualifications registrable with the General Medical Council of Great Britain or of such other Universities or Medical Schools as may be recognized for the purpose by the University Court Candidates are not admitted to the examination for the diploma until after the lapse of not less than one year from obtaining a registrable qualification The course of study begins in October and extends over a period of not less than three terms The examination which is written oral and practical is in two parts (*a*) physics and (*b*) radiology The examination is held twice yearly Full particulars may be obtained from the Dean of the Faculty of Medicine In this connexion it may be noted that radiology can now be taken as the special subject in the examination for Membership of the Royal College of Physicians of Edinburgh Several candidates have already taken radiology as their special subject it means that an honours standard has to be attained

The University of Liverpool grants a Diploma in Medical Radiology and Electrology Candidates before admission to the examination for the diploma must possess a registrable qualification approved by the university in medicine and

surgery, and must have attended courses of instruction in (*a*) physics (two terms) (*b*) (i) radiology and (ii) electrology during the nine months in the x-ray and electrotherapeutic departments of a hospital or hospitals An examination is held in March and June in physics in June radiology and electrology Examination in either part may be taken separately Fees tuition £31 10s examination and diploma £6 6s An enrolment deposit fee of £5 5s is charged on application and credited to the fees but is not returnable in the event of the candidate failing to enrol These courses commence during the first week in October Application should be made to the Dean Faculty of Medicine the University of Liverpool

Conjoint Diploma in Medical Radiology (D M R R C P S) —The examination is divided into two parts the first comprising physics as applied to radiology the second medical radiology, with special reference to its clinical application including radiodiagnosis x-ray therapy and radium therapy Both parts will be held in January and July of each year Candidates may enter for them either together or separately subject to the production of the required certificates The course for the diploma extends over one academic year (nine months) of full-time study subsequent to the attainment of a recognized medical qualification At the discretion of the committee of management the conditions of admission may be modified in special cases but exemption will not be granted from any part of the examination A syllabus has been drawn up for Part I of the examination but not for Part II The fee for admission or readmission to each part is six guineas Copies of the regulations may be obtained from the secretary at the Examination Hall 8–11, Queen Square W C 1

The London Diploma—The University grants an Academic Postgraduate Diploma in Medical Radiology The course is open to registered medical practitioners and graduates in medicine of this or another approved university Students are required to attend a course of study approved by the University and extending over not less than one academic year at one or more of the Colleges or Schools of the University The subjects of the course are as follows Part I physics and electro technology Part II (*a*) radiography and radiodiagnosis (*b*) radiotherapy The examination for the Diploma consists of two parts Candidates may enter for Part I and Part II at the same examination or may enter for Part I only The examination will consist of a paper a practical examination and an oral examination in each of the subjects under Part I and Part II Full particulars may be obtained from the Academic Registrar the Senate House University of London W C 1

Diploma in Laryngology and Otology

The Conjoint Examining Board in England (Examination Hall Queen Square, London, W C 1) grants a Diploma in Laryngology and Otology (D L O) after an examination held in June and December

The examination comprises two parts Part I on the anatomy embryology and physiology of the ear nose pharynx, larynx trachea and bronchi and oesophagus Part II on the recognition and use of special instruments and appliances and the medicine surgery and pathology of these regions Candidates may enter for Part I at any time after a recognized qualification in medicine surgery and midwifery has been obtained Candidates may enter for Part II on completion of one year of special study of diseases of the ear nose pharynx, and larynx after a recognized qualification has been obtained provided that Part I has been previously passed and on production of certain certificates The conditions of study may be modified at the discretion of the Committee of Management in special cases The fee for admission or readmission to each part is six guineas

Diplomas in Ophthalmic Medicine

A special Diploma in Ophthalmic Medicine and Surgery is granted by the University of Oxford and by the Conjoint Examining Board in England

University of Oxford—The Diploma in Ophthalmology (D O) is granted to registered medical practitioners and to non registrable graduates of universities approved by the Board of the Faculty of Medicine after they have passed an examination which is held annually in June This examination is open to candidates who have attended a special two months course of instruction at Oxford and who have in addition done a ten months course of clinical ophthalmology at a recognized hospital or hospitals Entries for the course should be made through the Dean of the Medical School, University Museum Oxford, from whom any further information that is necessary may be obtained

The Conjoint Board—The Diploma in Ophthalmic Medicine and Surgery (D O M S) of the Conjoint Examining Board of the Royal College of Physicians of London and Royal College of Surgeons of England is issued after completion of an examination held in two parts—in February and July The examination is partly written, partly oral, partly clinical or practical Part I comprises anatomy and embryology of the visual apparatus, physiology of vision, elementary optics Part II comprises optical defects of the eye, ophthalmic medicine and surgery pathology with special reference to medical and surgical ophthalmology Candidates may enter for Part I at any time after a recognized qualification in medicine, surgery, and midwifery has been obtained Candidates may enter for Part II on completion of one year of special study of ophthalmology after a recognized qualification has been obtained provided that Part I has been previously passed, and on production of certain certificates The conditions of study may be modified at the discretion of the Committee of Management in special cases The fee for admission or readmission to each part is six guineas

Diplomas in Obstetrics

The Society of Apothecaries of London, as stated on page 500, confers a Mastery of Midwifery, and issues a diploma under this title denoting the possession of specialized knowledge of ante-natal care, midwifery, and infant welfare and the public health aspects of these subjects This is a postgraduate diploma, and is not registrable under the Medical Acts The same applies also to the new diploma D C O G, which the British College of Obstetricians and Gynaecologists now issues to registered medical practitioners who have had special postgraduate training and experience in the subject and have satisfied the examiners (See page 500)

Diploma in Child Health

The Conjoint Examining Board in England grants a Diploma in Child Health (D C H, R C P and S Eng), and copies of the regulations may be had from the Secretary, Examination Hall, Queen Square, W C 1

The examination will be held twice a year, in March and October, and will be written, clinical, and oral, fee six guineas It will comprise the following subjects special emphasis being laid on their preventive aspects (*a*) The anatomy, physiology and pathology in childhood (*b*) The development of the child physical and mental, including speech, with their disorders physical education in childhood (*c*) The hygiene and dietetics of infancy and childhood (*d*) Affections of the newborn (*e*) Disease in infancy and childhood medical and surgical (*f*) The therapeutics of infancy and childhood including remedial treatment physical and mental (*g*) Legislation and public administration in regard to the care of children including the methods of infant welfare centres and of the school medical service Certificates of experience in children's diseases at a recognized hospital are required

Diplomas in Anaesthetics

The Conjoint Examining Board in England grants a Diploma in Anaesthetics (D A, R C P and S Eng) copies of the regulations may be had from the Secretary Examination Hall, Queen Square, W C 1

The examination, to be held in May and November will be written and oral the latter part requiring the candidate to demonstrate his knowledge of the use of various types of anaesthetic apparatus The fee for examination is six guineas and the subjects are (*a*) Human anatomy and physiology considered in relation to anaesthesia (*b*) The history theory and practice of anaesthesia, including inhalation anaesthesia intravenous, rectal, and other methods of inducing

thesis local regional and spinal anaesthe ia in all varieties anae thesia in its relationship to disea e (c) Pre operative investigation preparation and medic ition the recognition of post operative complications and their treatment in so far as they are related to anaesthesia (d) The pharmacology and elementary chemistry of drugs u ed for or in association with anaesthesia Certificates of experience in the administration of anaesthetics in recognized hospitals are required though the conditions of study may be modified by the Committee of Management at its discretion

Tuberculous Diseases Diploma

Candidates may be admitted to examination for the Tuberculous Diseases Diploma of the University of Wales after the lapse of not less than two years from the date of obtaining a qualification in medicine surgery and midwifery, registrable in Great Britain, or in the Dominions, Colonies, and Dependencies of the British Empire

Every candidate must have held a resident post in a tuber culosis hospital or at an orthopaedic institution providing not less than 100 tuberculosis beds or shall satisfy the Faculty of Medicine that he has pursued a special study of tubercu losis equivalent to the above for a period of not less than twelve months The examination is in two parts Part I (*a*) written and (*b*) oral and practical, including the examina tion of patients and the recognition of specimens Part II is a written and practical examination on the epidemiology pathology, and bacteriology of tuberculosis Every candidate will be required to satisfy the examiners in both parts in the same examination The course of instruction commences in January and continues until May each year when the exam inations are held Further particulars may be obtained from the Secretary the Welsh National School of Medicine 10 The Parade Cardiff A limited number of appointments for part time assistant tuberculosis physicians are advertised annually in September by the Welsh National Memorial Association enabling suitably qualified and selected candidates to study for the diploma Particulars on application to the Secretary Welsh National Memorial Association Memorial Offices Westgate Street Cardiff

Diploma in Clinical Pathology

The University of London grants an Academic Post-graduate Diploma in Clinical Pathology

The course of study is open to graduates in medicine of this or another approved university or registered medical practi tioners whose training has in the opinion of the university qualified them for registration as students for the diploma They are required to pursue an approved course of instruction and training lasting at least one calendar year as whole time workers under the supervision of the head of the pathological department of one of the colleges or schools of the university The examination is held once a year in October Candidates must apply to the Academic Registrar for an entry form and a certificate of course of instruction to be returned duly filled in and attested together with the fee of ten guineas by September 1

Foreign Degrees for Practitioners

UNIVERSITY OF LAUSANNE

It has been possible for a long time to obtain the M D degree (not registrable in this country) from one of the State Universities in Switzerland—namely Berne Geneva and Lausanne In 1930 new regulations came into force in the Faculty of Medicine of the University of Lausanne the main effect of which is to provide a special M D examination for medical practitioners from other countries Particulars may be obtained from Dr C A H Franklyn honorary secretary Lausanne Medical Graduates 34 Queensway Wragby Road Lincoln (booklet and copy of regulations post free 2s 1½d)

ROYAL NEDERLANDS UNIVERSITIES

It is possible for a British practitioner to secure the M D degree in Holland Such degree does not *ipso facto* confer the right to practise in that country but is purely an academic distinction At Leyden (Leiden) for instance any medical practitioner who holds a university degree and is registered in his own country and legally entitled to practi e medicine may proceed to the academic degree of M D by sending in a thesis This thesis must be sent in to one of the university professors in the Faculty of Medicine accompanied by a letter to the Minister of State concerned supplicating for the doctorate A high standard is required and the candidate must be able to prove that the thesis is his own work and that the observations made and the conclusions drawn are his own Normally such a thesis would take from six to twelve months to prepare Residence in Holland would not appear to be required while doing the work Anyone inter ested may write to the Hon Secretary Lausanne Medical Graduates Association 34 Queensway Lincoln

Dental Surgery

Until the passing of the Dentists Act 1921, the profession of dentistry in this country was regulated by enactments corresponding very closely with those relating to the practice of medicine—that is to say, there was no direct prohibition of the act of practice and the Dentists Act of 1878 gave the same degree of protection to legally qualified and registered dentists as was accorded to regis tered medical practitioners—namely the reservation of the use of certain titles This Act provided also (1) that no person should take or use the name or title of dentist (either alone or in combination with any other word or words) or of dental practitioner or any other name, title or description expressed in words or by letters implying that he was specially qualified to practise dentistry unless he was registered under a penalty of £20 and (2) that an unregistered person could not recover any fee or charge in respect of any dental operation attend ance or advice But in the case of the practice of medi cine by unqualified and unregistered persons certain deterrent factors came into play—such as the inability to give a death certificate—which did not operate to the same extent in the case of dentistry hence unqualified practice was far more prevalent in dentistry than in medicine and increased after a decision of the House of Lords placing a narrow interpretation upon the words specially qualified to practise dentistry by defining the word qualified as not referring to competence but to the possession of a recognized diploma

Dentists Act, 1921

This unsatisfactory position was remedied by the passing into law of the Dentists Act 1921 its provisions are based largely on the recommendations of a departmen al committee appointed in 1917 by the Privy Council to investigate the extent and gravity of the evils connected with the practice of dentistry and dental surgery by persons not qualified under the Dentists Act Since November 30 1922 no person has been permitted by law to practise or hold himself out whether directly or by implication as practising or as being prepared to practise dentistry unless he is on the *Dentists Register* kept under the Dentists Act 1878 For the purposes of the Act the practice of dentistry includes the performance of any such operation and the giving of any such treatment advice or attendance as is usually performed or given by dentists and the performing of any operation or the giving of any treatment advice or attendance on or to any person as preparatory to or for the purpose of or in connexion with the fitting insertion or fixing of artificial teeth The maximum penalty incurred by an unregistered practitioner is £100 for each offence There are how ever certain important exceptions to the requirement of registration A registered medical practitioner may prac tise dentistry without being on the *Dentists Register*

though under the National Health Insurance (Dental Benefit) Regulations he cannot give dental treatment to insured persons as an additional benefit unless he is registered A registered pharmaceutical chemist or chemist and druggist may extract a tooth where the case is urgent and where no doctor or dentist is available, but the operation must be performed without any kind of anaesthetic and minor dental work may be performed in a public dental service under the personal supervision of a registered dentist provided that it is in accordance with conditions approved by the Minister of Health after consultation with the Dental Board

Dentistry may be carried on by a corporate body provided that the majority of the directors and all the operating staff are registered dentists and that no business other than dentistry or only some business ancillary to dentistry is carried on by the company Companies carrying on the business of dentistry at the present time are permitted to continue to do so with certain restrictions provided that the name of the company is well as the names of the directors have been entered in a list kept under the Act for that purpose Every director or manager of a company convicted of an offence under the Act will be held to be guilty of the offence unless he proves that the offence was committed without his knowledge and the court may in addition to a fine order that the name of any director convicted shall be removed from the list of directors aforesaid

The Dental Board

On the establishment of the Dental Board in 1921 certain powers and duties of the General Medical Council were transferred to it, including the duty of erasing from the *Dentists Register* any entry which has been incorrectly or fraudulently made An inquiry into the case of a person alleged to be liable to have his name erased from the *Register* is made by the Board, which reports its findings to the General Medical Council, the order directing the erasure being made by the Council A name erased from the *Register* can only be restored by the Council upon a report made by the Board An appeal to the High Court may be made by any person aggrieved either by refusal of the Board to register his name or by the removal of his name from the *Register* The administrative expenses of the Board are defrayed from the registration fees and annual retention fees, and the surplus may be allocated to purposes connected with dental education and research or to any public purposes connected with the profession of dentistry The offices of the Dental Board are at 44, Hallam Street, London, W 1

Dental Education and Examination

The preliminary examination in general education is the same for medical and dental students, and the early stages of their education embrace much the same subjects[1], and as the dental student is required to obtain a knowledge of the broad principles of medicine and surgery, it is necessary for him to pursue some portion of his studies at a medical school as well as at a special dental school the latter not undertaking the teaching of these subjects

Degrees and diplomas in dentistry are granted by the Universities of Belfast Birmingham Bristol Dublin Durham, Leeds Liverpool London Manchester St Andrews, Sheffield and the National University of Ireland as will be found stated in the articles on these universities Licences in dentistry entitling the holder to be registered on the Dentists Register are granted by the Royal Colleges of Surgeons of England of Edinburgh and in Ireland and by the Royal Faculty of Physicians and Surgeons of Glasgow

[1] See the particulars as to the admission of students to Schools of Medicine printed in the article on the General Medical Council at page 483

Recognized dental schools are numerous In London there are those connected with the Royal Dental Hospital, Leicester Square, the National Dental Hospital (now the University College Hospital Dental School), Great Portland Street Guy's Hospital King's College Hospital, and the London Hospital In the provinces there are the Birmingham Dental Hospital, the Royal Infirmary and the General Hospital, Bristol the Dental Hospital and the Public Dispensary, Leeds, the Dental Hospital, Liverpool, the Dental Hospital Manchester, the Sutherland School, Newcastle on Tyne the Royal Hospital, Sheffield In Scotland there are the Dental Hospital Dundee, the Incorporated Dental Hospital and School, Edinburgh, and the Incorporated Dental Hospital, Glasgow, and in Ireland the Belfast Dental School the Incorporated Dental Hospital of Ireland Dublin, and the Royal College of Surgeons in Ireland, Dublin

General Medical Council's Recommendations

The Dentists Act still leaves to the General Medical Council the duty of controlling the course of study and examinations required for dental qualifications

ADMISSION OF DENTAL STUDENTS TO SCHOOLS OF DENTISTRY

Any application to be registered, on or after September 1 1938 as a dental student should be addressed to the dean or other appropriate authority of the school of dentistry to which the applicant desires to be admitted Students will no longer, as heretofore, be registered by the General Medical Council on their admission to schools, and it will rest with the authorities of schools and of licensing bodies to deal at their discretion without further reference to the Council with applications for registration On and after November 1 1938—that is to say, after the beginning of the first term of the academical year 1938-9—applications will be considered by the authorities of dental schools and of licensing bodies in the light of the recommendations of the Council in regard to the Registration of Dental Students, incorporating Resolutions in regard to General Education and Preliminary Scientific subjects, which come into operation on November 1, 1938 and supersede the Regulations of the Council in regard to the Registration of Dental Students (last revised in June 1934) and of the Recommendations of the Council as to the Course of Study and Examinations to be required of Candidates for Licences in Dentistry or Dental Surgery, which came into operation on October 2, 1933 and were amended by the Council on May 24, 1938, so as to bring them into harmony with the Recommendations in regard to the registration of students

The relevant provisions of the revised Recommendations as to the course of study and examinations to be required of candidates for qualifications in dentistry are as follows

1 That, subject to such exceptions as may from time to time be allowed by the authorities of Schools of Dentistry and of Licensing Bodies, every dental student at the commencement of his studentship should be registered in the same manner as a medical student, and under the same conditions with respect to age, preliminary examination in general education and additional examination or examinations, provided that it should be open to applicants for registration as dental students to commence professional study either at a recognized dental hospital or school or as pupils of a registered dental practitioner

2 That, with respect to applicants who have served an apprenticeship in dental mechanics, an applicant who has served two or more years subsequent to his attaining the age of 17 as a bona fide apprentice in dental mechanics with a registered dental practitioner should, if the licensing bodies think fit be allowed to antedate his registration for a period not exceeding six months

3 That before registration as a dental student every applicant should furnish evidence that he has attained or will within 3 months attain, the age of 18 years

4 That before registration as a dental student every applicant should be required to have passed (1) A recognized preliminary examination in general education which should be the same as that required for medical students (2) An additional examination

or additional examinations conducted or recognized by one of the licensing bodies which should be the same as the examination or examinations required for medical students

PROFESSIONAL STUDY

Every candidate for a degree or licence in dentistry or dental surgery should be required before admission to the final or qualifying examination to produce certificates showing

(i) That he is at least 21 years of age

(ii) That he has been registered as a dental student

(iii) That he has subsequently to registration as a dental student been engaged in professional study for at least four years of which three years at least shall have been spent at a school or schools recognized for professional study by one of the licensing bodies

(iv) That subsequently to registration as a dental student he has attended at a recognized medical or dental school courses of instruction which should be the same as those for medical students in (*a*) chemistry and (*b*) physics in their application to medicine and dentistry (*c*) elementary biology (A student who has diligently attended an approved course of elementary biology in a teaching institution recognized by a licensing body may be admitted to a professional examination in elementary biology immediately after his registration as a dental student) That he has attended at a recognized medical school courses of instruction *specially adapted for students in dentistry* in the following subjects (*d*) human anatomy including dissections for three academic terms or nine months This should include not less than 40 lectures and or demonstrations The course of dissections shall include dissections of the head and neck (*e*) Physiology (with laboratory instruction) extending over two academic terms or six months This should include not less than 40 lectures and/or demonstrations also a practical course in chemical and experimental physiology of not less than 40 hours (*f*) Histology should consist of a practical course of not less than 30 hours (*g*) General pathology for two academic terms (not less than 40 lectures and/or demonstrations) (*h*) Bacteriology for one term (not less than 10 lectures and 24 hours practical work) (*i*) Medicine for two academic terms or six months (not less than 30 meetings of the class) (*j*) Surgery for two academic terms or six months (not less than 40 meetings) (*k*) Clinical instruction in a recognized general hospital on selected cases in medicine and in surgery over a period of at least nine calendar months including instruction in venereal diseases with any bearing on dentistry Each of these courses should consist of not less than 50 meetings It is desirable that the systematic courses in medicine and surgery and the clinical instruction should so far as possible be co ordinated The course of instruction in medicine surgery and pathology should normally be taken after the student has passed the examinations in human anatomy and physiology

(v) That he has attended at a recognized dental school courses of instruction in (*a*) Special anatomy human and comparative The course should comprise a minimum of 20 meetings of the class (*b*) Practical normal and morbid histology (16 meetings) (*c*) Dental surgery (20 meetings) (*d*) Materia medica and therapeutics (10 meetings) (*e*) Metallurgy with practical work and demonstrations (16 meetings) (*f*) Dental mechanics and prosthetics (20 meetings) (*g*) Instruction in the use of anaesthetics employed in the practice of dentistry (*h*) Instruction in radiology and its application to dentistry (*i*) The principles of orthodontics (10 meetings)

(vi) That he has for at least two calendar years attended the practice of a recognized dental hospital or of the dental department of a general hospital recognized by a licensing body as forming part of a dental school

(vii) That he has received for not less than 24 calendar months or for 2 000 hours practical instruction in dental mechanics It is recommended that practical instruction in dental mechanics shall be taken at a recognized dental hospital and school If any part of such instruction be taken by the candidate as a pupil with a registered dentist the time devoted to it shall be at least twice the time required for the corresponding instruction taken at a dental school

PROFESSIONAL EXAMINATIONS

The examinations for a degree or licence in dentistry should be partly written partly oral and partly practical and should include the following subjects (*a*) Chemistry physics and biology in their bearing on medicine and dentistry (*b*) Human anatomy the oral examination in which should be conducted mainly on dissections especially of the head and neck (*c*) Physiology the oral examination in which should include practical physiological tests (*d*) Histology which may be included in the examination in either anatomy or physiology (*e*) General pathology the oral examination in which should be conducted with the aid of specimens including those of diseases connected with dentistry (*f*) Bacteriology the oral examination in which should include simple practical tests (*g*) Medicine and surgery the oral examinations in which should include a clinical examination of patients (*h*) Special anatomy human and comparative (*i*) Dental mechanics prosthetics and metallurgy including practical tests (*j*) Dental surgery including special pathology and histology materia medica and therapeutics and the principles of orthodontics (*k*) Practical dental surgery which should include the usual dental operations—for example filling and extraction of teeth and the giving of anaesthetics—and a clinical examination on the diagnosis and treatment of dental disease and abnormal conditions of the oral cavity

A candidate should produce a certificate of having administered general anaesthetics on at least ten occasions

ACKNOWLEDGMENT

The detailed information published in this Educational Number of the *British Medical Journal* for the benefit of intending students of medicine and newly qualified practitioners has been revised throughout with the co-operation of the deans and secretaries of the medical schools and kindred institutions and of officials in the several public services to all of whom we wish to acknowledge our indebtedness

THE CENTRAL MEDICAL SCHOOL, SUVA, FIJI

The annual report for 1937 of the Central Medical School Suva Fiji gives a concise account of the work of this useful institution During the year forty three students and four graduates were in residence at the school including in addition to a large Fijian contingent men from Samoa Solomon Islands Tonga and other Pacific islands The health of the students appears to have been exceptionally good and this may be attributed to a liberal and well chosen dietary adequate facilities for sport and games and prompt medical treatment of any minor ailments All the students are boarders and their food is prepared by two Indian cooks The annual cost for each student is stated to be approximately £75 so that the four years course of studies involves about £300 a head Total annual expenditure is divided among the nine participating administrations in the ratio of the number of student month units No grants in aid have been received since the cessation of the contribution from the Rockefeller Foundation in 1932 The object of the school is to furnish a corps of qualified native medical practitioners On an average four men qualify from the school each year while the average annual loss among practitioners is two In times of serious epidemics this loss may be greatly increased For example during 1918–19 eight qualified men out of a total of forty eight died of influenza within ten weeks At present there is one native medical practitioner for every 1 600 inhabitants With the inclusion of the Indian population of 86 000 and seven Indian medical practitioners the ratio is one qualified man for 2 700 persons A native medical practitioner service is gradually being built up in other island groups in the South Seas staffed by graduates of the Central Medical School Suva

We much regret to announce the death on August 28 of Sir David Wilkie Professor of Surgery in the University of Edinburgh and surgeon to Edinburgh Royal Infirmary also on August 28 of Dr Alexander Macphail H M Inspector of Anatomy for England and Wales medical officer of the Ministry of Health and Professor of Anatomy of the Royal College of Arts We hope to publish memoirs in our next issue

[The present issue being the Annual Educational Number much current material is held over and the Key to Current Medical Literature is not published this week]

The British Medical Association

ITS AIMS, WORK, AND CONSTITUTION

The British Medical Association as stated in our introductory article on the Profession of Medicine was founded in 1832 to promote the medical and allied sciences to maintain the honour and interests of the profession and to foster a feeling of friendship among its members To attain these objects it holds meetings, local and central for the discussion of medical and scientific subjects and of professional affairs it publishes the *British Medical Journal* and other scientific publications it maintains a reference and lending library it has instituted lectures and scholarships and grants in aid of research It concerns itself with every side of medical work and much of the Association's daily work consists in aiding individual members in solving professional problems The Association is the oldest largest and most powerful British organization devoted to the welfare of the medical profession Its membership is now 37 000 It has a fine building in Tavistock Square London for its headquarters

In addition meetings are held of Special Groups of practitioners such as pathologists radiologists etc at which problems relating to these particular fields of practice may be discussed

Privileges of Members

A member of the Association has the right—

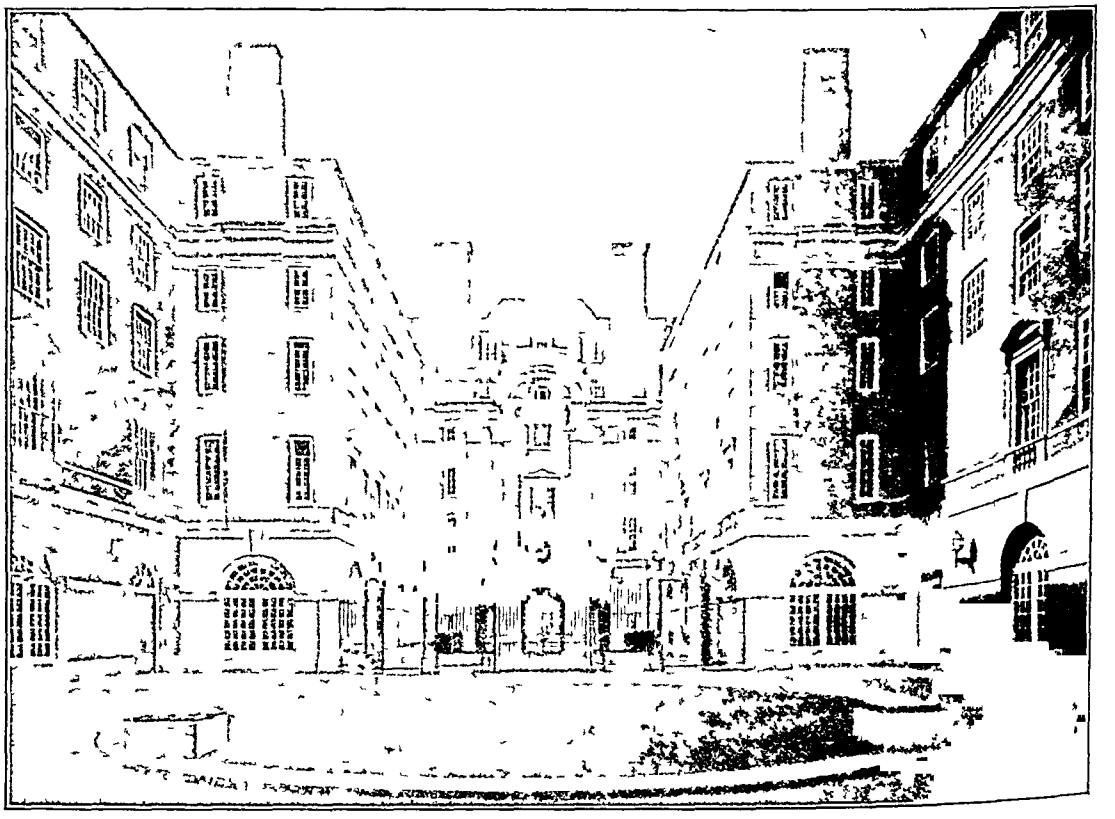
1 To attend the annual and other general meetings of the Association and the meetings of the Division and Branch to which he or she belongs

2 To receive by post the *British Medical Journal* published weekly which gives a full record with commentary of progress in clinical and scientific medicine and of medico-political affairs and medical economics.

3 To take part in the election of the representative of his or her Division in the Representative Body and also in the election of members of the Council

4 To receive the help and advice of the central office in any professional difficulty

5 To use the Library as a reading room and to borrow current medical or scientific books on payment of postage



BRITISH MEDICAL ASSOCIATION HOUSE LONDON

Constitution and Administration

The Association has Branches and Divisions throughout Great Britain and Northern Ireland and also in the Dominions Colonies, and Dependencies Thus there are 43 Branches and 189 Divisions in Great Britain and Northern Ireland and 68 Branches and 64 Divisions in the British Empire overseas The Branches in Australia and South Africa are linked up in Federal Councils for these respective areas The Medical Association of Eire (I M A and B M A) was formed at the beginning of 1936 and is now a corporate group of Branches and Divisions within the Association To the Association there is affiliated the Canadian Medical Association Members of Divisions elect representatives on the Branch Councils and also a member or members of the Representative Body which is the governing body of the Association and determines its policy

The Council is the executive of the Association It is elected partly by the Divisions and Branches and partly by the Representative Body and includes representatives of the public health service Navy Army Air Force and Indian Medical Services The Representative Body and Council elect standing committees to take charge of different subjects Among these may be mentioned the General Practice Special Practice Science Ethical Hospitals Public Health and Naval and Military Committees There are Committees also for the Dominions Scotland and Wales and for the working machinery of the Association such as the Organization Finance and Journal Committees The Insurance Acts Committee elected partly by the Association and partly by insurance medical practitioners is the recognized executive and mouthpiece of the insurance practitioners of Great Britain and Northern Ireland

The full benefits of the Association can be secured only by the co operation of large numbers of the medical profession for the greater the membership and the funds the more efficient and influential the organization A generous concession is made as regards subscription for those recently qualified for whom the Association has done much in improving the conditions of appointment in the public services or in civil life The Association's work for the Services is well known It feels a special responsibility to those members of the profession who by reason of their position are precluded from taking common action

Subscriptions and Applications for Membership

The ordinary subscription to the British Medical Association is 3 guineas a year for members resident in Great Britain and Northern Ireland but this is subject to exceptions Thus newly qualified practitioners elected within two years of registration pay half the sum up to the end of the fourth year after registration Service officers on the active list of the R N R A F R A M C (Reserve) and I M S pay 2 guineas concessions are made also to members of (in the British Isles) of forty years standing to members of medical years standing who have retired from practice to medical men couples residing together and to certain whole time teachers research workers The ordinary subscription for members abroad is 14 guineas but many overseas Branches have special local subscriptions After fifty years of membership no subscription is payable A member elected after June 30 pays the subscription for that year

All duly qualified British medical practitioners are eligible for election Full particulars can be obtained from the Secretary B M A House Tavistock Square London W C 1

No. 74

Removal of 'Elastoplast' Bandage

(excerpt from the film "The Use of 'Elastoplast' in Modern Surgery")



Applying Elastoplast bandage over tap

SURGEONS and General Practitioners who may be interested to see this sectionalised film are invited to communicate with *T. J. Smith & Nephew, Ltd., Dept. B 13, Hull,* for details regarding its exhibition

B.M.A. BRANCH Secretaries are invited to write for available dates for projections



Using tape to lift bandage to facilitate cutting

Elastoplast THE MODERN SURGICAL DRESSING

ELASTIC ADHESIVE BANDAGES, PLASTERS, DRESSINGS

Gaymer's CYDER
REG TRADE MARK

SPECIAL RESERVE (STILL)

(as advertised in The Diabetic Journal
& EXHIBITED AT THE BRITISH MEDICAL EXHIBITION, PLYMOUTH)

This brand of GAYMER'S CYDER has been recommended as suitable for Diabetics, it contains only the barest trace of sugar (see typical analysis)

Specific gravity	0 9984	Sugars	0 12%
Alcohol by volume	6 46%	Acidity	0 53%
Extract or solids	1 95%	Ash or Minerals	0 25%
Non-sugar solids	1 83%	Original gravity	1 0483

Calories per pint 250
Grams sugars per fluid oz 0 02

The extract contains metabolisable organic acids, glycerol and sorbitol The mineral matter is mostly carbonate and phosphate of potash

FREE SAMPLE ON RECEIPT OF MEDICAL CARD QUOTING "B M J"

WM GAYMER & SON, LTD, ATTLEBOROUGH, NORFOLK

130 Years Consistent recommendation by the medical profession

Robb's Nursery Biscuits provide a high nutrition factor, offering a balanced vitamin A, B, C, D content which ideally suits the special demands of the growing infant from 6 months up to school age Robb's" were evolved by Dr Golding, the founder of Charing Cross Hospital, and are made from ingredients of the highest quality including rich full cream dairy milk and the finest wheat and malt A surprising rate of progress in the condition of the infant is invariably observed after 'Robb s have been prescribed

Clinical samples free on request

ALEX ROBB & CO Ltd (Dept 6),
145 Atkins Road London, S W 12

Robb's
NURSERY BISCUITS

CASH
for your old car and a NEW CAR WITHOUT DEPOSIT

MOTOR BY SUBSCRIPTION

HODGKINSON & CROSSLEY LTD.

Dept B M J 4,
53, SOUTH SIDE, LONDON, S W 4

Please send me without obligation I am interested in a new Motoring by Subscription
My present car is a (make)
(year) *(h p)*
(body) *(mileage)*
Name
Address
Tel No
B M J Sept 3rd

TEL. MACAULAY 4331-2

This wool is very different

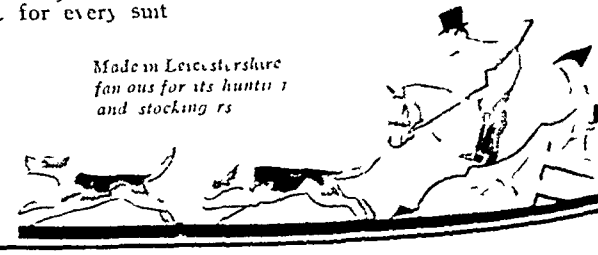
If you could see and compare St Wolstan Wool with lower grades before spinning, you would realize how great a difference there must be in the comfort of garments made from the one as against the others The fleecy white St Wolstan Wool which is extra soft, very strong and of long staple is a delight to the eye and to the touch This wool is transformed into handsome garments for your comfort and satisfaction Ask your hosier to show you Two Steeples No 83 Socks made in a shade for every suit

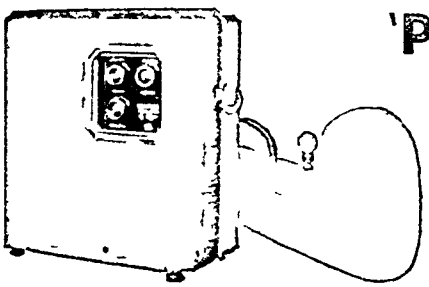
Two Steeples No. 83 Socks

No 83 Sock 4/6 per pair No 72 a lighter weight 3/6 per pair St Wolstan Wool Underwear from 13/6 per garment Darcuna Underwear from 8/6 per garment Also Quality Knitted Hacking Sweater Waistcoat Golf Hose etc

Latest models in hosiery and underwear sent on request to Dept 4 Two Steeples Ltd Wigston Leicester Hire

Made in Leicestershire famous for its hunting and stocking trade





'PAVAEX' Passive Vascular Exerciser

PRESSURE — HEAT — LIGHT

The Pavaex has for some time successfully promoted more rapid reconstruction of gangrenous tissue indolent ulcer etc It comprises a movable pressure mechanism and a boot of Pyrex Glass Controlled pressure and suction and artificial hyperthermia may thus be given concurrently to stimulate blood flow and local metabolism

Please write for case histories full details and operating instructions

SHORT & MASON, LTD., *The Instrument House* ANEROID WORKS, LONDON, E 17

SECONDHAND **MICROSCOPES** FOR SALE, OR WANTED FOR CASH

ZEISS	£32/10/-
ZEISS	20/- /-
LEITZ	15/15/-
BECK	15/10/-

1/12 OIL IMM OBJECTIVES FROM £3/10/-.

EXCHANGES AND REPAIRS

BROADHURST, CLARKSON & CO., LTD., 63, FARRINGDON ROAD, LONDON, E C 1
Note Name and Address (3 minutes from Farringdon Street Metro Station) *Over 100 years' reputation.*

QUEEN *non-irritant* Toilet Preparations specially for prescription in Allergic cases

Leaders of the profession have found these of great use as an alternative to beauty preparations and cosmetics suspected of giving rise to allergic symptoms Completely free of Orris in any of its forms or other irritants Through any Chemist or direct from —

BOUTALLS LTD., 150 Southampton Row, London W C 1

WHOLEMEAL & BUTTERMILK for Roughage and Nutriment

"Healthy Life" BISCUIT WAFERS 1/-

WRITE FOR SAMPLE
Dept. M MITCHELHILL'S 'Healthy Life BISCUIT FACTORY, EDINBURGH

VACCINE LYMPH



PURE ASEPTIC CALF LYMPH

for reliability and normal reaction
Prepared under Swiss Government control As supplied to the Bacteriological Department Guy's Hospital London

Price 9d. per small tube
(6 for 3s 9d)

Sole Agents
WILLIAM HEINEMANN
(Medical Books) Ltd,
99, Gt Russell St, London, W C 1
Telephone MUSEUM 3946 *Telegrams* SUNLOCKS LONDON

In the treatment of Varicose Veins where leg support is prescribed, Compri-Vena give meticulous attention to instructions

They will gladly supply particulars of

RUBBERLESS SURGICAL STOCKINGS

and the service they provide

Compri-Vena (1937) LTD

38 SOUTH MOLTON ST., W 1 MAYfair 0732

How the Purity of LACTOGEN is Ensured and Safeguarded

In the production of Lactogen, every possible safeguard and precaution is taken to ensure the maintenance of purity at every stage Only the purest and richest cows milk, after special tests, is used in the preparation of Lactogen Right through the process of manufacture, rigid safeguards are taken to ensure freedom from contamination The finished product, which is untouched by hand throughout, is packed in specially designed airtight containers as a final safeguard Thus Lactogen, which in proportion and in physical characteristics so closely resembles breast-milk, is also the safest food that it is possible to obtain



"LACTOGEN"
The Better Milk for Babies

FREE SAMPLES with detailed descriptive literature will be sent to any member of the Medical Profession upon request. Lactogen Bureau Nestlé's Milk Products Ltd (Dept Z174A) St George's House 6 & 8 Eastcheap London E.C 3

Copyright

FREQUENT MICTURITION

"YBWET" ABSORBENT BAGS
Male day pattern 35/
New Model Female day pattern 42/-

"DUPLEX" BAGS
Male or Female day and night 70/-

"SANITUBE"
For helpless bedridden patients 70/-

Our bags catch all leakage easing mind and body Invisible under clothing and easily emptied Now worn world wide Special patterns for motorists and aviators

Diagrams etc on request from
HILLIARD 123 Douglas Street Glasgow C 2

WANTED
ADDISON'S CONSTITUTIONAL AND LOCAL EFFECTS OF DISEASE OF THE SUPRARENAL CAPSULES, 1855
GOOD PRICE PAID
EWEN KERR 19, Stramongate, Kendal, Westmorland

NAME PLATES
in BRONZE or BRASS
Estimates and Sketches sent free
H K LEWIS & Co Ltd
Medical and Scientific Stationers,
136, Gower St, London, W C 1

D C to A C
ROTARY CONVERTERS
All sizes
Suitable for X Ray Work
UNIVERSAL ELECTRICAL CO.,
221, City Road, London, E C 1

NAME PLATES of character in Brass & Bronze
Send for Illustrated Brochure and Price List
F B **HALL** & CO 445 New Cross Rd S E 14 *TIDeway* 3818

NAME PLATES Brass Bronze Stainless Steel
REDUCED PRICES
Send for List 18 to the Actual Makers
F OSBORNE & Co, Ltd Tel Euston 4824
117 Gower Street London, W C 1

NAME PLATES
in BRONZE and ENAMEL or BRASS
Send details for sketch or leaflet
S J & A HERD Tel Clerkenwell 2441
30 CLERKENWELL ROAD E C 1

NAME PLATES in Bronze and Enamel
Stainless Steel Brass or Chromium
Actual Makers Quick Delivery Low Price
The WHITE BRONZE Co 106 London Rd CROYDON

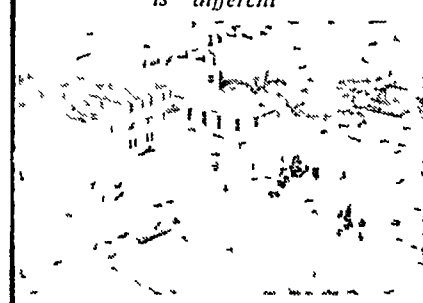
Tel and Telegram Haynes Brentwood 45
LITTLETON HALL, BRENTWOOD ESSEX
Large grounds 400 ft above sea HOME for ladies Mentally afflicted Voluntary Boarders received Stations Brentwood and Shenfield 1 mile Liverpool St 40 min Apply Dr HAYNES



Full range of Hydrotherapeutic Treatments in Unrivalled suites of Baths Turkish and Russian Baths Air and
ance Over 60 trained Male and Female Nurses Masseurs Attendants etc
Terms 13/ to 18/6 per day inclusive board.
Illustrated Brochure M J on request.
Resident Physicians
G C R HARBINSON M B B Ch B A O (R U I), R MacLELLAND M D C M
Phone No 17 *Grams* Smedleys Matlock

KENWORTHY'S HYDRO HOTEL, SOUTHPORT
SEPARATE SUITES OF LADIES' AND GENTLEMEN'S HYDROPATHIC BATHS, RECENTLY MODERNISED AND REDECORATED
All Hydropathic Treatments including Turkish Russian Vichy Aix Scotch Plombière Nauheim Soapless Foam and other remedial Baths
A fully equipped Massage and Electrical Department with Certificated Attendants
Diets under special supervision
Resident Physician R G CLEMENTS M D D P H F R C S
Terms from 12/- to 18/6 per day—inclusive of board Special Terms for long period Residents
Apply The Manageress *Tel Southport* 3137

The Physical Treatment Centre that is different



SUNNYSIDE RESTORIUM,
HASSOCKS, SUSSEX

50 minutes from London by frequent electric trains 15 minutes from Brighton Standing in 7 acres of lovely grounds at the foot of the South Downs

Climate, mild but not relaxing Maximum sunshine no fogs sheltered from cold winds

Comfort and Service combined with every facility for Physical Treatment without the irksome restrictions of nursing home or clinic

Treatments available include Foam and Medicated Baths Ultra violet and Infra red Ray Diathermy and other Electrical treatments Pistany Mud Packs etc Massage and Remedial Exercises Administered by fully qualified staff under the supervision of the Physician in Charge

Convalescent patients no longer requiring nursing home treatment specially catered for

Central Heating H & C in all bedrooms Electric Lift to all floors Fully Licensed Superb Cuisine Special Dieting if required

Medical Practitioners are cordially invited to visit the Restorium which has been recently redecorated and enlarged Write for Brochure and Terms to Physician in Charge Sunnyside Restorium Hassocks Sussex Telephone Hassocks 103

THE GRANGE,
near ROTHERHAM

A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental Disorders Both certified and voluntary patients received Approved for temporary Patients This is a large country house with beautiful grounds and park five miles from Sheffield Tel No 40030 Ecclesfield Res Phys GILBERT E MOULD L R C P M R C S *Station* Grange Lane L & N E Rly

LONDON, CORA HOTEL,
Upper Woburn Place near B M A Headquarters. Accommodates 235 Visitors Modern Comforts. Excellent table A A and R A C recommended. Room Bath and Breakfast from 8/6

SUNFIELD
CHILDREN'S HOME
Clent Grove, Clent, Stourbridge, Worcestershire

PRIVATE APPROVED HOME for backward and retarded children of both sexes up to 12 years of age Curative educational treatment on RUDOLF STEINERS Methods Home like surroundings individual attention House and grounds uniquely situated on Clent Hills Illustrated prospectus, terms, etc, from the Secretary
Phone Hagley 253

TORQUAY
GRESHAM COURT HOTEL

RECENTLY OPENED A small luxury Hotel 2 mins Sea, almost on level Luxurious comfort combined with an earnest desire to please
The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure M TEL. 365

WYE HOUSE, BUXTON, AND CLINIC,
for the PREVENTION and TREATMENT of NERVOUS and MENTAL DISORDERS in both sexes Large country house beautifully situated in its own grounds Croquet lawns hard tennis court billiards wireless installation throughout Every facility for specialised modern treatment Ultra psychotherapy occupational therapy ultra light diathermy Private rooms with special if required Voluntary Temporary and Certified patients received —For terms apply to the Medical Superintendent HELEN S E MURRAY M D
Nat Tel 130

HERMOSA, TEIGNMOUTH, S DEVON PAYING GUESTS
Highly recommended Restful home Garden tennis courts Hot and cold in bedrooms South aspect Terms from 3 guineas weekly

BISHOPSTONE HOUSE, BEDFORD
A select Private Mental Home for Ladies Certified and Voluntary with separate House and Grounds for Voluntary Boarders Under personal supervision of a Resident Mental Specialist and Physician Medical Supt Dr J LINGHAM MACKAY Bedford 2703

TYKEFORD ABBEY,
NEWPORT PAGNELL, BUCKS
FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest standing in 15 acres of garden and parkland and is situated 14 miles from Northampton and 54 miles from Bedford on the main London to Northampton Road Trains from London both services are frequently stopped. Psychotherapeutic Treatment is used extensively in suitable cases. Resident Medical Officer. Massage, Electrical Light, Diathermy and Four Baths. Billiards Tennis etc.

Apply D. D. E. M. DOUGLAS-MORRIS
Telephone Newport Pagnell 141

HILL END HOSPITAL AND CLINIC
FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS
(20 miles from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on modern lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital. Convalescent or mild cases can be treated in a delightful country mansion with extensive grounds known as

HIGHFIELD HALL,

situate about a mile away from the Hospital. FEES TWO TO THREE GUINEAS PER WEEK.
For further particulars apply to the Medical Supt., W. J. T. KIMBER, L.R.C.P. D.P.M.
ST. ALBANS, HERTS

CHISWICK HOUSE, PINNER, MIDDLESEX
Telephone: PINNER 234.

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes.

A modern country house 12 miles from Marble Arch in beautiful secluded grounds.

Fees from 10 guineas per week inclusive. Cases under Certificate Voluntary and Temporary patients received for treatment.

Douglas Macaulay M.D. D.P.M.

STRETTON HOUSE,
Church Stretton Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit. All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provisions of the Mental Treatment Act 1930. Bracing hill country. See *Medical Directory* p. 2328.—Apply to the Medical Superintendent. Phone 10 P.O. Church Stretton.

FENSTANTON,
CHRISTCHURCH ROAD
Streatham Hill S.W.2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders. Certified Voluntary and Temporary Patients received. Large Mansion with 12 acres of grounds. (*See Medical Directory* p. 2312.) Apply Resident Physician. *Telephone* Tulse Hill 7181.

BAILBROOK HOUSE, BATH

For sufferers from Nervous and Mental Disorders with or without certificates.
The house is gloriously situated in wooded grounds of 20 acres with magnificent views of the City and the Avon Valley. (See *Medical Directory* page 2322.)
For terms apply A. GUIRDHAM, M.A., D.M., B.Ch., D.P.M., Resident Physician.
Telephone Batheaston 8189.

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded grounds. For Ladies and Gentlemen suffering from Nervous or Mental Illness. Voluntary Patients. Temporary Patients and Patients under Certificate are admitted for treatment. Fees from 4 guineas a week upwards according to requirements. A few vacancies exist for Ladies and Gentlemen at reduced fees on the recommendation of the Patient's own Physician. Apply to Dr. J. A. SMALL. Telephone 80 Norwich. Telegrams Small 80 Norwich.

ST. ANDREW'S HOSPITAL
FOR MENTAL DISORDERS
NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

Patron THE MOST HON. THE MARQUESS OF EXETER, C.I.G., A.D.C.

Medical Superintendent THOMAS TENNENT, J.D., F.R.C.P., D.P.H., D.P.M.

This Registered Hospital is situated in 100 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or wish to prevent recurrent attacks of mental trouble temporary patients and certified patients of both sexes are received for treatment. Clinical, bacteriological, biochemical and pathological examinations. Private rooms with special nurses may be had in the Hospital or in one of the numerous villas in the grounds of the Institution, both can be provided.

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted. It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders. It contains special departments for hydrotherapy by various methods, including Turkish and Russian baths, the prolonged immersion bath, Vichy Douche, Scotch Douche, Electrical bath, Psychic cures, treatment etc. There is an Operating Theatre, a Dental Surgery, an X-ray room and Ultra Violet Apparatus, and a Department for Diathermy and High Frequency treatment. It also contains Laboratories for biochemical, bacteriological and pathological research.

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 600 acres. Milk, meat, fruit, and vegetables are supplied to the Hospital from the farm, gardens and orchards of Moulton Park. Occupation Therapy as a feature of this branch and patients are given every facility for occupying themselves in farming, gardening and fruit growing.

BRYN-Y-NEUADD HALL

The seaside house of St. Andrew's Hospital is beautifully situated in a park of 40 acres, Llanfairfechan, on the finest scenery in North Wales. On the North West side of the Estate a mile of sea coast forms the boundary. Patients may visit this Branch for a short seaside change or for longer periods. The Hospital has its own private bathing house on the seashore. There is trout-fishing in the park.
At all the branches of the Hospital there are cricket grounds, football and hockey grounds, lawn tennis courts (grass and hard courts), croquet grounds, golf courses and bowling greens. Ladies and gentlemen have their own gardens and facilities are provided for handicrafts, such as carpentry, etc.

For terms and further particulars apply to the Medical Superintendent (Telephone No. 2356 and 2357 Northampton), who can be seen in London by appointment.

COURT HALL, KENTON, near EXETER,
for the treatment of eight Ladies, voluntary, temporary or certified patients
Large gardens and own dairy

CLIFFDEN, TEIGNMOUTH for early and convalescent cases. A well appointed house with spacious balconies and extensive views of the South Devon coast. Sub tropical gardens, own dairy in 25 acres. Private road to beach.

		Telephones
Resident Physicians	BERTHA M. MULES, M.D., B.S.	Starcross 59
	ANNE S. MULES, M.R.C.S., L.R.C.P.	Teignmouth 289

THE COPPICE, NOTTINGHAM
HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment. It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted. Occupational Therapy. Voluntary and Temporary Patients received.
Tel. 64117. *For terms, etc. apply to the Medical Superintendent.*

HAYDOCK LODGE
NEWTON-LE-WILLOWS LANCASHIRE

Telegrams Street, Ashton-in-Makerfield. *Phone* Ashton-in-Makerfield 7311.

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntarily temporarily or under Certificate. Patients are classified in separate buildings according to their mental condition.
Situated in park and grounds of 400 acres. Self-supported by its own farm and gardens in which patients are encouraged to occupy themselves. Every facility for indoor and outdoor recreation. For terms, prospectus, etc. apply MEDICAL SUPERINTENDENT.

NORTHUMBERLAND HOUSE,
GREEN LANES, FINSBURY PARK, N.4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses. Conveniently situated and easy of access from all parts. Six acres of ground highly situated facing Finsbury Park. Voluntary and Temporary Patients received without certification. Occupational Therapy. Psychotherapy and other modern forms of treatment.
Telephone STAMFORD HILL 2623. Telegrams "SUBSIDIARY, LONDON."
Convalescent Home KEARSNEY COURT, DOVER. For further particulars apply to the Medical Sup

NEW LODGE CLINIC, WINDSOR FOREST,

This Clinic was founded in 1921 in order to provide for the scientific investigation and treatment of disease by a 'team' of physicians and specialists

All forms of non infectious medical cases are admitted, special attention being paid to disorders of digestion and metabolism arthritis anaemias, asthma, heart and kidney disease, and functional and organic nervous disorders

Particulars can be obtained on application to the Secretary, New Lodge Clinic, Windsor Forest, Berks
Telephone 181 and 182 Winkfield Row

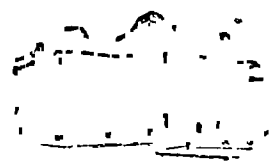
THE CLINIC

20 Devonshire Place
London, W.1

Tel Welbeck 4444 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns to 18 gns per week (Average—14 gns)
8 Operating Theatres
150 State Registered Nurses
2 Resident Medical Officers (for emergencies)
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary



CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS.

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy Cases of alcoholism and drug addiction are admitted The Physiotherapy Department has separate units fully equipped for X ray work heliotherapy short wave therapy electro therapy and hydrotherapy (swimming bath prolonged baths Scotch and Vichy douches Plombieres treatment electric and Turkish bath cabinets etc) There is a fully equipped gymnasium under qualified instructors Facilities are provided under special recreational therapists for all indoor and outdoor games including golf course cricket football and hockey grounds lawn tennis and squash courts croquet and bowling greens

The Hospital has its own Cinema Library and Hairdressing Saloon Terms include regular motor drives

Private rooms suites or villas are available and special nurses can be provided

The Hospital grounds extending to nearly 1 000 acres are situated in delightful country and include an extensive farm (1 T herd) gardens and orchards

As the Hospital is well endowed terms are exceptionally moderate e g First Department 3 to 30 guineas per week Second Department 2 and 2½ guineas per week Voluntary and certified patients are received Medical Certificates given anywhere in the British Isles are valid for admission of patients For prospectus necessary forms and further information apply to

Physician Superintendent P K McCOWAN JP MD FRCP DPM Barrister at Law
July 1st Tel Dumfries 1119

SHAFTESBURY HOUSE, FORMBY BY THE SEA, Nr Liverpool

Specially built and licensed for the care and treatment of a limited number of Ladies and Gentlemen suffering from Nervous and Mental breakdown Voluntary and certified patients received Ladies also admitted as Temporary Patients without Certification Terms moderate

Apply RESIDENT PHYSICIAN who may be seen at 31 Rodney Street Liverpool by appointment
Tel No 8 Formby

BARNWOOD HOUSE
GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS Within two miles of the G W and L M & S Railway Stations at Gloucester the Hospital is easily accessible by rail from London and all other parts of the United Kingdom It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres Voluntary Patients of both sexes also are received for treatment Special accommodation is also provided at five villa residences all of which stand in their own grounds and are entirely separate from the main hospital For particulars as to terms etc apply to G W T H FLEMING M R C S L R C P D P M Physician Superintendent
Telephone No 6207 Gloucester

RUSSELLS

HEMEL HEMPSTEAD RD WATFORD
Telephone WATFORD 5917

A convalescent home for the care and treatment of mild and recoverable nervous conditions in both sexes The house is situated high up in 40 acres of grounds 17 miles from London at the termination of the Watford by pass One Medical Officer is in residence and two others are in daily attendance Fees from ten guineas a week inclusive

Apply RESIDENT MEDICAL OFFICER.

THE GROVE HOUSE,
CHURCH STRETTON SHROPSHIRE

A private Home for the care of and treatment of a limited number of Ladies mentally afflicted Voluntary and Temporary Patients received under the new Mental Treatment Act 1930
Medical Superintendent Dr McCLINTOCK

HALLIFORD HOUSE, UPPER HALLIFORD, SHEPPERTON *Established in 1841*

This handsome secluded residence standing in a park of 36 acres situated 16 miles from London is licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections

Voluntary or certified cases received Terms moderate Patients are under the constant personal care of the Resident Medical Superintendent Dr R A Stewart from whom full particulars can be obtained Tel Sunbury on Thames 70

"ECCLESFIELD," Staplehurst, Kent
(Removed from Ashford Middlesex)

PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large mansion beautifully situated in 100 acres of park land Extensive views Home farm R C Chapel Under the management of the Sisters of the Good Shepherd Apply Rev Mother Tel Staplehurst 61

SPRINGFIELD HOUSE
Near BEDFORD ('Phone 3417)

For Mental Disorders with or without Certificates
Resident Physician CEDRIC W BOWER
Ordinary Terms Five Guineas per week
(Including separate bedrooms where suitable)
Interviews in London by Appointment

CITY OF LONDON MENTAL HOSPITAL
DARTFORD KENT

Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upwards

ALCOHOLISM,

DRUG HABITS, AND NERVOUS DISORDERS

25 minutes from London situated in charming grounds and country, "a home from home" for those seeking rest and treatment under medical supervision Fees from 6 guineas Illustrated brochure on application to the Matron or the RESIDENT MEDICAL SUPERINTENDENT, E G MORRIS L R C S I L R C P I Consultant L C F CHEVENS M R C S L R C P D P M
CHISLEHURST 451

OLD HILL HOUSE
CHISLEHURST - KENT



HOME FOR EPILEPTICS

MAGHULL (near LIVERPOOL)
FARMING and OPEN AIR OCCUPATION for PATIENTS

A few vacancies in 1st and 2nd Class Homes FEES 1st Class (men only) from £3 per week 2nd Class (men and women) 3 wards

For further particulars apply
C EDGAR GRISEWOOD, A.C.A.
Secretary, 20 Exchange Street East Liverpool

EPILEPSY

Owing to extensions there are present a few Vacancies at the

DAVID LEWIS COLONY

for Ladies and Gentlemen who are Epileptic, but are of good intelligence and sound mind

Colony life gives to most people who have epilepsy the best chance of happiness and contentment

Apply to the Director,

The David Lewis Colony,
Warford, Alderley Edge

BETHLEM ROYAL HOSPITAL, for Nervous and Mental Disorders,

Monks Orchard, Monks Orchard Road, Eden Park, Beckenham, Kent

Reg Tel Address Bethlem Beckenham *Station* Eden Park (Southern Railway) *Telephone* Elmers End 1100-1

President VISCOUNT WAKEFIELD OF HYTHE G C V O
Treasurer SIR LIONEL FAUDEL PHILLIPS BART
Physician Superintendent J G PORTER PHILLIPS M D F R C P

This REGISTERED HOSPITAL is situated at Monks Orchard in the midst of 200 acres of park pleasure and farm grounds
Application can be considered on behalf of patients of the educated classes in a presumably curable condition
With a view to early treatment voluntary or certified patients are admitted
Patients who can contribute 5 guineas weekly towards the cost of treatment and maintenance may be received as vacancies arise The Committee will also consider applications for admission at lower rates and in certain cases will be prepared to admit patients free of charge
The comfort of sensitive patients is greatly enhanced by the fact that the majority are given single bedrooms
TREATMENT ON MODERN PRINCIPLES—Every facility for specialised investigation and treatment is provided in the Lord Wakefield of Hythe Scientific and Treatment Unit in London RADIOLOGICAL and DENTAL DEPARTMENTS BIO-CHEMICAL PATHOLOGICAL and PSYCHOLOGICAL LABORATORIES
The Medical Staff have access to a panel of Consultants in cases which present unusual symptoms requiring specialised investigation and treatment
Under the direction of qualified officers HELIO-THERAPY HYDRO-THERAPY and ELECTRO-THERAPY are administered in the Physio-Therapy Department
INSULIN TREATMENT—For special cases of mental disorder Insulin Treatment is being carried out with good results and suitable cases are accepted
OCCUPATIONAL THERAPY in the form of various Arts and Crafts is actively encouraged from the medical aspect and under the guidance of a competent Instructress this department has proved most effective as a therapeutic factor in all classes of mental illness
The prescription of physical fitness is a prominent item of treatment and this is enhanced by arrangements for patients to take part in Outdoor and Indoor Sports and Entertainments, and special attention is drawn to the physical and dancing classes which form part of the regular hospital routine
Application should be made to the PHYSICIAN SUPERINTENDENT

CHEADLE ROYAL HOSPITAL

CHEADLE, CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay North Wales, is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES
The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary
In addition to the Main Building there are separate villas Extensive grounds Hard and grass tennis courts cricket and croquet grounds, and a court for badminton There are also extensive installations Golf may be had within easy distance Occupational therapy
VOLUNTARY TEMPORARY AND CERTIFIED PATIENTS received
The Hospital is nine miles from Manchester 10 minutes by rail from Liverpool and 3½ hours from London
For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT
Telephone GATLEY 2231 (3 lines)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds Detached Villas. Chapel Garden and dairy produce from own farm. Terms very moderate.

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds, with tennis courts etc which Voluntary Temporary or Certified Patients may visit by arrangement, for long or short periods.

Illustrated Brochure on application to the Medical Superintendent, The Old Manor Salisbury 'Phone Salisbury 2251.

CALDECOTE HALL

NUNEATON
WARWICKSHIRE
(Phone Nuneaton 241)

Residential treatment of
FUNCTIONAL NERVOUS DISORDERS
Including Alcoholism and other Addictions
(Certifiable Cases are not received)

This beautiful mansion situated in the heart of the country (less than two hours from London by L M S R) and surrounded by charming pleasure grounds in which games and outdoor occupational therapy are available is devoted to the treatment of Functional Nervous Disorders by psychotherapeutic and ancillary methods.

Illustrated brochure and prospectus obtainable from A E CARVER M.D., D.P.M., Resident Medical Superintendent

CAMBERWELL HOUSE, 33, Peckham Road, London, S E 5.

Telegrams "PSYCHOLIA LONDON" FOR THE TREATMENT OF MENTAL DISORDERS *Telephone* RODNEY 4242 (2 lines)

Also completely detached villas for mild cases with private suites if desired Voluntary patients received Twenty acres of grounds Hard and Grass Tennis Courts Putting Greens, Bowls Croquet Squash Rackets Recreation Hall with Badminton Court and all indoor amusements including Wireless and other Concerts Occupational Therapy Callisthenics and Dancing Classes *X* ray and Actino therapy Prolonged Immersion Baths Operating Theatre Pathological Laboratory Dental Surgery and Ophthalmic Dept. Chapel Senior Physician Dr HUBERT JAMES NORMAN assisted by three Medical Officers also resident, and visiting Consultants
An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary
The Convalescent Branch is HOVE VILLA, BRIGHTON and is 200 feet above sea level.

PECKHAM HOUSE, 112, Peckham Road, London, S E 15.

Telegrams Alleviated London. Telephone Rodney 2641 2642

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders Certified voluntary and temporary patients are received Separate houses for treatment and accommodation of special cases adjoin the Institution Occupational therapy physical drill and other forms of modern treatment There is a seaside branch Kearsney Court near Dover to which patients may be sent for treatment or on holiday Motor drives are arranged when required Tennis courts Entertainments dances and indoor amusements held throughout the year Terms from £3 3s per week. Illustrated prospectus and further particulars can be obtained from the Medical Superintendent.

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date Lovely house and grounds (18 acres) Certified and uncertified cases taken Facilities for going to the seaside

ESTABLISHED OVER 200 YEARS

Apply to Med Supt for illustrated brochure Tel. SALISBURY 2612

TOR-NA-DEE SANATORIUM

MURTLE DEESIDE ABERDEENSHIRE

FOR THE DIAGNOSIS AND TREATMENT OF ALL FORMS OF TUBERCULOSIS

Managing Director DAVID LAWSON, M D, F R S E.

Southern aspect Low rainfall Pure bracing air Sheltered grounds Beautiful surroundings All modern equipment for diagnosis and treatment, including operating theatre **No extra charge for X Rays, Artificial Pneumothorax, Ultra-Violet Light, or other special treatment**

Day and Night Nursing Staff All bedrooms have central heating electric light, hot and cold running water, and wireless (headphones) Comfortable and airy public rooms

Medical Superintendent J M JOHNSTON, M B, M R C S, D P H For terms and prospectus apply to the Secretary Telephone CULTS 107

PENDYFFRYN HALL SANATORIUM

BETWEEN CONWAY AND PENMAENMAWR, NORTH WALES

All Modern Methods of Treatment Available

Ideally situated for the treatment of Tuberculosis Sheltered from E and N E winds Climate mild and bracing Low rainfall high average of sunshine The Sanatorium is situated in its own park There are miles of graduated walks through pine gorse and heather rising to 1 000 ft and commanding extensive sea and mountain views Central heating electric light X ray installation Wireless in all rooms Full day and night nursing staff Special milk supply from a tuberculin tested herd Easily accessible from LONDON (4½ hours) MANCHESTER LIVERPOOL BIRMINGHAM and the North

Resident Physicians **Dennison Pickering M D, J W Pugh, M B, B Ch**

For particulars apply to the Secretary Pendyffryn Hall Nr Penmaenmawr North Wales Phone 0

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills, seven miles from Cheltenham, for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S S W, sheltered from North and East, elevation 800 feet Pure bracing air **Special Treatment by Artificial Pneumothorax** (X ray controlled) **Tuberculins and Ultra-violet Rays** are available when necessary without extra charge **X-ray plant** Fully equipped Dental Department Electric light Radiators, hot and cold basins and Wireless in all rooms Up to date main drainage

Full day and night Nursing Staff **Terms 5 gns to 7½ gns a week inclusive**

Med Supt GEOFFREY A HOFFMAN B A M B T C Dub *Asst Phys* MARGARET A HARRISON M B B S Lond *Pathologist* EDGAR N DAVEY M B B Ch *Consult Laryngologist* G N BARKER F R C S Edin D L O *Consulting Dental Surg* GEORGE V SAUNDERS L D S R C S Lond Apply Secretary The Cotswold Sanatorium Cranham Gloucester *Tel* 81 and 82 WITCOMBE *Grams* HOFFMAN BIRDLIP

THE TAVISTOCK CLINIC (Institute of Medical Psychology)

MALET PLACE, LONDON, W C 1

THE YEAR'S COURSE IN PSYCHOTHERAPEUTIC THEORY AND METHOD begins annually in October

The number to be admitted to this Course is limited and applications are now being received

The lectures which form a part of the work of this Course are open to all registered medical practitioners

A week end Course on MARRIAGE PROBLEMS begins on Saturday, October 1st

For detailed syllabus of these and other Courses apply to the EDUCATIONAL Secretary at the Clinic

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)

CITY ROAD, E C 1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Dental Clinics and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Resdential) Nearly 2 000 patients annually

RALPH B CANNINGS Secretary

EXAMINING BOARD IN ENGLAND

BY THE

ROYAL COLLEGE OF PHYSICIANS OF LONDON

AND THE

ROYAL COLLEGE OF SURGEONS OF ENGLAND

Notice is hereby given that the following Examinations will commence on the dates stated below

DIPLOMA IN CHILD HEALTH
FRIDAY September 30th

DIPLOMA IN PUBLIC HEALTH
FRIDAY October 7th

Candidates who have fulfilled the necessary conditions and who desire to present themselves for Examination must give notice in writing to the Secretary Examination Hall 8/11 Queen Square London W C 1 at least twenty-one days before the date of the Examination transmitting at the same time such certificates as may be required by the Regulations of the Board

HORACE H REW Secretary

THE POLYTECHNIC, REGENT STREET, W 1

DEPARTMENT OF CHEMISTRY AND BIOLOGY

Head of Department
H LAMBOURNE M A M Sc F I C

DAY COURSE IN CHEMISTRY PHYSICS AND BIOLOGY AND EVENING COURSE IN CHEMISTRY AND PHYSICS

For the 1st MEDICAL and PRE MEDICAL EXAMINATIONS

New Session Commences

Day	September 20th 1938
Evening	September 26th 1938

Fee to London students

Day	£8 8 0 per term
Evening	£2 2 0 per term

Early application should be made to the Director of Education

EXPERIENCED COACHING IN PHYSIOLOGY Pathology and Medicine by M D Lond (Hons) M R C P Lond B Sc Physiology Lond All exams Classes held—Address No 7902 B M A House Tavistock Square W C 1

DIPLOMAS IN MEDICAL RADIOLOGY.

ST. BARTHOLOMEW'S HOSPITAL, E C 1

A complete course of study for—

(a) The ACADEMIC DIPLOMA of MEDICAL RADIOLOGY, University of London, and

(b) The DIPLOMA of MEDICAL RADIOLOGY, Conjoint Board

will be given by St Bartholomew's Hospital and College beginning Monday 3rd October 1938

Tuition will be provided for both Parts I and II of the above

If accommodation is available a limited number of students will also be accepted for a course of instruction in Practical Radiology for Part II of the Diploma in Medical Radiology and Electrology Cambridge University

Application should be made to the Dean of the Medical College St Bartholomew's Hospital E C 1

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17, RED LION SQUARE, LONDON, W C 1

FOUNDED IN 1882 BY E. S. WEYMOUTH, I.A. (Lond.) *Telephone* Holborn 6313

POSTAL OR ORAL PREPARATION FOR ALL MEDICAL EXAMINATIONS

SOME SUCCESSES

M.D. (Lond.),	1901-37 (11 Gold Medals during 1913-37)	413	
M.S. (Lond.),	1901-37 (including Gold Medallists)	24	
M.B., B.S. (Lond.),	*Part I.* 1918-37 (Completed Exam.)	255	
F.R.C.S. (Eng.),	1919-37 *Part I.*	199	*Part I* 192
M.R.C.P. (Lond.),	1919-37	286	
D.P.H.	(Various) 1906-37 (Completed Exam.)	348	
F.R.C.S. (Edin.),	1918-37	65	
M.R.C.S., L.R.C.P.	*Final* Exam.) 1919-37 (Completed	606	
M.D.	(Various) By Thesis	Numerous successes	

Preparation for the above and for the Pre-Medical and subsequent examinations for M.R.C.S., L.R.C.P. and M.B. of various Universities, also D.P.M., D.O.M.S., D.T.M. & H., D.L.O., D.M.R.E., D.C.O.G., M.C.O.G., M.M.S.A., L.M.S.S.A., etc., also some examinations of Dominion Universities.

ORAL CLASSES.—M.R.C.P., M.D. Primary and Final F.R.C.S., F.R.C.S. (Edin.), Final M.B., B.S., and M.R.C.S., L.R.C.P. Museum and Microscope Work. Also Private Tuition for all Medical Examinations.

MEDICAL PROSPECTUS (47 pp.)

Contents: The method and the cost of entering the Medical Profession. *Particulars of all Medical Examinations*. Postal Courses and Oral Classes. Suggestions for the higher Medical Examinations. Suggestions for the higher Surgical Examination. Suggestions for the Special Diploma Examinations. Refresher Courses. Opening for Women. Hints for writing theses.

Medical Prospectus sent gratis, along with list of Tutors etc., on application to the Principal, 17 Red Lion Sq., London, W.C.1 (Telephone: Holborn 6313.)

THE LONDON SCHOOL OF DERMATOLOGY

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN,

5 LISLE STREET, LEICESTER SQUARE, W.C.2

The CHESTERFIELD LECTURES constituting a systematic Course in Dermatology will be given at 5 p.m. from October 4th to December 1st, 1938, and during January and February, 1939.

SYLLABUS—WINTER SESSION, OCTOBER 4th to DECEMBER 1st, 1938

1938		Subject	Lecturer
Oct. 4	Tues.	Eczema	Dr. W. GRIFFITH
" 6	Thurs.	Animal Diseases Communicable to Man	Dr. M. SYDNEY THOMSON
" 11	Tues.	Treatment of some Common Skin Diseases	Dr. J. E. M. WIGLEY
12	Wed.	Introduction to Histopathology of the Skin	Dr. I. MUENDE
" 13	Thurs.	Ringworm Infections	Dr. J. M. H. MACLEOD
" 18	Tues.	Psoriasis	Dr. H. W. BARBER
19	Wed.	Histopathology of Common Skin Diseases	Dr. I. MUENDE
25	Tues.	Virus Diseases of the Skin	Dr. G. DUCKWORTH
27	Thurs.	Dermatological Neuroses	Dr. W. J. O'DONOVAN
Nov. 1	Tues.	Skin Affections of the Hands and Feet	Dr. G. B. M. HEGGS
Nov. 3	Thurs.	Syphilis Through Four Centuries	Dr. H. CORSI
8	Tues.	Malignant Growths of the Skin	Dr. H. MACCORMAC
9	Wed.	Histopathology of Chronic Granulomata	Dr. I. MUENDE
" 10	Thurs.	Seborrhoea and Seborrhoeic Dermatitis	Dr. G. B. DOWLING
" 15	Tues.	Infantile Eczema and Papular Urticaria	Dr. W. N. GOLDSMITH
" 16	Wed.	Histopathology of New Growths of the Skin	Dr. I. MUENDE
22	Tues.	Cutaneous Affections due to Sunlight	Dr. HUGH GORDON
24	Thurs.	The Sarcoids and Lupus Pernio	Dr. A. M. H. GRAY
29	Tues.	Electro-Therapeutics	Dr. R. T. BRAIN
Dec. 1	Thurs.	Bullous Eruptions	Dr. J. L. FRANKLIN

A further Course will be held during January and February, 1939.

An Examination will be held at the end of the course in March and the CHESTERFIELD MEDAL will be awarded to the best candidate provided the required standard is reached. An intensive Course will also be held during the month of May.

CLINICS.—Instruction will be given daily in the Out-Patient Department as follows:—

Monday 2 P.M.	Dr. GRIFFITH	Wednesday 2 P.M.	Dr. WIGLEY	Friday 2 P.M.	Dr. FORMAN
6 P.M.	Dr. MUENDE (Pathologist)	6 P.M.	Dr. DOWLING	6 P.M.	Dr. BRAIN
Tuesday 2 P.M.	Dr. DUCKWORTH	Thursday 2 P.M.	Dr. CORSI	Saturday 9.30 A.M.	THE MEDICAL
6 P.M.	Dr. HEGGS	6 P.M.	Dr. GOLDSMITH		REGISTRAR.

LABORATORY.—Arrangements can be made for Classes, individual instruction or for research work. For Particulars and Fees apply to the Dean.

FEES.—For Hospital Practice including Lectures, One Guinea per month. Registered Medical Students may attend the Lectures free on signing their names and giving the name of their Hospital.

Medical Practitioners will be welcome as occasional visitors on presentation of their cards. For further particulars apply to the Dean or Secretary.

LEONARD G. R. TURPIN, Secretary. J. E. M. WIGLEY, M.B., F.R.C.P., Dean.

WEST LONDON HOSPITAL MEDICAL SCHOOL

Undergraduate Students (men and women) reading for University Degrees in Medicine are accepted for the Clinical Period of study only.

For further particulars apply to the Dean, WEST LONDON HOSPITAL, HAMMERSMITH, W.6.

TELEPHONE: RIVERSIDE 3441

THE MEDICAL AND DENTAL DEFENCE UNION OF SCOTLAND, LIMITED

Secretaries and Registered Office: Millar, Thomson & Dunlop, C.A., 113 St. Vincent Street, Glasgow, C.2

ANNUAL SUBSCRIPTION £1 *ENTRANCE FEE 10/-*

No entrance fee to those joining within 12 months of obtaining qualification. Benefits include defence of claims for alleged negligence in professional work including unlimited indemnity and costs and advice on professional difficulties.

Particulars and forms of application can be obtained from the Secretaries at the above address.

VALUABLE BOOK FREE

Are you preparing for any Medical or Surgical Examination?

Do you wish to specialise in any Branch of Medicine or Surgery?

Send Coupon below for our valuable publications

"Guide to Medical Examinations"
"The M R C P, and How to Obtain It"
"The F R C S Eng, and Other Higher Surgical Examinations"
"How to Write a Thesis for the M D Degree"
"Guide to the M D (London)"
"Guide to the D P M Examinations"
"Guide to Dental Examinations"
"Guide to Higher Examinations for Nurses"

Any of the above will be sent post free on application

Leaflets dealing with the following examinations have also been prepared and will be sent post free on application

"Diploma in Child Health"
"Diploma in Anaesthetics"
"Diploma in Radiology"
"Diploma in Laryngology"
"Diploma in Ophthalmology"
"Diploma in Bacteriology"

We specialise in COACHING for ALL MEDICAL EXAMINATIONS

Send Coupon below for any booklet and all information relating to your Examination

The Secretary, MEDICAL CORRESPONDENCE COLLEGE,
19, Welbeck Street, London, W 1

Sir—Please send me the following booklets by return

Name
Address
Examination in which interested
Publications required

MASTERY OF MIDWIFERY

OF THE SOCIETY OF APOTHECARIES OF LONDON (M M S A)

The Mastery of Midwifery is designed to give evidence of intensive study and practical experience in Ante Natal Care, Midwifery, and Infant Welfare and their relation to Hygiene and Preventive Medicine

The Diploma of the Mastery indicates competence to undertake the responsible control of Maternity and Child Welfare work

The tests imposed are stringent the examination written oral and clinical demands thorough and detailed knowledge gained by practical experience and constitutes a definite endeavour to combat Maternal and Infant Mortality

Examinations are held twice yearly in the months of May and November

Regulations and forms of application for admission to the examination may be obtained from —

THE REGISTRAR, The Society of Apothecaries, Water Lane, E C 4

Telephone and Telegrams Central 1143

THE LONDON HOMOEOPATHIC HOSPITAL

(Incorporated by Royal Charter)

GREAT ORMOND ST, & QUEEN SQUARE, W C 1

Telephone Terminus 3091
Telegrams Similimum Holb London

Education Facilities for Graduates and Senior Students of Medicine

WINTER SESSION, 1938-39

HONYMAN-GILLESPIE LECTURESHIP

30th Year

A Course of Lectures on HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS accompanied with CLINICAL DEMONSTRATIONS will be given by CHARLES E WHEELER M D B S B Sc Lond Consulting Physician to The London Homoeopathic Hospital at the Hospital on

Mondays and Thursdays October 1938 to March 1939 commencing Monday October 17th, at 5 o'clock On the First Thursday of the month the hour is 3 30 p m

The COMPTON-BURNETT LECTURES

A Course of Ten Lectures on HOMOEOPATHIC PHILOSOPHY AND PRESCRIBING as illustrated from the writing of the Organon and Modern Developments therefrom are given by Sir JOHN WEIR K C V O M B Ch B Glas (Physician to His Majesty the King Physician in Ordinary to H M Queen Mary and Physician to The London Homoeopathic Hospital) at the Winter Session only on

Fridays at 5 p m October to December commencing Friday, October 14th

AN INTRODUCTORY LECTURE TO THE WHOLE EDUCATION COURSE

entitled The Present Day Confirmation of the Homoeopathic Approach will be delivered by kind permission in the Barnes Hall of the Royal Society of Medicine 1 Wimpole Street W 1 by FRANCIS HERVEY BODMAN M D Bristol M B Ch B M R C S L R C P on Thursday October 13th 1938 at 5 p m

Medical Men and Women are invited to attend this Lecture

TUTORIAL CLASS

A class for individual study of the Materia Medica by the Repertory and References to Patients will be conducted by DOUGLAS M BORLAND M B Ch B Glas Physician to the London Homoeopathic Hospital on

Fridays at 6 15 p.m. October to March commencing October 14th.

CLINICAL TUTORIALS

On Monday and Friday afternoons at 2 o'clock throughout both the Winter and Summer Sessions the Medical Tutor to the Hospital WILLIAM WILSON RORKE M B Ch B Glas will conduct an Out patient Clinic for the purpose of instruction in the application of Homoeopathic principles

THE SIR HENRY TYLER SCHOLARSHIP COMMITTEE

also offer SCHOLARSHIPS to Medical Men of the Province desirous of taking a Post Graduate Course at The London Homoeopathic Hospital during the Ten Compton Burnett Lectures

Prospectus and further information regarding scholarship may be obtained on application to the Dean of the Education Committee The Homoeopathic Hospital W C 1

CORRESPONDENCE COURSE

For the benefit of Doctors unable to attend the Post Graduate Lectures a Post-Graduate Correspondence Course has been initiated under the auspices of the British Homoeopathic Association For particulars apply to the Medical Secretary British Homoeopathic Association 45 Russell Square London W C 1

THE LONDON SCHOOL OF DERMATOLOGY

St John's Hospital for Diseases of the Skin
5 Lisle Street Leicester Square W C

Conducted by the Honorary Staff of the Hospital together with the Physicians in charge of the Dermatological Departments of the London Teaching Hospitals Lectures Demonstrations twice weekly during January and November and again during February and four times weekly during March and April General Practitioners will be welcomed as visitors on presentation of their Cards Clinics at 2 p m and 6 p m Saturdays at 10 a m Laboratory is particularly well equipped Special arrangements can be made for the instruction of individual students Enquiries The Dean or Secretary of the

HOSPITAL FOR SICK CHILDREN

GREAT ORMOND STREET, LONDON, W C 1

MEDICAL SCHOOL for POST-GRADUATES

THE HOSPITAL CONTAINS 326 BEDS with an average admission of over 7 000 In patients per annum whilst in the Out patient Department about 20 000 new patients are seen each year

THE MEDICAL SCHOOL is recognised by the Universities of Oxford Cambridge and London and by the Conjoint Board of England as a teaching institution where students receive instruction in the diseases of children for such period as is required by the regulations of the Conjoint Board

POST GRADUATE INSTRUCTION open to all qualified medical men and women is given daily at both morning and afternoon sessions Morning sessions 10 to 12 noon include medical and surgical out patient clinics afternoon sessions include ward visits and surgical operations Ear Nose and Throat Eye Skin and Dental Clinics once a week morbid anatomy demonstration Wednesday 11 12 noon Instruction is also given in the Venereal Diseases Department and in the use of anæsthetics in dental and tonsillectomy operations

There are three terms yearly each of approximately 13 weeks during which lectures (particulars of which are published in advance in the medical press) are given on Thursday afternoons—*Clinical* 2 3 p m *and Clinico pathological or Biochemical* 3 4 p m

Fees One week 14 guineas two weeks £3 3s one month £5 5s two months 7½ guineas three months or whole term £10 10s Clinical Clerkships in the wards are available for fourth and fifth year under graduates Ward Clinical Assistantships for post graduate students for periods of three months and upwards can be arranged

SPECIAL COURSES IN PRACTICAL PATHOLOGY consisting of six demonstrations are also given at the Hospital These courses demonstrate such methods as can be usefully carried out away from a laboratory and are of general application Fee for each course £3 3s

FULLER DETAILS may be obtained from the Secretary at the Hospital

H F RUTHERFORD Secretary W G WYLLIE Dean

DIPLOMA IN PUBLIC HEALTH, &c

THE ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE

Patron
HIS MAJESTY THE KING

Director of Bacteriological Laboratories
E GOODWIN RAWLINSON M D D I H Oxon

Director of Chemical Laboratories
ALAN WEST STEWART D.Sc A I C Public Analyst for the Metropolitan Boroughs of Islington and Paddington etc

Lecturers on Public Health etc
ALBERT E THOMAS M A M D Oxon D P H Oxon Barrister at Law
ASHLEY G G THOMPSON M A Camb M D D P H Medical Officer of Health for the Metropolitan Borough of Lambeth
GEOFFREY E OATES M D Lond (State Medicine) D I H Camb Barrister at Law Medical Officer of Health for the Borough of Paddington

The Course of Instruction can be commenced at any time Special provision is made for students who can give only part time to the work

Further particulars can be obtained from the Secretary 28 Portland Place London W 1
(Laboratories 3 Queen Square W C 1)
Telephone LANGHAM 2731/2 (Two lines)

LONDON (ROYAL FREE HOSPITAL) SCHOOL OF MEDICINE FOR WOMEN

(UNIVERSITY OF LONDON)
8, HUNTER STREET BRUNSWICK SQ W C 1
Telephone Terminus 5385

Full Courses are arranged for the London M B B S Degrees and certain Examinations of other qualifying bodies

The Clinical Course is pursued at the Royal Free Hospital with additional experience at some special hospitals

Appointments at Hospital and Medical School are open to Students after qualification

Scholarships Bursaries and Prizes of the value of £ 000 are awarded annually

Residence is available for Students in the School Chambers

The Session begins on October 1st each year Application for admission must be made by March 1st for the following October

Prospectus and full information can be obtained from the Warden and Secretary
ELIZABETH BOLTON M D B S Dean

ST. MARY'S HOSPITAL MEDICAL SCHOOL, W.2

(University of London)

The WINTER SESSION will begin on October 1st 1938

EXCEPTIONAL SITUATION	The situation of the Hospital and Medical School is unique for while it is adjacent to a large poor district with a population of 60 000 it is also within a few minutes walk of Kensington Gardens and an extensive residential district in which students can live and so avoid a daily wearisome journey to and from their work Recent structural alterations include two new operating theatres and 75 additional beds
REBUILDING OF THE MEDICAL SCHOOL	Approximately £ 0 000 has been spent in rebuilding the Medical School and Laboratories The New Buildings are now in use Apart from the Laboratories Class-rooms and Theatres for all the subjects in the Curriculum they include a Library Restaurant Students Club Billiard Room Swimming Bath Squash Rackets Court Gymnasium Boxing Ring and an underground Garage for fifty cars
COMPLETE CURRICULUM	The entire Curriculum is provided and students may join the School at one of three dates after matriculation
SPECIAL CLINICAL FACILITIES	The formation of Clinical Units in Medicine and Surgery has been an important advance in connection with the Clinical teaching and this has been further developed by the affiliation for teaching purposes of several of the Hospitals in the neighbourhood bringing up the total number of beds available for teaching to 1 600 By agreement with Queen Charlotte's Lying in Hospital all students of St Mary's attend a short course of instruction there without extra fee before entering upon their duties in the Maternity District of St Mary's
INSTITUTE OF PATHOLOGY AND RESEARCH	The Institute of Pathology and Research under the directorship of Sir Almroth Wright F R S embraces seven departments the heads of which are members of the Honorary Staff of the Hospital
RESEARCH STUDENTSHIPS	A considerable sum is devoted annually to research and a part of this is applied to the upkeep of Research Scholarships designed to enable students recently qualified to learn the technique of research work
ENTRANCE SCHOLARSHIPS	All Entrance Scholarships are awarded annually by nomination The Geraldine Harmsworth Scholarship (£200) and other University Scholarships are open to members of British Universities who have completed their examination in Anatomy and Physiology
APPOINTMENTS AFTER QUALIFICATION	Numerous appointments are open to newly qualified members of the Medical School Six House Physicians (eight months) Ten House Surgeons (six to eight months) and Four Resident Obstetric Officers (six months) are appointed annually Two Resident Anæsthetists (six months) £1 0 per annum Four Casualty House Surgeons (six months) £100 per annum with board and residence Two Medical Registrars and Surgical Registrar £ 00 per annum with partial board Obstetric Registrar and Radium Registrar each £ 0 per annum with partial board In addition to the above Five Assistants to the Medical and Surgical Units are appointed from time to time with salaries ranging from £ 00 to £ 0 per annum
ATHLETIC GROUND	The Old Merchant Taylors Ground (13 acres) has been acquired On said it remains dry throughout the winter

The Illustrated Prospectus can be obtained from the School Secretary St Mary's Hospital Paddington W 2

C M WILSON (*M C*) M D F R C P, Dean

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL MEDICAL SCHOOL

(FOUNDED 1816)

HIGH HOLBORN, W.C. 1.

The R W O H is the second largest Ophthalmic Hospital in London, containing 100 Beds, and is recognised by the University of London for Studies in Ophthalmology, both for the qualifying examination and for the degree of M S It is also recognised by the Conjoint Board and other Bodies granting degrees and diplomas in OPHTHALMOLOGY

The Practice of the Hospital is open to qualified Medical Practitioners and registered Students of Medicine who may enter at any time and are eligible, on certain conditions, for appointment as Chief Clinical Assistant Clinical Assistant and Probationer Clinical Assistant

Classes are held periodically and include the following Subjects —

OPERATIVE SURGERY
THE PATHOLOGY & BACTERIOLOGY OF THE EYE
THE REFRACTION OF THE EYE
THE FUNDUS OCULI
METHODS OF EXAMINATION
MEDICAL OPHTHALMOLOGY
CLINICAL LECTURES

ORTHOPTIC DEPARTMENT

This the first to be opened in this country, is available for Medical Practitioners desirous of taking a practical course in Ocular Muscle Training—the fee for which is £5 5s 0d

FEES FOR THE PRACTICE OF THE HOSPITAL

PERPETUAL	£5 5 0	THREE MONTHS	£3 3 0
SIX MONTHS	£4 4 0	ONE MONTH	£1 1 0

The School Prospectus, which contains full information as to the D O M S, and other examinations, together with particulars of the CRUISE CLINICAL RESEARCH SCHOLARSHIP, GUTHRIE PRIZE, and various paid appointments, can be obtained from the DEAN or SECRETARY of the Hospital

Telegrams
Keratome, Westcent London

Telephones
Temple Bar 1457/9 and 7107

UNIVERSITY OF LONDON

OPHTHALMIC HOSPITAL MEDICAL SCHOOL

ROYAL LONDON OPHTHALMIC HOSPITAL

(Moorfields Eye Hospital), CITY ROAD, E.C.1

Qualified Medical Practitioners and Registered Medical Students may enter on the Practice of the Royal London Ophthalmic Hospital (Moorfields) at any time and are, on certain conditions, eligible for appointment as Chief Clinical Assistant Clinical Assistant and Junior Assistant

Courses of Instruction, extending over a period of five months, begin in OCTOBER and MARCH

1 Practical Refraction Classes
2 Methods of examination and use of the ophthalmoscope
3 Lectures every afternoon on the following subjects (*a*) Anatomy including Embryology and Normal Histology, (*b*) Physiology, (*c*) Optics, including Physiological Optics, (*d*) Pathology and Bacteriology (*e*) Ophthalmic Medicine and Surgery consisting of Medical Ophthalmology External Diseases of the Eye, Motor Anomalies and Squint Diseases of the Retina and Optic Nerve Diseases of the Uveal Tract
4 Ophthalmoscopic Conditions a practical class with demonstrations each week at 5 p m
5 Occasional Lectures on subjects allied to Ophthalmology
6 Operative Surgery In these classes the usual operations are performed by the student upon pigs eyes
7 Practical Pathology A course of demonstrations on the normal and morbid histology of the eye is given by pathologist in the laboratory
8 Practical Bacteriology
9 Classes in Radiography
10 Physico therapy (Ultra violet Light, Diathermy etc)
11 Slit lamp Microscopy

FEES —A composition fee of 35 guineas will admit Students once to all the lectures and classes (except the classes of Physico Therapy and Slit lamp Microscopy and the examination fee)

DIPLOMA IN OPHTHALMIC MEDICINE AND SURGERY AND OTHER DEGREES IN OPHTHALMOLOGY

The above complete curriculum is specially designed to meet the requirements of candidates entering for these examinations

Fees for the Practice of the Hospital

Perpetual	£5 5 0	Two months	£2 2 0
Three to six months	£3 3 0	One month	£1 1 0

Clinical work begins at 9 a m daily Operations are performed between 10 a m and 1 p m

For further particulars apply to the Secretary to the Medical School at the Royal London Ophthalmic Hospital City Road E C 1 or to the Dean Charles Coulden O B E M D M Chir F R C S

BRITISH POSTGRADUATE MEDICAL SCHOOL

(UNIVERSITY OF LONDON)

DUCANE ROAD, SHEPHERD'S BUSH, W.12.

STAFF OF SCHOOL

MEDICINE

Professor F. R. Fraser M.A., M.D., F.R.C.P.
Reader R. S. Aitken D.Phil., F.R.C.P.
Senior Assistant (L.C.C.) R. Griffith M.D.
First Assistants
J. C. Scarding M.D., M.R.C.P. (Respiratory)
I. H. Wood M.B., B.S., M.R.C.P. (Cardiovascular)
E. F. Sharples Schäfer B.A., M.Chir., M.R.C.P.
N. S. Alcock M.B., Ch.B., M.R.C.P. (Neurology)

OBSTETRICS AND GYNAECOLOGY

Professor James Young D.S.O., M.D., F.R.C.S.E., F.C.O.G.
Reader R. J. Kellar M.B., Ch.B., M.R.C.P.E., F.R.C.S.E., M.C.O.G.
Senior Assistant (L.C.C.) W. I. Field M.B., B.Ch.
First Assistants
M. Kenna M.B., B.S., M.C.O.G.
J. K. Sutherland M.B., Ch.B., M.R.C.P.
Visiting Obstetrician and Gynaecologist
V. L. Cell Armytage M.D., F.R.C.P., F.C.O.G.

RADIOLOGY

Radiologist J. Dixon White M.B., Ch.B., D.M.R.E.
Assistant Radiologist
E. J. E. Tophill M.A., M.B., B.Ch., M.R.C.S., D.M.R.E.
Physicist L. H. Clark M.Sc., Ph.D.

SURGERY

Professor G. Grey Turner D.Ch., F.R.C.S., F.A.C.S.
Reader A. K. Hirst M.B., M.Ch., F.R.C.S.I.
Senior Assistant (L.C.C.) C. H. Rob M.R.C.S., L.R.C.P.
First Assistants
A. J. Wright M.D., M.S., F.R.C.S. (Genito-urinary)
A. J. Watt M.B., B.S., F.R.C.S. (Fracture and Orthopaedic)
R. H. Franklin M.B., B.S., F.R.C.S.
R. Shackman M.B., F.R.C.S.
Assistant J. I. Griffith M.B., L.S., F.R.C.S. (Oto-rhino-laryngology)

PATHOLOGY

Professor J. H. Dible F.R.C.P.
Readers
J. Cran M.D. (Morbid Anatomy)
E. J. Kelly M.A., Ph.D. (Pathological Chemistry)
Hon. T. C. Stephen M.B., B.Ch., M.R.C.S., L.R.C.P. (Bacteriology)
Senior Assistants
J. M. Vetchinsky M.A., D.M., M.R.C.P. (Clinical Pathology)
T. H. Fell M.B., B.Sc. (Morbid Anatomy)
Assistant
C. V. Harrison B.Sc., M.B., B.Ch. (Wales), M.B., B.S. (Lond.) (Morbid Anatomy)
C. V. D. Hawley M.D., Ph.D., M.Sc. (Pathological Chemistry)
R. C. Macfarlane M.R.C.S., L.R.C.P. (Clinical Pathology)
J. Maclennan M.B., Ch.B., D.P.H. (Bacteriology)
D. M. Stone M.D., D.T.H. (Bacteriology)

ADMINISTRATIVE

Dean Colonel A. H. Lescher D.S.O., M.D., M.S., F.R.C.S.E., I.M.S. (Retd.)
Sub-Dean Dr. C. F. Newman M.D., F.R.C.P.
Secretary Paymaster Captain W. R. Seccombe R.N. (Retd.)

The British Postgraduate Medical School has been established to provide for the further and more advanced tuition in Medicine to qualified medical men and women. It is entirely reserved for those holding University Degrees or Registrable Qualifications. Students can be admitted at any time and for any period to the ordinary teaching and hospital practice of the School in Medicine, Surgery, Obstetrics and Gynaecology, Radiology and Anaesthetics. The clinical work is provided in the Hammersmith General Hospital (462 beds) which adjoins the School.

Arrangements can be made for Research and advanced work in Pathology, Bacteriology, Morbid Histology and Biochemistry. A course for the Diploma in Clinical Pathology lasting twelve months will commence on the first Monday in October.

Fees: Tuition and Hospital practice	1 month	Six guineas
	3 months	Twelve guineas
	6	Twenty-one guineas
Refresher Course		Five guineas
Course for Diploma in Clinical Pathology		Forty guineas

For further particulars apply —

THE DEAN, BRITISH POSTGRADUATE MEDICAL SCHOOL, DUCANE ROAD, LONDON, W.12.
(Shep. Bush 1260.) (Telegrams: Posgradmed, Chisk, London.)

Postgraduate students who require information or advice as to courses of study and postgraduate facilities in England should apply to the Dean. Information is also available regarding Postgraduate facilities in America and on the Continent.

For the convenience of postgraduate students who are strangers to London and students who require advice as to postgraduate facilities and courses of study a sub-office has been opened at —

The London School of Hygiene and Tropical Medicine, Keppel Street, W.C.1. (Mus. 0943.)

National Health Insurance Courses. Enquiries and correspondence regarding these Courses should be addressed to —

The Sub-Dean, British Postgraduate Medical School, London School of Hygiene and Tropical Medicine, Keppel Street, W.C.1. (Mus. 0943.)

KING'S COLLEGE HOSPITAL MEDICAL SCHOOL

(UNIVERSITY OF LONDON).

Dean JOHN B HUNTER, *M C*, M Ch F R C S

THE NEW MEDICAL SCHOOL (opened in July, 1933) contains Lecture Rooms, Lecture Hall Museum Research Rooms and Laboratories, Bio-Chemical Research Laboratory, Common Rooms and Refectory Two new Squash Rackets Courts adjoin the School

FOURTEEN ENTRANCE SCHOLARSHIPS, total value £1,530, are awarded annually

RESIDENT HOSPITAL APPOINTMENTS, numbering thirty-one are made during each year

ATHLETIC GROUND. The Athletic Ground of the Medical School is within ten minutes walk of the Hospital, and has accommodation for cricket football, hockey, and lawn tennis

SCHOOL HOSTEL. 'The Platanes, standing in large grounds, with three lawn tennis courts, provides residence for 80 students, and is within five minutes walk of the Hospital

The Dental School was opened in October, 1923 A full Course is given in co operation with King s College in preparation for Dental Degrees and Diplomas

For Particulars, Calendar of the School, and Appointments to see the School and Hospital, application should be made to the Secretary, S C RANNER, M A Cantab , King s College Hospital Medical School, Denmark Hill, London, S E 5

Telephone BRIXTON 1731 *Telegrams UNSELFISH CAMBER LONDON*

LONDON SCHOOL of HYGIENE and TROPICAL MEDICINE

(University of London)

Incorporating the Ross Institute

DIPLOMA IN PUBLIC HEALTH

The Course of Study for the UNIVERSITY OF LONDON DIPLOMA covers a period of nine months' whole time work.

THE COURSE WILL COMMENCE ON SEPTEMBER 26th, 1938

Full-time attendance is essential for Part I of the Course (September—December), but candidates selected for certain appointments in the London County Council's special hospitals will be admitted to Part II of the Course as part-time students

Inclusive FEE, 54 guineas, to cover lectures, demonstrations, the necessary practical work in public health departments and instruction in infectious diseases, etc

DIPLOMA IN TROPICAL MEDICINE AND HYGIENE (Eng)

THE COURSE OF STUDY IS DIVIDED INTO TWO PARTS Part I is a three months course and Part II a two months' course This Course of Study is recognised by the University of London as a Course for Associate Student

DATES OF THE COURSES, 1938 9

PART I *September 27th—December 16th* 1938 *January 3rd—March 24th* 1939 *April 3rd—June 2nd* 19)

PART II *January 16th—March 17th*, 1939 *April 17th—June 16th*, 1939

Fees (inclusive) Part I, £25 Part II, £15

DIPLOMA IN BACTERIOLOGY

The Course of Study for the UNIVERSITY OF LONDON DIPLOMA commences in October 1938 Inclusive FEE £47 15s As from October 1939 the fee will be 54 guineas

EPIDEMIOLOGY AND VITAL STATISTICS

Special Three-monthly Advanced Courses Composition FEE 7 guineas

INDUSTRIAL PHYSIOLOGY & PSYCHOLOGY

Two courses are provided one lasting a year the other two weeks The shorter course is restricted to persons with adequate industrial experience

For Prospectuses Synopses of Lectures etc apply to the SECRETARY, LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE KEPPEL STREET (Gower Street) LONDON W C 1 (Museum 3041)

THE MIDDLESEX HOSPITAL MEDICAL SCHOOL

(UNIVERSITY OF LONDON)

THE WINTER SESSION BEGINS ON OCTOBER 4th

The entire Medical Curriculum can be taken at this School Annual value of Scholarships and Prizes £1,000 Large Research Funds

ENTIRE CURRICULUM—THE PROVISION WHEREBY ALL THE SUBJECTS OF THE CURRICULUM INCLUDING CHEMISTRY PHYSICS AND BIOLOGY FOR THE EXAMINATIONS IN THE PRELIMINARY SCIENCES ARE TAUGHT WITHIN THE PRECINCTS of the HOSPITAL and MEDICAL SCHOOL and every effort made to encourage co ordination ensures that the student instead of proceeding to the study of the various subjects as if they were isolated and having little or no relation to each other is taught each subject by profes ors and lecturers who are instructing medical students only and are in close touch with all the other departments of the school The rebuilding of the Hospital is complete and those working in the Institution have facilities equal to or superior to those to be found in any other hospital in the United Kingdom The new buildings are not confined to the wards but include a new Out patients Department the Institute of Biochemistry and new Departments for Diseases of Children Neurology Dermatology etc In addition there is open a new Unit devoted to Clinical Research and it contains six small self contained wards and a large Clinical Lecture Theatre The newly built quarters for the Resident Officers have been enlarged and afford greatly improved facilities The following description of the work in various departments is designed to show how co ordination is carried out

CHEMISTRY is taught by Profe or W B Tuck and the cla s room and laboratories are in the immediate vicinity of thee for anatomy phy iology pharmacology patholo y and bacteriolo y This leads to a clo e a sociation with the e departments and the tudent realizes he is not learning ju t the chemistry which he requires for hi first pr fes ional examination but is acquiring knowledge which he will need and have to ap ly in later years

THE DEPARTMENT OF PHYSICS is under the charge of Profe or Sidney Ru who is al o Physician to the Ho ital and engaged in research work involving the u e of X rays Radium Ultra Violet Ray and oth r form of radiation He is in clo e touch with the department of phy iology and p thology and take an active part in departments for clinical therapeutic under his direction the student will realize at once that he is not tudying an i olated ubject for the purpo e of training his mind or imply to comply with regulations and pa an examination but is in touch with a ubject which will be of great and increasing importance in the proper understanding of his work in later years

BIOLOGY—The Lecturer on Biology is Dr J H Woodger who holds a University Reader hip in this subject His teaching in biology is characterized by co-ordination with other departments and the bearing of the subject on the later tages of the curriculum is emphasized Not only is the subject taught as an introduction to the tudy of Anatomy and Physiology but the increasing importance of a knowledge of the lower form of vegetable life and of the protozoa in the cau ation of di ea e and the tudy of in ect carrier of human diseases is emphasized by co-ordination with the Pathological Institute

IN THE DEPARTMENT OF ANATOMY under the direction of Profes or John Kirk with the general cientific tudy of Anatomy and its wider Biological aspect the relation of structure to function and patholo y is not lost ight of Fact of clinical medicine and urgery or pathology Biology and physiology are included in the teaching in order to emphasize the ignificance of anatomical point Ly clas es in Applied Medical and Surgical Anatomy the tudy of this subject is continued in the later tage of the tudent's career

THE TEACHING OF PHYSIOLOGY is in the hands of Pro or Sam on Wright and the department is in close touch with tho e for the teaching of both the preliminary and final subjects of the curriculum It is impre ed upon the tudent in the department that he cannot be a good clinician unle s he obtains a sound knowledge of Phy iology and Physiological teaching is made to overlap the later period of tuition by lecture on Applied Phy iology which are given by the Profe or to tudents during their Clinical Period Again while in the wards the student has the opportunity of applying what he has learnt in the laboratory to the study of clinical problems

PHARMACOLOGY and **THERAPEUTICS** are under the charge of Profe or Ernest Laqueur and the Department is in close touch with the clinical wards and the out patient department Here the tudent is taught to prescribe rationally and to appreciate the action of drugs on the human body in health and di ea e

IN THE BLAND SUTTON INSTITUTE OF PATHOLOGY all the departments of the Medical School are brought in touch Here the tudent learns the SCIENCE OF DISEASE The teaching of Pathology is in the hand of Profe or J McIntosh and under his tuition the tudent is enable to realise that Pathology and Medicine are one and that a clear knowledge of Pathology and Bacteriology is e ential for the prevention diagnosis and treatment of di ea e The teaching of Pathology is brought into the clo e touch with clinical teaching and the student ee the practical application of the cience in which he has been instructed in the earlier ear of the curriculum

THE COURTAULD INSTITUTE OF BIOCHEMISTRY building full equipped with laboratories for teaching and biochemical research Profe or E C Dodd who is in charge of the Department holds comple e cour e in Biochemistry for tudent both in their ea ly year and during their period of in truction in the wards In addition to this the tudent has acquires con tant practical experience of the important modern chemical investigation nece ary for the detection of di ea e and the tudy of its evolution Several valuable po t graduate appointments in this Institute become available for tudents showing pecial ability in this direction

CLINICAL TEACHING is carried out in the general wards and out patient department and in the pecial departments all of which are in clo e touch with the cientific department in the School The tudent has ample opportunities for carrying out the physical examination of patients and with his training on the cientific side combined with instruction in the Art of Medicine is con tantly being brought in contact with patients and being made to realize the human side of his profe ional work

There are ample clinical appointments for all tudents and thirty five Re ident appointments are open annually to tudents of the School who have obtained their degrees or diploma In addition twelve Registrar hips are appointed annually

RESIDENTIAL COLLEGE.—Accommodation for a limited number of tudents is provided in the Ho ital

THE SOCIAL AND ATHLETIC side of the tudent's life is also tudied and the facilities include a Medical Society a Common Room Society and Athletic ground at Cri ehurst The Club include Rugby Football Association Football Golf Cricket Hockey Sailing Swimming etc A Squash Racket Court is also available in the Ho ital

Prospectus may be obtained from the Secretary R C FOLEY F C C S The Middlesex School Middlesex Hospital London W 1

HERBERT BOLDERO M A D M F P C P DEAN Telephone Mu eum 8333

POST-GRADUATION SCHOOL

CENTRAL LONDON THROAT, NOSE & EAR HOSPITAL

GRAY'S INN ROAD, LONDON, W C 1

CLINICAL TEACHING covering every aspect of the Specialty given daily in the Out patient Department and the In-patient Theatres Teaching Ward-rounds by the Clinical Tutor twice weekly
CLINICAL ASSISTANTSHIPS available for periods of 3 6, or 12 months Lectures each Friday 4 p m
GENERAL PRACTITIONERS' WEEK twice yearly
COURSES IN METHODS OF EXAMINATION AND DIAGNOSIS at frequent intervals
COURSES IN ANATOMY AND PHYSIOLOGY (2 weeks) by the Teachers in Anatomy for Part I of the D L O Examination and CLINICAL COURSES (2 weeks) by the Hon Medical Staff for Part II of the Examination with Peroral Endoscopy and Pathology and Bacteriology Classes given in May and October each year
REVISION CLASS (2 weeks) for D L O Students by the Clinical Tutor, twice yearly
The teaching provided covers all the requirements of students intending to sit for the D L O (R C P & S Eng)

Full Syllabus obtainable from C GILL-CAREY F R C S Ed, *DEAN*

Charing Cross Hospital Medical School

(University of London)

Sessions begin October and April.

The most accessible of all the Schools of the University

Complete arrangements for Subjects of the whole Medical Curriculum, with special departments for every branch of Clinical work

FIRMS —Only thirty students are admitted each year Every medical clerk and surgical dresser is therefore assured of having not less than six beds in his personal care

THE INSTITUTE OF PATHOLOGY with the abundance and variety of its material and fully equipped laboratories offers exceptional advantages in this subject

RESIDENT APPOINTMENTS —The large number of Resident Appointments (27 annually) in proportion to the number of students make it probable that all students of average ability will be able to secure election to the House Staff

SCHOLARSHIPS — The following are awarded annually —(I) Two 'University' Scholarships each of the value of £120 Examinations are held in July Subjects (a) General Pathology (b) Anatomy and Physiology (II) One 'Open Scholarship of the value of £75, and (III) three 'Entrance Scholarships of £60 each In addition numerous Exhibitions and Prizes are awarded each year A post graduate Studentship in Clinical Pathology is offered biennially Value £225 to £275

THE STUDENTS UNION includes Common Rooms and Restaurant on the School premises and a Sports Ground of 8 acres within half an hour's journey of the School

Men Students only are admitted

Fees 38 Guineas per annum.

For Prospectus and full information apply personally or by letter to the Dean —

ERIC A CROOK M A M Ch, F R C S,
Charing Cross Hospital Medical School 62 Chandos Place
London W C 2

Telephone Temple Bar 3903 and 3901

THE

METROPOLITAN EAR, NOSE, & THROAT HOSPITAL

(1838) (INCORPORATED)

FITZROY SQUARE, LONDON, W.1

FACILITIES FOR CLINICAL WORK are afforded to Medical Practitioners and Students for one month, 3 Guineas, for three months, 5 Guineas

PRACTICAL DEMONSTRATIONS are given daily (Saturdays excepted) at 3 p m, in the manipulation of instruments used in the Diagnosis and Treatment of Diseases of the Ear, Nose and Throat

CLINICAL ASSISTANTS are appointed as vacancies occur, and have responsible duties Further particulars may be obtained from the Secretary L L PHILLIPS

Westminster Hospital Medical School

(UNIVERSITY OF LONDON)

The new building is now completed with its full educational opportunities which comprise the latest developments together with maximum convenience

SCHOLARSHIPS Four Scholarships to the value of £75 each are awarded on the result of an examination held in May of each year in First Year Subjects Four Scholarships are also awarded annually as the result of examinations in March and September in Anatomy and Physiology

FEES Entrance fee 13 guineas Clinical studies only 8 guineas Annual fee 44 guineas which includes membership to the Sports Union Club with its various branches—football cricket tennis hockey swimming fencing boxing sailing squash rackets and Guthrie Society The Sports Ground is within 20 minutes of the Hospital

RESIDENT APPOINTMENTS Paid appointments as Medical Surgical and Obstetric Registrars Casualty Officers, House Physicians House Surgeons and Anaesthetist are available for Students upon qualification There are excellent opportunities for research work in the endowed Carlill Laboratories The number of students is strictly limited to ensure the maximum advantages of individual clinical teaching and to afford the large majority of those who qualify the opportunity to secure one of these very valuable appointments

The Dean or Sub-Dean will be pleased to arrange for intending Students and Parents to inspect the Hospital and Medical School at any time

Only male students are admitted

A Prospectus and full particulars may be obtained on application to the Dean

ADOLPHE ABRAHAMS, OBE, MA, MD, FRCP

Westminster Hospital Medical School, Horseferry Road, Westminster, London, S W 1

Telephone VICTORIA 6041

UNIVERSITY COLLEGE HOSPITAL DENTAL SCHOOL

NATIONAL DENTAL HOSPITAL, GREAT PORTLAND ST., W.1.

Telephone Welbeck 1001

LECTURERS.

Dental Surgery and Pathology—J L DUDLEY BUXTON, L M S S A, L D S, R C S Eng
Mondays and Wednesdays at 5 p m October to March

Special Anatomy — ALAN SHEFFORD, O B E, L D S, R C S, Eng
Tuesdays at 5 p m

Orthodontics—A C McLEOD, D D S, B Sc (Dent), L D S
Tuesdays at 5 p m May to July

Dental Mechanics—J A SNAREY WRIGHT, L D S, R C S, Eng
Wednesdays at 5 p m January to March

Dental Materia Medica—H DAVIS, B Sc, A I C, Ph C
Mondays at 4 p m, and Tuesdays at 1 30 p m May to July

Bacteriology of the Mouth—Sir KENNETH GOADBY, K B E D P H L R C P, M R C S, L D S, R C S
Wednesdays at 2 p m January to March

General Pathology—L E GLYNN, M B, B S
Thursdays at 1 p m January to July

Bacteriology—E H GILLESPIE, M B, B Ch
Tuesdays at 2 p m January to July,

Dental Histology—A K INCE-JONES, L R C P, M R C S, L D S, R C S, Eng
Saturdays at 9 30 a m January to March

Dental Metallurgy—H TERREY, B.Sc
Tuesdays at 5 p m at University College October to December

Anaesthetics—M W P HUDSON, M B, B S, D A
Tuesdays at 5 p m October to December

Radiology—D A IMRIE, M D Lius L R C P I, L R C S E, D M R E, L D S
Wednesdays at 12 noon January to July

Special Medicine Lectures—J C HAWKSLEY, M D M R C P
Fridays at 4 p m January to July

Special Surgery Lectures—A J GARDHAM, M S, F R C S
Mondays at 4 p m January to July

THE WINTER SESSION COMMENCES TUESDAY, OCTOBER 4th, 1938.

The Hospital and School situated in the centre of a large population and within a few minutes of University College Hospital has recently been reorganized and equipped on the highest standard of modern requirement and admirably adapted for the teaching of students in every branch of the Science and Art of Dental Surgery The mechanical laboratory conservation room and X rays departments are replete with all the latest approved appliances

Students (men and women) enter as students of University College Hospital and attend classes in anatomy and physiology at University College adjacent to University College Hospital

Each student serves as a dresser in the extraction anaesthetic conservation and X rays departments which provides him with the opportunity of observing and actually carrying out the method of work in all branches

Four House Surgeons are appointed half yearly

The Calendar containing full information as to lectures fees prizes etc may be had on application to the *Sub Dean of Dental Students* who attends at the University College Hospital Medical School University Street Gower Street W C 1 on Wednesdays at 9 30 a m

UNIVERSITY COLLEGE HOSPITAL

540 Beds. **MEDICAL SCHOOL** *540 Beds.*

(UNIVERSITY OF LONDON),

UNIVERSITY STREET, GOWER STREET, W.C.1.

TELEPHONE—EUSTON 5050 (7 lines)

The WINTER SESSION will commence on Tuesday, October 4th, 1938

THE SCHOOL IS FOR FINAL STUDIES only

STUDENTS are prepared for the degree of the Universities of OXFORD CAMBRIDGE LONDON and DURHAM and for the Diplomas of the qualifying Bodies

CLINICAL UNITS in MEDICINE SURGERY and OBSTETRIC MEDICINE are now in operation The whole time Directors of the Units are concerned with the organization of the teaching generally but the honorary staff are responsible for the largest share of the teaching in the wards and out-patient Department of the Hospital The new Obstetric Hospital is now finished and in full occupation

Director of the Medical Unit—Prof I R ELLIOTT
Director of the Surgical Unit—Prof R S HILLHOUSE
Director of the Obstetric Unit—Prof F J BROWNE

FEES—Inclusive fee to cover complete Clinical Course £45 per annum for three years Oxford and Cambridge students who have completed one year in Pathology £40 per annum for three years There are no extra fees to be included (i) Courses of Instruction in Pharmacy Vaccine Therapy Fevers (ii) Life Subscription to the Medical Society or Women's Medical Club

APPOINTMENTS—Forty seven appointments are open during the year to students in addition salaried appointments to the annual value of £

SCHOLARSHIPS EXHIBITIONS and PRIZES of the value of over £1 000 are awarded annually Among the most important are

GOLDSMID ENTRANCE SCHOLARSHIPS entitling the holder to the Final Course of Medical Study are offered for competition annually and are open to student who are preparing for the Degree of the Universities of London Oxford Cambridge Durham or other University or for the Diploma of the Royal College of Physicians and Surgeons

GOLDSMID ENTRANCE EXHIBITION (value £80) entitling the holder to a reduction by £80 of the fees due for the Full Course of Medical Study

HILLIER ENTRANCE SCHOLARSHIP IN PATHOLOGY (value £52 10) entitling the holder to a reduction by £52 10s of the fees of the Full Course of Final Medical Study

HILLIER SCHOLARSHIP value £25 awarded annually in April or October

CLAYTON SCHOLARSHIP in Pathology £300 per annum

LESLIE PEARCE GOULD SCHOLARSHIP awarded every two years at £250

RADCLIFFE CROCKER TRAVELLING SCHOLARSHIP in Dermatology awarded every five years about £200

MACILVIR SCHOLARSHIP in Clinical Medicine about £160

ATKINSON SCHOLARSHIP about £55 per annum tenable for two years

PERCIVAL ALLEN SCHOLARSHIP about £300 awarded every year

ATKINSON MORLEY SCHOLARSHIP £45 per annum tenable for one year

BRITON POLLARD FELLOWSHIP of the annual value of £200 for a period maximum of three years

JOHN MARSHALL FELLOWSHIP value £500 tenable for two years

ARTHUR COLLARD LOAN FUND of the approximate amount of £53

BUCKNILL SCHOLARSHIP entitles the holder to free tuition at University College and Hospital Medical Courses at University College and Hospital Medical School

Further information and Prospectus can be obtained from the Secretary and the Dean can be interviewed at any time by appointment

Dean—GWYNNE WILLIAMS M S F R C S
Sub-Dean—W J HADSON D S O M C M D F R C S
Secretary and Registrar—J L DUDLEY BUXTON L M S S A L D S R C S Eng.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL

(UNIVERSITY OF LONDON)

HYDE PARK CORNER, S.W.

Telephone SLOANE 7151

THE HOSPITAL and MEDICAL SCHOOL occupy the finest site in London and are readily accessible from all parts of the Metropolis.

The entire teaching in the School is devoted to the subjects of the Final Examination in other words is specially adapted to the interests of men from the Universities who have passed their Examination in Anatomy and Physiology

St George's students attend at King's College for tuition in the Preliminary and Intermediate subject

SEVEN ENTRANCE SCHOLARSHIPS IN ANATOMY AND PHYSIOLOGY AND GENERAL PATHOLOGY, of the value of £120 £80 (3) £70 (2) and £50 respectively are offered for competition in July to candidates who have passed *the 2nd M B or corresponding examination In addition* EXHIBITIONS, each of the value of £40 and up to Four in number, will be awarded to candidate of approved merit in the Entrance Scholarship Examination

There is also one ENTRANCE SCHOLARSHIP IN ARTS AND SCIENCE, of the value of £100 for students about to begin the curriculum for the M B B S degrees of London University

MANY VALUABLE PRIZES ARE AWARDED EACH YEAR, including the following Allingham Scholarship of the value of £87 Laking Dakin Memorial Prize of the value of £115 the Brackenbury Prize in Medicine the Brackenbury Prize in Surgery and the Webb Prize in Bacteriology each of the value of £33

RESIDENT HOUSE APPOINTMENTS Eight Casualty Officer ten House Surgeon and ten House Physicians are appointed annually They are provided with board and lodging in the Hospital and receive honoraria of £40 per annum In addition the following resident appointments are open to all qualified students of the Hospital Resident Obstetric Assistant (two annually) and Resident Anaesthetist (two annually) They are provided with board and lodging and receive salaries of £100 per annum. There are also five further senior appointments namely one Resident Assistant Physician with a salary of £250 per annum two Surgical Chief Assistants, also resident with salaries of £200 per annum and two Medical Registrars non-resident with salaries of £100 per annum

The ST GEORGE'S HOSPITAL CLUB incorporates the *RUGBY FOOTBALL, CRICKET, LAWN TENNIS BOXING* RIFLE and other Clubs and possesses an ATHLETIC GROUND within easy reach of the Hospital and Smoking and Luncheon Rooms on the School Premises

Entrance Fee £10 10s 0d Annual Composition Fee which covers all courses lectures etc. in the Hospital and School £42 Annual Club Subscription £3 13s 6d

The Winter Session will begin on October 1st but students can enter at any time

Further information may be obtained from the Dean of the Medical School

M F NICHOLLS MChir FRCS
Dean

ST. BARTHOLOMEW'S HOSPITAL AND COLLEGE

(UNIVERSITY OF LONDON)

WINTER SESSION BEGINS OCTOBER 3rd, 1938

THE HOSPITAL has **762 Beds** and the **MEDICAL COLLEGE** contains large Lecture Rooms and Laboratories as well as a Museum and a Library

Every Special Branch of Medicine and Surgery has a Department

ENTRANCE SCHOLARSHIPS

Eight Entrance Scholarships and Exhibitions are awarded annually of the aggregate value of **£900**

Other Scholarships and Prizes amount to about **£1,000** annually

PRELIMINARY SCIENCES

Chemistry, Physics, and Biology are fully taught in the **Laboratories** allotted to these subjects

All the pre clinical Departments have now been transferred to the new site in Charterhouse Square formerly occupied by the Merchant Taylors School

HOSPITAL APPOINTMENTS

Over 100 Hospital Appointments (39 resident) are available each year for Students who have passed their final qualifying examination

Five hundred and sixty Ward Clerkships and Dresserships are open annually to Students before qualification

STUDENTS UNION

The Union possesses a Club Ground of seventeen acres at Chislehurst and athletic amenities are available on the newly purchased site in Charterhouse Square five minutes walk from the Hospital

HIGHER EXAMINATIONS

Special Classes are held for **F R C S**, etc

For further particulars apply personally or by letter to

THE DEAN OF THE MEDICAL COLLEGE, ST BARTHOLOMEW'S HOSPITAL, LONDON, E C 1

Telephone National 4444

GUY'S HOSPITAL MEDICAL AND DENTAL SCHOOLS
(UNIVERSITY OF LONDON)

THE HOSPITAL which contains 621 Beds available for teaching is situated one minute's walk from London Bridge Railway Stations
SPECIAL CLASSES are held in CHEMISTRY PHYSICS and BIOLOGY for the First M B Examination of the University of London and for the Pre Medical Examination for the Conjoint and L D S Diplomas
THE WINTER SESSION will commence on TUESDAY OCTOBER 4th 1938

ENTRANCE SCHOLARSHIPS—MEDICAL SCHOOL

The following Entrance Scholarships are awarded annually

A—Open Junior Scholarships—(1) An ARTS SCHOLARSHIP of the value of £100 (2) A SCIENCE SCHOLARSHIP of the value of £100 (3) A WAR MEMORIAL SCHOLARSHIP of the value of £200 awarded alternately in Arts and Science This Scholarship is open every other year the next award will be made in 1940 in Arts The Examination are held in the month of April

B—Continued Scholarship in Science—A JUNIOR SCIENCE SCHOLARSHIP of the value of £100 is offered to Candidates who have attended the Preliminary Science Classes at this School for a full academic year

The following Entrance Scholarships are awarded annually in the month of June or July

C—University Entrance (British Universities) Scholarships—(1) A WAR MEMORIAL SCHOLARSHIP the value of which shall be a free undergraduate medical education for a period of three years (2) An EXHIBITION of the value of £60 These Scholarships are awarded on the results of an Examination which is held in common with the Medical Schools of St Bartholomew's and St Thomas's Hospitals Subjects Candidates will be examined in two of the following Subjects at their option (1) Human Anatomy and Embryology (2) Physiology (3) Organic Chemistry (4) General Pathology including Bacteriology

THE DENTAL SCHOOL

Offers Two Open Scholarships in April of each year 1 A WAR MEMORIAL SCHOLARSHIP IN ARTS of the annual value of £40 per annum for four years 2 A SCIENCE SCHOLARSHIP of the value of £40 per annum for no more than four years
Numerous Prizes Medals and Scholarships are open for competition during the period of Studentship
For further particulars of Scholarships and for the Prospectus containing information as to the Course of Study advised the Residential College Fees et application should be made either personally or by letter to *The Dean Guy's Hospital Medical School London Bridge S E 1*

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL

(University of London) **Albert Embankment, S E 1**

The finest situation in London

The WINTER SESSION begins on TUESDAY, OCTOBER 4th, 1938.

FULL CURRICULUM Newly rebuilt and equipped Laboratories for Preliminary and Intermediate Subjects which are taught by Professors and Teachers recognized by the University of London For Clinical work the fullest facilities are provided including a special Maternity Ward, and liaison with St James's Hospital, Balham, and with Lambeth Hospital

UNIVERSITY MEN can join the School for any part of their M B Course and for Clinical work can join in January, April July or October

CLASSES for the PRIMARY and FINAL F R C S are held before each Examination

A RESIDENTIAL HOSTEL and Students Club, with all amenities, is attached to the Hospital

ENTRANCE SCHOLARSHIPS in SCIENCE and special UNIVERSITY SCHOLARSHIPS are awarded by Examination in July every year

PROSPECTUS and full particulars may be obtained from the Secretary The Medical School St Thomas's Hospital London S E 1

GOLDEN SQUARE THROAT, NOSE AND EAR HOSPITAL
LONDON, W 1

HONORARY MEDICAL STAFF

SURGEONS Mr Lionel Colledge Mr F Cunliffe Ormerod Mr A R Dingley, Mr Gilbert H Howells, Mr J F Simpson Mr S A Beards Mr J C Hogg
ASSISTANT SURGEONS Mr J Roydon Peacock, Mr Maxwell Ellis Mr G Livingstone, Mr S E Birdsall
PHYSICIANS Dr C E Lakin Dr N L Rusby
NEUROLOGIST Dr L R Yealland
PATHOLOGIST Dr Boycott
OPHTHALMOLOGIST Mr F A Williamson Noble
GENERAL SURGEON Mr J B Hunter
DENTAL SURGEONS Mr Hart Mr Hallon
RADIOLOGIST Dr Hope
ANAESTHETISTS Dr G I Moriarty Dr A W Mathew Dr S Coffin, Dr J H T Challis, Dr F Longhurst Dr D Lewis, Dr C Hochschild Dr G Edwards Dr Blair Gould, Dr Broad

The Hospital has 100 beds for In patients and an annual Out patient attendance of over 60,000

CLINICAL INSTRUCTION

Clinical instruction in the Diagnosis and Treatment of Diseases of the Ear, Nose and Throat is given in the Out patient Department from 2 to 5 p m daily and on Tuesdays and Thursdays from 6 to 9 p m also Major operations are performed every morning and afternoon except Saturdays in the In patient Operating Theatres Minor operations are performed in the Out patient Operating Theatre on three mornings a week

Practitioners and Medical Students are admitted to the practice of the Hospital as Post Graduates Clinical Assistants, whose duty it is to assist the staff are appointed as vacancies occur

For further information apply to the Dean GILBERT H HOWELLS

NEUROLOGY AND PSYCHOPATHOLOGY
CLINICAL INSTRUCTION AT THE
WEST END HOSPITAL FOR NERVOUS DISEASES
WELBECK STREET, W 1

D P M (Conjoint Board). A two months course in Neurology suitable for part two of this examination will be held in afternoons only between October 3rd and November 25th Fee for the course £7 The course is limited to 10

M R C P (London) Intensive course of a fortnight's duration in Neurology for this examination The next courses will be held on September 19th and December 5th Fee £3 10 0 The course is limited to 10

For particulars of above with other Post-Graduate facilities apply to the Dean T Rowland Hill, M D, M R C P or to the House Governor, West End Hospital for Nervous Diseases, London, W 1

THE UNIVERSITY OF LEEDS

FACULTY OF MEDICINE

SCHOOL of MEDICINE and THE GENERAL INFIRMARY at LEEDS

The First Term begins on **October 4th, 1938**

The degrees of M B , Ch B , Ch M and M D are conferred, and diplomas in Public Health and Psychological Medicine are granted by the University

The systematic Classes and Lectures are held in the School of Medicine of the University, while the Clinical instruction is given in the General Infirmary The combined courses of study are arranged to meet the University Regulations in the first instance but they also afford every opportunity for students preparing for the examinations of any licensing body

The instruction in the subjects for the First Examination is given in the Department of Science of the University

The Composition Fee for the Academic Courses and Clinical instruction is £242

For further particulars application should be made — *Telephone Leeds 4001 (4 lines)*

Regarding instruction given at the University to **The Academic Sub-Dean,** School of Medicine Leeds 2

Regarding instruction given at the Infirmary to **The Clinical Sub-Dean,** School of Medicine Leeds 2

THE UNIVERSITY OF LEEDS

SCHOOL OF DENTISTRY

The First Term begins on **October 4th, 1938.**

The degrees of B Ch D and M Ch D , as well as a diploma, L D S , are conferred by the University

The systematic Classes and Lectures are held in the School of Medicine and School of Dentistry of the University, while the clinical instruction is given in the Leeds General Infirmary and Dental School Hospital The combined courses of study are arranged to meet the University Regulations in the first instance, but they also afford every opportunity for study to students preparing for the dental examinations of other Licensing Bodies

Intending students can enter as pupils in the Dental School and can obtain instruction in the preliminary scientific subjects in the Department of Science of the University

For further particulars application should be made to —

The Warden, School of Dentistry Leeds 1

THE UNIVERSITY OF SHEFFIELD

FACULTY OF MEDICINE

Dean Professor G A CLARK, M D

Telephone Sheffield 21111

The University grants Degrees in Medicine (M B, Ch B', M D, Ch M) and in Dental Surgery (B D S, M D S) It also grants a Diploma in Dental Surgery (L D S) These are all open to men and women on equal terms

The Session 1938-1939 begins on October 5th

Lectures and laboratory courses are given in the University, whilst clinical instruction is provided in the general and special Hospitals in the City

Although the teaching is primarily directed towards the requirements of the University the instruction amply covers those of other examining bodies A number of resident hospital appointments are open to qualified male students of the school

Halls of Residence—For Men Crewe Hall, Clarkehouse Road, Sheffield, 10, Stephenson Hall, Taptonville Road, Sheffield 10

For Women University Hall for Women, Endcliffe Vale Road, Sheffield, 10 Particulars of the Halls may be obtained from the Wardens

Scholarships—A number of Entrance Scholarships are open to students wishing to enter the Faculty of Medicine There are also Post Graduate Scholarships

In order to maintain the present adequate facilities for clinical training entries to the Medical School are strictly limited

A prospectus containing all necessary details of the School and one giving particulars of Scholarships may be obtained free from—W M GIBBONS Registrar

UNIVERSITY OF DURHAM

THE MEDICAL SCHOOL,

KING'S COLLEGE, NEWCASTLE UPON TYNE.

The degrees in Medicine, Surgery, Hygiene, and Dentistry, the Diploma in Public Health, the Diploma in Psychiatry, and the Licence in Dental Surgery of the University of Durham are open to men and women

The WINTER SESSION, 1939, will be commenced on TUESDAY, OCTOBER 4th

At the Medical School, King's College, Newcastle upon Tyne, students can complete the entire course of professional study required for the above degrees, diplomas, and licence, also for the Examinations of the Royal Colleges of Physicians and Surgeons and other Examining Bodies

Hospital practice is carried out at the Royal Victoria Infirmary, a general hospital containing more than 700 beds, and there are facilities for the study of the various special subjects General and Special Post-graduate Courses are held

Practical Midwifery can be studied at the Princess Mary Maternity Hospital, which contains 90 beds, with an annual indoor and outdoor attendance of 3,000 cases Lectures are given on Psychological Medicine in the Medical School, and clinical instruction at the Mental Hospital, Newcastle Clinical instruction in Infectious Diseases is given by the Medical Officer of Health in the City Hospital at Walkergate

The Dental Department includes a dental hospital equipped on the most modern lines, with abundant material for clinical teaching and facilities for training in practical dental mechanics

Particulars may be obtained from the Dean of Medicine, Medical School, Queen Victoria Road, Newcastle upon Tyne.

UNIVERSITY OF BRISTOL

FACULTY OF MEDICINE.

The SESSION commences on October 4th, 1938

The University grants the degrees of Bachelor of Medicine and Surgery (M B Ch B) Master of Surgery (Ch M), Doctor of Medicine (M D) Bachelor of Dental Surgery (B D S), and Master of Dental Surgery (M D S) as well as diplomas in Public Health (D P H) (at present in abeyance) and Dental Surgery (L D S) and a Midwife Teacher's Certificate, and provides a Training Course for Health Visitors

Hospital Practice and Clinical Instruction are provided in the Hospitals and Asylum of the City associated with the University for this purpose and students have exceptional opportunities of studying the practice of medicine from a large variety of cases

Women are admitted to all Classes Lecture, Laboratory Practice and attend them with men The Hall of Residence for Men and for Women Students are situated near the University

INCLUSIVE FEES—

For the M B Ch B curriculum	220 guineas
For the B D S curriculum	214 "
For the L D S curriculum	206 "

For additional particulars apply to the DEAN OF THE FACULTY OF MEDICINE *Telephone Bristol* 23156

UNIVERSITY OF MANCHESTER

FACULTY OF MEDICINE

The WINTER SESSION Commences on OCTOBER 6th

The Laboratories and Museums afford every facility to Students and Graduates for Practical Instruction as well as for Original Research

SCOPE OF INSTRUCTION

Complete Courses of Instruction are offered for the Examinations of the University of Manchester and also for the Examinations of other Examining Bodies in the United Kingdom Post Graduate Courses are held in preparation for the Diploma in Psychological Medicine (Manch) and the Certificate in Venereal Diseases Clinical Assistantships are also available at various hospitals In the Dental Department Complete Courses are given preparing for the Degrees and Diploma in Dentistry granted by the University as well as for the Diploma of the Royal College of Surgeons of England and other Dental Diplomas The Public Health Laboratories are situated at a short distance from the University The fullest opportunities are offered to Graduates and others in preparation for the Diplomas in Bacteriology and in Public Health Particulars may be obtained from the Dean of the Medical School

OPPORTUNITIES FOR CLINICAL STUDY.—ROYAL INFIRMARY AND OTHER HOSPITALS

The Clinical Instruction is given in the Royal Infirmary opened in 1909 on a site near to the Medical School It is provided with every modern requirement for the treatment of the sick and the investigation of disease Instruction in Special Subjects is given in other Hospitals associated with the University A large number of beds in the General and in the Special Hospitals are available thus affording unrivalled opportunities for Clinical Study

1	Manchester Royal Infirmary	560 beds	8	Hospital for Diseases of the Throat and Chest	160 beds
2	The St Mary's Hospitals for Women and Children	290 beds	9	Hospital for Diseases of the Skin	54 beds
3	Manchester Children Hospital	190 beds	10	Christie Cancer Hospital and Holt Radium Institute	104 beds
4	Manchester Royal Eye Hospital	166 beds	11	Ancoats Hospital	150 beds
5	Manchester Northern Hospital for Women & Children	113 beds	12	Salford Royal Hospital	463 beds
6	Fever Hospital for Infectious Diseases	660 beds	13	Dental Hospital of Manchester	
7	Hospital for Diseases of the Ear	31 beds	14	Manchester Babies Hospital	

HOSPITAL APPOINTMENTS

In consequence of the large number of Hospitals associated with or in the vicinity of the University exceptional opportunities are offered to Graduates to obtain Resident Hospital Appointments

SCHOLARSHIPS EXHIBITIONS AND PRIZES

Two Open Entrance Scholarships for Graduates each of the value of 160 guineas are offered yearly in July In addition the Dreschfeld Scholarship of £20 per annum the John Russell Medical Entrance Scholarship of £45 per annum and other Entrance Scholarships of the value of £30 to £40 a year for two or three years are also tenable in the Medical Faculty

Fellowships Scholarships etc are also offered for competition to Students of the Faculty

RESIDENCE FOR UNDERGRADUATES

There are Halls of Residence both for Men and for Women Students and lodgings can be recommended

Prospectuses will be forwarded on application to the Registrar

THE UNIVERSITY OF LIVERPOOL

FACULTY OF MEDICINE

THE MEDICAL SCHOOL provides complete courses of instruction for the Examinations of the University of Liverpool and also meets the requirements of other Universities and Examining Bodies in the United Kingdom

Other Schools of the Faculty are —The School of Dental Surgery the School of Hygiene the School of Tropical Medicine and the School of Veterinary Science

DEGREES AND DIPLOMAS IN THE FACULTY OF MEDICINE

Bachelor of Medicine & Bachelor of Surgery	MB ChB	Master of Veterinary Science	MVSc
Doctor of Medicine	MD	Doctorate in Philosophy	PhD
Master of Surgery	ChM	Licence in Dental Surgery	LDS
Master of Orthopaedic Surgery	MChOrth	Diploma in Public Health	DPH
Bachelor of Dental Surgery	BDS	Diploma in Tropical Medicine	DTM
Master of Dental Surgery	MDS	Diploma in Tropical Hygiene	DTH
Bachelor of Veterinary Science	BVSc	Diploma in Veterinary Hygiene	DVH
Doctor of Veterinary Science	DVSc	Diploma in Medical Radiology & Electrology	DMRE

Valuable Fellowships Scholarships and Prizes are offered for competition each year

Clinical Instruction is given at (a) The Royal Liverpool United Hospital (The Royal Infirmary the Royal Southern Hospital the David Lewis Northern Hospital, and the Stanley Hospital), (b) five Special Hospitals viz The Eye Ear and Throat Infirmary, the Women's Hospital Liverpool the Royal Liverpool Children's Hospital, the Liverpool Maternity Hospital and the St Paul's Eye Hospital (c) certain Municipal Hospitals and the County Mental Hospital Rainhill

Prospectuses containing full information may be obtained on application to Professor W H Wood Dean of the Faculty of Medicine The University of Liverpool Telephone Liverpool Royal 5460

UNIVERSITY OF ST. ANDREWS

Chancellor—The Rt Hon The Earl BALDWIN OF BEWDLEY, K G, P C, LL D
Rector—(Vacant)
Vice-Chancellor and Principal—Sir JAMES COLQUHOUN IRVINE C B E Sc D, D Sc LL D D C L, F R S
The University of St Andrews includes the United College of St Salvator and St Leonard and St Mary's College in St Andrews and University College, Dundee, the Advanced Medical School in Dundee, and the Dundee Dental School

FACULTY OF MEDICINE

Dean and Adviser of Studies at Dundee—Professor FRANCIS JAMES CHARTERIS, M D
Adviser of Studies at St Andrews—Professor D WATERSTON M D
The University confers the following Degrees and Diplomas —M B, Ch B, M D, Ch M, Ph D, D P H (all open to men or women)
Session 1938-39 commences October 4th, 1938 The whole curriculum may be taken at Dundee, or the first two years may be taken in St Andrews and the remaining three in Dundee

Clinical Instruction Ample facilities at Dundee Royal Infirmary (450 beds) Maryfield Hospital (330 beds) King's Cross Hospital (250 beds), Ashludie (120 beds), Dundee Mental Hospital (600 beds), Dundee Eye Institution Dental Hospital and other Medical and Surgical Institutions in Dundee

Hospital Appointments Numerous resident hospital appointments are available in the above institutions

Residence Halls for Men in St Andrews, for Women in St Andrews and Dundee The William Low Residence for Medical Students at Dundee is available for students during Clinical study

Students' Unions Athletic Grounds and Gymnasia in St Andrews and in Dundee

Bursary (Scholarship) Competitions For Dundee, entry April 8th Examinations May For St Andrews, entry May 5th Examinations, June

Bursaries Exclusively for Medical Students At St Andrews Taylour Thomson (for women), 1 of £40 and 1 of £30 for 5 years, Malcolm (for men and women), £40 for 5 years, vacant annually At Dundee Hepburn (for men or women), £25 for three years

Bursaries for which Medical Students are Eligible At St Andrews About 10 Bursaries ranging in value from £10 to £20, tenable for 3, 4 or 5 years, vacant annually and Fourth-year Bursaries of £50, £30 and £22 At Dundee Nine Entrance Bursaries of from £50 to £40 for four years and four Bursaries of from £30 to £25 for allocation in the remaining years of the course In addition, there are four scholarships of £100 available for graduates

Residential Entrance Scholarships for Men At St Andrews Seven or eight of £100 competed for annually in June Medical students are eligible

Preliminary Examination September and March Entries August 3rd and February 6th

Fees For complete M B Ch B Course, exclusive of Examination Fees, Hospital Fees, etc £182

Provision for Post-Graduate Study and Research

Full information may be got from the Secretary of the University 71 North Street St Andrews, or the Dean of the Faculty of Medicine, Westlands, St Andrews

SCHOOL OF DENTISTRY

Adviser of Studies Professor H GORDON CAMPBELL L R C P, L R C S, L D S, Dental Hospital
The University confers the Degrees of B D S M D S, and Ph D and the Diplomas of L D S and D P D
Full facilities for instruction are available in the Scientific Departments of the University the Advanced Medical School and Medical and Surgical Institutions
The Dental Hospital is fully equipped for the training of Students in Mechanical, Prosthetic and Operative Dentistry
Financial assistance is available for students
Full information may be obtained from the Adviser of Studies, Dental Hospital, Dundee
The University St Andrews August, 1938
Telephones University of St Andrews St Andrews 35 University College Dundee Dundee 4706 Medical School Dundee Dundee 3686

BIRMINGHAM SCHOOL OF DENTISTRY.

UNIVERSITY of BIRMINGHAM and BIRMINGHAM DENTAL HOSPITAL.

DEAN OF THE FACULTY OF MEDICINE — STANLEY BARNES, M D, D Sc, F R C P
DEAN OF THE DENTAL HOSPITAL — C H HOWKINS, C B E, D S O, T D M R C S, L R C P, L D S
PROFESSOR OF DENTAL SURGERY — H F HUMPHREYS, K H P, O B E, M C, T D, D L, M B Ch B, M D S, L D S

The Session will commence on MONDAY, OCTOBER 3rd, 1938

DEGREES AND DIPLOMA IN DENTAL SURGERY.

The Degrees of Bachelor of Dental Surgery (B D S) and Master of Dental Surgery (M D S) and the Diploma in Dental Surgery (L D S) are open to Students who follow the requisite courses in the University

The School of Dentistry in conjunction with the General and Queen's Hospitals affords a complete curriculum for the Dental Diplomas and Denta Degrees of the University and all other Licensing Bodies

The Dental Hospital and the Dental Department in the Medical School are fully equipped for training of students in Mechanical Prosthetic and Operative Dentistry

A DENTAL SCHOLARSHIP of the value of £37 10s 0d is offered annually by the University

For syllabus and further information application should be made to the Dean of the Faculty, Medicine Medical School Hospitals Centre Birmingham 15 or to the Dean of the Dental Hospital Great Charles Street Birmingham *Telephone Birmingham Selly Oak 1162*

UNIVERSITY OF EDINBURGH

Principal—SIR THOMAS H HOLLAND, K.C.S.I., K.C.I.E.

Prospective students are required to make application for admission on a prescribed form not later than July 1st of the year in which they wish to enter

FACULTY OF MEDICINE

Dean—PROFESSOR SYDNEY SMITH M.D.

PROFESSORS

Chemistry—
Zoology—J. Ritchie M.A., D.Sc.
Botany—Sir Wm. Wright Smith M.A., D.es.Sc.
Anatomy—J. C. Brash M.C., M.A., B.Sc., M.D.
Physiology—J. de Burgh Daly M.A., M.D.
Materia Medica—A. J. Clark M.C., M.D., F.R.S.
Pathology—A. Murray Drennan M.D.
Bacteriology—J. J. Mackie M.D.
Forensic Medicine—Sydney A. Smith M.D.
Public Health—P. S. Leechman C.B., C.M.G., F.R.C.S.
Medicine—L. S. P. Davidson B.A., M.D.
Surgery—Sir D. P. D. Wilkie M.D., Ch.M.
Midwifery and Gynaecology—R. W. Johnstone C.B.E., M.A., M.D.
Clinical Surgery—Sir John Fraser Ch.M., M.D.
Clinical Medicine—D. Murray Lyon, M.D., D.Sc., D.M. Dunlop M.D., L.S.P. Davidson B.A., M.D.
Tuberculosis—Sir Robert W. Philip M.A., M.D., LL.D.
Therapeutics—D. M. Dunlop M.D.
Psychiatry—D. K. Henderson M.D.
Child Life and Health—Charles M'Neil M.A., M.D.

LECTURERS

Anatomy—E. B. Jamieson M.D., R. Wamsley M.D., R. C. Craig M.B.
Applied Anatomy—F. E. Jardine M.B.
Physiology—Philip Eggleton D.Sc., O. A. Trowell M.A., M.B., L.E. Bayliss B.A., Ph.D., A. Ninian Bruce M.D., D.Sc., J. D. S. Cameron M.B.
Materia Medica—J. M. Robson M.D.
Pathology—W. G. Millar M.B., R. F. Ogilvie M.D.
Pathology of Children—Agnes M. Greig M.B.
Bacteriology—C. A. Green M.B., S. Thomson M.B., A. J. Rhodes M.B., C. G. Anderson B.Sc., Ph.D.
Physics—G. A. Carse M.A., D.Sc., J. Paton M.A., B.Sc.
Botany—J. L. S. Smith M.A., A. Nelson B.Sc., Ph.D., J. Anthony M.A., B.Sc.
Chemistry—Edgar Stedman B.Sc., Ph.D., C. P. Stewart M.Sc., Ph.D., Ellen Stedman M.Sc.
Zoology—C. H. O'Donoghue, D.Sc., R. A. R. Gresson B.Sc., Ph.D., P. Gray, B.Sc., Ph.D., G. F. Friend B.A., B.Sc., F. Gross D.Phil.
Tropical Diseases—*Lt.-Col. E. D. W. Greig C.I.E., M.D.*
Entomology and Parasitology—A. E. Cameron M.A., D.Sc., D.O. Morgan Ph.D., J. W. McHardy B.Sc.
Public Health—John Guy M.D., J. du P. Langrishe *D.S.O.*, M.B.
Medicine—J. G. M'Crie M.B.
Infectious Diseases—A. Joe M.D.
History of Medicine—J. D. Comrie M.A., B.Sc., M.D.
Neuropathology—A. C. P. Campbell M.D.
Neurological Surgery—N. M. Dott M.B.
Applied Physiology—W. C. Wilson M.B.
Clinical Neurology—W. Ritchie Russell M.D.
Venereal Diseases—R. C. L. Batchelor M.B.
Psychology—J. Drever M.A., B.Sc., D.Phil.
Radiology—R. McWhirter M.B., D.M.R.E.
Psychiatry—R. G. M'Innes M.B., J. R. Bailey M.B., A. Ninian Bruce D.Sc., M.D., C. M. Ross M.B.
Therapeutics—J. G. W. Hill M.D., W. M. Arnott, B.Sc., M.D.
Orthopaedics—W. A. Cochrane M.B.
Clinical Midwifery—R. W. Johnstone M.A., M.D., Douglas Miller M.D., W. F. T. Haultain *O.B.E.*, *M.C.*, B.A., M.B., E. C. Fahmy M.B., John Sturrock M.B., Clifford Kennedy M.B., E. M. Robertson M.B., J. B. Dewar M.B.
Child Life and Health—L. H. F. Thatcher M.D., Gertrude Herzfeld M.B., J. M. Murray M.B., W. C. Wilson *M.B.*, *T. Y. Finlay M.D.*
Clinical Surgery—C. F. W. Illingworth M.D., B. M. Dick M.B., D. Bard M.B.
Clinical Medicine—R. M. Murray Lyon M.D., J. A. Bruce M.B.
Obstetrics and Gynaecology—R. T. Thin M.B.

CLINICAL TEACHING STAFF ROYAL INFIRMARY

Clinical Surgery—W. J. Stuart M.B., J. W. Struthers M.B., Sir D. P. D. Wilkie, M.D., Ch.M., Henry Wade, M.D., Sir John Fraser M.D., Ch.M., J. M. Graham, Ch.M., A. Pine Watson, Ch.M., F. E. Jardine M.B., W. Q. Wood M.D., Ch.M., J. J. M. Shaw M.D., Walter Mercer M.B., K. Paterson Brown M.B., R. Leslie Stewart M.B., T. M. W. Millar M.B., D. S. Middleton M.B., W. A. D. Adamson M.B., J. Bruce M.B.
Clinical Medicine—John Eason M.D., D. Murray Lyon M.D., J. D. Comrie M.D., Alex. Goodall M.D., A. Fergus Hewat M.D., W. D. D. Small M.D., W. A. Alexander M.B., D. M. Dunlop M.D., L. S. P. Davidson B.A., M.D., A. R. Gilchrist M.D., T. R. R. Todd M.D., J. K. Slater M.B., J. D. S. Cameron M.D., W. R. Russell M.D., J. G. M'Crie M.B., R. M. Murray Lyon M.D., W. L. Lamb M.B.
Clinical Gynaecology—R. W. Johnstone M.D., W. F. T. Haultain M.B., Douglas Miller M.D., E. C. Fahmy M.B., John Sturrock M.B., C. D. Kennedy M.B.
Diseases of the Larynx, Ear and Nose—G. Ewart Martin M.B., I. S. Hall M.B., J. P. Stewart, M.D., A. B. Smith M.D.
Diseases of the Skin—Robert Aitken M.D., G. H. Percival M.D., Ph.D., G. A. G. Peterkin M.B.
Diseases of the Eye—H. M. Traquair M.D., E. H. Cameron M.B., C. W. Graham M.B., J. R. Paterson M.B.

Practical Instruction is afforded under the superintendence of the Professors in Laboratories with the necessary appliances and in Tutorial and Practical Classes connected with the above Chairs and opportunities are afforded to Students to extend their practical knowledge and engage in original research.

Opportunities for Hospital Practice are afforded at the Royal Infirmary, the Royal Hospital for Sick Children, Royal Maternity Hospital, the City Fever Hospital, Edinburgh Municipal Hospitals, and the Royal Edinburgh Hospital for Mental Disorders. Upwards of 3,800 beds are available for the Clinical Instruction of Students of the University.

Four Degrees in Medicine and Surgery are conferred by the University of Edinburgh, viz. Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.).

The Class Fees for M.B. and Ch.B., including Hospital Fee (£12), amount to about £115, and the Matriculation and Examination Fees to £47 14s. 6d. An additional Fee of £1 is payable by those who proceed to M.D., and £1 by those who proceed to Ch.M.

POST-GRADUATE INSTRUCTION.—Courses of instruction are given for the University Diplomas in Public Health, Tropical Medicine and Hygiene, Psychiatry, and Medical Radiology. These Diplomas are open to approved registered practitioners as well as to graduates in Medicine and Surgery of the University. Courses of instruction for the Diploma in Tropical Veterinary Medicine are also given. This Diploma is open to those holding an approved veterinary qualification registrable by the Royal College of Veterinary Surgeons. The University also takes part in the Courses given under the auspices of the Edinburgh Post-Graduate Courses in Medicine. In the departments of the Faculty of Medicine provision is made for research by students of graduate standing. In the University laboratories facilities will be provided for candidates for the Degree of Ph.D. whose applications to engage in research have been accepted by the Senatus.

A Syllabus and further information as to Matriculation, the Curricula of Study for Degrees, etc., may be obtained from the Dean of the Faculty of Medicine, and for Degrees in the Faculties of Arts, Science, Divinity, Law, and Music from the Deans of these Faculties or from the Secretary, and full details are given in the University Calendar, published by James Thin, 45 South Bridge, Edinburgh. Price by post, 5s. 9d.

June 1938. Telephone: Edinburgh 41003. By authority of the Senatus, W. A. FLEMING, Secretary.

LONDON HOSPITAL MEDICAL COLLEGE & DENTAL SCHOOL

THE WINTER SESSION will Open on Monday, October 3rd

The LONDON HOSPITAL serves the East End of London and with eight hundred and ninety beds is the largest voluntary Hospital in England. The Out-patient Department which deals with a hundred thousand new patients per annum is extensively used for teaching.

The size of the Hospital necessitates a large number of resident medical officers. Every year seventy resident house physicians and house surgeons and eighty [illegible] is are appointed from among recently qualified students. The opportunities which these appointments offer for obtainin[illegible]

The [illegible] to the Hospital and is staffed by Professors of Anatomy, Physiology, Bacteriology, Chemical Pathology, Morbid Anatom[illegible] London.

Sp[illegible] Physiology for the Primary F.R.C.S. and Advanced Courses in Surgery for the Final F.R.C.S. Examination and in Med[illegible] examinations, are held twice a year.

Ev[illegible] *PRIZES* of the total value of £90 are awarded annually. Research Funds to the value of £113,000 permit of assistance being given to students and graduates engaged in medical research.

The MEDICAL COLLEGE contains a modern Museum of Pathology and a Library provided with all the current medical periodicals in charge of a full-time Librarian. There is also an Athenaeum Club and Dining Hall, a Gymnasium, a Fives Court, and two Squash Courts in the Students' Hostel. The Athletic Ground of 13 acres at Hale End is within easy distance of the Hospital.

The HOSPITAL is only 20 minutes from Charing Cross and Baker Street Stations. For those who wish to live in immediate proximity to the Hospital there is accommodation for sixty students in the Students' Hostel.

Further details may be obtained from the Dean, Dr. A. E. CLARK KENNEDY, M.D., F.R.C.P., Physician to the Hospital and Fellow of Corpus Christi College, Cambridge, who is always pleased to meet students wishing to see the Hospital and College, and to whom application for admission should be made. Turner Street, London, E.1.

UNIVERSITY OF ABERDEEN

SESSION, 1938-1939

FACULTY OF MEDICINE.

The WINTER SESSION commences on TUESDAY, OCTOBER 4th 1938, and closes on FRIDAY, MARCH 17th 1939
The SUMMER SESSION commences on TUESDAY, APRIL 18th, 1939, and closes on FRIDAY JUNE 23rd 1939
The Certificate of Attestation of Educational Fitness to enter the University, granted by the Scottish Universities Entrance Board, must be exhibited before commencing study for the Degrees of MB, ChB
The Faculty of Medicine embraces Twelve Chairs, besides various Lectureships, and instruction is given in all departments of Medical Science —

PROFESSORS

Biology —James R Matthews MA FLS FRSE and J Hogben MA DSc FRS
Physics —John A Carroll MA PhD
Chemistry —Alexander Findlay MA DSc PhD
Anatomy —R D Lockhart ChM MD
Physiology —E W H Cruickshank MD DSc PhD MRCP FRSE
Materia Medica —David Campbell MC MA LSc MD FRFPS
Pathology —John S Young MC, MA BSc, MD
Pacteriology —John Cruickshank MD
Surgery —James R Learmonth ChM FRCSE
Medicine —(Vacant)
Midwifery —D Baird BSc MD DPH FCOG

LECTURERS

Embryology —G Leslie Purser MA
Public Health —Harry J Rae MC MA MB ChB, DPH
Douglas Wales Berry MC MD DPH
Forensic Medicine —Robert Richards MA MD FRCSE
Bio Chemistry —Edgar Beard BSc
Tropical Medicine —Geo Alex Williamson MA, MD DPH DTM
Morbid Anatomy —William M Davidson MP ChI
Experimental Physiology —William Burns, BSc MI ChI
Malignant Disease and Radium Officer —W G Evan MB FS
MRCS LRCP
Medical Ethics —George Williamson MA MI CM FRCPE
Psycho pathology —Douglas R MacCalman MD
Bacteriology —James W Howie MD

CLINICAL LECTURERS AND SPECIAL TEACHERS

Royal Infirmary

Clinical Medicine —A G Anderson MA MD FRCP A W Hendry OBE MD MRCP
Clinical Surgery —Professor J R Learmonth ChM FRCSE Fred K Smith MA MB ChB W Anderson OBE MB ChB FRCS
Clinical Gynaecology —D Baird BSc MD DPH FCOG
Clinical Midwifery —George S Davidson MA MB, ChB FRCSE, MCOG
Ophthalmology —W Clark Souter MD, DO Harold Edgar Smith MA MB ChB
Diseases of Ear Nose and Throat —John H Otty MA MB ChB FRCSE DLO
Diseases of the Skin —Thomas E Anderson MD
Venereal Diseases —Frederick J T Lowie MB, ChB DPH
Radiology and Electro Therapeutics —John E Blewett MD DMR
Dental Surgery —Hugh M Crombie MB ChB LDS
Anaesthetics —J Ross Mackenzie MD
Clinical Chemistry —Alexander Lyall MA MD MRCP

Maternity Hospital

Obstetrics and Antenatal Clinic —Professor D Baird BSc MD DPH FCOG
Maternity and Child Welfare —(Vacant)

Ophthalmic Institution

Ophthalmology —A R Galloway OBE MA MB CM

Royal Mental Hospital

Mental Diseases —R Dods Brown MD FRCPE

Dispensary

Vaccination —John Brown MB ChB DPH

City Hospital

Fevers —Harry J Rae MC MA MB ChI DPH
Tuberculosis —George S Banks MB ChB DPH

Royal Hospital for Sick Children

Diseases of Children —Alexander Mitchell MA ChM John Cruickshank MB ChI MRCPE
Anaesthetics —J Ross Mackenzie MD

Health Service for Children of School Age —Alexander F MacBean MA MB ChB, DPH

Numerous Bursaries Scholarships Fellowships and Prizes may be held by Students in this Faculty The total cost of the curriculum for the Degrees of MB and ChB including Class Hospital Matriculation and Degree Fees is approximately £250

The Degrees in Medicine granted by the University are Bachelor of Medicine and Bachelor of Surgery (MB ChB) Doctor of Medicine (MD) and Master of Surgery (ChM) The degree of Doctor of Philosophy (PhD) is also granted in this Faculty A Diploma in Public Health (DPH) is granted after a special examination in Public Health to Graduates in Medicine of any University in the United Kingdom

A Prospectus of the Classes Fees &c may be had on application to the Secretary to the University and full details of the Courses Degrees Examinations Bursaries Prizes Fellowships &c will be found in the Aberdeen University Calendar published by the University Press Ltd

The University also grants Degrees in Arts Science (Pure Agriculture Forestry and Engineering) Law Divinity, Education and Commerce particulars of which may be had on application to —

H J BUTCHART Secretary

LIVERPOOL PSYCHIATRIC CLINIC

1, ABERCROMBY SQUARE, LIVERPOOL, 7

Telephone Royal 3772

AUTUMN TERM

September 30th—December 2nd, 1938

A Course of

CLINICAL DEMONSTRATIONS

illustrating theory practice and method of the psychiatric out patient clinic

will be held on

FRIDAYS at 1 p m throughout the term

A Course of Three Lectures on

THE ANALYTICAL PSYCHOLOGY OF JUNG

will be given on

WEDNESDAYS NOVEMBER 9th 16th and 23rd at 5 p m

Inquiries should be addressed to the Lecture Secretary at the Clinic

---

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH

The EXAMINATIONS for the LICENCE of the College (as a single qualification) for the ensuing year will be held on the *First Wednesday* and the following days of every month (except September and October)

Candidates for the LICENCE (as a single qualification) must send their names to the Secretary one week before the date of the Examination at which they propose to appear

The EXAMINATIONS for the MEMBERSHIP of the College are held on the *Second Tuesday* and the following days of *January April July* and *October*

Candidates for the MEMBERSHIP must submit their applications and testimonials to the Secretary one month before the date at which they wish to appear for Examination

For the Regulations in regard to the various qualifications granted by the College and all other information application may be made to the Secretary

---

ROYAL (DICK) VETERINARY COLLEGE, EDINBURGH

Principal
Colonel Sir A Oliver CB CMG FRCVS

116th SESSION COMMENCES OCTOBER

COURSES OF INSTRUCTION QUALIFY FOR MRCVS and BSc Edin

COLLEGE CALENDAR with full particulars of EXAMINATIONS BURSARIES &c may be obtained from A C DOULL CA Secretary

---

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH

ROYAL COLLEGE OF SURGEONS OF EDINBURGH

ROYAL FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW

COPIES OF REGULATIONS for the TRIPLE QUALIFICATION (LRCPE LRCSE LRFP & SG) and the DIPLOMA IN PUBLIC HEALTH containing dates of Professional Examinations for the year 1938-1939 Curriculum &c may be had on application to The Registrar Surgeons Hall 18 Nicolson Street Edinburgh 8 or to the Registrar 242 St Vincent Street Glasgow C 2

INCORPORATED 1505

ROYAL COLLEGE OF SURGEONS OF EDINBURGH

COPIES OF REGULATIONS for the Fellowship Licence Higher Dental Diploma Licence in Dental Surgery containing dates of Examinations may be had on application to The Clerk of the College Surgeons Hall Nicolson Street Edinburgh 8 Tel

---

UNIVERSITY OF OXFORD

DIPLOMA IN OPHTHALMOLOGY

The next Examination begins on The two months Course of Lectures April 24th 1939 For further particulars —The Dean of the Medical School Museum Oxford

P H ADAMS Registrar

UNIVERSITY OF WALES

Visitor and Protector H M THE KING
Chancellor H R H THE DUKE OF KENT K G K T

The Welsh National School of Medicine, Cardiff.

Provost A. W SHEEN C B E D L M S F R C S
Secretary S C EDWARDS

The School comprises the following Departments

Pharmacology—Professor R. St. V HEATHCOTE, M V D M B Ch B Sc M R C.I

Pathology and Bacteriology—Professor J B DUGUID M D

Obstetrics and Gynaecology—Professor GILBERT J STRACHAN M D Ch B F R C I F R C S F R C S E F C O G

Medicine—Professor T MILLS KENNEDY M D F R C P (Director of Unit)

Surgery—Professor LAMBERT ROGERS M Sc F R C S F R C S E F R A C S F A C S (Director of Unit)

Preventive Medicine—Mansel Talbot Professor R M F PICKEN M B Ch B B Sc D I H

Tuberculosis—David Davies Professor W H TYTLER B A M L (Toronto)

Within the University College of South Wales and Monmouthshire Cardiff —

Physiology—Professor T GRAHAM BROWN D Sc M D F R S

Anatomy—Professor C. MacLAREN WEST M C M B B Ch Sc D

The School is an independent unit of the University of Wales. There are four constituent Colleges of the University (Aberystwyth Bangor Cardiff and Swansea) wherein the preliminary studies may be pursued

Clinical Professorial Units are established at the Cardiff Royal Infirmary

Courses of Instruction for Medical Degrees and Diplomas

Courses of Instruction are given in the above Departments for the medical degrees (M B B Ch) of the University of Wales and may be attended by students preparing for degrees and diplomas of other Examining Bodies

The Cardiff Royal Infirmary is the main Teaching Hospital Clinical Instruction is also given at the Institution of the Cardiff City Council viz Llandough Hospital City Lodge Hospital City Mental Hospital City Isolation Hospital and Lord Tonypridd Hospital (Acute Rheumatism Children) at the Prince of Wales Hospital Orthopaedic) and at the Cefn Mably Llandaff and Sully Hospital (Tuberculosis) of the Welsh National Memorial Association

The Health Department and Clinics of the Cardiff City Council are used for instruction in public health

Fees The Composition Fee for the preliminary year is £25, and for each subsequent year £35 The approximate total cost of the six year course is £300 including Hospital Incidental Students Societies Fees and the Examination Fees of the University of Wales. Certain Scholarships etc are available

Postgraduate Study Facilities are given in the School for approved research Postgraduate Scholarships are available ranging in value from £100 to £250 per annum

Complete Postgraduate Courses of Instruction are given for Diplomas in Public Health (D P H) and for the Tuberculous Diseases Diploma of the University of Wales (T D D) Postgraduate Courses for Practitioners are regularly given and meet the requirement of the Welsh Board of Health

Appointments Resident appointments at the above-named Hospitals are available to qualified students of the School

Application for admission to any of the Courses should be made as early as possible to the Secretary The Welsh National School of Medicine The Parade Cardiff from whom further particulars may be obtained

QUEEN'S UNIVERSITY OF BELFAST.

FACULTY OF MEDICINE—SESSION 1938-9

Vice-Chancellor Vacant.

Anatomy—T Walmsley M D C J A Woodside M B F R C.S
Operative Surgery and Applied Anatomy—H P Malcolm M Ch
Dunville Chair of Physiology—H Barcroft M A M D
Practice of Medicine—W W D Thomson M D B Sc D P H.
Practice of Surgery—P T Crymble M B F R C S
Materia Medica and Therapeutics—J T Lewis M D
Midwifery and Gynaecology—C G Lowry M D F R C S I
Musgrave Chair of Pathology—J H Biggart M D B Sc
Medical Jurisprudence—J H Biggart M B F R C S
Ophthalmology—J R Wheeler M B F R C S
Sanitary Science—W J Wilson B A D.Sc M D D P H
Physics—K G Emeleus M A Ph D
Zoology—T T Flynn D Sc
Botany—James Small D Sc
Chemistry—A W Stewart D Sc
Organic Chemistry—H Graham D Sc
Biochemistry—D C Harrison D Sc Ph D S Andrews M D
Vaccination—S R Armstrong M D
Pharmacology—E B C Mayes M D D P H
Bacteriology—N C Graham M B
Psychological Medicine—N B Graham M B

The Lectures of the WINTER SESSION of 1938-9 will commence on Tuesday October 4. The Summer Medical Classes will commence on April 10 1939

The Examinations for Medical Scholarships at entrance are held in June

Scholarships will be open for competition at the Professional Examinations in Spring and Summer 1939

The Fees for a complete Medical Course (including Hospital Fees) amount to about £230

Queen's Chambers for men students offers residence during the terms Full particulars can be obtained from the Secretary

HOSPITALS IN BELFAST (recognised by the University of Clinical Instruction)

ROYAL VICTORIA HOSPITAL Clinical Fees Winter Session of six months £7 7s Summer Session of three months £4 4s Winter and Summer nine months £9 9s Perpetual Fees payable in two instalments £21 Hospital Fee half a guinea for each Winter or Summer Session

MATER INFIRMORUM HOSPITAL—The Clinical Fees are the same as those of the Royal Victoria Hospital

BELFAST UNION INFIRMARY and CHILDREN'S HOSPITAL

BELFAST FEVER HOSPITALS (CITY FEVER HOSPITAL Purdysburn and UNION FEVER HOSPITAL)

ROYAL MATERNITY HOSPITAL BELFAST HOSPITAL FOR SICK CHILDREN

ULSTER HOSPITAL FOR DISEASES OF WOMEN AND CHILDREN AND MIDWIFERY DISPENSARY

BELFAST OPHTHALMIC HOSPITAL AND EYE AND EAR DISPENSARY

BEN ULSTER EYE EAR AND THROAT HOSPITAL

SAMARITAN HOSPITAL FORSTER GREEN HOSPITAL FOR DISEASES OF THE CHEST

BELFAST HOSPITAL FOR DISEASES OF SKIN BELFAST DISTRICT LUNATIC ASYLUM

The Calendar containing full information regarding the new Regulations for Courses Fees Scholarships &c can be had on application to the Bursar Queen's University Belfast. price 2s postage 6d extra.

Telephone Belfast 21821 Telegrams University Belfast. RICHARD H. HUNTER Secretary

UNIVERSITY COLLEGE, DUBLIN.

MEDICAL SCHOOL.

Session 1938–39

WINTER SESSION—Lectures commence on OCTOBER 12th
Introductory Course on OCTOBER 5th

Professors and Lecturers

Anatomy
Professor—EDWARD PATRICK McLOUGHLIN B A M D B Ch B A O
Physiology
Professor—JAMES M O'CONNOR B A M D
Pharmacology and Biochemistry
Professor—EDWARD J CONWAY M B D Sc
Zoology
Professor—J BAYLEY BUTLER M A M B B Ch B A O
Botany
Professor—JOSEPH DOYLE B A D Sc
Chemistry
Professor—THOMAS J NOLAN B A D Sc
Professor of Chemistry as applied to Medicine—JOSEPH ALGAR B A D Sc
Lecturer—JOHN KEANE M Sc Ph D
Physics
Professor—JOHN J NOLAN M A D Sc
Professor of Technical Physics—JOHN J DOWLING M A F Inst P
Lecturer—PATRICK J NOLAN D Sc Ph D
Pathology and Bacteriology
Professor—THOMAS F O'FARRELL M D F R C S I D P H
Public Health and Bacteriology
Professor—WILLIAM D O'KELLY B A M D D P H

Medicine
Professor of Medicine—HENRY F MOORE M D D Sc
Professor of Systemic Medicine—
JAMES N MEENAN M D B Ch B A O D P H
Surgery
Professor of Surgery—HENRY L BARNIVILLE B A M D M Ch
Professor of Systemic Surgery—HENRY S MEADE M Ch F R C S I
Midwifery and Gynaecology
Professor—ROBERT P FARNAN M B B Ch M A O
Lecturer (Obstetrics)—JAMES J O'KELLY B A M B B Ch M A O
Lecturer (Gynaecology)—REGINALD WHITE F R C S I
Materia Medica and Therapeutics
Professor—THEOBALD W T DILLON M B B Ch B A O
Ophthalmology
Professor—R DWYER JOYCE F R C S I
Medical Jurisprudence
Professor—J McGRATH M Sc M B
Dental Surgery
Professor—E SHERIDAN M D S F R C S I L D S
Dental Mechanics
Professor—J I POTTER M D S L D S
Orthodontia
Lecturer—LAURENCE FLANAGAN B D S M B B Ch

All Scholarship Examinations in Medicine will be held on October 1st

Introductory Course.—Particular attention is paid to beginners for whom a special Introductory Course is delivered at the commencement of the Winter Session beginning on October 5th, it is continued daily for a week

Regulations for Courses of Study for Degrees and General Regulations containing information as to Scholarships etc may be obtained from **The Registrar, University College, Dublin**

ROTUNDA HOSPITAL, DUBLIN.

THE HOSPITAL contains 148 beds Upwards of 3 000 maternity cases and nearly 1 000 gynæcological patients are treated during the year Beside the Hospital there is an external Maternity Department with 2 000 cases The routine for students consists of attendance at the Morning Lectures on Mid wifery and Gynæcology examination of patients in the Gynæcological Department attendance at operations and all abnormal labour in the Hospital Ward and conduction of labour cases in the intern and extern departments Students both qualified and unqualified attend the Ante Natal Clinics the Infants Ward Dispensary A Bio-Chemist has just been appointed who is carrying out the ZONDEK ASCHHEIM test for pregnancy and is prepared to help any Post Graduates who are keen on doing research work on the material in the Hospital An X Ray Plant is used for diagnosis and treatment Large new ante natal dispensary has just been completed giving greatly increased facilities for ante natal and out patient gynæcological and infant clinics

Qualified students are given facilities for observing and following the course of all abnormal cases in the Hospital or in the district and where practical are allowed to perform some minor obstetric and gynæcological operations and assist at major ones

The Hospital Courses are always going on during the year and Students can join at any time The Class is limited therefore it is advisable to register in advance Board and residence can be obtained at the Hospital the living accommodation has been much improved lately One grass and two hard tennis courts and one standard squash rackets court are available for students living in the residents Mess Extra classes in gynæcological diagnosis and operative midwifery are conducted by Assistants to the Master

Fees one month £6 6s months other than the first £4 4s three months £12 12s six months £21

The L M certificate is given to fully qualified practitioners of Medicine on examination after six months residential attendance at the Hospital

Telephone DUBLIN 43s 6 Full particulars from A H DAVIDSON M D F C O G Master Rotunda Hospital

UNIVERSITY OF DUBLIN

SCHOOL OF PHYSIC.

TRINITY COLLEGE.

THE WINTER SESSION will begin on 1st October, 1938

All information regarding Courses for the Medical and Dental Degrees, for the Diploma in Public Health, for the Diploma in Gynæcology and Obstetrics, and for the Diploma in Psychological Medicine may be obtained on application to the Registrar of the School of Physic, Trinity College, Dublin

DIPLOMA IN OPHTHALMOLOGY
DIPLOMA IN RADIOLOGY
DIPLOMA IN LARYNGOLOGY AND OTOLOGY
Short Intensive Revision Courses [illegible]
Postal in preparation for these [illegible]
For full details write SECRETARY [illegible]
Correspondence College 13 Wel[illegible]
W 1

STAMMERING SPEECH DEFECTS
BEHNKE METHOD Estab 1[illegible]
resident treated at [illegible]
S W 3 and in residence in the [illegible]
days at Miss BEHNKE's [illegible]
Pre-eminent success in cases [illegible]
of stammering and other speech [illegible]
Thoroughly physiological [illegible]
The method is the [illegible]
effective — Guy's Hospital Gazette
Stammering Cleft Palate Speech [illegible]
[illegible] of Miss BEHNKE [illegible]

ST MUNGO'S COLLEGE,
GLASGOW

THE MEDICAL SCHOOL OF THE GLASGOW ROYAL INFIRMARY

SESSION 1938-39

The WINTER SESSION will be opened on MONDAY OCTOBER 10th 1938

LECTURES AND DEMONSTRATIONS

Physics 10 a.m. Monday Wednesday and Friday Practical 10 a.m. Tuesday and Thursday.—Prof Tompsett, B.Sc. Ph.D. F.I.C.

Chemistry 9 a.m.—Prof. Alex. B. Steven B.Sc. F.I.C.

Practical Chemistry as arranged.—Prof. Alex. B. Steven B.Sc. F.I.C.

Biology at hours to be arranged.—Prof. A. J. Allison.

Anatomy. Lectures daily 9-0-10.30. Dental and 11.0-1.30. Medical. Practical daily 9 a.m. to 5 p.m. Surgical days and hours to be arranged.—Prof. Batteby F.R.C.S.Eng. F.R.F.P.S.G.

Surgery. Systematic 11 a.m. Operative Surgery at periods and hours to be arranged.—Prof. John A. C. Macewen M.B. C.M. B.Sc. F.R.C.P.S.

Physiology. Lectures 11.15-1.15 daily. Practical. Dental 10.15-11.15 three times a week. Medical three weekly at hour to be arranged.—Prof. Eric G. Gastler B.A. M.B. Ch.B. M.R.C.P. F.R.F.P.S.

Clinical Surgery.—The Surgeons of the Glasgow Royal Infirmary.

Midwifery, daily at 2 p.m.—Prof. D. McKay Hart M.B. Ch.B. F.R.F.P.S. M.C.O.G.

Practice of Medicine 12 noon.—Prof. John Henderson M.D. Ch.B. F.R.F.P.S.

Clinical Medicine.—The Physicians of the Glasgow Royal Infirmary.

Materia Medica. Pharmacology and Therapeutics 12 noon.—Prof. Crawford M.D. F.R.F.P.S.

Pathology 2 p.m.—Pathologist to Royal Infirmary.

Ophthalmology Tuesdays and Fridays at 4 p.m.—Professor Barrie M.B. Ch.B. F.R.F.I.S.

Diseases of the Throat Nose and Ear 11 a.m.—Prof. James Harper M.A. M.B. Ch.B. F.R.F.P.S.

Diseases of the Skin twice weekly as may be arranged.—Prof. George Harvey M.B. Ch.B.

Gynaecology 3 p.m. or hour to be arranged.—Prof. D. McKay Hart M.B. Ch.B. F.R.F.P.S. M.C.O.G.

Psychological Medicine 3 p.m. Fridays. Clinique at Hawkhead Asylum 10.15 a.m. on Saturdays.—Prof. James H. Macdonald M.B. Ch.B. F.R.F.P.S.

Medical Jurisprudence 12 noon during 1st term.—Prof. Andrew Allison M.B. Ch.B. B.Sc. D.P.H. F.R.F.P.S.

Public Health 11 a.m. Prof. J. Hume Patterson F.R.F.P.S.G. D.P.H.

Tuberculosis.—(Vacant)

Hospital and Dispensary daily 9 a.m. and 2 p.m.

The fees for all the Lectures including Hospital attendance necessary for candidates for the diplomas of the English or Scottish Colleges of Physicians and Surgeons amount to about £1 0

conditions of the birth or extraction [illegible] eligible for the benefits of this Trust during the whole course of their studies at St. Mungo's College.

The Syllabus of the Medical Curriculum giving particulars of the classes fees etc. may be had gratis on application to the Secretary of the Medical Faculty 86 Castle Street Glasgow or from

THOMAS B. FERGUSON Secretary
97 West Regent Street Glasgow

These classes qualify for graduation in Medicine in the University of Glasgow

---

ADVICE ON THE CHOICE OF SUITABLE SCHOOLS AND TUTORS for BOYS and GIRLS with prospectuses of recommended establishments will be given free of charge to parents stating age of pupil district preferred range of fees and type of school required

J. & J. PATON
143 Cannon Street London E.C.4
Publishers of
Paton's List of Schools & Tutors Post free 5/6

NORTH EAST LONDON POST-GRADUATE COLLEGE
PRINCE OF WALES'S GENERAL HOSPITAL N.15

The Practice of the Hospital is limited to Medical Practitioners. Particulars from J. BROWNING ALEXANDER M.D. Dean

---

FRCS (Edin)

EDINBURGH POSTAL COURSES

Full details of above and Oral Classes.—H. C. ORRIN F.R.C.S. Surgeon's Hall Edinburgh

---

UNIVERSITY OF BIRMINGHAM FACULTY OF MEDICINE
(Associated with the General Queen's and Special Hospitals for Clinical Teaching)

THE NEXT SESSION OPENS ON OCTOBER 3rd, 1938

The University grants Degrees in Medicine Surgery and State Medicine and a Diploma in Public Health also Degrees and a Diploma in Dental Surgery.

The Courses of instruction are also adapted to meet the requirements of other Universities and Licensing Bodies.

HOSPITAL APPOINTMENTS

A large number of Resident Hospital appointments in Birmingham and District are open to qualified students of the School.

SCHOLARSHIPS EXHIBITIONS AND PRIZES

Entrance and other Scholarships and Exhibitions and various Prizes and Medals are awarded annually in the Faculty of Medicine full details of which are in the Faculty syllabus.

SCHOOL OF DENTISTRY
(University of Birmingham and Birmingham Dental Hospital)

The School of Dentistry in conjunction with the General and Queen's Hospitals affords a complete curriculum for the Dental Diplomas and Dental Degrees of the University and all other Licensing Bodies. A Dental Scholarship of the value of £37 10 0 tenable for one year is offered annually.

PRE REGISTRATION MEDICAL AND DENTAL EXAMINATIONS

The necessary courses of Instruction in Chemistry Physics and Biology may be attended in the University.

For syllabus and further information apply to the Registrar

STANLEY BARNES M.D. D.Sc. F.R.C.P.
Dean of the Faculty of Medicine
Medical School Hospitals Centre Birmingham 15

BRITISH POSTGRADUATE MEDICAL SCHOOL
(University of London)

DEPARTMENT OF SURGERY

A Course of THREL LECTURES
will be given by
PROFESSOR CHEVALIER L. JACKSON
of Philadelphia
on

September 12th and 13th

BRONCHOSCOPIC METHODS in the DIAGNOSIS and TREATMENT of BRONCHO-PULMONARY DISEASE

September 14th

MECHANICAL PROBLEMS of EXTRACTION of FOREIGN BODIES from the AIR and FOOD PASSAGES

at 4.30 p.m.

These lectures are for regular students of the School but a limited number of tickets are available without fee for medical practitioners.

Applications for tickets should be addressed to the Dean British Postgraduate Medical School Ducane Road Shepherd's Bush London W.12

THE ROYAL DENTAL HOSPITAL OF LONDON
SCHOOL OF DENTAL SURGERY
(University of London)

Leicester Square, London, W.C.2

Students are admitted for the Curriculum for the B.D.S. Degree and the L.D.S. Diploma in October January and May.

HOSPITAL PRACTICE.—The School is furnished with modern equipment and the Clinic of the Hospital is unrivalled. Students may attend the operations in the In Patient Department and chair side instruction is given in Advanced Operative Technique and Orthodontics.

DENTAL PROSTHETICS.—The Mechanical Laboratory is a spacious and fully-equipped department under the direction of the Lecturer in Prosthetics.

HOUSE APPOINTMENTS.—Six Senior House Surgeons and eighteen ordinary House Surgeons are appointed every year.

POST GRADUATE INSTRUCTION.—Instruction can be arranged in all branches of Dental Surgery.

SCHOLARSHIPS.—A number of Scholarships Bursaries and Prizes are awarded annually including eight open Scholarships ranging up to £.0 per annum.

Write for further particulars and School Calendar to THE DEAN. Telephone Whitehall 64.7

THE INCORPORATED EDINBURGH DENTAL HOSPITAL AND SCHOOL

The Incorporated Edinburgh Dental Hospital and School at 30 31 and 32 Chambers Street offers special advantages to Dental Students.

The General Courses required for the Dental Diploma are taken in the School of Medicine of the Royal Colleges.

General Hospital Practice and Clinical Instruction in Medicine and Surgery are taken at the Royal Infirmary.

The School of Medicine and the Royal Infirmary are within three minutes walk of the Dental Hospital.

Dental Hospital Practice extending over two calendar years affords the student ample opportunity for a full acquaintance with every branch of dentistry.

Fee for two years Dental Hospital Practice £.6 6s and Hospital Outfit of Instruments £.7 10s.

Women students are welcomed.

The Practice and Lectures of the Hospital are recognized by and qualify for all the Licensing Boards.

The minimum cost of Professional Education and the Licence in Dental Surgery of the Royal College of Surgeons of Edinburgh amounts to approximately £163 6s.

Students who desire to take a Medical qualification in addition to the Diploma in Dental Surgery have admirable facilities for so doing. The Triple Qualification of the Royal Colleges of Physicians and Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow (L.R.C.P. & S.) is recommended. The combined courses are arranged concurrently and should be completed in a minimum time of 5½ years. The minimum cost of Professional Education Triple Qualification and Licence in Dental Surgery amounts to approximately £.60.

Exclusive of premium for Mechanical Instruction (£63) and cost of Hospital Outfit of Instruments.

DEAN.—A. C. W. HUTCHINSON D.D.S. M.D.S. L.D.S. R.F.S.E. Telephone Edinburgh 2711

41st ANNUAL EDITION

PATON'S LIST OF SCHOOLS

An aid to parents in the selection of School and Tutors

Crown 8vo 888 pages Price 5/- postage 6d

Contains particulars with illustrations of Preparatory Private and Public Schools for Boys and Girls Tutors Co-educational Schools Domestic Science Secretarial Training and Physical Training Colleges etc. Schools on the Continent

J. & J. PATON Educational Agents
143 Cannon Street London E.C.4
ADVICE ALSO GIVEN FREE OF CHARGE

SOUTHERN RHODESIA MEDICAL SERVICE

GOVERNMENT MEDICAL OFFICER

Applications are invited from fully qualified unmarried male Medical Practitioners with surgical experience for appointment as a Government Medical Officer in the Southern Rhodesia Medical Service.

Salary will be on the scale £600-£25-£750 per annum. There is also a senior grade (£.50-£25 £900) to which promotions are made as vacancies occur. Salary will commence from the date of assumption of duty in Southern Rhodesia. In addition private practice is allowed.

The successful applicant will be required to sign an agreement for three years service in the first instance and thereafter may make application to be placed on the pensionable establishment.

A free second-class steamship passage to Cape Town and first-class railway ticket thence to Southern Rhodesia will be provided.

Canvassing either directly or indirectly will disqualify applicants.

The applicants should state the date on which they would be prepared to leave England if appointed.

Applications stating age qualifications and experience to-gether with copies of testimonials should reach the Official Secretary, Office of the High Commissioner for Southern Rhodesia Rhodesia House 429 Strand London W.C.2. (from whom further particulars and application form may be obtained) not later than September 14th 1938.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH

Applications are invited for the post of CONSERVATOR of the MUSEUM and DIRECTOR of POSTGRADUATE STUDIES tenable for five years with eligibility for reappointment at an initial salary of £1 000 per annum.

Applications along with the names of two persons to whom reference may be made must be lodged not later than October 31st 1938. Particulars of the duties of the post may be obtained from the Secretary Royal College of Surgeons 18 Nicolson Street Edinburgh 8 to whom applications should be addressed.

HIS MAJESTY'S COLONIAL SERVICE

COLONIAL MEDICAL SERVICE.

During 1938, the Secretary of State for the Colonies proposes to select a number of Medical Officers to fill vacancies the majority of which will occur in Tropical Africa and Malaya

QUALIFICATIONS —Candidates must be British subjects of European parentage, under 35 years of age and must possess a medical qualification registrable in the United Kingdom Preference will be given to candidates who have held Hospital or Public Health appointments, or who have special knowledge of anaesthetics, radiology, surgery, medicine, ophthalmology, gynaecology and midwifery, diseases of the ear nose and throat venereal diseases, etc

SALARY —Initial salaries vary from £600 to £700, and rise by increments to a maximum of between £1,000 and £1,200

PRIVATE PRACTICE —Private practice is not allowed as of right, but in the case of some appointments it is permitted on certain conditions

QUARTERS —In Tropical Africa free quarters, or an allowance in lieu are provided In Malaya quarters are provided at an annual rental not exceeding 6% of the officer s salary

PASSAGES —Free first-class passages are provided on first appointment and when proceeding on and returning from leave Assistance is also given towards family passages

TERMS OF APPOINTMENT —The appointments are pensionable, subject to a probationary period which varies from two to three years

COURSES OF INSTRUCTION IN TROPICAL MEDICINE AND HYGIENE —Selected candidates will normally be required to attend a course of instruction leading to the Diploma in Tropical Medicine and Hygiene before proceeding overseas

DUTIES —Although Medical Officers are appointed in the first instance for general service there are opportunities for work in special branches of medicine and surgery, in public health, and in medical research

Further particulars and forms of application may be obtained from the **Director of Recruitment (Colonial Service), 8, Buckingham Gate, London, S W. 1.**

ROYAL ARMY MEDICAL CORPS

Applications are invited from medical men for appointment to commissions in the Royal Army Medical Corps

Candidates will, for the present, be selected for commissions without competitive examination, and will be required to present themselves in London for physical examination and interview on, or about, 21st October, 1938 They must be registered under the Medical Acts, and normally must not be over the age of 28 years

Successful candidates will, in the first instance, be given short service commissions for five years During the 4th year of this period they will be given the opportunity of applying for permanent commissions in either the Royal Army Medical Corps or the Indian Medical Service Those not selected will retire on completion of five years' service with a gratuity of £1,000

Candidates who are successful will, unless they are seconded to complete a hospital appointment, assemble at the Royal Army Medical College, London, on 1st November, 1938

Particulars of the Conditions of Service in the Royal Army Medical Corps pay and allowances, and forms of application, may be obtained on application either in writing, or personally, to the Assistant Director General, Army Medical Services, The War Office, London, S W 1

INDIAN MEDICAL SERVICE

RECRUITMENT OF EUROPEAN OFFICERS

Applications are invited from Medical Men for Permanent Commissions in His Majesty's Indian Medical Service The terms offered include a gratuity of £1 000 on retirement after six years' service, or of £2,500 after 12 years service, together with free return passages for those who no longer desire to remain in the Service In other respects the terms will be as detailed below

British subjects of pure European descent who are under 32 years of age who are registered under the Medical Acts in force in Great Britain and Northern Ireland are eligible to apply

CAREERS

The Indian Medical Service offers a permanent career with wide opportunities of medical experience including clinical preventive specialist and research work At the beginning of his career an officer is employed on the military side which has medical charge of the Indian Army Promotion is on a time scale up to the rank of Lieutenant Colonel and by selection to the ranks of Colonel and Major General An officer may apply after one year's Indian Service to have his name registered for transfer to the civil side from which appointments are made to Civil Surgeoncies which are established at the principal civil centres to provide for the medical needs of Civil Officials and for general medical administrative purposes to specialist (for example public health and bacteriological) services to research posts and to professorships at the Medical Schools

RATES OF PAY

Years of Service	Rank	Basic Pay Rs. per mensem	Overseas Pay £ per month	Total £ per annum
1	Lieutenant	450	15	585
2	Captain	500	25	750
3	"	530	25	795
4	"	550	25	795
5	"	600	25	840
6	"	600	30	900
7	"	700	30	990
8	"	700	30	990
9	"	700	35	1050
10	"	700	35	1050
11	Major	800	35	1140
12	"	800	40	1200
13	"	800	40	1200
14	"	800	40	1200
15	"	800	40	1200
16	"	950	40	1335
17	"	950	40	1335
18	"	950	40	1335
19	"	1100	40	1470
20	"	1100	40	1470
21	Lieut.-Col.	1350	40	1695
22	"	1350	40	1695
23	"	1350	40	1695
24	"	1500	40	1830
25	"	1500	40	1830

Note—(1) The rupee is at present stabilized at a rate equivalent to 1s 6d

(2) An officer promoted to the rank of Lieut.-Colonel before completion of 20 years service will receive pay at the rate of Rs. 1200 per mensem (basic) plus £40 per month overseas pay

Extras—In addition to the above rates various allowances are admissible for a large number of special appointments on both the military and the civil side which may be held by members of the Indian Medical Service Special high rates of pay are also attached to the numerous administrative appointments open to officers in both branches of the Service

ANTEDATES IN COMMISSION

Candidates possessing certain higher medical qualifications or holding the Diploma in Public Health may be granted an antedate in their commissions Past service in certain hospital appointments may also render candidates eligible for an antedate Persons holding or about to hold resident posts at recognized hospitals may be seconded in those posts for a period The maximum period of antedate secondment or antedate and secondment combined admissible under this paragraph is limited to 18 months

OUTFIT ALLOWANCE

Officers on appointment will receive an allowance of £75 towards the cost of outfit.

PRIVATE PRACTICE.

With the exception of Administrative Officers military or civil and officers holding certain special appointments officers are not debarred from taking private practice so long as it does not interfere with their proper duties.

LEAVE.

Leave can be taken at reasonable intervals and adequate rates of leave pay are provided Extra leave (known as study leave) which may not exceed twelve months in all during an officer's service may be granted to officers desirous of pursuing special courses of study of a postgraduate nature During such leave study allowance at present fixed at the rate of 12s a day in the United Kingdom £1 a day on the Continent of Europe and £1 10s a day in the United States of America and Canada is granted to an officer in addition to ordinary rates of leave pay

PENSIONS

The rates of pensions are as follows —	Per annum.
After 17 years service for pension	£372 0s
18 "	£400 0s
19 "	£428 0s
" 20 " "	£465 0s
" 21 " "	£502 0s
22 "	£539 10s
23 " " "	£576 10s
" 24 "	£614 0s.
" 25 " " "	£651 0s
" 26 " "	£697 10s
27 "	£744 0s

There are additional pensions ranging from £65 to £350 per annum for officers who have held administrative appointments.

PASSAGES

An officer on appointment is provided with free passage to India The families of officers who are married prior to the date of the officers embarkation on first appointment will also be provided with free passage to India subject to the payment of messing charges Officers and their families are also eligible for passage concessions under which they are granted a certain number of return passages home at Government expense during their service

INSTRUCTION PRIOR TO EMBARKATION

Officers are required to undergo courses of instruction at the Royal Army Medical College and at Aldershot lasting approximately three months prior to their embarkation for India on first appointment. Information as to the rates of pay admissible during this period and subsequently up to arrival in India is contained in the memorandum referred to below

A memorandum giving full details regarding these appointments and forms of application may be obtained from the UNDER SECRETARY OF STATE FOR INDIA MILITARY DEPARTMENT INDIA OFFICE LONDON S W 1 The Selection Committee will meet at the India Office on 11th October 1938 next, and the selected candidates unless seconded for hospital appointment will be required to join a course of instruction commencing on 1st November prior to sailing for India in February 1939 Applications should reach the India Office as soon as possible

INDIA OFFICE, SEPTEMBER 1938

NOTICE OF ELECTION

Medical Act 1886 (49 *and* 50 *Vict C* 48)

NOTICE IS HEREBY GIVEN that pursuant to the Medical Act 1886 an ELECTION of TWO MEMBERS of the General Council of Medical Education and Registration of the United Kingdom to represent the registered medical practitioners resident in ENGLAND is about to be held

Every registered medical practitioner is qualified to be nominated as a candidate

Each candidate must be nominated by a separate nomination paper

Every registered medical practitioner resident in England is entitled to take part in nominating two candidates

Every nomination paper must state the name registered address and registered qualification or qualifications of the candidate nominated it must be signed by not fewer than twelve registered medical practitioners resident in England as nominating such candidate and the registered address and registered qualification or qualifications of each one so signing must be appended to his signature

Every nomination paper accompanied by a declaration in writing signed by the person nominated acknowledging that h consents to be nominated must be delivered by post or otherwise on or before the twentieth day of September 1938 addressed to The Registrar of the Branch Council for England 44 Hallam Street London W 1 where forms of nomination papers may on application by post or otherwise be obtained

Every nomination paper in respect of which any of these Regulations has not been complied with or which is not received at 44 Hallam Street London W 1 on or before the twentieth day of September 1938 will be invalid

JOHN BERESFORD LEATHES
Returning Officer

UNION OF SOUTH AFRICA

VACANCY FOR

(A) SENIOR PROFESSIONAL OFFICER (PHYSIOLOGY)—ONE POST (Salary Scale £700 £25 £800)

(B) OFFICER ONE POST (Salary

Applications are invited from suitable candidates for appointment to the above mentioned posts in the Department of Agriculture and Forestry in the Union of South Africa

The commencing salaries will be determined according to qualifications and experience

SPECIAL QUALIFICATIONS

1 *For the Post of Senior Professional Officer (Physiology)*

Applicants must be in possession of a doctorate in science with thorough training in physiology and must have given special attention to this branch in their advanced studies Consideration will be extended to experience in physiological research especially in the direction of fruit research although the latter qualification will not necessarily be regarded as essential

2 *For the Post of Senior Professional Officer (Biochemistry)*

Applicants must be in possession of a doctorate in science with thorough training in biochemistry and must have given special attention to this branch in their advanced studies Experience in biochemical research work especially in the direction of fruit research will be a recommendation although this qualification will not necessarily be regarded as essential

Candidates should furnish full particulars regarding qualifications and experience *Original certificates and testimonials should not be submitted in the first instance*

Before appointment to the fixed establishment in a permanent capacity the successful candidates will be required to serve on probation for a period of not less than twelve months they must be British subjects and have resided in the Union of South Africa or in the Mandated Territory of South West Africa for not less than three years and they must furnish satisfactory certificates of birth and health Successful candidates who do not satisfy the nationality and/or residential qualifications will be appointed on contract until if their services are satisfactory they acquire eligibility for permanent appointment Proficiency in one of the official languages—English and Afrikaans) (or Nederlands)—is an essential requirement

Copies of publications and/or scientific reports of which the applicant is the author must be attached to all applications where possible

Any degrees obtained by candidates must be those of universities of recognized standing Any qualifications additional or of a standard equal to those which are required will also be taken into account

Application must be made on the prescribed form (Z 33) which is obtainable from the Secretary Office of the High Commissioner for the Union of South Africa South Africa House Trafalgar Square London WC 2 to whom all completed forms must be addressed

Applications from the High Commissioners must reach the Union Government not later than September 15th 1938

MINISTRY OF HEALTH

The Minister of Health invites applications from registered medical practitioners (men and women) for six vacant appointments as MEDICAL OFFICERS on the staff of the Ministry

The salary commences at £850 per annum and rises by annual increments of £30 to a maximum of £1 200 per annum

The appointments will be subject to the usual Civil Service conditions as to pension holidays etc

Candidates must be registered medical practitioners of not less than five years standing and have experience in Public Health or Hospital services

Generally preference will be given to candidates possessing a University degree in Medicine and a Diploma of Public Health but for one of the appointments special surgical experience of the treatment of Cancer by modern methods and for another special knowledge of pharmacology would be taken into consideration

Medical Officers are required to devote their whole time to the Public Service and must be prepared to work in any part of England or Wales if required to do so

Canvassing through members of Parliament or in other ways will render a candidate liable to disqualification

Forms of application with further particulars of the appointments may be obtained from

The Director of Establishments
Ministry of Health
Whitehall S W 1

No application can be considered unless received on the prescribed form not later than September 13th 1938

UNIVERSITY OF THE WITWATERSRAND
Johannesburg

PROFESSOR OF OBSTETRICS AND GYNAECOLOGY

The Council of the University of the Witwatersrand Johannesburg invites applications for appointment to the Chair of Obstetrics and Gynaecology

The Professor is ex officio a member of the senior honorary staff of the Johannesburg Hospital

The Professor will be entitled to undertake private practice provided that this does not interfere with his University duties

Assumption of Duties—January 1st 1939 or as soon as possible thereafter

Salary—£1 000 £50 £1 100 subject to 6 per cent deduction for Provident Fund contributions Government and University together contributing an equal amount Half salary will be paid for the period from date of leaving England to date of assumption of duties in Johannesburg

Transport—£100 will be contributed towards the cost of passage and first class rail fare will be refunded for the journey from Capetown

Further information and forms of application may be obtained from the Secretary Office of the High Commissioner for the Union of South Africa (South Africa House Trafalgar Square London W C 2) with whom applications must be lodged in triplicate not later than September 24th 1938

THE OTAGO HOSPITAL BOARD

UNIVERSITY OF OTAGO AND DUNEDIN HOSPITAL NEW ZEALAND

Applications are invited for the position of RESIDENT SURGICAL OFFICER (senior)

Candidates must hold a degree in Medicine of a British University must have been qualified for three years and have held resident hospital appointments for at least one year Preference given to unmarried applicants

The duties will be those of superintending house surgeons with in addition certain tutorial work under the direction of the Professor of Surgery

Salary to be at the rate of £500 per annum with board and residence

Full details may be obtained on application to the office of the *British Medical Journal*

JOHN JACOBS Secretary

Otago Hospital Board Dunedin
August 9th 1938

UNIVERSITY OF GLASGOW

BARCLAY LECTURESHIP IN SURGERY AND ORTHOPAEDICS IN RELATION TO INFANCY AND CHILDHOOD

The Selection Committee gives notice of a vacancy in the Barclay Lectureship in Surgery and Orthopaedics in Relation to Infancy and Childhood tenable at the Royal Hospital for Sick Children Glasgow

The post carries with it the appointment as a VISITING SURGEON to the Royal Hospital for Sick Children Salary (for the combined post) £700

Information regarding the Lectureship may be obtained on application to the Secretary of the University Court The University Glasgow W 2 to whom applications should be sent not later than September 30th 1938

J S GUTHRIE HEAD
August 1938 Secretary of University Court

WARWICKSHIRE AND COVENTRY JOINT COMMITTEE FOR TUBERCULOSIS

ASSISTANT TUBERCULOSIS OFFICER

Applications are invited from qualified and registered Medical Practitioners for the post of Assistant Tuberculosis Officer Applicants must be prepared to devote the whole of their time to the duties of the office and must have had special practical experience in the treatment of tuberculosis in sanatoria dispensaries and otherwise and must be thoroughly acquainted with modern methods of diagnosis and treatment

The commencing salary is at the rate of £6 per annum rising by annual increments of £10 to £700 per annum and is subject to a deduction of 5 per cent in respect of contributions under the Local Government and Other Officers Superannuation Act 1922 in addition motor-car allowances in accordance with the Committee's scale and reasonable travelling expenses are paid The appointment is also subject to a satisfactory medical examination by one of the Committee's independent medical referees

Forms of application and statement of the duties and terms of the appointment can be obtained from the undersigned Applications marked Assistant Tuberculosis Officer with copies of not more than three recent testimonials must be received by me not later than first post on Saturday September 10th 1938

Canvassing directly or indirectly will be considered a disqualification

Shire Hall E EDGAR STEPHENS
Warwick Clerk of the Joint Committee
August 22nd 1938

GLOUCESTERSHIRE JOINT BOARD FOR TUBERCULOSIS

STANDISH HOUSE SANATORIUM
Stonehouse Glos

Applications are invited from registered medical men for the post of JUNIOR ASSISTANT MEDICAL OFFICER at the above Institution No previous professional experience is necessary

There are at present 250 beds including those for women and children There is an orthopaedic block

The salary is £250 per annum with board furnished apartments and laundry in addition

The appointment is for six months (with the possibility of extension for a further period of six months) and may be terminable within that period by one month's notice on either side

Applications stating qualifications and age and accompanied by copies of three recent testimonials should be received not later than September 10th

Shire Hall RICHARD L MOON
Gloucester Clerk of the Joint Board
August 18th 1938

BOROUGH OF CHORLEY

APPOINTMENT OF MEDICAL OFFICER OF HEALTH

Applications are invited for the position of whole time male Medical Officer of Health School Medical Officer

Candidates must have had previous experience of the various duties attaching to the position of Medical Officer of Health and in addition to the qualifications prescribed by statute must possess the Diploma of Public Health

Salary £800 per annum plus an allowance of £25 per annum for travelling expenses The position is designated under the Superannuation Act of 1922 The appointment will be subject to the provisions of the Sanitary Officers (Outside London) Regulations 1935 and to the approval of the Ministry of Health

Further particulars and form of application may be obtained from the undersigned by whom applications must be received not later than September 15th 1938

GEORGE JACKSON
Town Clerk

August 19th 1938

CITY OF MANCHESTER

PUBLIC HEALTH DEPARTMENT

APPOINTMENT OF ASSISTANT PATHOLOGIST

The Public Health Committee invites applications from qualified medical practitioners for the appointment of Assistant Pathologist for the Pathological Department of the Manchester Municipal Hospitals Public Health Service

Salary £660 per annum rising by annual increments of £25 to £700 per annum subject to the Manchester Corporation Superannuation Scheme

Applicants must have had experience in clinical pathology in all branches of clinical pathology

Full information and forms of application may be obtained from the Medical Officer of Health Town Hall Manchester 2 and completed forms must be received by him not later than September 23rd 1938

F E WARDLEWORTH
Town Clerk

Town Hall Manchester 2
August 20th 1938

COUNTY COUNCIL OF DURHAM

DISTRICT TUBERCULOSIS MEDICAL OFFICER

The County Health Committee invite applications for a District Tuberculosis Medical Officer at a commencing salary of £900 per annum rising by annual increments of £25 to £1000 per annum. Travelling allowance will be paid by the County Council in accordance with a scale to be approved from time to time. The appointment will be held subject to three calendar months' notice on either side, and to the following conditions:

1. The officer appointed must be a registered medical practitioner under the age of 40 years, must devote the whole of his time to the duties of the office and must not engage in private practice.

2. He should have held a previous appointment as Tuberculosis Medical Officer with the approval of the Ministry of Health or

(i) have had at least three years experience in the treatment of his profession

(ii) have spent in general clinical work a period of not less than eighteen months, of which not less than six months have been spent in a hospital as Resident Medical Officer in charge of beds occupied by general medical or surgical cases, and

(iii) have received special training for a period of not less than six months in the diagnosis and treatment of tuberculosis.

3. He will be attached to the County Health Department, and will subject to the direction of the County Medical Officer be under the control of the Central Tuberculosis Medical Officer.

4. He will be required to reside within his dispensary area or such other area as required by the Council.

5. He must be prepared if called upon to act as locum tenens to other members of the medical staff of the County Medical Officer.

6. The holding of a Diploma in Public Health will be deemed an additional qualification for the post.

The candidate appointed will be required to pass the County Council's medical examination and will be subject to the provisions of the Local Government and Other Officers' Superannuation Act 1922.

Applications endorsed "District Tuberculosis Medical Officer" and accompanied by copies of not more than three recent testimonials must be addressed to the County Medical Officer, Shire Hall, Durham, and must be received by him not later than first post on Monday, September 19th, 1938.

J. A. HOPE,
Shire Hall, Clerk of the County Council.
Durham. August 23rd, 1938.

LONDON COUNTY COUNCIL

ASSISTANT MEDICAL OFFICERS (men or women) required for mental health services. Candidates (under 35 years of age) must (I) be registered to practise both in medicine and surgery in England, (II) be of at least one year's professional standing and (III) have held residential position in general hospital for six months or comparable general experience. Salary £470 a year, rising by £25 to £570 (additional allowance of £10 to holders of D.P.M.). No emoluments. Charges for board, lodging, etc. (at present £1 9s. a week) if required to be resident. Pensionable. Marriage terminates service in case of women.

For application form, returnable by September 5th, send stamped addressed foolscap envelope to Chief Officer (B/A), Mental Hospitals Dept., Shell Mex House, Strand, W.C.2. Canvassing disqualifies.

LONDON COUNTY COUNCIL

Applications invited from MEDICAL PRACTITIONERS of at least one year's standing to undermentioned position. Experience in a resident appointment in a general hospital for at least six months desirable. Married quarters not available.

ASSISTANT MEDICAL OFFICER (Grade II). Salary £250 a year to either with board, lodging and washing. Appointment for one year only in first instance (renewable for a second year under certain conditions) at—

KING GEORGE V SANATORIUM,
near Godalming, Surrey.

Application forms obtainable (stamped addressed foolscap envelope necessary) from Medical Officer of Health, Staff Division, 2A, County Hall, S.E.1, returnable by September 19th.

Canvassing disqualifies.

LONDON COUNTY COUNCIL

Applications invited for appointment as ASSISTANT CONSULTING DENTAL SURGEON (permanent and pensionable) in Public Health Department. Duties will be in connexion with scheme for dental treatment of school children and other dental services of the Council. Salary £750–£850–£950 a year. Candidates must be licentiates in dental surgery or hold university degree in dentistry; medical qualification an advantage but not essential.

Applications must be on form obtainable (stamped addressed foolscap envelope necessary) from Clerk of the Council, County Hall, London, S.E.1, returnable by September 12th. Canvassing disqualifies.

BRIDGBURY AND ROMILEY URBAN DISTRICT COUNCIL
HAZEL GROVE AND BRAMHALL URBAN DISTRICT COUNCIL
MARPLE URBAN DISTRICT COUNCIL
DISLEY RURAL DISTRICT COUNCIL

APPOINTMENT OF WHOLE TIME MEDICAL OFFICER OF HEALTH

Applications are invited from duly qualified and registered Medical Practitioners not exceeding 45 years of age who have had not less than five years' whole time experience of a Diploma in Sanitary Science, Public Health or State Medicine for the above appointment.

The appointment will be made subject to the provisions of the Ministry of Health (Provision of Section 110 of the Local Government Act 1933 and the Sanitary Officers (Outside London) Regulations 1935.

The person appointed will be required to commence his duties on January 3rd 1939 and devote the whole of his time to the performance of the duties of the office.

He will not be permitted to engage in private practice as a Medical Practitioner will be required to enter into an agreement with each Authority and to reside within the area.

Commencing salary £600 per annum plus a motor car allowance.

Each Council will designate the position as an established post under the provisions of the Local Government and Other Officers' Superannuation Act 1922 and the successful candidate will be required to pass a medical examination.

Application forms to be obtained from the undersigned endorsed "Medical Officer of Health" stating particulars of qualifications and Local Government experience (if any) supported by copies of not more than three recent testimonials which will not be returned must be delivered to the undersigned not later than Friday, September 16th, 1938.

Canvassing of members of any Authority directly or indirectly will be deemed a disqualification.

The Council House, F. E. CAPPER,
Hazel Grove, Clerk to the Joint Committee.
Cheshire.
September 1st, 1938.

SURREY COUNTY COUNCIL

PUBLIC HEALTH DEPARTMENT

KINGSTON COUNTY HOSPITAL
(268 beds, mainly acute)

APPOINTMENT OF RESIDENT SURGEON

Applications are invited for the appointment of Resident Surgeon at the Kingston County Hospital, Wolverton Avenue, Kingston-upon-Thames.

Candidates must have had considerable experience in surgical appointments and must possess a Higher Surgical Qualification.

The Officer appointed will be required to devote his whole time to the services of the Council and any fees he may receive from time to time must be paid into the County Fund.

Commencing salary £660 per annum rising by annual increments of £25 to a maximum of £700 per annum together with full residential emoluments valued for superannuation purposes at £125 per annum. An additional salary at the rate of £50 per annum will be paid in the event of the officer appointed being required to act as Deputy Medical Superintendent.

Applications may be considered from candidates prepared to provide their own accommodation in the immediate vicinity of the Hospital in the case of a non-resident appointment the value of the emoluments referred to above will be paid in cash less appropriate deductions for meals supplied by the Hospital.

The officer appointed will be required to pass a medical examination and will be subject to the provisions of the Local Government and Other Officers' Superannuation Act 1922.

Applications stating age, qualifications, experience and enclosing copies of not more than three recent testimonials should be sent to the County Medical Officer, County Hall, Kingston-upon-Thames, by Thursday, September 15th, 1938.

County Hall, DUDLEY AUKLAND,
Kingston-upon-Thames. Clerk of the Council.
August 29th, 1938.

COUNTY BOROUGH OF SOUTHEND-ON-SEA

SOUTHEND MUNICIPAL HOSPITAL

The Health Committee of the Town Council invite applications for appointment of ASSISTANT MEDICAL OFFICER (male) grade I at their Municipal Hospital, Rochford, Essex (465 Beds). Candidates must have had two years' previous resident experience in hospitals and experience in midwifery. Salary £300 per annum rising by annual increments of £25 to £400 per annum with full residential emoluments.

Form of application to either with particulars of the appointment can be obtained from the Medical Superintendent, Southend Municipal Hospital, Rochford, Essex, by whom applications should be received not later than September 14th, 1938.

Town Clerk's Office, H. J. WORWOOD,
Southend-on-Sea. Town Clerk.

COUNTY BOROUGH OF OLDHAM

THE MUNICIPAL HOSPITAL

Applications are invited from fully qualified practitioners for the post of RESIDENT OBSTETRIC OFFICER at the above Hospital (30 Beds).

Candidates must have held previous resident appointments in a Maternity Hospital and have had experience in Ante-Natal work.

The duties are chiefly in connexion with the Maternity Wards and the Ante-Natal Clinics but the officer will also be required to undertake such duties in the Hospital or in the Institutions as may be required.

The appointment is subject to the provisions of the Local Government and Other Officers' Superannuation Act 1922 and the person appointed will be required to pass a medical examination.

Salary £200 rising by annual increments of £25 to £300 per annum with board, laundry and lodging. In accordance with the Grading Scheme of the Corporation the first increment will be paid on April 1st next following the appointment provided a period of six months has elapsed since the commencement of duties otherwise the increment will be paid on the subsequent April 1st.

The appointment may be terminated by one month's notice on either side.

Canvassing or solicitation of testimonials from members of the Council or any Committee appointed by the Council will be a disqualification.

Applications, stating age, experience and qualifications, together with not more than three recent testimonials and endorsed "Resident Obstetric Officer," should be forwarded to the Medical Officer of Health, Town Hall, Oldham, so as to be received not later than 9 a.m. on Monday, September 19th, 1938.

Town Hall, Oldham. TOWN CLERK.
August 6th, 1938.

CITY OF PORTSMOUTH

TUBERCULOSIS OFFICER AND SENIOR ASSISTANT MEDICAL OFFICER OF HEALTH.

Applications are invited for the above appointment from registered medical practitioners having special experience in the diagnosis and treatment of tuberculosis. Previous experience in general public health and the possession of a D.P.H. are essential.

Salary will be at the rate of £700 per annum rising by three annual increments of £30 and one of £37 10s. to a maximum of £937 10s. but the commencing salary will be fixed according to the previous experience of the successful applicant.

Applicants not to exceed 40 years of age.

The duties will be concerned mainly with Tuberculosis but the successful candidate will be required to perform other duties in the Health Department and to deputize for the Medical Officer of Health during his absence in certain aspects of the work.

The post is designated as an established post under the Local Government and Other Officers' Superannuation Act, 1922, and the salary and emoluments will be subject to a statutory deduction of 5 per cent. under that Act. Successful candidates will be required to pass a medical examination and may reside in any district of Portsmouth or Southsea.

Application forms may be obtained from and must be returned to the Medical Officer of Health, The Guildhall, Portsmouth, not later than Saturday, September 10th, 1938.

Canvassing either directly or indirectly will be deemed a disqualification.

The Guildhall, F. J. SPARKS,
Portsmouth. Town Clerk.

WORCESTERSHIRE MENTAL HOSPITAL
Barnsley Hall, Bromsgrove.

SECOND ASSISTANT MEDICAL OFFICER
(Male Service)

Applications for this post are invited from duly qualified Registered Medical Practitioners. Salary £300 per annum rising by annual increments of £25 to £450 with board, apartments, laundry and attendance, valued for superannuation purposes at £90 per annum. An additional £50 per annum will be paid to the successful candidate if holding the Diploma in Psychological Medicine.

Appointment subject to the provisions of the Asylums Officers' Superannuation Act 1909.

Forms of application may be obtained from the Medical Superintendent and must be returned to him (or either) with copies of three recent testimonials by Thursday, September 15th, 1938.

WREXHAM AND EAST DENBIGHSHIRE WAR MEMORIAL HOSPITAL
(156 Beds)

Two RESIDENT HOUSE SURGEONS required by the above Hospital (male or female) to commence duty on October 1st, 1938. Appointments for six months. Salary £150 per annum with board and lodging.

Applications, stating age, nationality, experience and qualifications, to be sent, together with copies of three recent testimonials, to the undersigned immediately.

LESLIE SPENCER, Secretary.
August 25th, 1938.

COUNTY BOROUGH OF DARLINGTON

ASSISTANT MEDICAL OFFICER OF HEALTH

Applications from qualified Medical Practitioners are invited for the combined appointment of Assistant Medical Officer of Health for Tuberculosis Public Assistance under the terms of the Public Assistance Order 1930 and other Public Health duties (not including domiciliary visiting by the Public Assistance Committee)

Applicants must not exceed 40 years of age and should have had at least three years postgraduate experience in general medicine and surgery and in public health work The person appointed will be required to give full time service under the Authority to act generally under the direction of the Medical Officer of Health to pass a medical examination to contribute to the Superannuation Fund and to reside in a house provided by the Authority for which a rental of £40 per annum exclusive of rates will be charged

The total salary is £550 per annum rising to £700 per annum by annual increments of £25 plus a car allowance of £30 per annum In the case of a candidate now in the service of another Authority on a rising salary scale recognition may be given to past service with such Authority in fixing the commencing salary All fees or emoluments received must be paid over to the Local Authority

Application forms may be obtained from the Medical Officer of Health Greenbank Darlington and duly completed and endorsed Assistant Medical Officer of Health they should be returned to him together with copies of three recent testimonials not later than September 17th 1938

H HOPKINS
Town Clerk

August 29th 1938

GLOUCESTERSHIRE COUNTY COUNCIL

ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

Gloucestershire County Council invite applications for the appointment of an Assistant County Medical Officer of Health (male) The salary will be on the scale £600 per annum × £25 to £700 per annum Travelling and subsistence allowances will be paid in accordance with the Council's scale

The post is designated for the purposes of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination by the Council's medical adviser Applicants must be registered Medical Practitioners and should hold a Diploma in Public Health Previous experience in various branches of public health and school medical work is desirable

Forms of application with particulars of the duties and conditions of appointment may be obtained from the County Medical Officer of Health Shire Hall Gloucester to whom completed applications with copies of three recent testimonials should be sent not later than September 19th 1938

Canvassing directly or indirectly will disqualify

RICHARD L MOON
Clerk of the County Council

CITY AND COUNTY OF BRISTOL

ASSISTANT MEDICAL OFFICER OF HEALTH

The Council invite applications for a whole time Assistant Medical Officer of Health for maternity and child welfare and school medical work Age not exceeding 40 years

Salary £600 rising by annual increments of £50 to £700 per annum

The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 The Diploma of Public Health is essential Particulars of the duties of the post may be obtained from the undersigned

Applications on forms to be obtained from the Medical Officer of Health 40 Prince Street Bristol 1 accompanied by not more than three recent testimonials must be received by him not later than September 9th 1938 Envelopes should be endorsed Assistant Medical Officer of Health

Canvassing will disqualify

Council House JOSIAH GREEN
Bristol 1 Town Clerk

August 1938

COUNTY BOROUGH OF BOLTON

PUBLIC ASSISTANCE AND PUBLIC HEALTH COMMITTEE

TOWNLEYS HOSPITAL

Wanted for the Townleys Hospital Farnworth near Bolton an ASSISTANT MEDICAL OFFICER (male) for a period of one year

The salary will be at the rate of £— per annum with rations furnished apartments attendance etc Applications form with condition of appointment may be obtained from the Public Health Department Civic Centre Bolton and must be returned to each the undersigned not later than [illegible] September 1938 endorsed Assistant Medical Officer

R M GALLOWAY M D
Medical Officer of Health

Public Health Department
Civic Centre Bolton
September 1938

SURREY COUNTY COUNCIL

PUBLIC HEALTH DEPARTMENT

EPSOM COUNTY HOSPITAL
(250 acute beds 126 chronic beds)

FIRST ASSISTANT MEDICAL OFFICER
(Acting Deputy Medical Superintendent)

Applications are invited from registered Medical Practitioners for the appointment of First Assistant Medical Officer at the Epsom County Hospital Dorking Road Epsom The Hospital with Ewell Park Annexe provides accommodation for 376 patients at present but a programme of extension and improvement is contemplated which will increase the accommodation to 500 beds

The Medical Officer appointed must have had considerable previous experience in surgical appointments and should preferably possess a Higher Surgical Qualification

The tenure of the appointment is limited to a period of 5 years but the appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 The cash salary is at the rate of £350 per annum rising by annual increments of £25 to a maximum of £450 per annum together with full residential emoluments valued at £125 per annum The First Assistant Medical Officer will receive an additional salary of £50 per annum as Acting Deputy Medical Superintendent

Applications stating age qualifications and experience and enclosing copies of not more than three recent testimonials should be addressed to the County Medical Officer County Hall Kingston on Thames so as to be received not later than Thursday September 8th 1938

County Hall DUDLEY AUKLAND
Kingston upon Thames Clerk of the Council
August 31st 1938

ROYAL BUCKINGHAMSHIRE HOSPITAL
Aylesbury (115 Beds)

An unforseen vacancy has arisen for the post of SECOND RESIDENT MEDICAL OFFICER (male) for the period September 24th to December 31st 1938 Salary £150 per annum with full board residence in own flat and laundry

Previous Hospital experience is desirable Opportunity will be afforded to undertake all branches of medical practice including anaesthesia and work with London consultants

Selected candidates will be required to attend for interview by the Medical Committee on Friday September 9th 1938

Applications should be sent to the undersigned by September 7th 1938

F G DAWES Secretary

ROYAL LONDON OPHTHALMIC HOSPITAL
(MOORFIELDS EYE HOSPITAL)
City Road E C 1

Applications are invited for the post of OUT-PATIENT OFFICER to attend on Mondays and Thursdays (mornings) each week

Candidates must be registered Medical Practitioners Salary at the rate of £100 per annum The Out patient Officer will be appointed for a period of one year and will be eligible for reappointment Copies of regulations can be obtained on application

Applications with testimonials stating age and qualifications together with photograph must be received by the undersigned not later than September 10th 1938

A J M TARRANT Secretary

ST MARY'S HOSPITAL W 2

ASSISTANT RADIOLOGIST

Applications are invited for the above appointment Candidates must be registered medical practitioners and must hold a Diploma of Radiology Honorarium £125 per annum

Applications giving particulars of qualifications and experience should be forwarded to the undersigned on or before Monday September 19th 1938 The appointment is in the first instance for a period of six months

A copy of the regulations may be had on application to the Secretary's office

W TARKES
House Governor

BOROUGH OF WILLESDEN

RESIDENT MEDICAL OFFICER

Applications are invited for the post of Resident Medical Officer at the Willesden Municipal (Fever) Hospital The salary will be at the rate of £—50 per annum with board lodging and laundry and the appointment is for a period of twelve months The Hospital admits all the notifiable diseases

Application stating age qualifications and previous experience with copies of three recent testimonials to be sent to the Medical Superintendent Willesden Municipal Hospital Brentfield Road Neasden N W 10

W J FIRTH
Deputy Town Clerk

August 29th 1938

MANCHESTER ROYAL INFIRMARY

MEDICAL NEUROLOGICAL DEPARTMENT

PSYCHIATRIST

The Board of Management invite applications for the above newly created post Applicants must be registered medical practitioners Higher qualifications desirable The successful candidate will be attached to the Medical Neurological Department and will be required to attend the Hospital for seven half days per week The duties will include the study and treatment of both out and in-patients and participation in teaching Ample research facilities will be available

The appointment is part time and carries with it a salary of £300 per annum and permission to engage in practice

The appointment is renewable annually

It is the intention of the Board of Management to reconsider the status of the appointment within three years

Candidates should forward fifteen copies of their application stating age experience etc together with fifteen copies of three recent testimonials not later than 9 a m on Thursday September 15th 1938 to the undersigned

By Order
F J CABLE
General Supt and Secretary

August 29th 1938

MANCHESTER ROYAL INFIRMARY

The Board of Management of the Manchester Royal Infirmary invite applications for the post of RESIDENT MEDICAL OFFICER of the Private Patients Home of 100 beds

Applicants must be registered and hold a Medical and Surgical qualification and must have had previous resident experience in a general hospital

The appointment is for twelve months renewable for a further period

Salary £250 per annum with board residence and laundry allowance

Full information is obtainable from the undersigned to whom applicants must send twelve copies of their application and testimonials on or before 9 a m on Thursday September 15th 1938

By Order
F J CABLE
General Superintendent and Secretary

MANCHESTER AND SALFORD HOSPITAL FOR SKIN DISEASES
(84 Beds 14 500 Out Patients per annum)

HOUSE SURGEON

Applications are invited for the post of House Surgeon Must be registered The appointment is for six months from October 1st Salary at the rate of £150 per annum with board and residence

Applications with copies of three testimonials to be sent to the undersigned Quay Street Manchester not later than September 6th

JOHN NALL
Secretary

UNIVERSITY COLLEGE HOSPITAL
Gower Street W C 1

Applications are invited for the appointment of HONORARY ASSISTANT ANAESTHETIST to [illegible] duty on Saturday mornings at the National Dental Hospital Great Portland Street W 1 and in the Department of the University College Hospital

Applications accompanied by evidence of [illegible] for the post should reach the Secretary University College Hospital Gower Street W C 1 by noon on Monday September 26th 1938

August 30th 1938

INVERNESS DISTRICT ASYLUM

JUNIOR ASSISTANT MEDICAL OFFICER (male) required Recent graduate with general hospital experience preferred Salary £— per annum with board lodging and laundry

Appointment is subject to terms of Mental Officers Superannuation Act 1937

Applications stating age and qualifications copies of testimonials to be sent to the Superintendent

NORTH DEVON INFIRMARY
Barnstaple
70 Beds (including Maternity)

Wanted on September 27th [illegible] SOLE RESIDENT MEDICAL OFFICER [illegible] £150 per annum with board [illegible] laundry Appointment to be for [illegible] months Applications stating [illegible] with copies of testimonials to [illegible] Secretary

BEDFORD COUNTY HOSPITAL

FIRST HOUSE SURGEON [illegible] Salary £1 5 per annum [illegible] October and for [illegible] years

BOLINGBROKE HOSPITAL
Wandsworth Common S W 11
(135 Beds)

Applications are invited for the post of RESIDENT SURGICAL OFFICER (male unmarried) The post is that of Senior Resident Officer and the work being chiefly surgical preference will be given to candidates holding the F R C S qualification

The appointment is for twelve months commencing on October 1st 1938

Salary £60 per annum with board residence and laundry

Applications stating age qualifications and experience, with copies of not more than three testimonials should be sent to the undersigned on or before September 7th 1938

W S RANDOLPH BISS
Secretary Superintendent.

CENTRAL LONDON THROAT NOSE AND EAR HOSPITAL
Gray's Inn Road W C 1

RESIDENT HOUSE SURGEON (MALE)

There will be a vacancy for a Third Resident House Surgeon to enter on duty on October 1st The appointment will be for a period of nine months three months as Third House Surgeon three months as Second House Surgeon and three months as First House Surgeon Remuneration at the rate of £5 per annum

Applications, accompanied by copies of not more than three testimonials, should be sent to the undersigned as soon as possible and in any case not later than September 14th

JOHN H YOUNG
Secretary Superintendent

ALBERT DOCK HOSPITAL
Alnwick Road E 16
(Seamen's Hospital Society)

RESIDENT MEDICAL OFFICER required for six months from October 1st Salary £110 per annum and a proportion of fees with board residence and laundry Candidates must be male and single.

Applications with copies of three testimonials to be sent in on or before September 16th to the undersigned

F A LYON
Secretary
Seamen's Hospital Society
Greenwich S E.10
August 20th 1938

RESIDENT SURGICAL OFFICER REQUIRED
for the new ALBERT DOCK HOSPITAL E 16 (55 Beds with Fracture Clinic and Rehabilitation Centre)

Appointment will commence October 1st 1938 and will be for one year in the first instance but renewable up to three years Commencing salary £250 per annum Candidates (male) should be Fellows of the Royal College of Surgeons

Applications stating age and previous experience with copies of not more than three testimonials to be sent in on or before Thursday September 15th to the undersigned from whom further particulars may be obtained

F A LYON
Secretary
Seamen's Hospital Society
Greenwich S E.10

CITY OF LONDON MATERNITY HOSPITAL
City Road E C 1

Applications are invited for the post of male ASSISTANT RESIDENT MEDICAL OFFICER for three months from October 1st—salary at the rate of £80 per annum At the end of the period the candidate will if satisfactory be appointed Senior for three months at £100 per annum

Forms of application returnable not later than September 10th may be obtained from the undersigned

RALPH B CANNINGS
Secretary

CHARING CROSS HOSPITAL

MEDICAL REGISTRAR

The Council invites applications for the post of Medical Registrar Candidates must be registered Practitioners (male) Honorarium £150 per annum

A copy of the Regulations can be obtained from the undersigned to whom applications to other with copies of three recent testimonials must be submitted not later than September 20th 1938

GEORGE J JONES
Secretary
Charing Cross Hospital
London W C 2.

CHARING CROSS HOSPITAL

OBSTETRIC REGISTRAR

The Council invite applications for the post of Obstetric Registrar Honorarium £100 per annum

Applications to other with copies of three testimonials must be submitted to the undersigned not later than September 20th 1938

GEORGE J JONES
Secretary
Charing Cross Hospital
London W C 2

DREADNOUGHT HOSPITAL, GREENWICH
S E 10
(257 Beds)

MEDICAL SUPERINTENDENT

The Committee of Management of the Seamen's Hospital Society invite applications for this post falling vacant on November 1st 1938

The appointment will be for one year in the first instance at the commencing salary of £250 per annum with board residence and laundry

Previous surgical experience is required and candidates must be male and unmarried

Applications stating age and previous experience with copies of not more than three recent testimonials to be sent in on or before September 9th to the undersigned from whom further particulars may be obtained

F A LYON
Secretary

DREADNOUGHT HOSPITAL GREENWICH
S E 10
(Seamen's Hospital Society) (257 Beds)

HOUSE PHYSICIAN required for six months as from October 1st Salary £110 per annum and a proportion of fees with board residence and laundry Candidates must be male and single

Applications with copies of three testimonial to be sent in on or before September 9th to the undersigned

F A LYON
Secretary

DREADNOUGHT HOSPITAL GREENWICH
S E.10
(Seamen's Hospital Society) (257 Beds)

HOUSE SURGEON required for six months as from October 1st Salary £110 per annum and a proportion of fees with board residence and laundry Candidates must be male and single

Applications with copies of three testimonials to be sent in on or before September 9th to the undersigned

F A LYON
Secretary

ROYAL MASONIC HOSPITAL
Ravenscourt Park W 6

A post of RESIDENT SURGICAL OFFICER (Male) one of three Residents will be vacant on October 1st 1938 Salary at the rate of £100 per annum with board residence and laundry The appointment is for six months Candidates must be registered and must have held resident appointments at a general hospital The Institution (145 beds at present but to be increased) is primarily for paying patients of both sexes of moderate means usually unable to afford ordinary Nursing Home treatment etc

Applications stating full particulars to be sent on or before Monday September 5th 1938 to the Honorary Secretaries from whom further information may be obtained

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road N W 1

Applications are invited for the following posts

RESIDENT MEDICAL OFFICER Salary £175 per annum board residence and laundry allowance

CASUALTY OFFICER Salary £100 per annum board residence and laundry allowance

HOUSE SURGEON Salary £100 per annum board residence and laundry allowance

The appointment is for a period of six months in each case as from October 1st Preference will be given to those who have held resident posts Candidates must submit applications stating qualifications age etc with copies of not more than three testimonials by Monday September 5th addressed to the Secretary

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St Quintin Avenue North Kensington W 10
(75 Beds)

HOUSE SURGEON (male) required for six months from October 1st 1938 Salary at the rate of £100 p.a. for the first three months and £150 p.a. for the second three months with board residence and laundry

Applications with copies of three recent testimonials must be submitted on a form to be obtained from the undersigned and must reach him not later than Monday September 12th 1938

H J ELEY
Secretary

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL

Applications are invited for the posts of HOUSE SURGEON (two male unmarried) one for seven months from October 1st and one for six months from November 1st renewable for a further period of six months on the recommendation of the Medical Board £100 per annum with full board quarters and laundry Applicants should be registered Medical Practitioners.

Applications with copies of testimonials should be sent to the House Governor 234 Great Portland Street W 1 not later than September 14th

WEST LONDON HOSPITAL
Hammersmith W 6 (239 Beds)

Required one HOUSE PHYSICIAN one HOUSE SURGEON and one RESIDENT ANAESTHETIST The duties of House Physician will include some work in the Children's Department and of the House Surgeon some work in the Genito-Urinary Dept. These three appointments (males) are tenable for six months from October 1st next subject to one month's notice on either side Salary at the rate of £100 per annum with board and lodging Candidates must be registered under the Medical Act.

Applications (which must be made on printed forms obtained from me) must reach me not later than first post Wednesday September 14th Selected candidates will be required to call upon such members of the Medical Staff as directed to be in attendance at the Medical Council Meeting on Friday September 23rd at 4.30 p.m. and the House Committee Meeting at 5 p.m. the same day when the appointments will be made

H. A. LADGE
Secretary

WEST END HOSPITAL FOR NERVOUS DISEASES

In Patient Department Gloucester Gate Regent's Park N W 1
Out Patient Department 73 Welbeck Street W 1

The Committee of Management invites applications to fill the following vacancies

HON. ASSISTANT OPHTHALMIC SURGEON Candidates who must be Fellows of the Royal College of Surgeons England are requested to obtain further particulars from the undersigned before Monday September 12th Twelve copies of the application with not more than three recent testimonials will be required

HON. SURGICAL ASSISTANT Candidates who must be Fellows of the Royal College of Surgeons England should send in their application with copies of not more than three recent testimonials to the undersigned before Monday September 12th

73 Welbeck Street W 1 J P WETENHALL
Secretary and House Governor

THE PRINCESS ELIZABETH OF YORK HOSPITAL FOR CHILDREN
Shadwell London E 1
(Formerly East London Hospital for Children)
(135 Beds)

A HOUSE PHYSICIAN is required on October 1st, 1938 by the above Hospital Candidates are invited to send in their applications, addressed to the Secretary not later than the first post on Tuesday September 6th 1938 accompanied by copies of not more than three recent testimonials and evidence of having held a responsible hospital appointment The appointment is for six months. Salary at the rate of £125 per annum with board residence and laundry

Candidates must be properly registered in this country Forms of application and copies of the rules can be obtained from the Secretary Superintendent

THE ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road London S W 3

Applications are invited for the post of RESIDENT MEDICAL OFFICER to commence duties on October 1st 1938 The appointment is for twelve months at a salary at the rate of £100 per annum with board residence and laundry At the end of this period reappointment for a further twelve months may be applied for

Applications to be made on a form which will be supplied by the Secretary with copies of not more than three recent testimonials to be sent to the Secretary not later than the first post on September 16th 1938

CLEMENT COBBOLD Secretary

THE QUEEN'S HOSPITAL FOR CHILDREN
Hackney Road London E 2 (160 Beds)

HOUSE PHYSICIAN required October 1st 1938 Ear Nose and Throat HOUSE SURGEON required October 1st, 1938

Six months appointments Salary at the rate of £100 per year with board lodging and laundry in each case.

Applications must be made on forms to be obtained from the undersigned and be sent in, with copies of not more than three testimonials on or before September 14th 1938

CHARLES H BESSELL Secretary

THE WEIR HOSPITAL,
West Road Balham S W 12
(30 Beds)

SENIOR RESIDENT MEDICAL OFFICER (male unmarried) required October 10th Salary £200 per annum with board residence and laundry Candidates must be fully qualified and duly registered

Applications with copies of three testimonials to be sent to the Secretary from whom further information may be obtained

ROYAL NORTHERN HOSPITAL
Holloway N 7
(Borough of Islington Tuberculosis Dispensary (North))

Applications are invited for the appointment of TUBERCULOSIS OFFICER (Non resident) in the above Dispensary vacant on November 7th 1938

Candidates must possess a registered British qualification and have had previous experience in the treatment of Tuberculosis

The appointment is a whole time post with salary at the rate of £750 per annum

Particulars with regard to duties and the submission of testimonials etc may be obtained from the undersigned to whom applications should be sent not later than September 23rd

GILBERT G PANTER Secretary

ROYAL NORTHERN HOSPITAL
Holloway N 7

Applications are invited for the post of MEDICAL REGISTRAR Candidates will be required to attend at the Hospital from Monday to Friday inclusive The appointment is for one year from November 1st 1938 with eligibility for re election

Honorarium £200 per annum with luncheon and tea provided

Applications with copies of testimonials should be sent by September 9th to the undersigned from whom the necessary forms of application and rules can be obtained

GILBERT G PANTER
Secretary

ROYAL NORTHERN HOSPITAL
Holloway N 7

Applications are invited for the following appointment

HOUSE SURGEON vacant October 1st The appointment is for nine months (six months as House Surgeon and three months as Casualty Officer) Salary at the rate of £70 per annum with board residence and laundry

Applications with copies of testimonials should be sent by September 9th to the undersigned from whom the necessary forms of application and rules can be obtained

GILBERT G PANTER Secretary

ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road London S W 3

Applications are invited for the two posts of FULL TIME ASSISTANT RADIOLOGISTS at this Hospital One for the Diagnostic Department and one for the Therapeutic Department

Applicants must be Registered Medical Practitioners who hold a Diploma in Radiology

The appointments will be for one year commencing on October 1st 1938 at a salary at the rate of £350 per annum each

Applications to be made on a form which will be supplied by the Secretary together with three (copies only) recent testimonials should be sent to the Secretary on or before Monday September 19th 1938 CLEMENT COBBOLD Secretary

ST JOHN'S HOSPITAL LEWISHAM S E 13

Applications are invited for the appointment of HONORARY PHYSICIAN in Psychological Medicine (male)

Preference will be given to candidates who have held appointments in Mental Hospitals for not less than three years The successful candidate will be required to take on O P Clinic on one half day a week and will be in charge of patients admitted to the wards

Applications stating age with copies of testimonials should reach the undersigned who will be pleased to give further information not later than September 10th

J C GILBERT
Secretary Superintendent

ACTON HOSPITAL W 3

CASUALTY OFFICER (male unmarried) required to commence duties September 24th 1938 for a four months appointment with promotion to Resident Medical Officer for a further period of three months if approved Salary £150 per annum with board residence and laundry

Candidates must be fully qualified and registered

Applications stating age nationality and qualification should be sent with copies of three testimonials to the Secretary and should arrive not later than first post Tuesday September 13th 1938

DONALD C D SWORD
Acton Hospital Secretary
Gunnersbury Lane
Acton W 3

GERMAN HOSPITAL
Dalton London E 9

HONORARY OPHTHALMIC SURGEON

The Committee invite applications for the appointment of Honorary Ophthalmic Surgeon at the above Hospital Fellowship of the Royal College of Surgeons and some knowledge of the German language desirable

Applications to be sent to the Secretary forthwith

THE HOSPITAL FOR SICK CHILDREN
Great Ormond Street London W C 1

Three OUT PATIENT SURGICAL ASSISTANTS are required Duties to commence on October 10th 1938 Honorarium £50 per annum The appointment is tenable in the first instance for one year but is renewable Duties will include attendance upon members of the Surgical Staff in the Out patient Department on two mornings a week

Candidates must possess a legal qualification to practise and have held a responsible resident appointment at a General Hospital Preference will be given to those holding the Fellowship of the Royal College of Surgeons of England

Applications must be received by noon on Monday September 26th 1938 and candidates must be prepared to attend for interview by the Joint Committee at 4 45 p m on Wednesday October 5th 1938 Full instructions and forms of application are obtainable from the undersigned

HERBERT F RUTHERFORD
August 1938 Secretary

THE HOSPITAL FOR SICK CHILDREN
Great Ormond Street London W C 1

An OUT PATIENT MEDICAL OFFICER (part-time and non resident) is required on October 10th 1938 Salary £150 per annum

This appointment is tenable in the first instance for one year but may be held for a period of two years subject to re election The duties will include those of the former Out Patient Medical Registrar Candidates must possess a legal qualification to practise and have held a responsible resident appointment at a General Hospital

Applications must be received by noon on Monday September 26th 1938 and candidates must be prepared to attend for interview by the Joint Committee at 4 45 p m on Wednesday October 5th 1938 Full instructions and forms of application are obtainable from the undersigned

HERBERT F RUTHERFORD
August 1938 Secretary

THE HOSPITAL FOR SICK CHILDREN
Great Ormond Street London W C 1

Two HOUSE PHYSICIANS and two HOUSE SURGEONS are required Duties to commence on October 18th 1938 The appointments are tenable for six months Salaries at the rate of £50 per annum Candidates must be unmarried possess a legal qualification to practise and have held a responsible resident appointment at a General Hospital

Applications must be received by noon on Monday September 26th 1938 and candidates must be prepared to attend for interview by the Joint Committee at 4 45 p m on Wednesday October 5th 1938 Further particulars and forms of application are obtainable from the undersigned

HERBERT F RUTHERFORD
August 1938 Secretary

KING EDWARD MEMORIAL HOSPITAL
EALING (145 Beds)

Applications are invited for the posts of RESIDENT MEDICAL OFFICER (male) Six months appointment with possibility of re election for a further period Salary £275 per annum with usual residential emoluments Applicants must have had good experience (at least two years) in House appointments

HOUSE SURGEON (male) to act in the Eye Gynæcological and Ear Nose and Throat Departments Six months appointment with possibility of re election for a further period Salary £150 per annum with usual residential emoluments

Applications stating age experience and qualifications and accompanied by copies of two recent testimonials to be sent to the undersigned not later than September 16th

R A MICKELWRIGHT
House Governor

THE LONDON CHEST HOSPITAL
Victoria Park E 2
(Bus Tram and Rail Cambridge Heath L and N E Railway)

The Committee of Management is desirous of appointing a LARYNGOLOGIST Applicants must be Fellows of the Royal College of Surgeons of England An honorarium is attached to the post

The Assistant Laryngologist is an applicant

Applications accompanied by copies of testimonials should reach the undersigned at the Hospital not later than Saturday September 17th 1938 THOMAS BROWN
Secretary

HAMPSTEAD GENERAL AND NORTH WEST LONDON HOSPITAL
Haverstock Hill N W 3

APPOINTMENT OF CASUALTY MEDICAL OFFICER

Applications are invited from registered medical women for the resident appointment of Casualty Medical Officer for six months vacant October 1st next at the Out Patient Department Bayham Street Camden Town Salary £100 per annum

Application to be made on the prescribed form together with copies of not more than three testimonials should be returned to the Secretary by September 17th

WESTMINSTER HOSPITAL
Broad Sanctuary S W 1

The Wander Scholarship in Diseases of Children

Applications are invited for the office of WANDER SCHOLAR (Clinical Pathologist and Registrar to the Children's Department Salary £250 per annum Duties to commence October 1st 1938

Candidates must be registered medical practitioners who have held a resident Hospital post and had some experience in pathology or in diseases of children The office is a whole time one and is tenable for one year

Applications (six copies) together with six copies of three recent testimonials should be submitted to the undersigned (from whom further details regarding the duties of the office can be obtained) not later than Friday September 16th 1938

By Order of the House Committee
CHARLES M POWER Secretary

THE MANOR HOUSE HOSPITAL
Golders Green London N W 11
(140 Beds)

Applications are invited for the post of JUNIOR MEDICAL OFFICER Salary at the rate of £150 per annum with board residence

Appointment tenable for six months which may be renewed if mutually agreeable Candidates male and unmarried must be fully qualified and registered The successful candidate will be requested to take up his duties at the earliest possible moment

Applications stating full particulars and accompanied by copies of not more than three recent testimonials should be forwarded to the undersigned forthwith

JAMES W LINKHORN F C C S
Secretary

THE MIDDLESEX HOSPITAL AND MEDICAL SCHOOL W 1

Applications are invited for the appointment of MEDICAL REGISTRAR The appointment will be for fourteen months from November 1st 1938 and the holder will be eligible to apply for re appointment and may retain office for two further consecutive years Salary £300 per annum

Further particulars may be obtained from the Secretary Superintendent to whom applications with copies of not more than three testimonials must be sent by noon on Saturday October 15th 1938 By Order of the Board

S R C PLIMSOLL
Secretary Superintendent

MILDMAY MISSION HOSPITAL
Austin Street Bethnal Green E

Applications are invited for the post of ASSISTANT CASUALTY OFFICER (female) which is now vacant The appointment is for resident and for six months Salary £140 per annum Dinner tea and supper when on duty

Candidates must be registered under the Medical Acts and the Mildmay Council is anxious that they should be fully in sympathy with the religious work of the Hospital

Applications with copies of recent testimonials should be sent to the Medical Superintendent as soon as possible

THE WILLESDEN GENERAL HOSPITAL
Harlesden Road N W 10

Applications are invited from fully qualified registered candidates (unmarried) for the appointment of a Resident Officer to hold the appointment of CASUALTY OFFICER for a period of six months from October 1st 1938 followed by a six months appointment as HOUSE PHYSICIAN (total nine months)

Salary at the rate of £100 per annum

Applications to be received by the Secretary later than first post on Thursday September 29th 1938

August 29th 1938

THE FINCHLEY MEMORIAL HOSPITAL
Granville Road N 12 (1st Block)

RESIDENT MEDICAL OFFICER

Applications are invited for the post of Resident Medical Officer vacant September 1st 1938 at the rate of £150 per annum for six months at the rate of £175 per annum renewable for further period of six months with board residence laundry and coals

Applications stating qualifications and experience with copies of testimonials to be sent to the Secretary

METROPOLITAN HOSPITAL
Kingsland Road E 2

Application are invited for the post of ASSISTANT MEDICAL OFFICER in the Therapeutic Department Experience in Physiotherapy and Electro-Therapy is necessary Salary £150 per annum the appointment to be for six months with board residence and laundry which is attached may be obtained

Applications and testimonials to be sent by September 17th 1938

FRANK JENKINS
House Governor

NORTHAMPTON GENERAL HOSPITAL
(309 Beds)

There will be the following vacancies for Resident Medical Officers on October 1st 1938 —

One HOUSE SURGEON to the Ear Nose and Throat Department
One RESIDENT ANAESTHETIST
One HOUSE SURGEON to the Maternity and Gynaecological Department

Salaries will be at the rate of £150 per annum with board residence and laundry Candidates who must be duly qualified and registered must be males and of British nationality

The successful candidates will be elected for a period of six months and will be eligible for re election for a further period of six months

Applications stating age qualifications etc with copies of three testimonials must reach the undersigned not later than the first post on Wednesday September 7th 1938

GORDON S STURTRIDGE MB BS
August 23rd 1938 Superintendent

PRESTWICH MENTAL HOSPITAL
Near Manchester

LOCUM TENENS (with a possibility of permanency) male MEDICAL OFFICER age not exceeding 35 required at the above Hospital which is a training school Salary £7 7s per week with board lodging and laundry Copy testimonials only must be sent

Candidates must be unmarried and registered under the Medical Act Appointment terminable by one week s notice on either side

Apply as soon as possible stating age hospital and other experience qualifications and full particulars to the Medical Superintendent as above.

ROCHDALE INFIRMARY AND DISPENSARY
(110 Beds)

The Board of Management invite applications for the appointment of SENIOR HOUSE SURGEON The salary attached to the appointment is at the rate of £200 per annum including board residence and laundry

Applications stating age nationality etc together with copies of three recent testimonials to be sent to the Secretary endorsed "House Surgeon Conditions of the appointment may be had on application to the Secretary

Infirmary Office W WYNNE Secretary
Rochdale Lancs

ROYAL SURREY COUNTY HOSPITAL
Guildford

WANTED 1st OCTOBER HOUSE SURGEON (Male)

General Surgery Gynaecological and Ophthalmic six months appointment recognized for the F R C S Salary £150 per annum with board residence and laundry

Applications stating age and essential particulars with copies of not more than three testimonials to reach the Secretary Superintendent not later than September 6th 1938

ROYAL ISLE OF WIGHT COUNTY HOSPITAL
Ryde Isle of Wight

HOUSE SURGEON (Senior Resident) wanted for October either sex unmarried qualified and registered State age and nationality Salary at the rate of £140 a year with board residence and laundry

Apply enclosing copies of testimonials to Secretary before Wednesday September 7th Return third-class fare for selected candidates

A S GORDON Secretary

ROYAL ISLE OF WIGHT COUNTY HOSPITAL
Ryde Isle of Wight.

HOUSE PHYSICIAN with care of Casualty and Special Departments wanted for October either sex unmarried qualified and registered State age and nationality Salary at the rate of £130 a year with board residence and laundry

Apply enclosing copies of testimonials to Secretary before Wednesday September 7th Return third-class fare for selected candidates

A S GORDON Secretary

ROYAL HOSPITAL RICHMOND SURREY

The C invite applications for HON BIOLOGIST (Male)

Applications together with full particulars as to age qualifications and previous experience with copies of testimonials should be forwarded to the Secretary Superintendent CAPTAIN G M EDEN MBE by September 8th

PRINCESS ELIZABETH ORTHOPAEDIC HOSPITAL Exeter

Applications are invited for the post of ANAESTHETIST for one half-day attendance per week Honorarium £35 per annum

Applications for the appointment should be sent to P METHUEN Secretary

ANCOATS HOSPITAL MANCHESTER 4

RESIDENT MEDICAL OFFICER required to commence duty on October 1st next Appointment for six month and is renewable Salary at the rate £150 per annum with board residence laundry etc Previous experience in a similar capacity essential The appointment includes the supervision of the Medical Beds and work in the Medical Out Patient Clinic

CASUALTY OFFICER required to commence duty on September 21st next Appointment for twelve months Salary £150 per annum with board residence laundry etc Preference will be given to applicants who have passed the Primary Fellowship examination of one of the Royal Colleges of Surgeons The successful applicant will do duty for the Resident Surgical Officer at alternate week-end and other scheduled times

Applications for the above posts stating age qualifications experience and full particulars of previous appointments to be forwarded to the undersigned on or before Wednesday September 7th to either with copies of three recent testimonials

By Order of the Board
HERBERT J DAFFORNE
General Superintendent and Secretary

SOUTHEND-ON-SEA GENERAL HOSPITAL

235 Beds extensions in prospect.
Eight Residents
Hon Specialist Staff of twenty members

APPOINTMENT OF R M O and MEDICAL REGISTRAR

Applications are invited for the post of Resident Medical Officer and Medical Registrar duties to begin on or about October 1st 1938 The appointment will be for one year with eligibility for annual re-election for a further maximum period of two years and will be resident, with board etc provided Commencing salary £300 p.a.

Applicants should possess the degree of M R C P (London) and must have held resident appointment as House Physician at a General Hospital Original medical work will be encouraged

Application forms with copies of the regulations and duties of the post may be obtained from the undersigned and must be returned with copies of three recent testimonials not later than September 14th 1938

By Order of the Committee
P H CONSTABLE
Secretary

SOUTHEND-ON-SEA GENERAL HOSPITAL
(235 Beds) Eight Residents
Hon Specialist Staff of 20 members

Applications are invited for the post of HOUSE PHYSICIAN Duties to commence on October 1st 1938 The appointment is for six months Salary at the rate of £100 p.a. with board residence and laundry Candidates must be Registered (male) Practitioners

Applications with copies of two recent testimonials should be sent to the undersigned not later than September 14th 1938

P H CONSTABLE
Secretary

ROYAL UNITED HOSPITAL BATH

Application are invited for the following posts
HOUSE PHYSICIAN duties to commence October 1st
HOUSE SURGEON (Obstetrics and Gynaecology and Anaesthetics) duties to commence September 14th
Salary for both appointments £150 per annum with board residence and laundry
Applications stating age qualifications and experience together with a copy of three testimonials to be addressed to the undersigned by September 5th J LAWRENCE MEARS
August 23rd 1938 Secretary Superintendent

ST MARY'S HOSPITALS MANCHESTER

Two HOUSE SURGEONS for the Whitworth Street West Hospital (Maternity) and one for the Whitworth Park Hospital (Gynaecological Dept) each for a period of six months from November 1st next Salaries at the rate of £100 per annum with board and residence

Application with copies of three testimonials to be sent to the undersigned on or before September 14th

A R WISE
Superintendent and Secretary

ST JAMES HOSPITAL FOR NERVOUS AND MENTAL DISORDER
Milton Portsmouth

LOCUM TENENS ASSISTANT MEDICAL OFFICER (male) required age not to exceed 35 years There is a possibility of a permanent appointment

Seven guineas a week with board lodging and laundry

Apply to the Medical Superintendent

SUTTON AND CHEAM HOSPITAL
Sutton Surrey
(75 Bed)

Applications are invited for the post of SENIOR RESIDENT MEDICAL OFFICER (male) Salary £150 per annum with residence board and laundry The appointment will be for six months from October 1st next

Applications giving full particulars as to age and qualification together with copies of three recent testimonials should be sent to the Secretary not later than September 16th next

Applications are invited for the post of JUNIOR RESIDENT MEDICAL OFFICER (male) Salary £100 per annum with residence board and laundry The appointment will be for six months from October 1st next

Applications giving full particulars as to age and qualifications together with copies of three recent testimonials should be sent to the Secretary not later than September 16th next

W N MURCH
Secretary

THE BIRMINGHAM UNITED HOSPITAL

NEW HOSPITALS CENTRE AT EDGBASTON (400 Beds)

MEDICAL SCHOOL

Applications are invited from fully qualified candidates for the following resident appointments

One RESIDENT MEDICAL OFFICER Salary £175 per annum

One RESIDENT SURGICAL OFFICER (F R C S Eng Edin or Ireland essential) Salary £150 per annum

Three RESIDENT HOUSE PHYSICIANS Salary £70 per annum

Three RESIDENT HOUSE SURGEONS Salary £70 per annum

All with full residential emoluments

Applications stating age experience qualification and nationality with copies of recent testimonials should be forwarded at once to the undersigned but not later than Thursday September 8th 1938

G HURFORD
(House Governor at Queen's Hospital)

THE CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE
Withington Manchester

Applications are invited for the post of RESIDENT MEDICAL OFFICER to the above Hospital and Institute for duty with the Radiotherapy Department to commence October 1938 Appointment is for six months in the first instance but is renewable

Salary at the rate of £150 per annum plus residence (private suite) board etc

The appointment offers an excellent opportunity of obtaining experience in Radium and X ray Therapy

Candidates must have had previous Medical and Surgical experience

Applications stating age qualifications and previous experience to be received by the undersigned not later than September 9th

PERCY N GLASS
Superintendent

AYR COUNTY HOSPITAL
(Voluntary General Hospital)

The Directors invite applications for the position of HOUSE SURGEON (male) Salary £100 per annum with board and residence Candidates please state age

Appointment to be for six months from October 1st

Applications with copy testimonials to be lodged with the undersigned on or before Saturday September 10th

JOHN J GOUDIE
Secretary and Treasurer

THE CHESTER ROYAL INFIRMARY
(205 Beds)

Applications are invited for the post of HOUSE SURGEON (male) to take up duty on October 1st 1938 Salary £150 per annum with board lodging and laundry Duties will include work in the Orthopaedic Department and Fracture Clinic The appointment is approved in connexion with the M S (London University) and F R C S (Eng) Examinations Application list closes September 14th 1938 Application forms may be obtained from

W H GRACE M D M R C P
Hon Secretary Medical Committee

THE CHESTER ROYAL INFIRMARY
(225 Beds)

Applications are invited for the post of HOUSE SURGEON (male) to take up duty on October 2nd 1938 Salary £150 per annum with board lodging and laundry The appointment is approved in connexion with the M S (London University) and F R C S (Eng) Examinations Application list closes September 10th 1938 Application forms may be obtained from

W H GRACE M D M R C P
Hon Secretary Medical Committee

CORNELIA AND EAST DORSET HOSPITAL
Poole Dorset (117 Beds)

RESIDENT SURGICAL OFFICER

Applications are invited (from single men) for the post of Resident Surgical Officer Period six months Salary at the rate of £200 per annum with usual emoluments Reappointment may be applied for

Duties to commence October 1st 1938

The Hospital is recognized by the Royal College of Surgeons of England in connexion with the Final Examination for the Fellowship

Applications stating age nationality experience and qualifications together with copies of three recent testimonials (which will not be returned) should reach the undersigned at the Hospital by September 12th 1938

Preference will be given to applicants who have already held a resident appointment in a hospital

E A HART
Secretary

HULL ROYAL INFIRMARY
(365 Beds)

Applications are invited from registered Medical Practitioners for the post of HOUSE SURGEON (male) to the Ophthalmic and Ear Nose and Throat Departments vacant September 22nd

Salary at the rate of £150 per annum plus residence board and laundry

The post is recognized for the clinical work required in the regulations for the D O M S and D L O

The appointment will be for a period of six months but will be determinable at any time by one month's notice on either side

Applications giving particulars of age experience and nationality together with copies of recent testimonials should be addressed to the undersigned R J CARLESS
August 29th 1938 House Governor

ESSEX COUNTY MENTAL HOSPITAL
Brentwood

ASSISTANT MEDICAL OFFICER required commencing salary £510 per annum rising by annual increments of £25 to £610 an additional £50 per annum is given for the Diploma in Psychological Medicine Subject to deductions under the Asylums Officers Superannuation Act 1909 A modern house on the estate is available for a married man at a moderate rental

Applications with full particulars of qualifications and previous experience accompanied by three recent testimonials to be sent to the Medical Superintendent endorsing envelope Medical Officer as soon as possible

LIVERPOOL HEART HOSPITAL

Applications are invited for the position of HONORARY ASSISTANT PHYSICIAN to the above Hospital The Institute for the Prevention of Disease is the Research Department of the Hospital There is a vacancy for a RESEARCH FELLOW at the Institute (£250 per annum) These two positions may be held by the same gentleman There are available at the Institute unique laboratory facilities including those for animal experimentation Candidates from outside Liverpool will receive the same consideration as local men

Applications to Miss LEWIS Secretary not later than Monday October 3rd

EAST SURREY HOSPITAL
Redhill Surrey

SENIOR HOUSE SURGEON (male or female) required immediately Salary at the rate of £150 per annum with board residence and laundry Candidates must be fully qualified and registered Appointment for six months

Applications stating full particulars and copies of recent testimonials to be sent to the undersigned
E C AYLING
Secretary

EAST SUFFOLK AND IPSWICH HOSPITAL
(350 Beds—8 Residents)

Wanted immediately CASUALTY OFFICER (male—British) Salary at the rate of £144 per annum with board apartments and laundry

Applications stating age qualifications and experience to be sent to the undersigned together with copies of three recent testimonials

The Hospital ARTHUR GRIFFITHS
Ipswich Secretary
September 3rd 1938

KING EDWARD VII HOSPITAL WINDSOR
(100 Beds)

HOUSE SURGEON required beginning October [illegible] must be fully qualified men or women [illegible] registered

Salary at the rate of £110 per annum [illegible] with board residence and laundry

[illegible] Qualifications and experience to be supported by testimonials should be [illegible] than September [illegible]

[illegible] CHURCHER Secretary

THE GUEST HOSPITAL DUDLEY
(General Hospital 139 Beds)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons

HOUSE SURGEON (male) required immediately Salary at the rate of £150 per annum with furnished apartments board and laundry Candidates must be fully qualified and registered

Applications stating age qualifications and experience accompanied by copies of testimonials to be sent to the undersigned
H RAYMOND HURST
House Governor and Secretary
August 29th 1938

THE ROYAL LIVERPOOL CHILDREN'S HOSPITAL
Myrtle Street Liverpool 7

The Committee invite applications for the post of SURGICAL REGISTRAR for twelve months from October 1st 1938 and for the post of MEDICAL REGISTRAR for six months from January 1st 1939 Salary in both cases at the rate of £150 per annum

Further particulars may be obtained from the Secretary Royal Liverpool Children's Hospital Myrtle Street Liverpool 7 to whom applications should be sent with copies of recent testimonials on or before Monday September 12th 1938

THE NOTTINGHAM HOSPITAL FOR WOMEN

HOUSE SURGEON (male or female) required to commence duties on October 1st 1938 Appointment for period of not less than six months Salary at the rate of £150 per annum with board residence and laundry Previous hospital experience essential

Applications stating age experience and qualifications accompanied by copies of three recent testimonials to be sent to the Secretary Mr A L MORTELL Burton Buildings Upper Parliament Street Nottingham not later than September 16th 1938

SCARBOROUGH HOSPITAL YORKSHIRE
Telephone No 2120/1

Wanted November 1st 1938 one HOUSE SURGEON and one HOUSE PHYSICIAN

Appointments are for six months

The House Physician is in charge of Ophthalmic Patients in addition to the Medical Wards

Salary at the rate of £150 per annum together with board residence laundry etc

Applications stating age and experience together with copies of not more than three recent testimonials to be sent to the Hon Secretaries not later than the first post on September 19th 1938

THE LADY CHICHESTER HOSPITAL
Hove Brighton
For Functional Nervous Diseases
(60 Beds)

SENIOR HOUSE PHYSICIAN (woman) required Six months appointment £100 per annum all found Valuable experience for Diploma in Psychological Medicine

Also JUNIOR (woman) at £75 per annum

Applications with testimonials to be sent to the Secretary Mr P I SPOONER 33 West Street Brighton
July 25th 1938

ROYAL INFIRMARY BLACKBURN
(244 Beds—Five Residents)

RESIDENT HOUSE PHYSICIAN (male) required at a salary of £175 per annum with board residence laundry etc

In addition to Medical Wards to be attached to the Eye Ear Nose and Throat Department

Applications with copies of testimonials stating age nationality experience etc to be sent to the undersigned as early as possible
T DEWHURST
General Supt and Secretary
Royal Infirmary Blackburn

THE LIVERPOOL EYE & EAR INFIRMARY
Myrtle Street Liverpool

Applications are invited for the post of AURAL HOUSE SURGEON Salary £120 per annum with board residence and laundry Duties to commence on October 8th The post is tenable for six months

Applications stating age qualifications and experience with copies of recent testimonials should be sent to the undersigned not later than September 12th
W LEAR Secretary

THE LIVERPOOL EYE & EAR INFIRMARY
Myrtle Street Liverpool

Applications are invited for the post of OPHTHALMIC HOUSE SURGEON Salary £120 per annum with board residence and laundry Duties to commence immediately The post is tenable for six months

Application stating age qualification and experience with copies of recent testimonials should be sent to the undersigned
W LEAR Secretary

VICTORIA HOSPITAL BURNI
(150 Beds)

This Hospital is officially recognized for the s. practice required before admission to th Fellowship Examination of the Royal Colle Surgeons

HOUSE SURGEON (MALE)

Applications are invited for the above post will become vacant on September 30th next. appointment is for six months in the first in at a salary of £150 per annum toget r board residence and laundry At the end o period reappointment may be applied for a confirmed the salary for the second six m will be at the rate of £200 per annum

Applications with full details of qualifi and experience and stating nationality t with copies of recent testimonials shou addressed to the undersigned forthwith
J E WHEATCROFT
Secreta

VICTORIA HOSPITAL BURN
(150 Beds)

HOUSE PHYSICIAN (Male)

Applications are invited for the above which will become vacant on September 14th The duties include the giving of a certain n of anaesthetics The appointment is for six m in the first instance at a salary of £150 per a together with board residence and laundry the end of this period reappointment m applied for and if granted the salary for second six months will be at the rate of £ annum

Applications giving full details of qualifi and experience stating nationality r ether copies of recent testimonials should b to the undersigned forthwith
J E WHEATCROFT Secreta

NORTH STAFFORDSHIRE RO INFIRMARY STOKE ON TRENT
(390 Beds)

HOUSE SURGEON (GENERAL)

The Committee invite applications for th post Salary at the rate of £150 per annum board residence and laundry

The appointment will be made for six m renewable

Previous hospital surgical experience ess

Applications stating age and experien copies of two recent testimonials to b the undersigned immediately
By Order
W STEVENSON
Secretary and House Go
August 29th 1938

THE ROYAL SEA BATHING HOSPIT
Margate
(320 Beds—for Surgical Tuberculosis)

A male HOUSE SURGEON re d October 1st next The salary is at the r per annum with board residence after laundry Candidates for the post m qualified and registered The appoint six months but may be extended for a period of six months There are 3 0 be and children which afford special for the study of surgical tuberculosis

Applications stating age previous ap with copies of three recent testimon sent to the Secretary R S B H O Buildings Adelphi London W C possible

ROYAL ALBERT EDWARD INFIRMA AND DISPENSARY
Wigan (210 Beds)

Wanted for twelve months from ber 1st 1938 RESIDENT MEDICAL SURGICAL OFFICER AND REGIST Candidates must have held pre appointments at a hospital Pref given to those possessing the I R C S Degree The salary is at the r annum with board residence and l Applications giving proof of r more than three testimonials to b undersigned as soon as po sible
A STANLEY BAL
August 13th 1938 General S

PRESTON AND COUNTY OF LA ROYAL INFIRMARY

Applications are invited f SURGEON to the E Wards and Cli Salary at the rate board residence and of the General Hos Application stating perience together with to be forwarded to the

JOH Gl
Secre
August 24th 1938

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association, B M A House, Tavistock Square, W C 1 (in the case of Scottish appointments, with the Scottish Secretary, 7, Drumsheugh Gardens, Edinburgh)

(a) British Islands

Town or District.	Town or District.	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—*(contd.)*	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY *(Medical Officer)*	MID-RHONDDA MEDICAL AID SOCIETY *(Assistant Medical Officer)*	MIDDLESBROUGH EDUCATION COMMITTEE *(Senior Assistant School Medical Officer)*
BLAENAVON MEDICAL SOCIETY *(Chief Medical Officer)*	NEATH AND DISTRICT *(Medical Aid Association)*	COUNTY OF ROXBURGH *(Assistant Medical Officer of Health)*
GILFACH GOCH GLAMORGAN *(Workmen's Medical Scheme)*	OGMORE VALLEY GLAMORGAN *(Wyndham Colliery Medical Aid Society) (Workmen's Medical Scheme)*	**DISPENSARY APPOINTMENTS**
LLWYNYPIA CLYDACH VALE PENYGRAIG GLAMORGAN *(Workmen's Medical Scheme)*	OAKDALE MON *(Medical Officer for Medical Aid Association)*	LIMERICK CITY *(Whole-time Dispensary Medical Officer)*

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association, B M A House Tavistock Square W C 1

Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch
NEW SOUTH WALES *(All Friendly Society Appointments)*	The Medical Secretary New South Wales Branch 135 Macquarie Street, Sydney N S W	**VICTORIA** *(All Institute or Medical Dispensaries)*	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria	**WESTERN AUSTRALIA** *(Contract and Lodge Practices)*	The Hon Sec Western Australian Branch British Medical Association Shell House 205 St Georges Terrace Perth Western Australia
QUEENSLAND *(Brisbane Associate Friendly Societies Institute)*	The Hon Sec Queensland Branch British Medical Association B M A House 225 Wickham Terrace Brisbane B 17				

August 31, 1938 By Order of the Council G C ANDERSON, *Secretary*

BIRMINGHAM AND MIDLAND EYE HOSPITAL (114 Beds)

Applications are invited from duly qualified Medical Practitioners for the post of RESIDENT SURGICAL OFFICER at the above Hospital Salary £200 per annum and £10 laundry allowance

The Resident Staff consists of a Resident Surgical Officer and three House Surgeons and in the event of one of the latter being promoted to the position of Resident Surgical Officer applicants should state whether they will be willing to accept appointment as House Surgeon at a salary of £130 rising at the end of six months satisfactory service to £150 per annum

Applications with testimonials and evidence of registration should be forwarded to—

Church Street J W PEARCE
Birmingham 3 House Governor

NORTH RIDING INFIRMARY
Middlesbrough
(General Hospital 143 Beds Three Residents)

Wanted SENIOR HOUSE SURGEON to take duties on September 3rd 1938 Candidates must be male unmarried and of British nationality Preference will be given to applicants who have held a previous hospital appointment.

Salary is at the rate of £175 per annum with board residence and laundry

Applications stating age qualifications and experience together with copies of three recent testimonials should be sent to the undersigned on or before September 5th 1938

GERALD A KENYON
Secretary Superintendent

WHITEHAVEN AND WEST CUMBERLAND HOSPITAL

HOUSE SURGEON required for end of September Ninety beds Two House Surgeons in residence Six months appointment Salary at the rate of £1 0 per annum board residence and laundry

Applications with copies of three recent testimonials to be sent to the Secretary

---

ROYAL DEVON AND EXETER HOSPITAL
Exeter (280 Beds)

THREE HOUSE SURGEONS (Male)
ONE HOUSE PHYSICIAN (Male)

Applications are invited for these posts which become vacant on September 30th Appointments are for six months but candidates are eligible for re-election Salary at the rate of £150 per annum with board lodging and washing

Applications giving particulars as to age and qualifications together with copies of three recent testimonials should be sent to the undersigned on or before Saturday September 10th 1938

S S COLE
Secretary and Manager

N B—The duties of the third House Surgeon will be to act as House Surgeon to the Ear Nose and Throat Department and also as House Surgeon to one of the Honorary Surgeons

---

KENT AND CANTERBURY HOSPITAL
New Hospital (185 Beds—4 R M O s)

HOUSE SURGEON required male unmarried Six months appointment commencing September 17th 1938 Salary £125 per annum with board residence and laundry

The Hospital is recognized under F R C S regulation

Application together with copies of testimonials should be sent immediately to the undersigned

J F KENT
Superintendent and Secretary

COUNTY MENTAL HOSPITAL
Mickleover Derby

ASSISTANT MEDICAL OFFICER (male) required Commencing Salary £3 0 per annum rising by increments of £25 to £4 0 to either with board quarters and attendance A further increment of £50 will be given on obtaining the Diploma of Psychological Medicine

Applications giving full particulars and enclosing copies of two recent testimonials should be addressed to the Medical Superintendent

---

GRANTHAM HOSPITAL
(100 Beds)

Applications are invited from fully qualified medical practitioners for the post of RESIDENT MEDICAL OFFICER The appointment is for six months (renewable) and will become available in October 4th 1938 Salary £200 per annum with board residence and laundry Preference given to applicants who have already held a resident appointment

Applications stating age nationality qualifications and experience with copies of three recent testimonials should be sent to the undersigned

JOHN E RAY
Secretary Superintendent

EAST SUFFOLK AND IPSWICH HOSPITAL
Ipswich

TO MEDICAL WOMEN

Applications are invited from fully qualified medical women for the position of WHOLE TIME ASSISTANT PATHOLOGIST Some experience in general pathology and particularly biochemical work desirable Commencing salary £4 0 per annum

Applications stating age qualifications and experience accompanied by copies of three recent testimonials to be sent to me by September 10th

ARTHUR GRIFFITHS
August 27th 1938 Secretary

DORSET COUNTY HOSPITAL

HONORARY RADIOLOGIST

There will be a vacancy on the Honorary Medical Staff of the Dorset County Hospital for an Honorary Radiologist on October 16th next

Applications should be made accompanied by three recent testimonials to the Secretary by October 1st.

Particulars of the above appointment may be obtained from the Secretary

(Appointments continued on p 80)

RATES FOR SMALL ADVERTISEMENTS

The Minimum Charge is 9/- which covers up to 30 words. Extra words are charged 1/6 for 5 or less each 33 words would be charged as 45. Name and address should be included when counting words for cost.

If Box number is used it should be reckoned as 5 words in the total.

CLOSING DAY—TUESDAY (noon)

The British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

ADVERTISEMENT MANAGER
BRITISH MEDICAL JOURNAL
B.M.A. House, Tavistock Square, London, W.C.1
Telephone EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA TOBACCO. GOOD SMOKES at a low price quality guaranteed. Box of 50 for 5/- post free.—Sole Manufacturers: J. J. FREEMAN & CO. LTD., 90 Piccadilly, London, W.1. (GRO 1529.)

"BIZIM" CIGARETTES THESE luxurious delicious satisfying smokes 50's or 100 at 6/3 per 100, 5/6 per 1000 post free.—Sole Manufacturers: J. J. FREEMAN & CO. LTD., 90 Piccadilly, London, W.1. (GRO 1529.)

"SOLACE CIRCLES" TOBACCO THE finest combination ever discovered of Choice Natural Tobaccos. Every pipeful an indescribable pleasure. 12/6 per ½ lb. tin post free.—Sole Manufacturers: J. J. FREEMAN & CO. LTD., 90 Piccadilly, London, W.1. (GRO 1529.)

HOME WANTED FOR BOY AGE 17 suffering from sleepy sickness. Not much nursing required. Light occupation. Preferably within 20 to 30 miles from Sydenham.—Apply to R. P. PERCIVAL TURNER LTD., 25 Minden Lane, London, W.C.2.

MEDICAL PSYCHOLOGIST WILL ACCEPT CHARGE of CHILD requiring attention to health and education. Share home life with own children. Country house, large garden, South Devon.—Address No. 8419, B.M.A. House, Tavistock Square, W.C.1.

M.I.S.Ch.—THESE DESIGNATORY letters after a *CHIROPODIST'S* name indicate that he or she is a MEMBER of the INCORPORATED SOCIETY OF CHIROPODISTS. Founded 1912. Patron: His Grace the Duke of Portland, K.G., P.C., G.C.V.O. Panel of Examiners in Medical Subjects approved by the Royal College of Physicians and Royal College of Surgeons of England respectively. The regulations of the Society PROHIBIT Members from advertising, but names and addresses of Chiropodists in the district who are members of the Society and also information regarding training for Membership may be obtained from the Secretary, Incorporated Society of Chiropodists, 21 Cavendish Square, London, W.1. (Telephone: Langham 3228.)

NURSE WITH PRIVATE COUNTRY VILLA will take INVALID as PAYING GUEST; every attention, good food; moderate terms; 4 gns. daily.—NURSE MARGARET, Meriden Road, Hampton-in-Arden, Warwickshire. Phone: Hampton 69.

TYPEWRITING—SPECIALISTS IN TYPING Medical and scientific papers, lectures, theses and books. Shorthand typists always available. Proof reading, indexing.—MARGARET WATSON, LTD., 16 Palace Chambers, Bridge Street, S.W.1. WHitehall 3838.

TYPEWRITING, DUPLICATING, TRANSLATIONS.—Experts in Medical work. TESTIMONIALS, THESES, etc. *accurately copied in* style that commands attention.—WOBURN BUREAU, Drayton House, Gordon Street, London, W.C.1. (close B.M.A. House.) EUSton 1775.

6 MILES NORTH BLACKPOOL, LANCS. Small HYDRO registered nursing home, modern corner building, terra cotta facings, floodlit. Electric lifts. The Hydro has been fitted regardless of expense. The hydropathic dept. fitted high colonic irrigation, whirlpool, aeration, Aix and Vichy Douche, Needle spray, stimulators, percussion machine, Duo Therapy, Galvanic and Faradic Machine, Vibrators, Violet rays, etc. Unlimited scope.—Address No. 8439, B.M.A. House, Tavistock Square, W.C.1.

ASSISTANCIES

WANTED IMMEDIATELY.—OUTDOOR ASSISTANT (unmarried) for general practice in pleasant country town, with use of local hospital. Preference given to man who has had some resident hospital experience. Must have own car. Salary £200 p.a. Send full particulars (personal and professional) to Address, c/o B.M.A. House, Tavistock Square, W.C.1.

WANTED IMMEDIATELY, INDOOR AND OUTDOOR ASSISTANTS for busy mixed Country Practice, with and without motor. Partnership. Good salaries. Useful State Aid partnerships.—BRITISH MEDICAL BUREAU, 11 Cross Street, Manchester.

WANTED IMMEDIATELY, FOR MIXED practice (40 miles London), a first-class ASSISTANT, English or Scotch. Would suit recently qualified. Good prospects.—Address No. 8434, B.M.A. House, Tavistock Square, W.C.1.

WANTED FOR OCTOBER 1st, ASSISTANT, male, under 30. Pleasant residential district, Yorkshire. Large cottage hospital. Commencing salary £200 per annum, all found.—Address No. 8435, B.M.A. House, Tavistock Square, W.C.1.

WANTED, ASSISTANT (ABERDEEN GRADUate preferred) early Oct. for mixed practice 5 miles from London. Salary £400, all found, increasing to £450 p.a. Opportunity for study.—Address No. 8417, B.M.A. House, Tavistock Square, W.C.1.

WANTED IN SOUTH YORKSHIRE TOWN, male ASSISTANT, English or Scotch preferred; salary £300-£350 p.a., indoor, car or an allowance; dogs kept; good practice; excellent experience.—Address No. 8431, B.M.A. House, Tavistock Square, W.C.1.

WANTED, INDOOR ASSISTANT FOR EAST Somerset, aged under 30. Compact panel and private practice. Work light. Midlands. State experience and give full particulars. References required.—Address No. 8427, B.M.A. House, Tavistock Square, W.C.1.

WANTED, INDOOR MALE ASSISTANT FOR Practice near Cardiff. Must be experienced motorist and able to drive car. Salary £360.—Address No. 8418, B.M.A. House, Tavistock Square, W.C.1.

WANTED, MALE OUTDOOR ASSISTANT, rural Kent, old established growing practice, panel and private, four partners. Salary £550 inclusive. Prospects good. Car necessary. State full details.—Address No. 8409, B.M.A. House, Tavistock Square, W.C.1.

WANTED, MALE OUTDOOR UNMARRIED ASSISTANT for colliery practice near Cardiff. Salary £400 with furnished rooms and attendance. Car provided. Driving licence essential. Young, energetic principal. Please furnish recent photograph and testimonials stating age and nationality with application.—Address No. 8430, B.M.A. House, Tavistock Square, W.C.1.

WANTED, OUTDOOR FEMALE ASSISTANT, London area, £400 per annum.—Address No. 8427, B.M.A. House, Tavistock Square, W.C.1.

WANTED, SINGLE MALE BRITISH ASSISTANT for Glamorgan Colliery Practice. Salary £400 with rooms and attendance, £50 car allowance. Cottage Hospital Dispenser and other assistants kept.—Address No. 8414, B.M.A. House, Tavistock Square, W.C.1.

WANTED, YOUNG MALE INDOOR ASSISTANT (British) after Sept. 11th. Industrial town near Manchester. Good prospects for right man. Salary £350 (car provided). Previous experience not essential.—Address No. 8347, B.M.A. House, Tavistock Square, W.C.1.

WANTED, YOUNG MARRIED OUTDOOR ASSISTANT for mixed practice near Birmingham. Salary £400 p.a. plus car allowance and good house. Previous experience not essential. Prospects for suitable man.—Address No. 8404, B.M.A. House, Tavistock Square, W.C.1.

ASSISTANT REQUIRED, MALE, SCOTTISH or English, unmarried, young, some experience general practice preferred. Own rooms at branch, Kent border. £350 per annum, all found, £50 car allowance and garage.—Address No. 8348, B.M.A. House, Tavistock Square, W.C.1.

ASSISTANT WANTED (OCTOBER 1st). British male. Salary £400, plus £50 car allowance. Mixed urban and rural practice. Midlands. Five partners.—Address No. 8418, B.M.A. House, Tavistock Square, W.C.1.

INDOOR ASSISTANT, £250 P.A., MALE, under 30, British. Four weekday afternoons free for postgraduate work. Postgraduate student desired.—Address No. 8442, B.M.A. House, Tavistock Square, W.C.1.

MALE ASSISTANT (OUTDOOR) REQUIRED, October 1st. Panel and private practice in Staffs. £300 per annum and all found. Car allowance.—Address No. 8415, B.M.A. House, Tavistock Square, W.C.1.

MEDICAL WOMAN, SCOTS EXPERIENCED, GP., requires PART-TIME WORK during week. Week-end and some free days. Help in home.—Address No. 8436, B.M.A. House, Tavistock Square, W.C.1.

OUTDOOR ASSISTANT WANTED IN South East England (married). Practice RC. Salary £400 and quarters. Use of car. Opportunity for research.—Address No. 8437, B.M.A. House, Tavistock Square, W.C.1.

PART-TIME ASSISTANT REQUIRED, evenings and week-ends. Central.—Apply C/F, Saccharin Chemical Co., Ltd., Ruskin Park House, Champion Hill, London, S.E.5.

WOMAN DOCTOR WISHES ASSISTANTSHIP preferably with view to partnership; practice, vicinity of London, Surrey, Bucks, Herts, Sussex. Can drive car and assist.—Address No. 8438, B.M.A. House, Tavistock Square, W.C.1.

YOUNG UNMARRIED OUTDOOR MALE ASSISTANT wanted for part-time duty. Practice near Manchester. Scottish preferred. Salary £400 and £50 car allowance and fees.—Address No. 8402, B.M.A. House, Tavistock Square, W.C.1.

LOCUMS

INDIAN L.R.C.P. L.R.C.S. AGE THIRTY, two years experience G.P. and part time, drives car, desires LOCUM or ASSISTANTSHIP. Good references.—Address No. 84, B.M.A. House, Tavistock Square, W.C.1.

PUBLIC HEALTH LOCUM OR TEMPORARY WORK. M.O.H. with experience and diploma. Own car.—Address No. 8419, B.M.A. House, Tavistock Square, W.C.1.

MEDICAL POSTS DISPENSERS

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request; qualified and with practical experience in private practice and dispensary work; also trained in Bacteriological Laboratories of the LONDON COLLEGE OF PHARMACY FOR WOMEN. Preparation for Examinations.—Write, wire or phone (Hammersmith 0693). Secretary, 7 Westbourne Park Road, W.2.

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY, and Secretarial Dispensers can be supplied to Doctors. Sessions January, April and September.—Apply Principal, School of Pharmacy, Drayton House, Gordon Street, W.C.1. Phone: Euston 3930.

COMPETENT LADY SHORTHAND-TYPIST, single, recently Secretary-Receptionist to consultant surgeon, Seeks suitable private or hospital post, part or full time. Highest references.—Address No. 8411, B.M.A. House, Tavistock Square, W.C.1.

DISPENSING CAREER FOR YOUNG LADIES. FULL TRAINING for Apothecaries Hall *Certificate*. Enrolments every three months.—Apply The Principal, Central School of Pharmacy, 29 Morton Street, London, S.W.1. Telephone: Victoria 1641.

DOCTORS REQUIRING QUALIFIED Secretary-Dispensers, Nurse-Dispensers are invited to write, wire or phone Temple Bar 5458. The DISPENSERS BUREAU, 3 Lindsay House, 11 Shaftesbury Avenue, London, W.C.2.

EDITORIAL WORK ON *IMPORTANT* Full time appointment. MAN WANTED. Editorial experience essential.—Address No. 8441, B.M.A. House, Tavistock Square, W.C.1.

MASSEUSE FULLY QUALIFIED AND EXperienced in hospital and private practice desires POST as ASSISTANT in London doctor's PRIVATE CLINIC, specialising in physical therapy.—Address No. 8417, B.M.A. House, Tavistock Square, W.C.1.

MALARIA RESEARCH.—YOUNG MEDICAL MAN required for WORK IN TROPICS. Salary £800-£1,000 p.a.—Address No. 8416, B.M.A. House, Tavistock Square, W.C.1.

TEMPORARY OR PERMANENT POST wanted. Whole or part time. Experience in Public Health or GP. Expert in Pro... in sche... Sanatorium... West In...

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION 88 Eccleston Square, S W 1 (Telephone Victoria 2720) supplies qualified Dispensers, Bookkeepers Laboratory Assistants Sanitary Assistants Male Nurses Mental and Special Treatment Orderlies Dental Clerk Orderlies Porters Caretakers etc without charge to prospective employers.

THOROUGHLY EXPERIENCED AND efficient DISPENSER BOOKKEEPER (man or woman) required in semi-rural two-partner practice in home counties —Address No 434 B M A House Tavistock Square W C 1

WEST END DOCTOR RECOMMENDS young LADY RECEPTIONIST tactful and efficient. Free immediately —Address No 8415 B M A House Tavistock Square W C 1

YOUNG LADY DESIRES POST AS A SECRETARY or SECRETARY RECEPTIONIST Experienced in medical clerical work competent shorthand typist —Address No 84 6 B M A House, Tavistock Square W C 1

PARTNERSHIPS

FRCS (ED) 28 YEARS OF AGE WITH special obstetrical experience desires PARTNERSHIP with 3 or 4 doctors preferred South —Address No 8431 B M A House Tavistock Square W C 1

HALF SHARE (ABOUT £700) OFFERED IN A rapidly growing private practice with ample scope for increase in Newcastle-on-Tyne. Small panel Excellent opportunity for keen energetic man.—Address No 8423 B M A House Tavistock Square, W C 1

LONDON —PARTNERSHIP WITH VIEW TO SUCCESSION in sound old-established general practice. Initial share worth £800 gross at 2 years purchase Preliminary assistantship can be arranged Scotsman preferred Protestants only Excellent opportunity to suitable man with experience —Address No 8446 B M A House, Tavistock Square W C 1

MIDLAND CITY —PARTNERSHIP IN favourite part Panel 2,100 £—— last year Half share at £3 000 or near offer Choice of house —THE WESTERN MEDICAL AGENCY 22 Clare Street Bristol 1 (Bristol 24689) and 15 Bedford Street Strand W C 2 (Temple Bar 253)

PARTNER FOR LARGE MIXED PRACTICE in Glasgow Gross share over £1 600 Suitable house to purchase Apply with full particulars of qualifications and experience to CRAWFORD HERRON AND CAMERON Solicitors 257 West George Street, Glasgow

PARTNERSHIP —SOUTH COAST POPULAR seaside resort non panel non-dispensing good fees Beautiful house garden and hard tennis court sale or rent Premium for share producing about £1 000 £2,500 Apply with bankers reference —Address No 8410 B M A House Tavistock Square W C 1

SHARE IN OR PURCHASE SOUND WEST end PRACTICE. Ample capital available Married middle aged great experience surgery medicine especially midwifery Late consultant large eastern hospital Personal London references —Address No 8214 B M A House Tavistock Square W C 1

THIRD PARTNER REQUIRED IN LARGE old-established practice in West Country town Audited accounts show steady annual increase Scope for surgery Share valued at approximately £1 00 gross for disposal at 2 years purchase —Address No 8405 B M A House Tavistock Square W C 1

PRACTICES

WANTED IMMEDIATELY UNOPPOSED country PRACTICE from £1 000-£1,500 p a with Panel Good garden and house essential —Address No 8401 B M A House Tavistock Square W C 1

BIRMINGHAM OR WITHIN 20 MILES— Wanted a PRACTICE of about £2 500 a year No agents —Address No 8132 B M A. House Tavistock Square W C 1

COUNTRY PRACTICE, ESTABLISHED OVER 20 years for sale. Close to Leicester Average receipts £1 400—capable of increase Good house and garden on lease. Practitioner retiring owing to ill-health Price £4 000 —Apply BRAY AND BRAY Solicitors Leicester

GLASGOW —OLD-ESTABLISHED PRACTICE for sale Receipts about £1 000 Panel 1 1 0 House for sale separate consulting rooms to rent. —Apply MILLER THOMPSON HENDERSON AND Co 50 St Vincent Street Glasgow

LONDON N —FOR SALE PRACTICE private and panel 1 1 0 Receipts £3 000 House to rent £160 with garage Premium £5,000 —Address No 8422 B M A House Tavistock Square W C 1

LONDON SE —STEADILY INCREASING PRACTICE Panel 1,400 Average £1 765 p a Premium £3 500 House rent —THE WESTERN MEDICAL AGENCY 15 Pedford Street, Strand W C 2 (Temple Bar 2653) and 22 Clare Street Bristol 1 (Bristol 24689)

MIDLAND CITY —STEADILY INCREASING PRACTICE Average £1,460 p a Panel 2 100 Premium £5,000 Excellent house —THE WESTERN MEDICAL AGENCY 22 Clare Street Bristol 1 (Bristol 24689) and 15 Bedford Street, Strand W C 2 (Temple Bar 2653)

MIDLAND CITY —WOMANS PRACTICE This Practice has been worked entirely independently to the above but they can easily be amalgamated and worked together if required Average £880 p a Panel 1 500 Premium £1 500 House Rent —THE WESTERN MEDICAL AGENCY 22 Clare Street Bristol 1 (Bristol 24689) and 15 Bedford Street, Strand W C 2 (Temple Bar 2653)

NORTHANTS — UNOPPOSED COUNTRY PRACTICE in good part Good schools and all sports Low expenses Panel 900 Receipts £1 600 p a 2 years purchase or near offer House sale or rent —THE WESTERN MEDICAL AGENCY 22 Clare Street Bristol 1 (Bristol 24689) and 15 Bedford Street Strand W C 2 (Temple Bar 2532)

OLD-ESTABLISHED COUNTRY PRACTICE for sale £600 p a good appointments and panel nice roomy house £60 and garden rates £15 —Address No 8547 B M A House Tavistock Square W C 1

OLD-ESTABLISHED PRACTICE RESIDENTIAL district, South-east London. Average £900 per annum panel £200 transferable appointment £50 Price £2 000 or near offer Excellent freehold house for sale £1 600 —Address No 8420 B M A House Tavistock Square W C 1

OLD ESTABLISHED WORKING CLASS panel and private PRACTICE for sale in large industrial city Number of insured persons 1 770 Gross cash receipts for last three years average £1 760 per annum Practice increasing each year House 5 bedrooms etc on lease For further particulars apply—MESSRS DAY JOHNSON AND BOOT Solicitors 8 Park Row Nottingham

ST JOHNS WOOD NW 8 —PART TIME PRACTICE for disposal Most exclusive area with sole right to practise from large block of flats Nominal premium only —Address No 8543 B M A House Tavistock Square W C 1

SOUTH COAST —EASILY WORKED PRACTICE over £1,300 per year panel over 1,200 also P M S Sale owing to ill-health Growing district. Freehold house and garage for sale or rental Practice premium 12 years Fullest particulars —Address No 8229 B M A House Tavistock Square W C 1

SOUTHERN RHODESIA —PRACTICE FOR sale established nine years Gross cash receipts average £2 000 p a approximately over last four years Appointments Hospital rapidly growing town Excellent schools lovely country large modern house offices tennis-court gardens garage etc Sport of all kinds Good fees Premium for practice 14 years purchase Would sell or rent house Living cheap income tax 6d in £1— Address No 8544 B M A House Tavistock Square W C 1

UNOPPOSED COUNTRY PRACTICE 70 miles London Panel 5 0 receipts £750 increasing Premium 14 years purchase Excellent house large garden all services for sale or rent —Address No 8420 B M A House Tavistock Square W C 1

WOMANS PRACTICE FOR SALE country town within 30 miles London £7 0 per year 2 years purchase Excellent house for rental small panel facilities sport and education —Address No 8421 B M A House Tavistock Square W C 1

MISCELLANEOUS SALES etc.

INCOME TAX

YOUR burden OUR business
Taxation practice to the Medical Profession

HARDY & HARDY
49 CHANCERY LANE, LONDON W C 2
Telephone Holborn 6659
Write for free copy of Advice on Income Tax

FOR SALE—COMPLETE THEATRE EQUIPMENT Hospital Beds for Patients and full Staff bedding and all Accessories suitable for Cottage Hospital or Nursing Home.—Address No 8404 B M A House Tavistock Square W C 1

IMPORTANT

to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE. Specially Cut, Fitted and Moulded to each individual figure, made from finest Quality Materials and in the Best Possible Style, cost no more than mass production ready-made clothes

The invaluable Practical Experience and Advice of our 14 Expert West End Cutters and Fitters is always at your disposal.

ALL "HALLZONE" Productions are HAND FINISHED IN EVERY ESSENTIAL DETAIL.

SPECIAL OFFER

JACKET & VEST (in black or grey) £4 4s
Lined best quality Art Satin, Art Silk or Alpaca.
SOLID FANCY WORSTED TROUSERS £2 2s
The ideal Suit for Professional or Business wear

LOUNGE SUITS	to measure from	£6 6s
OVERCOATS	" "	£5 5s
DINNER SUITS	"	£8 8
DRESS SUITS	from	£10 10s
PLUS FOUR SUITS	from	£6 6

THE IDEAL Suit for Country and Sporting Wear
GOLD MEDAL RIDING BREECHES from £2 2s
RIDING HABITS £8 8s
RIDING BOOTS " £3 3s
COSTUMES & LONG COATS £6 6s

UNSOLICITED APPRECIATION

I strongly advise all medical men who wish to have satisfaction to patronise Harry Hall Ltd as all the clothes I have had from them during 35 years have been perfect in Fit Cut and Finish
(Signed) S I A. M A M B F R C P S

PATTERNS POST FREE.

Perfect Fit Guaranteed from Simple Self-measurement Form or Pattern Garments.

Visitors to London can order and fit same day Special Patterns would then be sent and Perfect Fitting Clothes supplied after without trying on.

HARRY HALL, LTD

Governing Director Harry Hall.
"THE" Coat, Breeches Habit and Costume Specialists
181 OXFORD ST., W 1 149 CHEAPSIDE, E.C.2
Telephones
GERrard 4905 4906 and 4907 NATional 8696/7
Makers of Finest Quality Bespoke Civil, Sporting and Hunting Clothes for Ladies and Gentlemen.
Highest Awards 12 Gold Medals
Est. over 40 years.

TAILORING —CUSTOMERS VISITED AT their surgery or private address anywhere within a radius of 10 miles of London by a Lite West End tailor Suits from 4 guineas to 8½ guineas Every garment made in the West End Large selection of Worsteds Saxonies Flannels etc Ladies Costumes at the same prices Credit Terms if desired —BROOKS 29 Gainsborough Road N 12 Hillside 2250

HOUSES CONSULTING ROOMS

ESTABLISHED 1860

BEDFORD & CO.

Surveyors Auctioneers and Estate Agents
10 WIGMORE STREET
CAVENDISH SQUARE, W 1
Specialists in Professional Houses Flats, and Consulting Rooms
in Harley Street and leading Medical Positions
Telephone Langham 3927 and 3923

CONSULTING SUITE BARGAIN HARLEY STREET Rent only £300 p.a 3 newly decorated consulting rooms waiting room partial attendance Lease by arrangement. Recommended by MIVART AND Co (incorporating Bertram and Co) 59 Connaught Street, W.2. (Pad 1642 3)

CONSULTING ROOMS GROUND AND first floor to let from September quarter Charming sunny situation service and waiting rooms inclusive in rent. Exceptional opportunity for dentist.—Apply CARETAKER, 6 Park Crescent, Portland Place, W 1

CONSULTING ROOMS WITH USE, IF needed of fully equipped X ray room Full service and receptionist provided Exclusive May fair position Reasonable rent —Address No 8433 B M A House Tavistock Square, W C 1

DETACHED DOCTORS HOUSE, NEAR Chester garage main coast road Industrial area. Sell or let. No premium —Particulars Dr WALTON, Beryl Road Parkgate Wirral Neston 307

FOR DENTIST CONSULTING ROOM WORK SHOP USE of WAITING ROOM doctor's corner house, main road growing middle-class district S W area. Rent moderate. September quarter —Address, No 8409 B M.A. House, Tavistock Square W C.1.

ESTABLISHED 1845

ELLIOTT, SON & BOYTON

(H C ROWLETT)

11 REST, CAVENDISH SQUARE W 1

Estate Agents Auctioneers and Surveyors

are the BEST LOCAL AGENTS for HOUSES and CONSULTING ROOMS in the Harley Wimpole Queen Anne and other streets in the Cavendish Square district Valuations for all purposes

Telephone 3404 MAYFAIR

HARLEY STREET AND MEDICAL DISTRICT

For all types of available accommodation

BERTRAM & CO., Surveyors and Estate Agents

59 Connaught Street W 2 Paddington 1642 3

DIRECTLY ADJOINING SLOANE SQUARE — A delightful HOUSE in perfect order just re decorated Accommodation consists of 9 fine living rooms including ideal consulting and waiting rooms on the ground floor Upper part perfect for private residence Sterling at price £ 950 for long lease at low ground rent Apply Sole Agents J EWART GILKES AND PARTNERS 2 Hans Road S W 3 Ken 0066

DOCTORS ATTRACTIVE DOUBLE FRONTED HOUSE situated in leading residential road in growing neighbourhood 3 reception rooms 8 bedrooms good offices delightful garden Lease 37 years Ground rent £21 Price £750 including nucleus of desirable practice —Address No 8407 B M A House Tavistock Square W C 1

FOR SALE —CORNER HOUSE GOOD RESIdential locality bordering newly developed district near Bromley Kent Modern building 4 bedrooms 2 reception all conveniences space for building adjoining surgery good garden separate brick built large double garage Vacant December £2 100 freehold Please write—V S c o Abbotts Ltd 32 Eastcheap London E C 3

HARLEY STREET AND DISTRICT —A NUMber of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application —LECOOD AND Co 10 Henrietta Place Cavendish Square W 1 Lang 2601

DEVONSHIRE STREET TWO DOORS FROM Harley Street an excellent CONSULTING SUITE of three good rooms in one of the finest professional houses Rent only £250 p a or single rooms may be had at £100 p a with plate on the door and all services Vacant Sept 29th 1938 —Address No 7610 B M A House Tavistock Square W C 1

PARK LANE —ADVERTISER WISHES TO meet consultant with view to LETTING ROOM Use of waiting and ladies room also small x rays £155 p a References —Address No 8406 B M A House Tavistock Square W C 1

QUEEN ANNE STREET —ONLY £40 P A *secures exceptionally fine* CONSULTING ROOM for use when required with attendance and all services Residential accommodation available —Address No 6355 B M A House Tavistock Square W C 1

SOUTH WEST LONDON — PROMINENT CORNER HOUSE for sale or lease Freehold Excellent living and professional accommodation Separate entrances Garden garage —Address No 8540 B M A House Tavistock Square W C 1

1, BENTINCK STREET (CORNER WELBECK Street) —Finest New CONSULTING SUITES in Medical Area Each 2 rooms and lavatory Also 4 roomed FLATS —Sole Agents ERNEST DURBRIDGE AND Co 4 Duke Street W 1 Welbeck 8295

NEAR MARBLE ARCH —WHOLE OR PART OF HOUSE to let Excellent situation — Agents ERNEST DURBRIDGE AND Co 4 Duke Street W 1 Welbeck 8295

VERY SUITABLE FOR CONVALESCENT and Nursing Home Chislehurst—highest part adjoining Common QUEEN ANNE PERIOD HOUSE with 14 bed and dressing rooms 3 bath rooms hall 4 large reception rooms conservatory and ground floor offices with maids sitting room *Central heating* Lav basins in 3 bedrooms Large garage etc Fine old grounds and kitchen garden—in all about 1½ acres Freehold £5 250 (mortgage if required) Rent on lease £250 p a Details of DAVID J CHATTELL AND SONS Chislehurst

VACANT SEPTEMBER 29TH —ONE OF THE finest PROFESSIONAL MAISONETTES in the Harley Street district 2 reception 4 bed 2 bath rooms and usual offices electric passenger lift Licence for one plate allowed Rent only £430 p a on lease For full particulars and order to view— Address No 8403 B M A House Tavistock Square W C 1

To Medical and Scientific Professions Institutions and Corporate Bodies

Exceptionally attractive Freehold Property of interest to the above

Situate in Surrey some 14 miles from London

ST WINIFREDS, KENLEY

Commodious structure containing Head Master's Principal's Residence Dining Hall Common Room Class Rooms Dormitories Staff Quarters Cloakrooms Lecture Rooms Science Laboratory Domestic Bedrooms Bathrooms ample offices

Modern Services Main Drainage Central Heating Hot Water Installation

GYMNASIUM CHAPEL SANITARIUM GARAGE etc SWIMMING POOL and Playing Pleasure Grounds Playing Fields and Woodlands OF OVER 9 ACRES

Possession at valuation including fittings with vacant possession

AUCTION SALE 4th OCTOBER NEXT at 3 p m (UNLESS sold privately)

Solicitors Messrs J Lord Hampson and Weeks 30 New Road Brighton

Particulars from Joint Auctioneers J EWART GILKES & PARTNERS Hans Road Brompton Road S W 3 or HAMILTON & SONS Ltd 6 Arlington Street St James's S W 1

UPPER BROOK STREET W 1 (FEW DOORS from Park Lane)—Important RESIDENCE 9 beds 5 baths etc and 4 flats of which 3 would make excellent consulting rooms Good servants quarters etc the light central heating Separate chauffeur's accommodation and garage 7 years if required 99 years direct Westminster Lease at £425 p a Ground Rent Price £15 000 or would sub let —Address No 8540 B M A House Tavistock Square W C 1

APPOINTMENTS —Contd

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(250 Surgical and Medical Beds)

CASUALTY OFFICER AND FRACTURE HOUSE SURGEON

Applications are invited from fully qualified men for the above post to commence as soon as possible

The appointment is for six months salary at the rate of £200 per annum with board apartments and laundry

The duties include the post of House Surgeon to the Director of the Fracture Clinic under whose care the whole of the fractures both in and out patients are treated and deputy to the Resident Surgical Officer

Candidates for this post should have had special fracture experience

Application stating nationality and age together with copies of three recent testimonials should be sent to the undersigned as early as possible

M H BOONE
Superintendent and Secretary

August 26th 1938

ROYAL BERKSHIRE HOSPITAL READING
(338 Beds)

Applications are invited for the following resident appointments which fall vacant on November 1st 1938

One HOUSE PHYSICIAN (male)
One HOUSE SURGEON (male)

Appointments are for six months and candidates must be fully qualified and registered

Remuneration at the rate of £130 per annum with board residence and laundry

Applications stating age and experience with copies of testimonials to be sent to the undersigned on or before October 1st 1938

H E RYAN
Secretary and House Governor

BUTE HOSPITAL LUTON

HOUSE SURGEON (male) wanted to commence duties as soon as possible Salary £150 per annum with board residence and laundry

Applications stating age nationality and experience together with copies of not more than three recent testimonials should be sent immediately to the Secretary of the Medical Advisory Committee at the Hospital

R E LINGARD
Bute Hospital Secretary

BRISTOL ROYAL HOSPITAL FOR SICK CHILDREN AND WOMEN
St Michael's Hill Bristol 2

Applications are invited for the post of HOUSE SURGEON Salary at the rate of £125 per annum with board rooms laundry and attendance

The appointment is for six months and applicants should state age qualifications experience and send testimonials to the undersigned not later than September 10th

REGINALD C THOMAS F C I S

THE ROYAL GWENT HOSPITAL
Newport Mon
(150 Beds Six Resident Posts Two of these posts are combined by the Royal College of Surgeons for the final Fellowship)

CASUALTY OFFICER required to commence duties not later than September 19th 1938 Salary at the rate of £150 per annum with board residence and laundry

Applications stating age nationality and experience together with copies of three testimonials should be forwarded to the undersigned as early as possible

ALAN RUDDLE
Secretary Superintendent

(Newport 2 hours by train from London)

WARRINGTON INFIRMARY AND DISPENSARY

The post of THIRD RESIDENT will fall vacant on October 1st 1938 and applications are invited from male candidates who must be duly qualified Medical Practitioners and unmarried Salary at the rate of £150 per annum with board residence and laundry

At the expiration of six months this term of office and subject to there being a vacancy on the Medical Board the Third Resident will be promoted Second Resident (salary £175 per annum) and will then remain Resident (salary £250 per annum) for a further period Candidates should understand that before being successful in obtaining the appointment they will be required to remain at the Hospital for a period of six months in all

Applications stating age and qualifications and accompanied by copies of three recent testimonials should be sent in not later than first post on Tuesday September 13th Chosen candidates will be interviewed on Friday September 16th 1938

By Order
HENRY L BOOT
Superintendent and Secretary

August 20th 1938

YORK COUNTY HOSPITAL
(94 Beds)

Applications are invited for the post of HOUSE SURGEON to the EYE EAR NOSE AND THROAT DEPARTMENT Salary £150 per annum with board residence and laundry

Application stating age and previous experience together with copies of not more than three recent testimonials to be sent immediately to the undersigned

J R MACKRILL
Secretary

THE DOCTOR IN PRACTICE OR ABOUT TO ENTER THEREIN SHOULD BE ADEQUATELY PROTECTED BY INSURANCE IN RESPECT OF

HIS LIFE
HIS HEALTH
HIS HOME
HIS PRACTICE
AND
HIS CAR

FOR ALL THESE CONSULT

The Medical Insurance Agency

(Limited by Guarantee)

BRITISH MEDICAL ASSOCIATION HOUSE
TAVISTOCK SQUARE, W.C.1

WE CAN ALSO ARRANGE ADDITIONAL CAPITAL FOR THE PURCHASE OF A PRACTICE OR PARTNERSHIP

State age next birthday when writing

PERCIVAL TURNER
LTD
MEDICAL AGENCY

ESTABLISHED 60 YEARS

25 MAIDEN LANE STRAND, W C.2
(Corner of Bedford Street)

T leg am "Et omian London
Ph one T mple Bar 9011 (3 line)
After office hours Walton-on-Thames 1785

Assistants and Locums Provided without fee to Principals Practices investigated Book keeping Debt Collecting etc

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE EXCLUSIVE OF HOUSE PROPERTY £50 FULL TERMS ON REQUEST

FOR DISPOSAL

SUSSEX COAST —£1 360 P A IN CREASING Non-panel non-disp Fees 7/6 up Premium ~ years purch Good house (5 bed) tennis etc S ll or let —1

LONDON S E —ABOUT £2 600 P A Panel 1 800 Half share for disposal at £2 750 —2

WEST AUSTRALIA —OVER £5 000 p a and scope Premium £4 000 Excellent House for sale or rent —Another £1 4 0 p a increasing Premium £1 0 0 House to rent at £_ per week furnished or sell —3

OUTER LONDON SUBURB S E— Residential Over £1 000 increasing Panel 300 Good fees Nice corner house to rent or sell —4

HANTS COAST —NON PANEL NON DISPENSING Over £1 000 p a Better class Scope panel Vendor specialising Excellent house 5 bed etc Premium only £1 000 —5

BUCKS — WELL ESTABLISHED £9/1 000 p a House ~ recep 4 bed etc Would sell or let —6

EASTERN COUNTY —TOWN PRAC TICE within 50 miles £1 800 p a Panel 2,500 Premium 1½ years purchase Good family house rent or sell Prelim assy considered —7

WEST OF ENGLAND — COUNTRY PRACTICE £9 0 p a Panel 750 Excellent house 7 bed etc Acre garden Freehold £2 400 —8

SURREY —NEAR LONDON £800 P A rapidly increasing Panel now 650 Small house £78 p a Premium £1 ,50 —9

LONDON S W —LOCK UP LADY S PRACTICE £485 p a Panel 500 (approx) Premium £600 —10

FRENCH RIVIERA —POPULAR Resort Old-established PRACTICE M D ssential —11

NEAR PROSPEROUS MIDLAND TOWN —Country PRACTICE about £770 p a Good class select panel increasing and scope hoice of house Premium 1½ years purchase —12

NORTHERN TOWN —ABOUT £2 000 a Very old-estd Panel Clubs and Appts 1,500 p a Visits 5/ to 6/ Prem £3 600 incl ook debts etc House only £,00 —13

KENT COAST — WOMAN S PRAC ICE Average £400 p a Panel over 200 Visiting ees 5/ to 10/6 Premium £650 House 4 bed tc Rent £85 p a —14

MIDDLESEX — HALF SHARE OF 1 000 p a with scope Panel 700 Appts over 100 p.a Premium £800 Nice house to rent —15

LONDON W 5 —ABOUT £550 P A anel 860 Visits 3/6 to 5/ Premium 2 years urch House 4 bed etc to rent —16

LONDON N W —ONE FIFTH SHARE f over £5 000 p a Panel 6 000 Appts over £160 ees 2/6 to 10/6 Prem 2 years purch Small arsonette to let —17

SCOTLAND (N) —COUNTRY OVER 1 000 p a incl panel of £300 p a Visits 5/ to 5 5s Premium 1½ years purchase or offer Good ouse rent or sell —18

MIDDLESEX —SUBURB £1 030 P A anel 600 increasing P M S £100 Premium 2 ars purch Comfy house (4 bed) sell or let —19

SURREY SUBURB —HALF SHARE £3 000 p a Old-est increasing modern house rden and garage to let. Premium £3 000 —20

LANCSTOWN —OLD EST INCREAS NG £1 100 p a Select panel of 1 000 Nice ouse ample accommodation Premium £1 550 l drugs and surgery furniture —21

SOUTH COAST —OLD EST NEARLY 400 p a increasing Fair panel mixed middle d better class Detached house garden and rage for sale or might let Premium £2 500 —22

BIRMINGHAM NEAR — NEARLY 00 p a good scope panel nearly 800 develop- g area House garden garage for sale at £8 0 let at 2/s 6d p w Premium £1,500 —23

NO CHARGE TO PURCHASERS
FINANCIAL ASSISTANCE ARRANGED

ASSISTANTS — VACANCIES IN own and Country Indoor and Outdoor List on plication.

THE MEDICAL AGENCY, Ltd.
DUDLEY HOUSE, 36 38, SOUTHAMPTON ST, STRAND, W C 2
Telephones—Temple Bar 1034-10-4 Established in 1893 by J A. REASIDE.

LONDON S E.—PARTNERSHIP old-established mixed middle and working-class Mostly cash and panel House to rent Receipts £2,600 Panel 1 800 Fees 2 6 up Half share £2 750 Practice expanding

HOME COUNTIES —PARTNERSHIP in better class G P situated in growing locality Suitable for Surgeon Share worth about £1 300 2 years pur House to rent or sale Many other available details on request

LONDON (Residential suburb) —PARTNERSHIP Good middle-class non-dispns G P Receipts approx £2 500 Panel (select) over £,00 Fees 7 6 up Half share 2 years purchase or near offer

WEST COUNTRY —PARTNERSHIP Old-estab Town and Country Practice suit to competent Surgeon One third share offered with view to half

LOCUMS AND ASSISTANTS ALWAYS AVAILABLE

Receipts £4 000 Large panel Prem 2 years pur

LONDON S E —Working-class G P House to rent. Receipts approx. £2,700 Panel 3 200 inc Fees 1/6 up 1 App Prem 2½ years pur or offer

N E. COAST —Mixed G P Receipts approx £2,000 Panel nearly 2,200 Clubs nearly £500 1 App Premium £~ 000 or near offer to include Book Debts Surgery Furniture Drugs, etc

YORKSHIRE — Mixed G P Residential locality near large Town Medium sized house Large garden garage Receipts £1 00 Panel over 2 000 Fees 3 6 up Premium £2,500

LONDON W —PARTNERSHIP Suburban G P., scope House to rent Receipts nearly £6 000 Panel approx 4 900 One fifth share 2½ years purchase with view to one third share

MANY OTHERS FOR SALE **DETAILS ON REQUEST**

ESTABLISHED 1868

PEACOCK & HADLEY, Ltd ,
MEDICAL TRANSFER AGENCY,

67 68 Chandos Place Bedford St Strand W C 2

Telegrams Herbana Lesquare London
Telephone Temple Bar 5564

LOCUM TENENS and ASSISTANTS supplied free of charge to principals

FOR DISPOSAL

1 NORTHANTS — Delightful old-established country PRACTICE Receipts £1 450 p a panel 9 0 and various appointments Fine old family house Premium for practice and house £3 850 Good schools

2 NEAR HENDON N W — Old-established PRACTICE Receipts £650 p a panel 835 Very nice corner house rent £100 p a Also branch Vendor retiring Good scope Premium £1 300

3 A number of small PRACTICES at low pre miums Excellent opportunities for practitioners wishing to get a practice with scope

4 DURHAM — Large town Old-established PRACTICE Receipts £2 000 p a panel 2 135 Very nice house £~00 Premium for practice £3 600 cash

5 MIDDLESEX (~5 minutes Charing Cross) — Well-established PRACTICE Receipts average £450 p.a panel over 500 increasing Nice corner house Good scope Premium for practice and house £1 800 payable only £1 000 down

6 LARGE MIDLAND TOWN (Suburb) — PRACTICE held 16 years by vendor Receipts average nearly £800 p a good panel Attractive house on rental Premium about £1 500

7 NEAR VICTORIA —Well-established mixed class PRACTICE Receipts last year nearly £1 000 fair panel Nice flat on rental Premium about £850

8 SCOTLAND — Old-established PRACTICE Vendor retiring Receipts £1 000 p a good panel Good introduction £500 accepted for quick sale

9 WANTED IN LONDON OR PROVINCES PRACTICES with incomes £800 to £2 000 p a Many purchasers waiting and quick transactions for immediate cash

No charge made to purchase s or for inquiries

THE WESTERN MEDICAL AGENCY

Dr K H BENNETT and Dr W J PARAMORE, who give personal attention to every client.

22 CLARE STREET BRISTOL 1
Teleg Medgen Bristol. *Tel* Bristol 22689

15 BEDFORD ST., STRAND W C.2
Tel Temple Bar 2532.

COVERS FOR BINDING

Vols I and II of the BRITISH MEDICAL JOURNAL for 1937 and previous years can be had price 2s 6d or post free 2s 10d each Orders with appropriate remittance should be addressed to

THE MANAGER
BRITISH MEDICAL JOURNAL,
B M A HOUSE TAVISTOCK SQUARE,
LONDON W C 1

ESTABLISHED 1877

LEE & MARTIN, LTD.
The Birmingham Medical Agency
71 TEMPLE ROW, BIRMINGHAM
Telegrams Locum Birmingham *Telephone* 5963 Midland B ham

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED

MAXIMUM FEE £50 if exclusively entrusted to us

ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED

RELIABLE AND EFFICIENT LOCUMS SUP PLIED AT SHORT NOTICE, also ASSISTANTS

WANTED TO PURCHASE

1 BIRMINGHAM (or within 0 miles thereof) — Good Mixed PRACTICE with a Panel of 1 ,00 over and receipts of from £1 100-£3 000 URGENTLY REQUIRED CAPITAL AVAIL ABLE

2 REQUIRED —Good English Scottish and Irish LOCUMS immediately Also ASSISTANTS good posts to offer with and without view

FOR DISPOSAL

1 NORTHANTS — Old-established unopposed country PRACTICE Receipts £1 600 p a Panel 900 Excellent house which may be rented

2 MIDLANDS —Rapidly increasing mixed private and panel PRACTICE Receipts a er ge £1 600 p a Panel 1 100 Excellent house with all services

3 STAFFS —Rapidly increasing mixed private and panel PRACTICE Receipts last year £1 0 0 and panel 1 ,30 over Excellent house

4 SOUTH WALES —Well-established middle and working-clas PRACTICE Receipts average £2 200 Panel 2 100 ample scope to increase and good house

5 MIDLANDS — Old-established industrial and working-class PRACTICE Receipts aver ge £1 068 p a Panel 96_ good scope to increase and good hou e

6 GLOUCESTERSHIRE — Well establi hed middle and working-class PRACTICE Receipts average £1 ,50 p a Panel 1 ,00 Excellent House with all services

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partner ships on very reasonable terms Full particulars on application

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE.

Telephone Welbeck 27 8
Telegrams ASSISTIAMO LONDON

NURSES
MALE OR FEMALE

TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES

Nurses reside on the premises and are available for urgent calls Day and Night

THE NURSES ASSOCIATION
(In conjunction with the MALE NURSES ASSOCIATION)
29 York St., Baker St London, W1
Mrs MILLICENT HICKS *Supt*
W J HICKS *Secretary*

British Medical Bureau

(The SCHOLASTIC, CLERICAL & MEDICAL ASSOCIATION LTD)
(Incorporated)

Tele Address: Triform, Westcent—London
TAVISTOCK HOUSE SOUTH, TAVISTOCK SQUARE, W.C.1
Telephone Euston 1611, 1612

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical Scholastic and Accountancy business and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult the Manager in all transactions requiring the services of a Medical Agent.
Members of the British Medical Association may take advantage of a reduced scale of charges applicable to them.

REDUCTION IN FEES

In cases where the Purchasers are sole Agents the commission in respect of any sale of goodwill, book debts, furniture, drugs, fittings and other effects (excluding sale of any freehold or leasehold property or of practice effects etc. outside Great Britain) is limited to a maximum fee of Fifty Pounds.

EASY TERMS ON APPLICATION

Practices and Partnerships for Disposal — **Full Particulars sent free**

1 EASTERN COUNTIES—Middle and working class town PRACTICE. Cash receipts past 12 months £3,600. Panel 2,500. House (5 bedrooms etc.) to rent on lease. Premium two years purchase or near offer.

2 S.W. of ENGLAND—Non dispensing general and surgical PRACTICE averaging £1,636 p.a. in favourite watering place. Small panel. House for sale or rent. Good hospital. Premium £2,500.

3 KENT—PARTNERSHIP in Practice in industrial town. Cash receipts last year £3,646. Panel about 1,400. House with 6 bedrooms and dressing rooms to rent. Share of about £1,200 p.a. two years purchase.

4 HERTS—PRACTICE about £750 p.a. in growing residential district. Panel 540. Nice house, garage and garden price £1,600. Purchaser should be English or Scottish and under 35 years of age. Premium £1,400.

5 MIDLANDS—PRACTICE in very attractive village about 70 miles from London. Receipts past year nearly £750. Panel 535. Detached modern house for sale or rent. Premium 14 years purchase to include stock of drugs.

6 SUSSEX—NUCLEUS, near coast. Receipts past year £270. Panel about 200. Charming house and garden for sale. Alternative house to rent if desired. Premium £450.

7 EASTERN COUNTIES—PARTNERSHIP in old established middle- and working class practice, £3,600 in country town. Panel 2,500. House available to rent. Premium one third share two years purchase.

8 EAST ANGLIA—PARTNERSHIP in old established country Practice averaging £3,724 p.a. Panel 2,060. Detached house (6 bedrooms) with beautiful garden. Incoming partner should be aged 30/40 and married. Premium for half share two years purchase.

9 S. COAST—Non dispensing PRACTICE of £1,250 p.a. in health resort. No panel but ample scope. Commodious well built residence with garage and garden for sale. Premium £1,000.

10 S. MIDLANDS—PARTNERSHIP (after a preliminary Assistantship) in an increasing Practice of £4,400 p.a. in a progressive town. Panel 2,000. Semi-detached house (5 bedrooms etc.) for sale or to rent. Premium for one fourth share two years purchase.

11 EAST ANGLIA—A Medical Woman's PRACTICE in a nice town. Cash receipts year ended April 5th, 1938 £454. Panel 300. Semi-detached house (6 bedrooms), and half an acre of garden. Premium £750.

12 UNIVERSITY TOWN—THIRD PARTNER required (after preliminary Assistantship) in old established Practice averaging £5,820 p.a. Panel 2,200. Premium for one sixth share two years' purchase.

13 HAMPSHIRE—PARTNERSHIP in well-established Practice in beautiful residential district. Cash receipts 1937 £2,431. Panel 1,300. Choice of houses. Premium for one half share two years' purchase.

14 MIDDLESEX—Old-established PRACTICE of £1,000 p.a. in developing town. Panel 880. Corner house with garage and garden for sale. Premium two years purchase.

15 W. AUSTRALIA—PRACTICE of over £5,000 p.a. in suburb of important coast town. Excellent house for sale or might be rented. Premium £4,000.

16 LONDON, W.—Well established non-dispensing non-panel PRACTICE of £1,000 p.a. in nice suburb. House with [illegible] and well-kept garden for sale. Premium £1,000.

17 S. MIDLANDS—Well established PRACTICE about £700 p.a. in good town. Panel 758. Detached corner house with garage and garden to rent. Premium £50.

18 KENT—Medical Woman's PRACTICE of £600 p.a., in outlying suburb. Panel 193. Detached house with garage and garden to rent. Premium £450.

19 S. WALES—Old established PRACTICE over £500 p.a. in small town. Panel 600. Detached house (4 bedrooms) for sale. Premium 4 years purchase.

20 S. OF ENGLAND—Easily worked PRACTICE about £1,000 p.a. in Cathedral city (clubs worth about £60 and panel 1,065). House (6 bed and dressing rooms) for sale or rent. Premium one and a half years' purchase.

21 S.E. COAST—Easily worked middle class PRACTICE, over £650 p.a., in summer resort. House (6 bed etc.) in best part, with small garden and garage, for sale. Branch surgery rented at 10s. weekly. Panel 200. Scope. Prem. £1,000.

22 HOME COUNTIES—Old established country PRACTICE of about £700 p.a. under 30 miles from London. Panel 450. Good house in excellent position with garage and garden to rent. Premium £800.

23 LONDON, W.12—Old established PRACTICE about £800 p.a., in suburban district. Panel 900. Good house (4 bedrooms etc.). Freehold for sale. Prem. two years purch.

24 S.E. COAST—Medical Woman's PRACTICE of about £400 in a popular seaside resort. Panel 208. House with garage for sale, or to rent. Premium £650.

25 SURREY—PARTNERSHIP (after a preliminary Assistantship) in growing residential district about 10 miles from London. Cash receipts average about £2,300 p.a. Panel 1,050. A three-eighths share is for disposal at two years purchase.

26 SURREY—PARTNERSHIP in Practice of about £3,000 p.a. in residential district. Panel 600. Modern house (4 bedrooms), garage, garden. To rent. Preference would be given to an F.R.C.S. One half share £3,000.

27 E. ANGLIA—Old established country PRACTICE of about £2,200 p.a. within easy distance of coast. Panel 1,500. Well built house to rent. Premium two years' purchase.

28 S. WALES COUNTY TOWN—PARTNERSHIP in Practice, £2,800 p.a. Panel over 1,000. Visits 5/- to £1 1s., medicine extra. One half Partner must hold F.R.C.S.Eng. opportunity for surgical scope after Preliminary Assistantship.

29 S.E. COAST—PARTNERSHIP in non dispensing Practice about £4,500 p.a. Panel 1,400. One fifth or one fourth share at two years purchase. Preliminary Assistantship. Scotsman preferred.

30 LONDON, N.12—Middle class increasing PRACTICE in growing district. Receipts past year £420. Panel 167. Modern labour saving house for sale or rent. Premium £650.

31 S. WALES—Contract and small private panel PRACTICE over £1,900 p.a., in industrial district. Panel over 2,100. House with surgery premises to rent. Prospect of appointment. Premium £3,500.

32 S. COAST HEALTH RESORT—OPHTHALMIC PRACTICE. Receipts 1938 £1,600. House to rent. Unlimited scope. Premium one year's purchase.

British Medical Bureau

(The SCHOLASTIC, CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1880)

Tele. Address
Triform, Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W.C.1

Telephone Euston 1644
1645

Practices and Partnerships for Disposal (continued)

33 LONDON S.W.—ELECTRO-THERAPEUTICAL PRACTICE Receipts 1937 £1 727 Large consulting room and treatment room to rent Premium £1 000 plus apparatus valued about £750

34 LONDON N.—LOCK UP PRACTICE £390 p.a. run by medical woman Panel 327 Rent at surgery 25/- weekly Good scope Premium 1½ years purchase

35 N. WALES.—Popular seaside resort—Good-class chiefly non-dispensing PRACTICE averaging £870 p.a. No panel Excellently situated detached residence for sale Good scope Premium £1 400

36 LONDON E.—Cash and panel PRACTICE averaging £2 800 p.a. Panel 4 300 House (5 bedrooms) Rent £156 p.a. Scope Premium two and a half years purchase to include drugs etc

37 W. MIDLANDS.—PARTNERSHIP in Practice averaging £6 000 p.a. in market town Panel 3 500 One sixth share at first at two years purchase Incoming partner should be aged 28/30 and able to do general surgery and minor E.N. and T. work Hospital Preliminary Assistantship

38 N. MIDLANDS.—PRACTICE in residential district near progressive town Receipts 1937 £770 Panel about 100 House for sale Good scope Premium £900

39 S. OF ENGLAND.—Well established SANATORIUM for the open air treatment Receipts at present at rate of about £3 000 p.a. Prem. £1 000 include furniture etc

40 LONDON, S.E.—PRACTICE averaging £800 p.a. in populous suburb Panel 800 Detached double fronted house Price of leasehold £1 250 Scope Premium £1 750

41 FRENCH RIVIERA.—Old established PRACTICE M.D. essential Vendor at present in England

42 S.W. ENGLAND.—Country PRACTICE over £1 400 in beautiful part Panel about 1 100 Exceptionally nice modern house standing in own grounds for sale Hunting and shooting Scope Premium two years purchase

43 Consulting Ear Nose and Throat PRACTICE in industrial city Receipts average £1 350 p.a. (in addition appointments worth about £850 p.a.) Centrally situated house to rent Purchaser should hold F.R.C.S. and have specialist experience Premium two years purchase

44 KENT.—PRACTICE in developing district 12 miles from London Receipts past year over £500 Panel about 465 House (3 bedrooms) to rent Ample scope Premium £750 to include drugs etc

45 WEST END near Lord's Cricket Ground.—PRACTICE averaging about £1 900 p.a. in ideal residential part Panel about 1 300 prospects of good increase Choice of house to rent Good intro Premium £3 200

46 MIDDLESEX.—PARTNERSHIP in steadily increasing town Practice about £2 000 p.a. Panel 1 800 House to rent Premium one half share two years purchase Applicant should be English or Scottish

47 SURREY.—Medical Woman's PRACTICE, over £300 p.a. in outlying suburban district Panel 130 House for sale or rent Scope Premium £300

48 S. AFRICA.—Medical Woman holding D.O.M.S. required in Ophthalmic Practice Experienced in operative work and not over 40 preferred SHARE about £1 000 offered after ASSISTANTSHIP

49 S. COAST.—PARTNERSHIP in Practice over £3 000 p.a. in seaside resort Panel about 2 000 Semi-detached house (5 bedrooms) for sale or rent Premium one half share £3 000 Excellent hospital and scope for surgery

50 N.E. ENGLAND.—PARTNERSHIP in non panel Practice doing about £6 000 in one of the chief towns House available One sixth share at two years purchase Partner should be surgically inclined

51 MIDLAND SPA.—PARTNERSHIP in Practice about £1 900 p.a. Panel 1 200 Excellent house for sale Premium one half share £1 800

52 S. COAST.—PARTNERSHIP in non dispensing Practice over £5 600 p.a. in health resort Panel about 600 Share worth about £900 at two years purchase

53 WEST END OF LONDON.—Good class non dispensing PRACTICE about £1 150 No panel Large house to rent Premium lease and practice £3 000

54 BUCKS.—PRACTICE in growing town Receipts last year £894 Panel about 790 House for sale Well equipped hospital Premium £1,500

55 LONDON S.W.—Medical Woman's PRACTICE about £960 p.a. in outlying suburb No panel Suitable accommodation available Premium £950

56 PARTNERSHIP in increasing Ear Nose and Throat Practice in provincial town Partner must hold F.R.C.S.

57 MIDDLESEX.—FOURTH PARTNER required in Practice over £7 600 p.a. in residential district on the Thames Panel 1 600 House (5 bedrooms) to rent Scope Premium 6/30ths share £3 100

58 LONDON N.W.—PARTNERSHIP in Practice averaging about £5 200 p.a. Panel about 6 000 Maisonette (2 beds. etc.) to rent One fifth share at first at 2 years pur

59 N.E. COAST.—Middle and better working class PRACTICE over £1 150 p.a. in seaport town No panel Private residence for sale Premium £750 to include furnishings etc of consulting rooms or near offer

60 LONDON N.W.4.—Middle class PRACTICE about £800 p.a. in developing part Panel 300 House (3 bedrooms) for sale or rent Scope Premium £1 250

61 HOME COUNTY.—FOURTH PARTNER required in Practice in growing town Panel 3 000 Incoming partner must be energetic aged about 30 (married preferred) with a leaning towards medicine Initial share about £1 250 p.a. Premium £3 000 Preliminary Assistantship

62 CORNISH COAST.—PARTNERSHIP in non dispensing Practice nearly £3 000 in favourite resort Panel 1 200 House obtainable One third share at two years purchase Good anaesthetist required Short Assistantship

COLONIES.—Number of Colonial PRACTICES Incomes range from about £750 p.a. upwards

Purchasers can raise additional capital for the purchase of approved practices or shares
Particulars will be forwarded on application

All communications to be addressed to The Manager

Manager W. M. SCOBIE

SCOTTISH BRANCH, 21, Alva Street, Edinburgh, 2

Telephone Edinburgh 3969

FOR DISPOSAL

A S. OF SCOTLAND.—Country PRACTICE in lovely district Receipts approximately £1 000 Panel 760 Exceptionally convenient house Price £2 000 Premium for practice one and a half years purchase

B SCOTLAND.—Old established City PRACTICE Receipts approximately £2 400 Panel 2 500 House, price £900 Premium two years purchase or near offer

C YORKSHIRE.—Country PRACTICE Receipts £1 200 Panel 500. Excellent house with garage Price £1 200 freehold Premium one and three quarter years purchase

D E. OF SCOTLAND.—Country town Receipts last year £685 (appointments £112 panel 565) Excellent house with garage and garden Price £1 450 Premium £1 000

E N. OF SCOTLAND.—Country PRACTICE Long established Receipts approximately £1 000 Panel 275

F EDINBURGH.—PRACTICE doing £450 House must be bought Premium, practice and house £1 650

G CENTRAL SCOTLAND.—Country town PARTNERSHIP both partners retiring. Receipts average £2 357 Panel 1 343 Excellent houses prices £1,500 and £1 250 Premium for practice two years purchase

For further details apply The Manager 21 Alva Street Edinburgh

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager to whom all communications should be addressed

RELIABLE LOCUMS and ASSISTANTS are URGENTLY REQUIRED by ALL OFFICES of the BUREAU

BRITISH MEDICAL BUREAU

(The Scholastic, Clerical and Medical Association Ltd.)

(*FOUNDED* 1880)

NORTHERN BRANCH

33, CROSS ST., MANCHESTER, 2.

Telephones {Manchester - Blackfriars 3925 / Manchester - Rusholme 2549 (*Night Calls*)

Telegrams "Locum, Manchester"

Branch Offices at Leeds and Belfast

Recommended with every confidence to the profession by the BRITISH MEDICAL ASSOCIATION as a thoroughly trustworthy medium for the transaction of all Medical Agency business

TRANSFER OF PRACTICES AND PARTNERSHIPS INTRODUCTION OF RELIABLE ASSISTANTS AND LOCUM TENENS at Short Notice VALUATION and INVESTIGATION OF PRACTICES, Etc

FOR DISPOSAL

Full particulars free on request

Practices and Partnerships wanted Large list of bona fide purchasers with ample capital available Enquiries invited from prospective vendors All information treated in strict confidence

CHESHIRE TOWN near Manchester—DEATH VACANCY—Old established mixed Panel and Private PRACTICE Cash receipts last year £1 646 Panel 2 138 Scope Excellent detached house (in own grounds) 2 reception rooms study 4 bedrooms 3 Professional rooms garage with servant's quarters and garden For sale at valuation Premium—Practice—best offer—No 1136

NORTHANTS—Sound unopposed Country PRACTICE Cash receipts approx £1 600 p a of which £950 is derived from Panel and transferable appointments Panel 900 Excellent house 7 bedrooms 3 Professional rooms garage and pretty garden Electricity Main drainage and water supply Price £1 200 or would let on lease Premium—2 years purchase—No 1160

LINCOLNSHIRE—PRACTICE or SHARE in prosperous town Suit man whose wife is also a doctor Gross receipts average £4 200 p a Panel 2 500 Good house to rent Premium—whole Practice or one third share—2 years purchase—No 1164

LINCOLNSHIRE—Very old-established PRACTICE in pleasant Country town Cash receipts last year £2 471 Panel about 1 300 Scope Cottage Hospital Good house 5 bedrooms garden and garage To rent Premium—£3 150—No 1132

MANCHESTER—Old established middle and working-class PRACTICE in suburb Cash receipts last year £2 527 Panel 2 200 Good scope Good semi detached house 2 reception 3 bedrooms garage and small garden Premium—1½ years purchase—No 1154

LANCS TOWN—Very old established mixed Panel and Private PRACTICE Cash receipts last year £1 372 Panel 1 925 Scope Good house 2 reception 4 bedrooms 3 Professional rooms (separate entrance) Premium—Practice 1½ years purchase—No 1131

SHROPSHIRE — Old established unopposed Country PRACTICE Cash receipts last year £688 Panel 450 Modern house 2 reception 5 bedrooms 3 Professional rooms garage and large garden Electric light Rent £30 p a Premium—best offer—No 1086

MANCHESTER—Old established mixed class PRACTICE in suburbs Average cash receipts £1 380 p a Panel 838 Good corner house 5 bedrooms 3 Professional rooms garage Premium—1½ years purchase—No 1150

DERBYSHIRE—Old established PRACTICE capable of great increase Cash receipts last year £740 (increasing) Panel 862 Excellent house 2 reception 4 bedrooms 3 Professional rooms (separate entrance) garage and good garden Premium—Practice and house £1 600—No 989

NEAR MANCHESTER—Very old established middle and better working class PRACTICE Cash receipts over £2 500 p a Panel 1 450 Excellent detached house 2 reception 6 bedrooms garage and garden with tennis court Price £1 000 Premium—1½ years purchase—No 1108

MONMOUTHSHIRE—Old established Contract PRACTICE Cash receipts last year £2 114 of which over £2 000 is from contract work Excellent house containing 3 reception 4 bedrooms 2 maid's rooms garage for 2 cars and garden Rent £52 p a on long lease Good prospects of increase in income Premium—best offer—No 1144

NORTH WEST LANCS—PARTNERSHIP in old established middle and better working class Practice in pleasant town near Coast owing to retirement of senior partner Cash receipts last year £6 037 Panel 3 600 and appointments £450 p a Suitable for well qualified physician or one holding diploma in ophthalmology Possible Hospital appointment Purchaser may choose own residence Premium—1th or 1th share—2 years purchase (to include drugs book debts etc)—No 1158

NORTH LANCS—YORKSHIRE BORDER—Old-established unopposed Country PRACTICE in present hands 20 years Cash receipts £1 000 p a Panel and appointments approximately £420 p a Well built house with ample accommodation central heating electric light, garage and garden of 2 acres Rent £75 p a Premium—£1 500 Vendor retiring—No 1119

NORTH WEST LANCS—DEATH VACANCY—Well established PRACTICE in beautiful Country district near lakes and sea Cash receipts last year £1 359 Panel 195 Good house 2 reception 5 bedrooms garage and garden Rent £80 p a Premium—£1 000 or near offer—No 1161

MANCHESTER—Sound old established PRACTICE in industrial district Cash receipts last year £2 200 Panel 2 230 House 4 bedrooms 2 Professional rooms Rent £50 p a Premium—best offer—No 1084

NEAR MANCHESTER—Very old established middle and working class PRACTICE in prosperous town Very suitable for two friends in partnership or may be run by one man and an Assistant Cash receipts last year £3 393 Panel 3 000 Nice modern house 2 reception 4 bedrooms separate Professional rooms garage and large garden For sale at valuation Premium—best offer—No 1137

MIDLAND SPA—PARTNERSHIP (after preliminary Assistantship) in old established Practice Cash receipts last year £3 774 Panel 1 100 Incoming partner may choose own residence Possibility of Hospital appointment Premium—7/24th share—2 years purchase—Further share in three years—No 1067

MANCHESTER—Well established mixed Panel and Private PRACTICE in pleasant suburban district adjacent to new Housing Estate Cash receipts approximately £1 100 Panel about 1 000 Excellent modern house 2 reception 4 bedrooms garage and nice garden For sale or may be rented Premium—1½ years purchase—No 1115

NORTH WEST LANCS—Old-established mixed Panel and Private PRACTICE in large town Cash receipts last year £1 10- Panel over 1 000 Good house pleasantly situated 2 reception 5 bedrooms garage and small garden Premium—Practice—1½ years purchase—No 1105

SHEFFIELD—Sound old-established working-class PRACTICE in present hands 34 years Average cash receipts £15 p a Panel 1 196 Good house eight rooms etc Price £750 or may be rented at £55 p a Premium—1½ years purchase—No 1163

YORKSHIRE (W R)—Old-established mixed Panel and Private PRACTICE Cash receipts about £1 200 p a Panel 900 Scope Excellent detached house 2 reception 4 bedrooms garage and garden Premium—1½ years purchase or near offer—No 1125

LADY DOCTOR'S PRACTICE—MANCHESTER—Old-established Cash receipts last year £1 020 Panel 370 Scope Good house 2 reception 3 bedrooms garage and garden Premium—1½ years purchase—No 1071

LADY DOCTOR'S PRACTICE—LIVERPOOL—Well-established and capable of increase Cash receipts about £600 Panel 470 Good house 4 bedrooms to rent Premium—1½ years purchase—No 1157

MIDLANDS—Increasing middle and working class PRACTICE in large town Cash receipts last year £1 050 Panel over 1 000 Scope Excellent modern house 2 reception 4 bedrooms garage and large garden For sale Freehold Premium—Practice—£2 000—No 1123

NORTH STAFFS—Very old-established better working and middle class PRACTICE Cash receipts last year £2 431 Panel 1 225 Scope as district developing Excellent house 2 reception 4 bedrooms maid's room surgery premises garage and garden For sale Freehold Premium—Practice—1½ years purchase or near offer—No 1120

CHESHIRE—Old-established mixed Panel and Private PRACTICE in large Country town Average cash receipts £2 727 p a Panel 1 597 Attractive house 3 reception 5 bedrooms garage and large garden with tennis court to rent Premium—1½ years purchase—No 1140

NORTH MIDLANDS—Old-established mixed Panel and Private PRACTICE in Country district near large town Average cash receipts £1 067 a Panel 970 and transferable appointments £200 p a Excellent detached house 2 reception 6 bedrooms Professional rooms garage and large garden Price £1 250—Premium—1½ years purchase—No 1117

LANCS TOWN—Sound mixed Panel and Private PRACTICE close to In present hands 38 years Cash receipts last year £1 457 Panel 1 400 detached house 2 reception 5 bedrooms garage and large garden Premium—Practice—£2 000—No 1153

NORTH EAST COAST—Old established mixed Panel and Private PRACTICE Cash receipts last year £2 160 Panel 2 220 Appointments (transferable) over £400 p a Good house 2 reception 3 bedrooms 3 Professional rooms garage and small garden Price £700 Premium—1½ years purchase—No 1094

NORTH WALES COAST—Good-class PRACTICE in select resort Cash receipts last year £905 No Panel or appointments Nice detached house with splendid accommodation garage and garden Premium—Practice—2 years purchase—No 1152

— WANTED —

ASSISTANTS and LOCUMS

For Immediate Engagements

Apply with full particulars to above address

All communications to be addressed to the Branch Manager BRITISH MEDICAL BUREAU 33 CROSS STREET, MANCHESTER, 2

BOVRIL MEDICAL AGENCY, LTD.

ALDINE HOUSE,
10 13 BEDFORD STREET, STRAND, LONDON, W C.2

Telegrams BOVMEDICAL, LESQUARE LONDON Telephone TEMPLE BAR 1616 (3 Lines)

Chairman and Managing Director, Dr J FIELD HALL

The maximum commission payable on the sale of any Practice or Partnership in Great Britain placed exclusively in the hands of this Agency is £50 (fifty pounds) which sum covers goodwill drugs surgery fittings fixtures and furniture, instruments and book debts but not house property Schedule of Terms will be forwarded on application.

Accountancy and legal services furnished by the Agency where desired at moderate inclusive charges
No charge is made to Principals for the introduction of Locum Tenens or Assistants

1 YORKS —Country PRACTICE.—Old-established income about £1 000 p a with scope for increase About £350 of present income is derived from panel of some 00 patients Good freehold house with ample accommodation garden and garage Price for practice and house £3 600 of which about £1 900 may be left on mortgage

2. GLOS —NEAR WYE VALLEY —Very sound PRACTICE producing about £1 300 p.a. including panel of 1 150 patients and appointments worth about £.0 p.a Low expenses Detached house with large garden 5 bed rooms etc Freehold Premium 1½ years purchase

3 NORTH LONDON —GROWING AREA —PARTNERSHIP SHARE to produce about £1 00 p a with increase later Present income nearly £4 000 steadily increasing Suitable flat with garden and garage inclusive rental £1..6 p a Premium 2 years purchase

4 FAVOURITE SOUTH COAST RESORT —Private and better class PRACTICE averaging over £1 000 p a Minimum fee 5 No dispensing. Scope for panel if desired Modernized house with ample accommodation. Premium £1 000

5 UNOPPOSED COUNTRY within easy distance North of London Income about £1 600 of which about £1 000 is from panel appointments and club Convenient family residence with 6-7 bedrooms etc Freehold for sale or let on lease Premium 2 years purchase

6 ESSEX —PARTNERSHIP after ASSISTANTSHIP of 3 months in chiefly better class practice offering considerable scope Good house available on rental Share worth £800 £900 p a at 2 years purchase

7 WEST LONDON RESIDENTIAL DISTRICT —Old-established chiefly upper and middle-class PRACTICE averaging approximately £1 00 p a Selected panel of 114 patients but scope for increase if wished Fees 5 to 21/ Non-dispensing Scope for increase as large blocks of modern flats in course of erection. Excellent house with ample accommodation. Premium £3 000

8 LINCS —MARKET TOWN —Old-established PRACTICE in prosperous district producing nearly £2 500 p a Panel of nearly 1 387 Substantial house (2 reception 7 bedrooms etc good garden) Rent £75 p a. Premium 1½ years purchase or near offer for quick sale

9 MIDLANDS —GOOD RESIDENTIAL COUNTRY DISTRICT —Compact PRACTICE at present producing about £750 p a but capable of considerable expansion Choice of 2 houses. Moderate premium for quick sale Vendor retiring through ill health

10 SUSSEX —FAVOURITE RESIDENTIAL TOWN WITHIN 40 MILES — PARTNERSHIP —TWO FIFTHS SHARE (with increase later) in old established good-class practice averaging about £3 125 p a (last year approximately £3 500) Panel of about 1 200 Suitable house with 3 reception 4 bedrooms, etc Garden Garage Rent £80 p a Premium 2 years purchase Ingoing partners should be over 30 used to better-class practice and able to do midwifery

11 OUTLYING NORTHERN SUBURB —Recently established PRACTICE on new estate producing about £300 p a including panel of 350 House with 2 reception 3 bedrooms, etc. Garden Price £670 Reasonable premium accepted

12 SUSSEX —PARTNERSHIP —A half share in old-established good-class Practice producing over £3 200 p a Panel of about 1 500 and various appointments producing about £600 p a. Good house with ample accommodation sale Good schools and social facilities oing partner should be experienced and have

13 N —Well-established PRACTICE producing luding panel of over 1 000 Excellent free etc Easily worked On rental or can be bought Premium 1½ years purchase or near offer

14 NORTH WEST LONDON —PARTNERSHIP —One fifth share (with increase later) in well-established Practice producing about £5 200 p a. including panel of about 600 Suitable maisonette with 2 reception 2 bed rooms etc Inclusive rental £90 p a Premium 2 years purchase.

15 DURHAM COUNTY —Old-established ndustrial PRACTICE producing £2,000 p a of which only about £450 is derived from private work Panel of over 2,100 units Practice ha been held by the vendor for about 20 years. Pre drugs surgery furniture etc. (part by

16 CO S OF LONDON —Well-established PR p a of which about £1 100 p a is deri 1 300 patients, P N S., etc Good free modernized and redecorated central hea garage Price £1 800 Premium 2 years purchase Scope for anyone who can do surgery

17 CITY LOCK UP —Old-established PRACTICE producing about £1 250 p a gross, or approximately £700 p a net Fees 10 6 and 21/ Good deal of electrotherapy done Premium £1 400 with furniture equipment, etc. at valuation Ha

18

19

and Public Assistance work Large proportion of cash. Premium 2 years purchase

20 SURREY —WITHIN 15 MILES OF LONDON —PARTNERSHIP — ONE-HALF SHARE residential district. substantial panel garden (2 reception 2 years purchase Ingoing partner must be experienced in surgery

21 LONDON S W —Old-established mixed-class PRACTICE producing for last 12 months £7 0 including panel of 280 Flat can be rented at £78 p.a. Premium £1,2..0

22 LONDON EAST —Middle and working-class PRACTICE producing over £..00 p a. with good scope Panel of about 7 0 Fees from Ten roomed corner house Price for lease £5 0 Premium £..00 to include drugs, surgery fittings etc and some furniture

23 DEVON COAST —POPULAR HOLIDAY RESORT —Old-established non-dispensing PRACTICE averaging for the past 3 years £1 6..0 p a. including panel of ..00 Suitable house with ample accommodation Freehold £1 ..00 or would rent. Premium £2 ..00

24 Middle-class non-panel PRACTICE scope Detached house overlooking Sport of all kinds. Good schools. Premium 2 years purchase Ill health reason for sale

25 WEST MIDLANDS —PARTNERSHIP with success ion in 2 or 3 years. Mixed-class Practice in attractive country town in very pleasant surroundings. Average receipts for last 3 years £1 825 p a. Panel of about 850 On succession ideal house available 3 reception large lounge hall billiard room 5 bedrooms, etc excellent Practice accommodation, nice garden garage Premium for half share £1 6 0

26 BEDS —PARTNERSHIP —ONE THIRD SHARE in well-established mixed-class Practice producing £1 675 p a. Panel of 760 Suitable house easily obtainable Premium £1 000 Definite scope

27 WELSH COAST —Well-established good mixed PRACTICE producing over £2 000 p.a including panel of 1 ..0 Suitable house with ample accommodation good garden and garage Rent £..0 p a. Premium £3 000 for quick sale

28 SURREY —RAPIDLY EXPANDING DISTRICT —PRACTICE at present produces about £700 p a but could be much increased Panel of 3..0 (discouraged) No midwifery Excellent house with all modern conveniences. Premium for Practice and house £3 000

29 S W ENGLAND —FAVOURITE COAST TOWN —HALF SHARE after preliminary assistantship in chiefly better-class Practice producing nearly £2,000 p a Small panel Choice of residence Must be experienced and preferably knowledge of E N T Premium 2 years purchase part by arrangement.

30 LONDON S E —Well-established PRACTICE, chiefly cash. Receipts average about £1 030 p a with panel and club producing over £..00 p.a. Can be run as a lock up Suitable premises available Premium 2 years purchase

31 SURREY —Well-established increasing PRACTICE situated in developing residential district Gross cash receipts for last 12 months about £900 including panel of about ..00 Small compact freehold house Price £8..0 part on mortgage or would rent at £85 p a. Premium £1 ..00 Ample scope for energetic worker

32 GROWING RESIDENTIAL DISTRICT WITHIN 10 MILES OF LONDON —Recently established upper and middle-class PRACTICE producing about £ 00 p a. with definite scope for increase Selected panel of 72. Fees 5 upwards. Prominent corner house with 2 receptions, 5 bed rooms Separate entrance to Professional rooms. Well laid out garden House on rental Premium 1½ years purchase

33 LONDON S W —WITHIN EASY REACH OF CITY AND WEST END — Well-established chiefly middle and better-class PRACTICE with surgical scope producing about £1 ..50 p a Selected panel of ..5 Fees 5 and 7/6 Good sized first floor flat with all conveniences Purchaser should be able to do surgery and F R C S would be advantageous.

34 LONDON —WESTERN DISTRICT —Old-established non-dispensing non-panel PRACTICE producing about £800 p a Capable of expansion, especially if panel work undertaken Well-situated corner house on main road with ample accommodation Premium 1 year's purchase Practice would be sold apart from house if wished.

35 SOUTH WALES —Old-established mainly contract PRACTICE producing last year £2,200 of which £2,050 is from contract work and panel Suitable house available Future prospects are considered to be excellent, as new works have recently been erected in the district Premium £3 500

36 KENT COAST —FAVOURITE SEASIDE RESORT —Old-established middle-class PRACTICE producing about £670 p.a. Small panel ..00 patien the town with ample accommoda tion 00 Emir nhy suitable for retired army or there is scope for younger man.

37 SUSSEX —FAVOURITE COAST TOWN producing about £800 p a including panel Good house on two floors, 2 reception, 4 be Premium 2 years purchase

38 NORTHANTS —ASSISTANTSHIP with view to Partnership in an old established country Practice with good future prospects. Initial salary £500 p a. including car allowance the assistant to live out. Full details on application

39 MIDLANDS — FAVOURITE COUNTY TOWN — SURGICAL OPENING —A QUARTER SHARE (after preliminary assistantship of 3 months) is offered in old-established increasing Practice producing approximately £3 900 p a Panel of about 2,800 One appointment worth about No dispensing Suitable house with garden emium 2 ears purchase part by arrangement 35 experienced, and able to do some surgery

40 SOUTH OF ENGLAND —COAST TOWN —PARTNERSHIP —A HALF SHARE in good mixed-class Practice established over 100 ears, average approximately £3 000 p.a. with substantial panel. Appointments with about £300 p a. Suitable house on rental at £100 p a. Premium 2 years purchase ASSISTANTS REQUIRED —Several good vacancies. Full details on application.

The Agency has made arrangements for special facilities on very favourable terms to be afforded to approved purchasers for the advance of part of the premium for any suitable practice or partnership Full details on application.

INDEX TO ADVERTISEMENTS

PUBLISHERS

Appleton Century Co 6
British Medical Association 10
Cassell & Co Ltd 15
Churchill J & A Ltd 2 & 3
Harrap & Co 10
Heller W & Sons Ltd 14
Heinemann Wm Ltd 13
Lewis H K & Co Ltd 11
Lippincott J B Co 12
Livingstone E & S 8 & 9
Longmans Green & Co Ltd 12
Oxford University Press 4
Practitioner The 7
Saunders W B & Co Ltd 5
Stationery Office H M 10
Wright John & Sons Ltd 16

ASSURANCE & INSURANCE

London & Counties Med Prot Soc Ltd Supp i
Medical & Dental Def Un of Scotland 17
Medical Insurance Agency 80

BANKS & FINANCE

British Medical Finance Ltd 86

CHEMISTS

Allen & Hanburys Ltd 26 33
Bayer Products Ltd Cover iii
Bell John & Croyden 18
Boots Pure Drug Co Ltd 26
Boutalls Ltd 41
British Drug Houses Ltd 23 25 27
Burroughs Wellcome & Co 36 & 37
Ciba Ltd Supp i
Continental Laboratories Ltd 35
Duncan Flockhart & Co 21
Eli Lilly & Co Ltd 23
Fellows Med Mfg Co Ltd 22
Fox C G & Co Ltd 27
Hewlett C J & Son Ltd 24
Medico Biological Laboratories Ltd 29

Chemists—*continued*

Ticket Thomson Research Products 21
Ridd H Francis Ltd 22
Sacharin Corpn Ltd 23
Sandoz Products Cover iv
Wander A Ltd 32
Warner W R & Co Ltd 31

FOODS, BEVERAGES

Benger Food Ltd 23
Brand & Co 30
European Dietary Service 24
Gardner W & Son Ltd 30
Genatosan Ltd 34
Glaxo Laboratories Ltd 33
Marmite Food Extract Co Ltd 20
Mitchell Hall's Biscuits 41
Nestlé's Milk Products Ltd 41
Robb Mrs & Co Ltd 40
Schweppe Ltd 20
Valentine's Meat Juice Co Cover iii

FOOTWEAR, TAILORING & CLOTHING, etc

Clark C & J Ltd 17
Deimel Fabric Co 16
Two Steeples Ltd 40

MICROSCOPES

Broadhurst Clarkson & Co Ltd 41
Clarkson's 17
Hawksley & Sons Ltd 17

MOTORS & ACCESSORIES

Hodgkinson & Crossley Ltd 40

NAME PLATES, etc

Hall F B & Co 42
Herd S J & A 42
Lewis H K & Co Ltd 42
Osborne F & Co Ltd 42
White Bronze Co 42

SURGICAL APPARATUS

Corsopress Ltd 41
Curtis H J & Son Ltd 15
Elmed A & Co 18
Franklin J G & Sons Ltd 17
Hilliard 42
Mayo Son & Sons Ltd 39
Milfilkin & Lawley 14
Robinson & Son Ltd 28
Salmon Ody Ltd 14
Salt & Son Ltd Supp iv
Smith & Nephew T J Ltd 39

TOBACCO & CIGARETTES

Carreras Ltd Supp ii
Wills's Three Castles 16

VACCINES, SERA, etc

Evans Sons Lescher & Webb Ltd Cover ii
Heinemann Wm Ltd 41
Thackray C F Ltd Supp iii

X-RAYS & ELECTRO-MEDICAL

Gowllands 19
Short & Mason Ltd 41
Sonotone Supp ii
Universal Electrical Co 42

HOMES & INSTITUTIONS

Pages 43 44 45

HOUSE AGENTS

Page 80

HOSPITALS & CLINICS

London Clinic 44
New Lodge Clinic 44

HOTELS

Page 42

SANATORIA

Cotswold Sanatorium 49
Fairyldryn Hall Sanatorium 46
Torosa Dene Sanatorium 5

SPAS, HEALTH RESORTS, & HYDROS

Kenworthy's Hydro Hotel 47
Shandley's Hydro 47
Sunnyside Restorium 47

MEDICAL SCHOOLS, COLLEGES, UNIVERSITIES, TUTORS, & LECTURERS

Pages 45 & 6

NURSING, etc

Page 81

TRANSFER AGENTS

Bovril Medical Agency Ltd 83
British Medical Bureau 82, 83, 84
Lee & Martin Ltd. 81
Medical Agency Ltd 81
Pearlock & Hadley Ltd 81
Turner Percival Ltd 81
Western Medical Agency 81

CONTRACT PRACTICE

Page 7

HOSPITAL VACANCIES, etc.

Pages 68 69 70 71 72 73 74 75 76, 77 & 83

CLASSIFIED ADVERTISEMENTS—(Wanted & Vacant)

Pages 78 & 79

GENERAL

Frankland E J & Co Ltd 14
Norwich Med Protection Soc 14

BMF

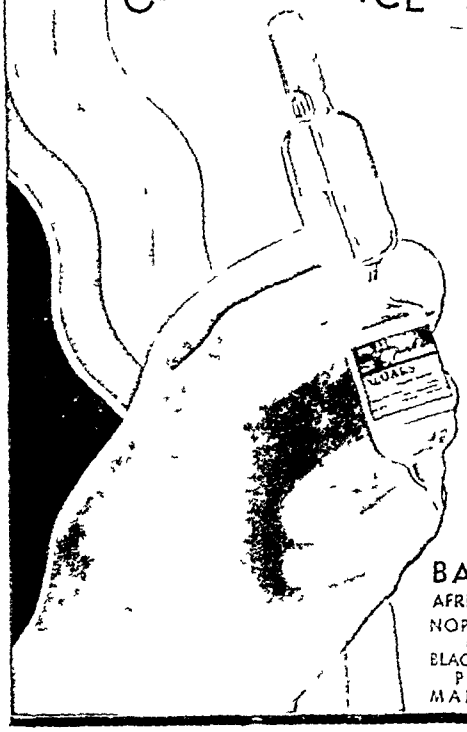
A Comprehensive Financial Service for Medical Men

THE scope of the facilities offered by the Company has been greatly extended and finance can now be obtained by a doctor for ANY purpose connected with the running of his practice or his house The charges are unusually low and the service is strictly confidential as between the Company and the doctor Further particulars and proposal forms may be obtained from the Company

BRITISH MEDICAL FINANCE LTD.
TAVISTOCK HOUSE SOUTH, TAVISTOCK SQUARE, LONDON, W C 1

Published by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Eyre and Spottiswoode Limited East Harding St Fleet St, London E C 4 Printed in Great Britain Entered as Second Class at New York, U S A, Post Office

CONVENIENCE - ACCURACY - SAVING IN TIME



By Administration of
EHRLICH'S Original 'SALVARSAN' preparations in

ISO DOUBLE AMPOULE

containing the necessary amount of sterile redistilled water for preparation of solutions ready for use

'NEOSALVARSAN'
TRADE MARK Neoarsphenamine BRAND
(Ehrlich's Original '914')
Also Double Ampoules 0·15 0·3 0·45 0·5 0·75 gm

'MYOSALVARSAN'
TRADE MARK Sulpharsphenamine BRAND
For *intramuscular* and subcutaneous injection
Iso Double Ampoules with glucose solution, 0·15 0·3 0·45, 0·6 gm

BAYER PRODUCTS LTD
AFRICA HOUSE KINGSWAY LONDON W.C.2

NORTHERN OFFICE
(Information only)
BLACKFRIARS HOUSE
PARSONAGE
MANCHESTER 3

DUBLIN OFFICE
MOLESWORTH HOUSE
1/2 STH FREDERICK ST
DUBLIN

Fifty Years of
1888 BAYER 1938
PHARMACEUTICAL PRODUCTS

Valentine's Meat-Juice

IN Vomiting of Pregnancy, in the Exhaustion following Haemorrhage or Prolonged Labour, and before and after Abdominal Operations, the Ease of Assimilation and Power of Valentine's Meat-Juice to Restore and Strengthen has been Demonstrated in

Hospitals for Women

The quickness and power with which Valentine's Meat-Juice acts, the manner in which it adapts itself to and quiets the irritable stomach, its agreeable taste, ease of administration and entire assimilation recommend it to physician and patient

Physicians are invited to send for Clinical Reports

For Sale by European and American Chemists and Druggists



VALENTINE'S MEAT-JUICE COMPANY
RICHMOND, VIRGINIA, U.S.A.

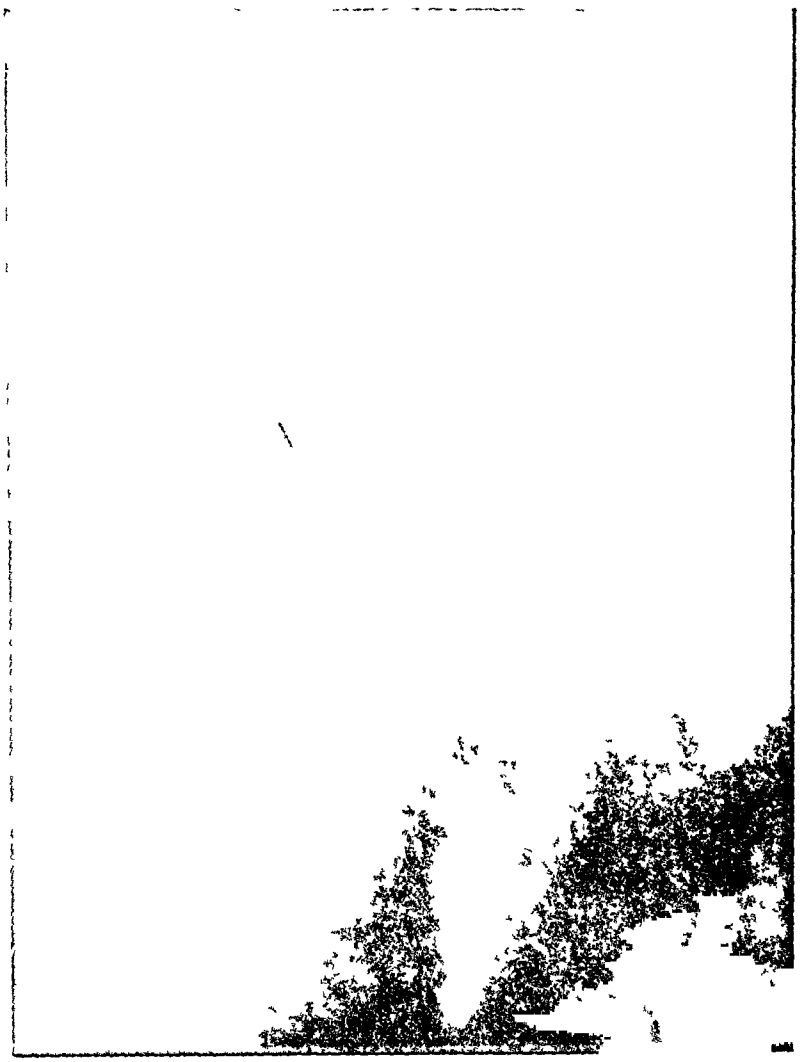
JB 96

FEMERGIN

SANDOZ

ergotamine tartrate

AFFORDS COMPLETE RELIEF FROM PAIN AND OTHER SYMPTOMS IN A HIGH PERCENTAGE OF MIGRAINE PATIENTS



The MIGRAINE ATTACK

as portrayed by Stephen Deutch

"The experience of the past few years has demonstrated fully the value of hypodermic injection of Femergin (ergotamine tartrate) in the relief of an attack of migraine"

—*Medical Annual* 1937 p 208

"Certain recent work goes to confirm the view that the headache of migraine is associated with a vasodilatation of the meningeal vessels First we have the action of ergotamine tartrate This drug was introduced as a remedy for the pain of migraine a few years ago, and experience has shown it to have a most potent action in cutting short an attack"

—*Glasg Med J* 1937 *10* 214

"Because of the constancy and character of the relief obtained from 1042 headaches in eighty-nine sufferers of migraine after the administration of ergotamine tartrate, I recommended its use for the termination of these attacks, and believe that the drug is a valuable addition to medical therapeutics"

—*J Amer Med Ass* 1936 *107* 171

Supplied in Ampoules, Tablets and Solution

Further particulars from—

J. Flint, SANDOZ PRODUCTS, 134, Wigmore St, London, W1

BRITISH MEDICAL JOURNAL

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION

SATURDAY SEPTEMBER 10 1938

PRINCIPAL CONTENTS

Occipito-Posterior Positions	p 555	Leading Articles	p. 577
Interruption of Early Pregnancy by Orally Active Oestrogens	557	Annotations	579
Treatment of Empyema in Children	560	Correspondence	588
Synergy in Chemotherapy of Staphylococcal Infections	564	Surgery in General Practice. Fractures of Thumb and Fingers—II	583
Daylight in Relation to Climate and Health	565	Reviews	570
		Epidemiology Section	602
		Efficiency of Steam Sterilizers	574

WITH SUPPLEMENT AND EPITOME

LONDON

BRITISH MEDICAL ASSOCIATION

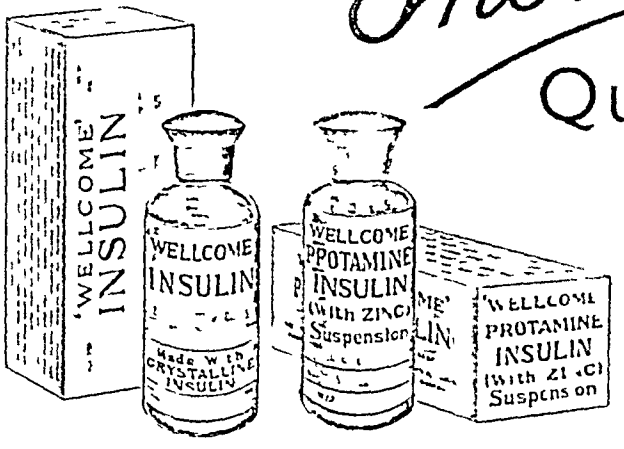
TAVISTOCK SQUARE

No 4053 WEEKLY, PRICE 1 3

Copyright

REGISTERED AS A NEWSPAPER

Insulin



Quality which constitutes a triumph of research

TRADE MARK **'WELLCOME'** BRAND

INSULIN

Made with pure crystalline Insulin

20 Units per c.c., 5 c.c. vial 1 6 40 Units per c.c. 5 vials, 2 10
20 ,, ,, c.c., 10 c.c. ,, 2 10 80 ,, c.c. 5 c.c. 5 6

TRADE MARK **'WELLCOME'** BRAND

PROTAMINE INSULIN (with ZINC)

Suspension

Prolongs the blood-sugar lowering action
Patient may be maintained on one daily injection

40 Units per c.c., 5 c.c. vials, 2 4 40 Units per c.c. 10 c.c. vials, 4,6
80 Units per c.c. 5 c.c. vials 4 6

London Prices to the Medical Profession

Descriptive literature to Medical Men on request

BURROUGHS WELLCOME & CO. LONDON

Address for communications SNOW HILL BUILDINGS E.C.1

Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W.1

Associated Houses
NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

H 3636

COPYRIGHT

BRITISH MEDICAL JOURNAL

SEPTEMBER 10 1938

TABLE OF CONTENTS

ADDRESSES AND PAPERS

Occipito posterior Positions of the Vertex and their Complications CHASSAR MOIR M D F R C S Ed 555

Interruption of Early Pregnancy by Means of Orally Active Oestrogens A S PARKES SC D F R S E C DODDS M D F R C P and R L NOBLE M D 557

Treatment of Empyema in Children H L WALLACE M D F R C P Ed 560

Synergy in Experimental Chemotherapy of Staphylococcal Infections S P DE M B and U P BASU D Sc 564

Daylight in Relation to Climate and Health W R G ATKINS F R S 565

Efficiency of Steam Sterilizers H R RISHWORTH F R C S 574

SURGICAL SERIES

Dislocations and Fractures of Thumb and Fingers—II DAVID TREVOR M S F R C S 583

CLINICAL MEMORANDA

Volvulus of Pelvic Colon in a Young Person K L JAMES M S F R C S 569

Cervical Pregnancy L TARLETON M R C S L R C P 569

REVIEWS

The Hypothalamus 570
Books on Obstetrics 570
Tinned Food 571
A Manual of Hygiene 571
Arthritis Fibrositis and Gout 572
Notes on Books 572

OBITUARY

Sir David Wilkie, M D , M Ch , F R C S Ed (With Portrait) 598
Alexander Macphail M D (With Portrait) 600
T D Harries F R C S 601

GENERAL ARTICLES AND NEWS

Malnutrition among School Children 585

Nova et Vetera
The Medical History of Mozart 586
Medicine in Iceland 100 Years Ago 586

PREPARATIONS AND APPLIANCES 572
MEDICAL NEWS 603

LEADING ARTICLES

The Occipito posterior Case 577
Industrial Health 578

ANNOTATIONS

Insurance for the Medical Profession 579
Experimental Interruption of Pregnancy 580
Immunization against Scarlet Fever 580
Pharmacological Actions of Analeptics 581
Catarrhal Jaundice 581
Inflammatory Carcinoma of the Breast 582
The Weltmann Reaction 582

SUPPLEMENT

Insurance for Medical Men and Women—I
HENRY ROBINSON M D D L J P

Co-operation in Public Health Administration
R M F PICKEN M B Ch B D P H

PUBLIC HEALTH NOTES
B M A SCHOLARSHIPS
DURATION OF INCAPACITY
HOSPITAL SAVING ASSOCIATION
INSURANCE MEDICAL SERVICE
CORRESPONDENCE
POSTGRADUATE NEWS
NAVAL MILITARY AND AIR FORCE APPOINTMENTS
Association Notices Vacancies and Appointments Diary

LOCAL NEWS

ENGLAND AND WALES—
Royal National Hospital for Rheumatic Diseases 587
Liverpool Psychiatric Clinic 587
London Hospitals Street Collections 587
The Merseyside Hospitals 587
Supervisors of L C C Midwives 588
Medical Society of London 588

EPIDEMIOLOGY SECTION

TABLE OF INFECTIOUS DISEASES AND VITAL STATISTICS 602
EPIDEMIOLOGICAL NOTES 605

CORRESPONDENCE

Convalescent Serum in Infantile Paralysis G R GIRDLESTONE F R C S 588
A Mere Examining Body Sir E GRAHAM LITTLE M D MAJOR GREENWOOD F R S 589
Bennett's Fracture Sir W I DE COURCY WHEELER F R C S I 590
Treatment of Ganglion R RUTHERFORD F R C S 590
Reduction of Backward Displacement in Colles's Fracture M F MAGNIER M B 591
Sulphonamide in Gonorrhoea E E PREBBLE M D A J CONKINS F R C S and G L M McELLIGOTT M R C S 591
Complications of Chemotherapy W R THROWER M D 591
Orthopaedic in Rheumatoid Arthritis W A COCHRANE F R C S Ed 592
Rheumatoid Arthritis and Jaundice G LAURENCE F R C S Ed S J HARTFALL M D H G GARLAND M D and W GOLDIE M B 592
Treatment of Malaria KENNETH ROYES B M 593
Tuberculosis Dispensaries or Chest Clinics? P ELLMAN M D 593
Prevention of Blindness C G KAY SHARP M D 594
Undescended Testicle P M F BISHOP B M 594
A Strict Vegetarian Diet Sir LEONARD HILL F R S F WOKES Ph C B Sc 595
Stomach II Operation for Prostatic Enlargement T HUNTER M D 595
Prolonged Occipito posterior Presentation J T MACLACHLAN M D 595
Psychosomatic Illness J L HALLIDAY M D 596
Medical Evidence at Inquests A LANKESTER M D J J DAVIS M R C S 596
Vitamin C in Milk J H LLOYD M B 597
Sequelae of War Gas Poisoning W N ABBOTT M B 597
London Emergency Bed Service R E PEERS 597

LETTERS AND ANSWERS

Origin of the Laryngoscope 604
Chronic Uric Acid Dermatitis 604
Treatment of Superficial Glossitis 604
Income Tax 604
Modern Art for the Hospital 604
Medical Postage Stamps 604
Corrigendum 604

THE PRACTITIONER

Edited by
SIR HUMPHRY ROLLESTON BT GCVO KCB MD FRCP and ALAN MONCRIEFF MD FRCP

DISORDERS OF SEX

SEPTEMBER 1938

It is generally agreed that medical education still presents several troublesome deficiencies One of these undoubtedly is instruction on the problems of sexual disorders In *The Practitioner* for September a group of experts deal with these maladies and their management from different angles Dr Havelock Ellis rightly explains in his introduction that the medical schools provide for this subject little if any better than they did fifty years ago Medical practitioners and students will find great help therefore, in this attempt to remedy a striking defect in the medical curriculum

PRINCIPAL CONTENTS

SEX EDUCATION AND THE GENERAL PRACTITIONER
By Havelock Ellis FRCP

SEXUAL DEVELOPMENT OF THE CHILD AND ADOLESCENT
By H Crichton-Miller, MD MRCP *Honorary Senior Physician Tavistock Clinic London*

SEX PROBLEMS IN MARRIAGE
By J A Hadfield MA MB CHB *Director of Studies Tavistock Clinic London Lecturer in Psychopathology and Mental Hygiene University of London*

PROBLEMS OF CELIBACY IN THE MALE
By Kenneth Walker FRCS *Lecturer in Venereal Diseases St Bartholomew's Hospital Surgeon Royal Northern Hospital and St Paul's Hospital London*

SEX PROBLEMS OF THE SINGLE WOMAN
By Laura Hutton BA MRCS LRCP *Physician Tavistock Clinic London*

HOMOSEXUALITY
By Desmond Curran MB FRCP DPM *Psychiatrist and Lecturer in Psychological Medicine St George's Hospital London*

This number also contains practical articles on the following subjects

LOCAL ANAESTHESIA AND ANALGESIA
SPLINTS FOR THE PRACTITIONER
SPEECH DEFECTS IN CHILDHOOD
THE TREATMENT OF ASTHMA IN CHILDHOOD
DIET IN RHEUMATISM AND GOUT

120 pages of text Price 4s post free

¶ **The October issue will be a greatly enlarged Special Number on "Advances in Diagnosis and Treatment, 1938" (Price 7s 6d)**

ORDER FORM

To the Publishing Department,
The Practitioner
5 Bentinck Street, London W 1

I enclose £2 2s Please send to me *The Practitioner* post free for one year subscription to include two Special Numbers without extra cost

NAME

ADDRESS

BMJ 10 9 38

J. & A. CHURCHILL LTD.

NEW BOOKS

B W I Thr M I InD

BIOCHEMISTRY FOR MEDICAL STUDENTS

4 Plate and 33 Text figure 12s 6d
(Just Published)

The Institute undertakes to supply the student from India or Dependency with text books and other requisites

By James Walls MD MS FRCS

ELEMENTARY ANATOMY AND PHYSIOLOGY

With a Foreword by Prof T B Johnston MD ChB 287 Illustrations 12s 6d
(Ready end of September)

Correlates structure and function and emphasizes the essential interdependence of Anatomy and Physiology

By G L Beaumont D I FPCP

DIETS FOR DIABETES
Arranged in MENU FORM

2s *(Just Published)*

Offers the patient the easiest method of selecting meals which suit both his appetite and his taste and does away with the necessity of working out equivalent food values from table

By Sir John H Parsons CBE DS FRCS FRS

DISEASES OF THE EYE

Nine (9th) Edition 21 Plate 20 in Colour and 360 Text figure 18s

This favourite book gives details of new drugs and new methods of treatment

By C F W Illingworth MD FRCS Ed and B M Dick MB FRCS Ed

A TEXTBOOK OF SURGICAL PATHOLOGY

New (3rd) Edition 299 *Illustrations* 36s

Thoroughly revised and brought up to date Includes much new material

By H C Rutherford Dorling MD MS FRCS

SURGICAL NURSING AND AFTER-TREATMENT

New (6th) Edition 206 *Illustrations* 9s

Carefully revised throughout Incorporating much new matter and several new illustration

By Sydney Smith MD FRCI

FORENSIC MEDICINE
A Textbook for Students and Practitioners

New (6th) Edition 119 *Illustrations* 24s

Entirely up to date Revised throughout New Illustration

STUDENTS' TEXTBOOKS

TAYLOR'S PRACTICE OF MEDICINE

11th Edition Revised and Edited by E P POULTON DM FRCI Physician to Guy Hospital and Collaborator 71 Plate (16 Coloured) and 104 Text figure 28s

MEDICINE Essentials for Practitioners and Students

By C E PEALMONT DM FRCI Physician to The Middlesex Hospital
3rd Edition 4 Illustration 21s

DISORDERS OF THE BLOOD

By E H WHITBY *CIO MC* MD FRCI and C J C HITCHEN MD DPH Assistant Pathologist The Bland Sutton Institute of Pathology The Middlesex Hospital *3rd Edition* 15 Plate (8 Coloured) and 60 Text figure 21s

DISEASES OF INFANCY AND CHILDHOOD

By WILFRID SHELDON MD FRCP Physician for Diseases of Children Kings College Hospital Physician to Out Patient Hospital for Sick Children Great Ormond Street *New (2nd) Edition* 12 Text figure and 13 Plate 21s

CUSHNY'S TEXTBOOK OF PHARMACOLOGY AND THERAPEUTICS

11th Edition Revised by Prof C W EDMUNDS MD and Prof J A GUNN MD FRCI 170 Illustration 25s

THE ESSENTIALS OF MATERIA MEDICA, PHARMACOLOGY AND THERAPEUTICS

By J H MICKS MD FRCPI Professor of Pharmacology Royal College of Surgeons in Ireland *New (2nd) Edition* 12s 6d

STARLING'S PRINCIPLES OF HUMAN PHYSIOLOGY

7th Edition Edited and Revised by Prof C LOVATT EVANS DSc FRCP FRS 554 Illustration 6 in Colour 24s

HUMAN PHYSIOLOGY

By F R WINTON MD Reader in Physiology University of Cambridge and J L BAYLISS PhD Lecturer in Biophysics University of Edinburgh *Second Edition* 211 Illustration 15s

SYNOPSIS OF REGIONAL ANATOMY

By T B JOHNSTON MD ChB Professor of Anatomy University of London
3rd Edition 111 Illustration 12s 6d

EDEN & HOLLAND'S MANUAL OF OBSTETRICS

8th Edition By EARDLEY HOLLAND MD FRCP FRCS FCOG Obstetric and Gynaecological Surgeon The London Hospital 15 Plate (5 Coloured) and 398 Text figure 24s

EDEN & LOCKYER'S GYNAECOLOGY

4th Edition Revised by Sir H BECKWITH WHITEHOUSE MS FRCS FCOG 36 Coloured Plates and 619 Text figure 38s

TEXTBOOK OF GYNAECOLOGY

By WILFRED SHAW MD FRCS FCOG Physician Accoucheur with Charge of Out patient St Bartholomews Hospital *2nd Edition* 4 Coloured Plates and 213 Text figure 18s

THE QUEEN CHARLOTTE'S TEXTBOOK OF OBSTETRICS

By Member of the Staff of the Hospital *4th Edition* 4 Coloured Plate and 291 Text figure 18s

THE SCIENCE AND PRACTICE OF SURGERY

By W H C ROMANIS MB FICS and PHILIP H MITCHINER *CBE* MS FRCS Surgeon St Thomas Hospital *6th Edition* 800 Illustration Two Volume 28s

THE OPERATIONS OF SURGERY

8th Edition By R P ROWLANDS MS FRCS and HUGH TURNER MS FRCS and Collaborator Vol I 435 Illustration 35 in Colour 36s
Vol II 414 Illustration 4 in Colour 36s

THE RADIOLOGY OF BONES AND JOINTS

By JAMES T BRAILSFORD MD MRCS Radiological Demonstrator in Living Anatomy University of Birmingham. *2nd Edition* 343 Illustration 30s

104 Gloucester Place, London W 1

H. K. LEWIS & Co. Ltd., Publishers and Booksellers

BOOKSELLING DEPARTMENT { TEXTBOOKS and Works in Medical, Surgical, and General Science FOREIGN BOOKS

PROMPT DELIVERY URGENT ORDERS BY TELEPHONE OR POST CAN BE DISPATCHED FROM STOCK IMMEDIATELY

Telephone EUSton 4282 (5 lines)

Books Advertised or Reviewed in this Journal supplied promptly from Stock or to order

STATIONERY DEPARTMENT Special Stock of Medical Stationery, Card Index Systems, Name Plates, etc
MODELS DEPARTMENT Anatomical Models, Charts, Osteology etc

MEDICAL AND SCIENTIFIC LENDING LIBRARY.
Annual Subscription from One Guinea Prospectus on application

SECOND-HAND BOOKS DEPARTMENT, 140, GOWER STREET, W C 1

LONDON H K LEWIS & Co Ltd, 136, GOWER STREET, W C 1 Telegrams PUBLICAVIT WESTCENT LONDON

EYSTON
again
relied on
LODGE
PLUGS
for his amazing
new
World's Land Speed Record
of
345·49 m.p.h.
(subject to official confirmation)

Lodge Plugs are obtainable of all garages and motor accessory dealers, from 5/- each They are made completely in England by Lodge Plugs Ltd Rugby

OUR 50 YEARS' REPUTATION
& a 10 years' guarantee



FRANKLAND'S VITAL PULSE WATCH (Regd)
(For Doctors) Fully jewelled lever movement
Silver chrome 60 or 13 payments of 5/ Gold £5 17 6 or 16/ down and 11 payments of 10/ 10 YEARS GUARANTEE

Stand behind the e watches Offered to Doctors and Nurses *for immediate possession* without displacement of capital they represent the highest possible value and perfection of workmanship and are made especially for your professional needs

Visit our showrooms or Selections sent on Approval

DEPARTMENTS—Furs Fur Coats Jewellery Plate Cutlery Furniture etc *Write for Catalogue*

PROTECTIVE MONTHLY PAYMENT TERMS

E J FRANKLAND & Co, Ltd (Dept M) 42 57, Imperial Building, Ludgate Circus London E C 1
Estab 1885 *Phone Central 2188*

FURNITURE OF QUALITY AND DISTINCTION

The contents of Famous Mansions the e ant appointments of numerous Town Flat etc removed for convenience of sale by Privat Treaty now being dispersed of at enormous sacrifice On Sale Daily 9 till 7 Stored and delivered free

The entire contents of 500 Bedrooms comprising suites of super quality in Walnut Mahogany Oak, Lacquer Satinwood etc including **An Exceptionally Fine Full Figured Walnut Suite of Exquisite Design and of Finest make comprising Fully Fitted Wardrobe with Bow Centre large Pedestal Dressing Table with Shaped Triple Mirrors Fully Fitted Gent's Wardrobe Double Bedstead** The complete set 45 gns (less than ½ cost 15 months ago) Enormous selection of fine old Wardrobes from £8/10/ Bow and Square Chests Dressing Tables in Walnut and Mahogany Tallboy Toilet Mirrors at 25/ Double and Single Bedsteads in Walnut Mahogany and Oak at 27 6

The Dining Rooms Libraries and Halls contain suites and pieces of every period Tudor Queen Anne Georgian and modern style including some exceptionally fine sets in Lacquered Oak comprising **Old Dresser Refectory Table and set of 6 Old Rush Seat Ladder Back Chairs** at 28 gns Rare old Serpentine Mahogany Sideboard 10 gns Old Georgian Dining Table £8/15/ together with 150 sets of fine Chairs of all period including a rare set of 4 small and 2 Arm **Wheelbacks** in Elm on Cabriole Legs at 15 gns Fine Selection Super Sprung Luxuriously Upholstered Settees and Club Chairs in Grape Hide and Silk Damask including Elegant Knowle Suite in Beige Damask as new at 42 gns Super Set in Brown Hide at 15 gns also a Magnificent Spoon Back Suite in Red Morocco of *Rare Quality* 50 Super Easy Chairs at 27/6 Settees to match at £3 15 Fully Guaranteed Super Library Furnishings, Bookcases Tedestal Desk Bureaux together with the complete household effects Pictures China Clocks Cut Crystal etc etc

Carpets of Every Description including Plain Wilton in all Colours made up and laid Free

Phone CAN 2141 Buses 4 19 30 143 pass door

THE FURNITURE & FINE ART DEPOSITORIES
Islington Park St, Upper St, Islington, N.1

X-RAY CAR SERVICE

PORTABLE X RAYS LTD
POWER ROAD, CHISWICK
TELEPHONE CHISWICK 4006

ANY HOUR ANY DAY ANYWHERE

FOOTWEAR & NATIONAL FITNESS

MEDICAL men have, of course, long realised the importance to fitness of properly made and accurately fitted footwear

It has been said that manufacturers and shoe retailers have failed in the past to provide such footwear, and that retailers have lacked the necessary knowledge and skill to fit shoes correctly

We would draw attention to the fact that we have long been alive to the importance of this matter, and have concentrated for many years upon the production of shoes the correct construction of which meets with the approval of medical men, and which can be fitted with great accuracy by properly trained assistants

There are more than 300 retailers who are fully trained and qualified to fit our shoes correctly

Church's Arch Moulded Shoes are made in a wide variety of styles for men and women (there is nothing of the 'surgical" shoe about them) They contain fixed supports for the longitudinal and metatarsal arches, and they are available in a full range of graded fittings, which include six different widths in sizes and half sizes—upwards of 100 fittings in all

We will gladly send particulars to anyone interested

Church's
ARCH-MOULDED
SHOES



"Like a firm supporting hand"

CHURCH & CO LTD NORTHAMPTON

Nurses! -do you know

—HOW RADIOGRAPHS ARE INTERPRETED?
—HOW HYPERTHYROIDISM IS TREATED?
—WHY SPENCER WELLS INVENTED FORCEPS?
—HOW TO CONTROL GASTRIC ASPIRATION?
—THE ANATOMICAL STRUCTURE OF THE EAR?

This new nursing weekly tells you

50 PAGES OF READING MATTER (EXCLUDING ADVERTISEMENTS) ALL PROFUSELY ILLUSTRATED

YOU want to know all about new treatments, how new ideas in medicine and surgery affect your work. Week by week, "Nursing Illustrated will keep you right up to date Special articles by famous authorities — simply written, generously illustrated — will keep you in touch with every important development both at home and abroad

But Nursing Illustrated will not only keep you up to date professionally In regular weekly features — brightly written and profusely illustrated — well known experts will bring you the stop press news on clothes, beauty care films, physical fitness books and all off duty activities To realise how fascinatingly alive is every page of this new Nursing weekly, you must see it for yourself Order a copy today



CONTENTS OF No 1 *includes*

SPECIAL ARTICLES
X-Ray Interpretation Acute Appendicitis Bandaging Anatomy and Physiology — The Skin

OFF DUTY FEATURES
Films by C A Lejeune Books by Olive Jones Physical Culture by Prunella Stack Beauty Care Fashions by Quin Needlework Competition Crossword Short Story

Special Articles by Famous Authorities

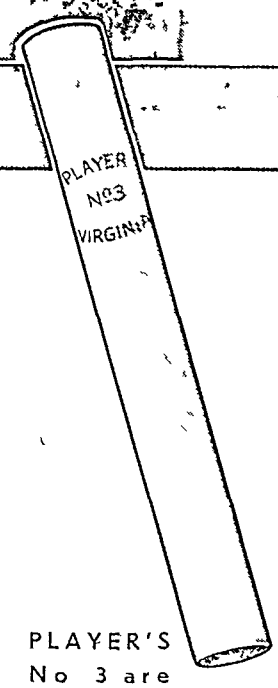
OUT EVERY FRIDAY 2D



NOTABLE NUMBERS

THE HOUSE OF AGNES — 71 St Dunstan's Street, Canterbury, traditionally associated with Charles Dickens and said to be the original of Mr Wickfield's 'very old house, bulging out over the road'

Notable, in matters of smoking, is that other famous number—Player's No 3 It is a number with definite associations the mellowness, the distinctive flavour and aroma of a *finer quality* cigarette



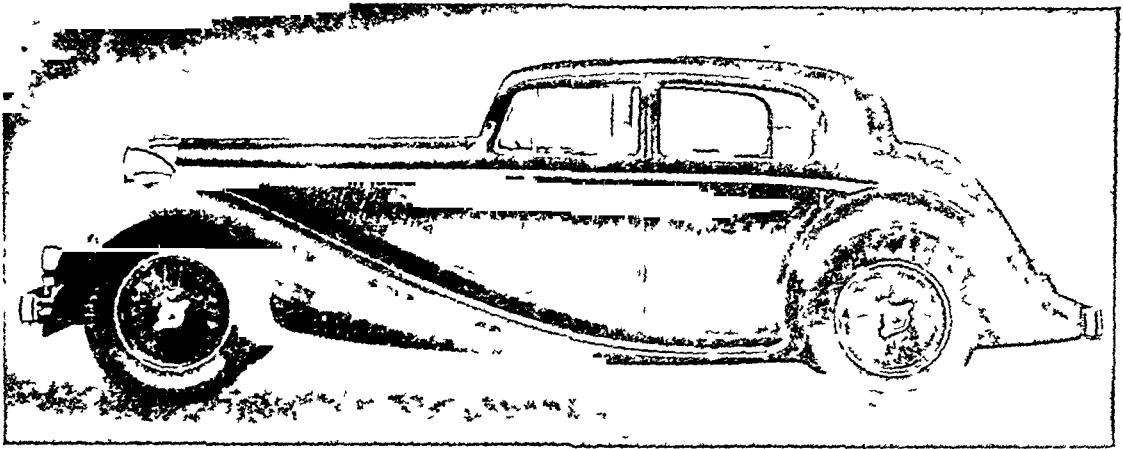
PLAYER'S No 3 are supplied either plain or cork-tipped so ask for which you prefer

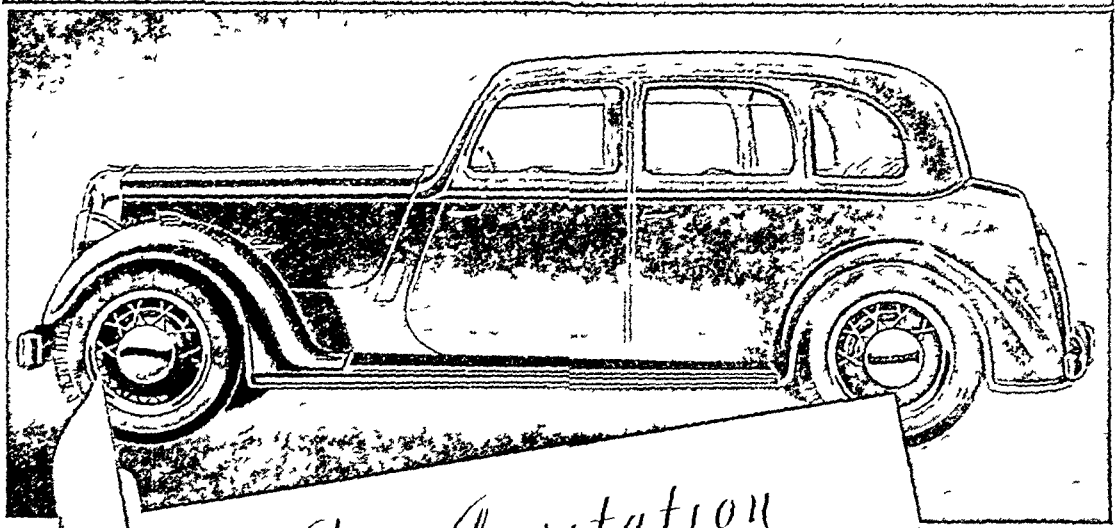
PLAYER'S NUMBER 3

EXTRA QUALITY VIRGINIA

20 FOR 1/4 50 FOR 3/3 50 TINS (plain only) 3/4

3 P 51A





An Invitation

TO THE MEDICAL PROFESSION

Henlys England's Leading Motor Agents invite the investigation by medical men of the many outstanding advantages to be gained by coming to Henlys for new or used cars

If you prefer a new car Henlys are distributors for SS Jaguar Rover Alvis, Austin and Studebaker and agents for other outstanding productions, including Morris, Riley Daimler Humber Hillman Armstrong etc

If your choice is a used car Henlys offer you the largest selection in the country—7 days free trial, and a guarantee with every example £100 and over

20 EQUAL MONTHLY PAYMENTS BUY ANY NEW CAR

To the medical profession Henlys offer special car purchase terms Any make of new car can be bought from Henlys and paid for by 20 equal monthly payments—the most favourable rate obtainable anywhere

Any car will be taken in part exchange Write 'phone or call now for further particulars

THE LARGEST & FINEST SELECTION OF NEW & USED CARS IN ENGLAND

HENLYS

HENLY HOUSE, 385 EUSTON ROAD N.W.1 PHONE EUSTON 4444 DEVONSHIRE HOUSE PICCADILLY W.1 AND AT MANCHESTER BRISTOL AND BOURNEMOUTH

A SPECIALIST PUBLICATION OF THE BRITISH MEDICAL ASSOCIATION

ARCHIVES of DISEASE in CHILDHOOD

Edited by

CHARLES HARRIS, M D, F R C P, and ALAN MONCRIEFF, M D, F R C P

with the help of

H C CAMERON, M D, F R C P
H A T FAIRBANK, D S O, M S, F R C S
LEONARD FINDLAY, D Sc, M D, F R C P
A DINGWALL FORDYCE, M D, F R C P Ed
REGINALD MILLER, M D, F R C P
C MAX PAGE, D S O, M S, F R C S
LEONARD G PARSONS, M D, F R C P
SIR FREDERIC STILL, K C V O, M D, F R C P
HUGH THURSFIELD, D M, F R C P
EDITOR OF THE *British Medical Journal*

SEPTEMBER, 1938

CONTENTS

Wilms' embryoma By Ruby O Stein, M D, and G H Nowns, M D, M R C P

Oesophagitis in infancy By J H Ebbs, M D, D C H

Symmetrical degeneration of the neostriatum in Chinese infants By W J C Verhaart

Clinical ascariasis in children By Cicely D Williams, D M, M R C P, D T M & H

Precocious puberty, with a report on a case of pineal syndrome By A V Neale, M D, M R C P

Congenital pyloric stenosis in first and second cousins By E A Cockayne, D M, F R C P

Nutritional oedema in children in Egypt By H Shukry, M R C P, M A Mahdi, M Sc, B Pharm, and A A El Gholmy, M D

Spontaneous subarachnoid haemorrhage in children By H. G Miller, M B

Congenital haemolytic anaemia with normal fragility of the red blood cells By F Schiff, M D

Case reports

Hydatid cyst of the spinal canal successfully treated by operation By J S Y Rogers, D S O, M B, C M, and G R Tudhope, M D, Ph D, D P H

Tetany in the new-born By O Lloyd, M B, B S

Cranio carpo-tarsal dystrophy By E A Freeman, F R C S, and J H Sheldon, M D, F R C P

British Paediatric Association **Proceedings of the Eleventh Annual General Meeting**

Published March, June, September and December

Yearly subscription (4 numbers), 25/- To members, 20/-
Single Number, 7/6

Applications with remittance should be addressed to
Archives of Disease in Childhood, B.M.A. House, Tavistock Square, London, W.C.1

The WOLSELEY 14/56 answers every need of the doctor

EASY STARTING—In the Wolseley 14-56 h p a thermo-statically controlled water system does away with warming up delays and sluggish pulling A 12 volt electric system and twin batter es ensure ample starting energy

ROOMINESS—Quick and easy exit through wide doors fresh air renewal every 60 secs and anatomically correct seat ing mean lack of fatigue on even the longest day

NIGHTWORK — Powerful headlamp twin fog lamps stop and rever ing lamps and duplex screen wipers essen the strain of dark and rainy nights

ECONOMY—24 to 28 miles per gallon is good for a 14 Wolseley stabilised production policy lowers depreciation

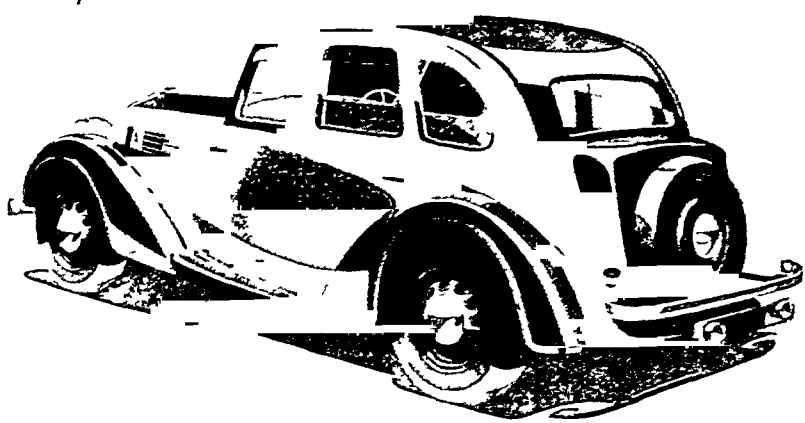
QUIET — Body door and floor are completely in ulated from noise—the interior from fumes

APPEARANCE — The Wolseley 14/56 either as a Saloon or in its Salon de Ville form is a distinguished hand some car—very indicative of the standing of its owner

WOLSELEY

14/56—"the doctor's car"

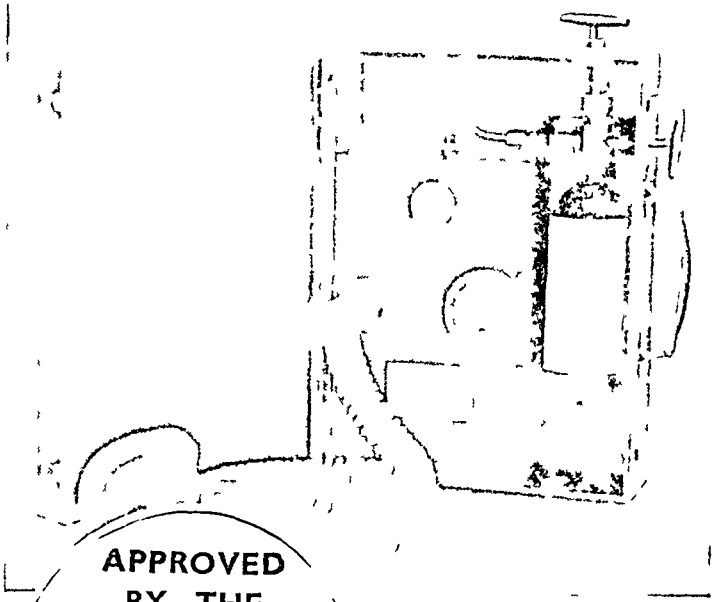
The price of the 14/56 h p Saloon is from £260—the Salon de Ville £3..5 18/80 h p are from £280 Super Sizes from £330 and the 12/48 h p from £245 Dunlop Tyres Triplex Safety Glass and Jackall Jacks



WOLSELEY MOTORS LTD WARD END BIRMINGHAM 8 London Distributors Eustace Watkins Ltd Berkeley Street, W 1
Sole Exporters M I E Ltd Cowley Oxford England BETTER BUILT—A BRITISH CAR.

Longleys

The "QUEEN CHARLOTTE'S" *portable* GAS AND AIR MACHINE



DESIGNED FOR
SAFETY-LOW COST
PORTABILITY
COMPACTNESS
SIMPLICITY

APPROVED BY THE CENTRAL MIDWIVES BOARD

The Queen Charlottes apparatus has been recognised by the Central Midwives Board as one which may be used by midwives in accordance with the terms of the Boards ruling regarding the administration of Nitrous Oxide and Air by midwives Three models are available which can be supplied to midwives and full particulars are obtainable on application to the address below

STATEMENT AUTHORISED BY CENTRAL MIDWIVES BOARD SEPT 27, 1937

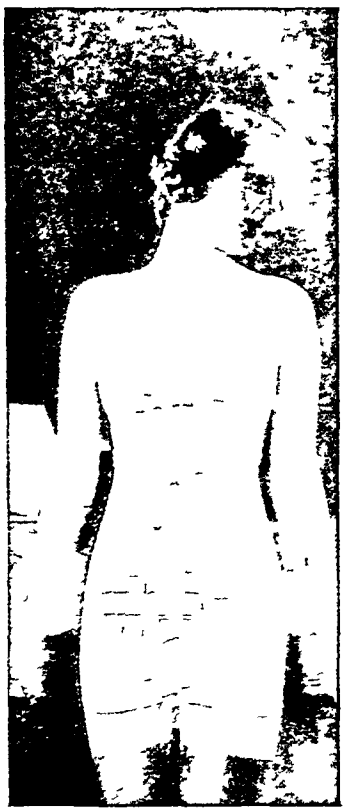
"The Queen Charlotte's Gas Air Analgesia apparatus has been recognised by the Central Midwives Board as an apparatus which may be used by midwives in accordance with the terms of the Board's ruling regarding the administration of Nitrous Oxide and Air by midwives"

The BRITISH OXYGEN CO LTD

MEDICAL SECTION

EAST LANE, WEMBLEY, MIDDLESEX
TELEPHONE ARNOLD 1234 (13 Lines)

Supports for Back Conditions



Photograph of a Spencer Sacro-iliac Corset. The tapes in front provide convenient adjustment *from the outside* of the inner belt and pad that hold the ilia in position

are a

Spencer Speciality

Lumbo-sacral Strain, Sacro-iliac Relaxation, Faulty Posture and Mild Curvatures are Aided by Spencer Supports Designed for the Individual Patient and Specific Condition

All Spencer Supports are designed to help support the abdominal muscles and to assist in correcting the pelvic tilt Each is individually designed, cut and made for the patient Thus the doctors' exact specifications can be incorporated into the garment It will fit perfectly and be securely anchored to the figure, ensuring constant unvarying support The weight of support in a Spencer is always placed on the pelvic girdle—not on the spine at or above the lumbar region (A support that places the strain on the lumbar region is likely to cause backache and nervousness)

Spencers are comfortable, light in weight, flexible and easily laundered They are guaranteed NEVER to lose their shape

BEWARE OF SUBSTITUTION—Spencer Corsets Ltd regret the necessity of warning the medical profession that in several instances where doctors have specifically prescribed a Spencer Support, a corset of another make has been substituted and because its makers do not understand the Spencer principles of individual designing has been unsatisfactory Every genuine Spencer Support bears the SPENCER Label

Trained Spencer Corsetiere are resident throughout the Kingdom

Name of nearest gladly supplied on request

A scientifically trained Spencer Corsetiere will call at your surgery or at your patient's home to take measurements under your supervision

SPENCER

CORSETS - GIRDLES - BELTS
BRASSIERES - SURGICAL SUPPORTS

Branch Offices and Salons

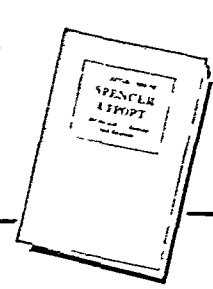
LONDON GLASGOW BRISTOL LIVERPOOL
BIRMINGHAM EDINBURGH MANCHESTER,
LEEDS

(See Local Telephone Directory)

Expert Fitter (Trained Nurses) at your immediate Service

Spencer Supports and Corsets are never sold in shops

May we send you this New Professional Booklet describing Spencer Supports and their Accepted Uses?



SPENCER CORSETS LIMITED,
Spencer House, Banbury, Oxon

Please send me your illustrated booklet I am particularly interested in supports for

Name Dr

Address

AS AN ANTACID OR IN FEBRILE CONDITIONS



LEMBAR JUSTIFIES THE DOCTOR'S HIGHEST RECOMMENDATION

COMPOSITION

	% Composition
Natural Lemon Juice	35 0
Cane Sugar	25 0
Glucose (Dextrose)	4 0
Sol Extracts Barley (Maltose and Dextrin)	5 75
Starch	2 25
Water	28 0

100 gms provides 154 Calories

Tested and approved by a leading London Hospital Prescribe it for any condition in which lemon juice and barley water are allowed

RAYNER'S

LEMBAR

Made from finest fresh lemons, good Scotch barley and Glucose (with cane sugar) More efficient, better flavour and more economical than ordinary lemon and barley *A bottle makes a gallon* It keeps indefinitely

SAMPLE sent with pleasure also useful booklet with special diet sheets and sickroom recipes from a London Hospital Write to Rayner & Co Ltd, Medical Dept B London N 18

2/- a bottle at all leading chemists and grocers

IMPORTANT ANNOUNCEMENT

'SUMMIT' Hypodermic Needle now ALL-BRITISH

The sole manufacturing rights of the 'SUMMIT' hypodermic needle having recently been taken over by S and R J Everett and Company Limited, it is now entirely British

EXCLUSIVE FEATURES OF 'SUMMIT'

(1) EASY TO WIRE
Cleaning wire can be conveniently inserted through the mount due to a tapered cone running down the needle bore.

(2) FIRM SILKY FIT
Ensured by a soft durable metal seating to a specially reinforced mount (Pat 7359)

(3) EASY TO ATTACH
The shape of the Summit mount enables it to be firmly gripped between the thumb and forefinger

(4) LEGIBLE NUMBERING
Owing to the shape and construction of the mount the needle size is cast on it in very legible characters

(5) APPEARANCE
The special metal with which the mount is made retains a perfect appearance throughout the life of the needle

'SUMMIT' Needles

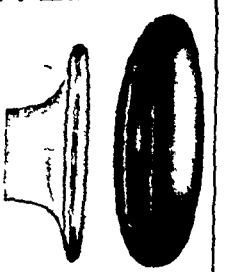
From all Surgical Instrument Suppliers

Manufacturers and Wholesale Suppliers
S & R J EVERETT & CO LTD, THORNTON HEATH SURREY
Telephone Thornton Heath 3252 3 *Telegrams Hypodermic Croydon*

The SIMPLIC (Patent) BREAST RELIEVER PAD

Eliminates pain bruising and nervous strain unavoidable with the ordinary glass ended breast reliever

The SIMPLIC Patent Pad is made of special sponge filled Rubber and is instantly detached for sterilizing Clinically approved as giving extreme comfort and relief



OBTAINABLE FROM SURGICAL SUPPLY HOUSES or from *Sole Manufacturers* —

J. G. FRANKLIN & SONS LTD.,
BIRKBECK RUBBER WORKS, LONDON, E 8

PURITY AND RELIABILITY

PHIL-SANO ASPIRIN TABLETS

Brand 5 Gr

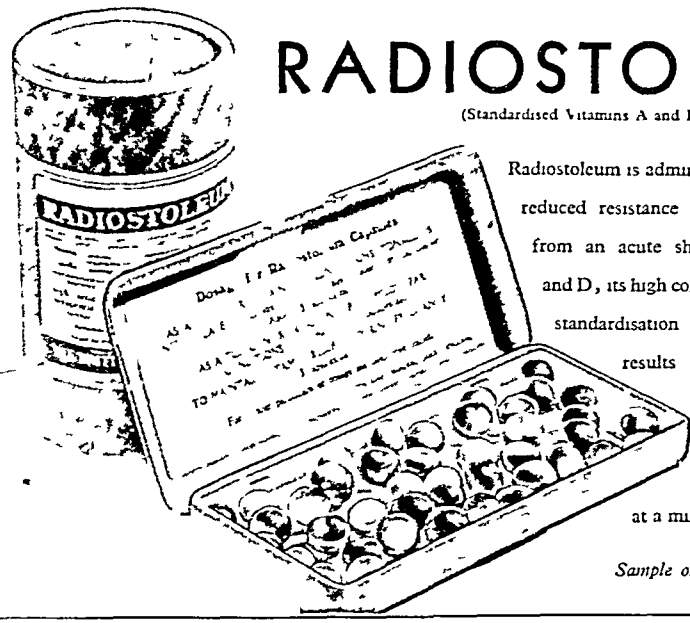
are of exceptional remedial activity and purity compounded in the most scientific manner to secure therapeutic efficiency The important features of Phil Sano BRITISH MADE ASPIRIN TABLETS are the whiteness of the Tablets the extreme purity of the Aspirin used in their manufacture and their instant disintegrating properties there are no Aspirin Tablets of better or higher quality

Bottles of 25 Tablets 6d
50 10½d
100 1/3
Also packed in Bottles of 1 000 and 500 for Dispensing
Trial Sample will be sent on request
If any difficulty in obtaining supplies they will be sent, post free, on receipt of remittance

PHIL-SANO LIMITED
106, GREAT RUSSELL STREET, LONDON, WC1
Telephone Museum 8533 *Codes A B C 5th Edition and Marconi Inter national*

RADIOSTOLEUM

(Standardised Vitamins A and D)



Radiostoleum is administered in conditions of reduced resistance and in those resulting from an acute shortage of Vitamins A and D, its high concentration and accurate standardisation ensure definite clinical results from small dosage, furthermore these satisfactory clinical results are achieved at a minimum of cost

Sample on request

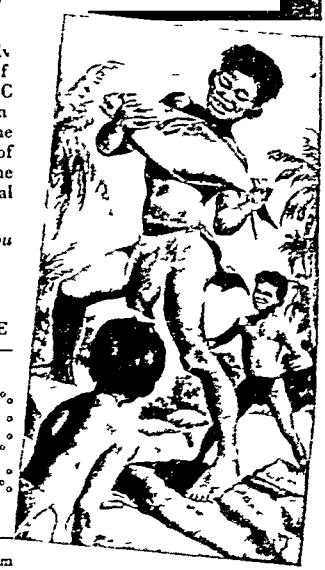
THE BRITISH DRUG HOUSES LTD LONDON N 1
Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

Rstm/S/362

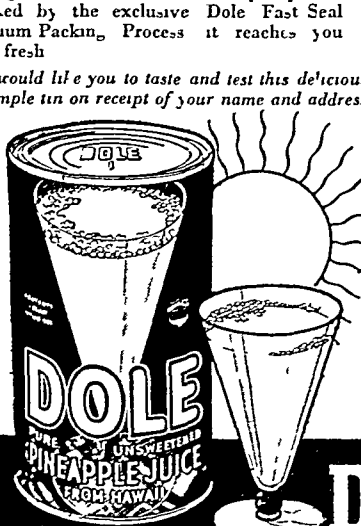
If the Sun only shone all the year round!

It doesn't, but in this respect we feel we can help you Dole Hawaiian Pineapple Juice is the unsweetened juice of *sun ripened* pineapples This is important when you consider that much of the fresh fruit obtainable during the winter is artificially ripened Packed by the exclusive Dole Fast Seal Vacuum Packing Process it reaches you field fresh

The typical analysis below tells you exactly what Dole Pineapple Juice is composed of It is a good source of Vitamins A B and C and is invaluable in cases of throat irritation It yields alkaline reacting minerals in the body which tend to offset the effects of acid producing foods It also carries the Seal of Acceptance of the American Medical Association Committee on Foods



We would like you to taste and test this delicious tangy drink and will be pleased to send you a sample tin on receipt of your name and address



2000 Doctors have already written for Sample Tins of DOLE HAWAIIAN PINEAPPLE JUICE

TYPICAL ANALYSIS

Moisture	85 3 %
Ash	0 4 %
Fat (ther extract)	0 3 %
Prote n (N/6 25)	0 3 %
Crude fib e	0 02 %
Titratable ac dity as c t c ac d	0 9 %
R duc ng ugars as nvert sugar	12 4
Carbohydrate other than ugars (by d ff rence)	0 38

Dole Pineapp e Juice comes to you field fresh from sunny Hawaii—a golden nutritious drink from Hawai s King of Fruits

DOLE PINEAPPLE JUICE *from Hawaii*
J. K. HUSBAND & CO. LTD., 10 EASTCHEAP, LONDON, E.C.3

SULPHAQUA BATH CHARGES

SULPHAQUA SOAP

Extremely effective in Disorders of the Sebaceous Glands and in Eczematous and other skin Troubles

In boxes of ½ doz and 1 doz BATH CHARGES 2 doz TOILET CHARGES and ½ doz SOAP TABLETS

For upwards of thirty-five years largely prescribed for the local treatment of

GOUT RHEUMATISM ECZEMA SCABIES and all SKIN DISEASES

Relieve Pain and Intense Itching, Soothing and Sedative in Effect Instantly prepared No objectionable Odour

SAMPLES AND LITERATURE ON REQUEST

THE S.P. CHARGES CO. ST HELENS LAN

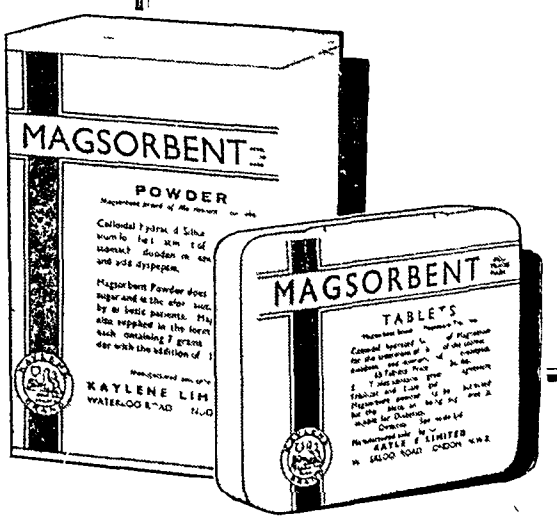
STOCKED BY ALL THE LEADING WHOLESALE HOUSES IN AFRICA, CANADA, AUSTRALIA NEW ZEALAND INDIA

The Original and Standard Brand of Synthetic Hydrated Magnesium Trisilicate —

MAGSORBENT

REG. TRADE MARK

The safe and effective **ANTACID** for the treatment of CHRONIC PEPTIC ULCER, HYPERCHLORHYDRIC DYSPEPSIA and ACID FERMENTATION



- ACIDITY—COMPLETE CONTROL
- NEUTRALISATION—SUSTAINED
- NO TOXIC ALKALOSIS
- CORRECT PHYSICO-CHEMICAL CONSTITUTION

Supplied in Powder and Tablet form—samples on request

Manufactured only by

KAYLENE, LTD, WATERLOO RD, N W 2

Sole Distributors ADSORBENTS LTD

"ALMOST INSTANTANEOUS RELIEF IN THE SEVEREST ATTACKS OF ANGINAL PAIN"

Euphyllin, administered intravenously, will check severe Anginal pains, even during the injection

Euphyllin dilates the coronary and kidney vessels, greatly increases the rate of flow of blood through the heart and improves the mechanism of exchange between the blood and the tissues

Euphyllin is a non-mercurial diuretic of great potency and can therefore be recommended for oedema, uremia, eclampsia, etc

AMPOULES **TABLETS** **SUPPOSITORIES**

Special literature and samples will be forwarded on request

WHIFFEN & SONS, LTD, CARNWATH ROAD, FULHAM, LONDON, S W 6

Phone FULHAM 003[illegible] Sole Agents in U K for EUPHYLLIN BYK GULDENWERKE BERLIN Grams WHIFFEN LONDON

LACTAGOL (Edestine Calcium Phosphorus) helps to compensate for the constant drain by the foetus upon the reserves of the expectant mother
It is a valuable roborant during convalescence following parturition and exerts a definite galactagogue action on the mammary glands of the nursing mother Specimens for clinical trial free on application Lactagol Ltd , Mitcham, Surrey

Expectant and Nursing Mothers thrive upon Lactagol

KOROMEX METHOD

The Koromex Occlusive Diaphragm is made in a range of sizes to fit each individual patient pure latex rubber pessaries Light and comfortable practically unfelt Two year durability guaranteed Practitioners and birth control clinics for more certain protection prefer to use the perfect fitting Koromex Diaphragm with

KOROMEX VAGINAL JELLY

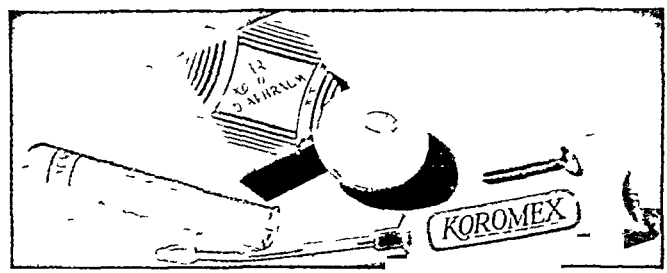
Stainless and prolonged effective spermicide The carefully gauged viscosity of Koromex Jelly affords the all-important mechanical block. No toxicity or irritation makes the diaphragms easier to insert

Advise the Koromex Method Your patient will be grateful

A sample of Koromex Jelly will be sent on application to medical practitioners also a booklet the Physician's Guide on the technique of fitting the Occlusive Koromex Diaphragm No charge Write to

The Highest Record of PROVEN SUCCESS in Contraceptives

● Evidence of the high degree of efficacy of the Koromex Method is based upon the experience of 234 clinics—140 hospitals—over 50,000 physicians



THE KOROMEX METHOD

KOROMEX DIAPHRAGM + KOROMEX JELLY

● The Koromex Diaphragm appears on the National Birth Control Association's approved list with seven Prentif products, including Condoms, Sheaths, Jellies and Suppositories Illustrated descriptive Price List on request

PRENTIF LIMITED, CONTRACEPTIVE SPECIALISTS, LONG'S COURT, ST MARTIN'S STREET, LONDON, W.C.2

Sole agents in Great Britain for Holland Rantos Co , Inc , New York

If you are not receiving regularly the Prentif Quarterly Medical Bulletin "Contraceptive Practice," kindly inform us We shall be pleased to supply missing back numbers and arrange that future issues are specially sent, if requested

RELIEF OF ECZEMA ★

We have on record many cases where persistent eczema which had proved refractory has yielded readily to Sphagnol Peat Ointment It is commonly known that difficulty in obtaining rapid healing of eczematous conditions is often due to interference by the patient provoked by the intensive irritation Particularly is this so with children Sphagnol Ointment soothes from the first application giving instant relief from itching At the same time the healing peat distillates which it contains promote the growth of clear healthy skin
In case you have had no personal experience of Sphagnol we shall be pleased to send you a clinical size sample for testing if you will write to Peat Products (Sphagnol) Ltd Dept B M J 13 21 Bush Lane London E C 4

CONTAINS DISTILLATES OF PEAT

★ **Sphagnol**

MEDICAL SOAPS OINTMENT SUPPOSITORIES, ETC

VITAMIN B_1 B.D.H.

MODERN diets usually contain sub-optimal quantities of Vitamin B_1 Thus latent hypovitaminosis is common and the premonitory symptoms of clinical B_1-hypovitaminosis—anorexia and constipation—are frequently encountered, particularly during convalescence *The diminished appetite will tend to* bring about an intensification of the condition, the patient's symptoms thereby being aggravated

The extra-dietary supply of Vitamin B_1 is thus a matter of considerable importance, even in minor conditions of deficiency

Recently it has been suggested that susceptibility to poliomyelitis is increased in B_1-hypovitaminosis (Can Med Assoc Journ, March 1938, p 260), and it is recommended that ' a fair clinical trial should be given to this natural nerve-protective agency which has *proved to be so effectual in the treatment* of other paralytic conditions of undoubted similarity'

The administration of Vitamin B_1 B D H. is recommended, therefore, as a prophylactic measure and as collateral therapy in all acute and febrile infections as well as in convalescence

Sample on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

$VitB_1/S/360$

VICHY-CÉLESTINS

THE WORLD-RENOWNED NATURAL MINERAL WATER

FERMENTATIVE DYSPEPSIA

When the secretion is vitiated in quality, and the motricity of the stomach weakens that organ dilates and the gastric stagnation allows the micro-organisms of many ferments to develop Quite a series of acids are then to be met with (butyric, lactic, acetic etc) which not only irritate the mucosa, but further, after their passage into the intestine, become absorbed by the lymph atics and swept into the circulation **Vichy-Célestins,** by its slightly stimulating action, clears out the stomach, and thus avoids stagnation and consequent fermentation As, in addition to doing this, it modifies stomachal metabolism the secretions return little by little to their normal physiological condition



NATURAL VICHY SALT for Drinking and Baths

VICHY DIGESTIVE PASTILLES prepared with Natural Vichy Salt

CAUTION —Each bottle from the STATE SPRINGS bears a neck label with the word "VICHY ETAT" and the name of the SOLE AGENTS

INGRAM & ROYLE, LTD.

Bangor Wharf, 45, Belvedere Road, London, S E 1 And at Liverpool and Bristol

Samples free to Members of the Medical Profession

MANDECAL

(Compound Calcium Mandelate B D H)

IN PYELITIS OF PREGNANCY

Clinical trials have shown that the tendency of mandelic acid therapy to cause nausea has been reduced to a minimum in Mandecal



This preparation is ideal, therefore, for the treatment of pyelitis of pregnancy, as well as Bact coli infections in persons of all ages who are readily nauseated

In Mandecal, the immiscibility of calcium mandelate has been overcome, and a pleasant, palatable suspension is easily formed by stirring the powder in water

As with Mandelix (Elixir of Ammonium Mandelate B D H), the collateral administration of ammonium chloride is rarely necessary with Mandecal

Sample and literature on request

THE BRITISH DRUG HOUSES LTD LONDON N1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

Med S 12

Valentine's Meat-Juice

IN Typhoid and other Fevers, Extreme Exhaustion, Critical Conditions, Before and After Surgical Operations, when Other Food Fails to be Retained, Valentine's Meat-Juice demonstrates its Ease of Assimilation and Power to Restore and Strengthen

Clinical Reports from Hospitals and General Practitioners of Europe and America posted on application

For Sale by European and American Chemists and Druggists.



VALENTINE'S MEAT-JUICE COMPANY

RICHMOND, VIRGINIA, U S A

JB 93

NAPP
CLASSICAL ETHICAL PRODUCTS

HEPAMULT

Active Liver Principles
Standardized
Palatable
Economical

A British made "NORGINE" Product

Ergoapiol-(Smith)

A Menstrual Regulator . . .

When the periods are irregular, due to constitutional causes, ERGOAPIOL (Smith) is a reliable prescription Containing apiol (M H S special) together with ergot, aloin and oil of savin of the highest quality, this preparation effectively stimulates uterine tone and controls menstrual and postpartum bleeding

In cases of *Amenorrhœa*, *Dysmenorrhœa*, *Menorrhagia* and *Metrorrhagia*, Ergoapiol s

as a good uterine tonic and hemostatic Valuable in obstetrics after delivery of the child and for the menstrual irregularity of the *Meno pause*

Prescribe 1 to 2 capsules 3 or 4 times daily
Supplied only in packages of 20 capsules
Literature on request

As a safeguard against imposition the letters MHS are on the inner surface of each capsule *visible only* cut in half at seam as shown

M.H.S.

MARTIN H. SMITH COMPANY
NEW YORK

THOS. CHRISTY & CO., LTD.

Alphidine and Pancreatin

In the Treatment of

Graves' Disease

Palatinoid No 3211, O S & Co with Pulverette 'Alphidine,' O S & Co

Pancreatin, gr 5	Equals Iodine, gr $\frac{1}{2}$
One thrice daily, before meals	One twice daily between meals on two or three days each week

For full particulars see B M J, Oct 2nd 1937 p 660

Oppenheimer Son & Co. Ltd.
Handforth Laboratories, Clapham Road, LONDON, S W 9

OVALTINE

BEFORE AND AFTER OPERATIONS

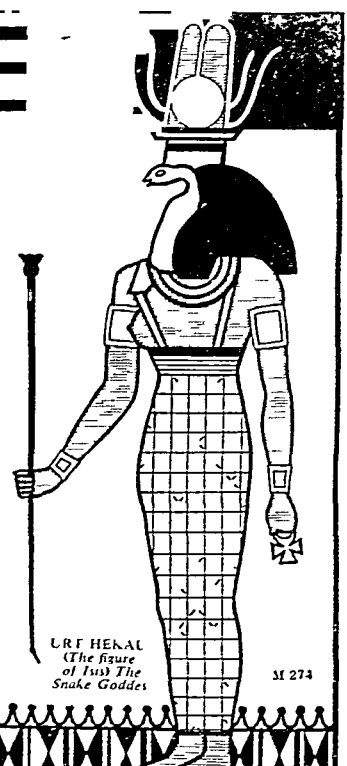
THE use of Ovaltine before a major operation is of great service in helping to build up the system against the strain involved by operative interference In abdominal cases especially where a light and unirritating diet is necessary the use of Ovaltine alone for a few days before the operation will be found sufficient to maintain the patient s nutrition at a sufficiently high level

After severe operations the regular use of Ovaltine is of the greatest service on account of its bland nature its ready digestibility and its highly nourishing and sustaining properties

Ovaltine is a complete food composed of fresh full cream milk eggs and malt extract in the form of crisp granules which dissolve readily in milk to form a delicious beverage acceptable to the convalescent patient

A liberal supply for clinical trial sent free on request

A WANDER, Ltd, 184, Queen's Gate, S W 7
Laboratories and Works KING S LANGLEY HERTS



URT HEKAT (The figure of Isis) The Snake Goddess

M 274

NATURAL

KARLSBAD SPRUDEL-SALT



Prepared only by the Municipality of Karlsbad from the World-famous Sprudel "Spring" at Karlsbad
(IN CRYSTALS OR POWDER)

Is the **Only Genuine** KARLSBAD SALT

Largely prescribed in cases of Chronic Gastric Catarrh, Hyperaemia of the Liver, Gall-stones, Chronic Constipation, Diabetes, Renal Calculi, Gout, and Diseases of the Spleen, arising from residence in the Tropics or Malarious Districts

Medical Practitioners should kindly note, when prescribing, to specify "Karlsbad SPRUDEL-Salt"

The wrapper round each bottle of genuine Salt bears the Signature of the Sole Agents

INGRAM & ROYLE, LTD.,
BANGOR WHARF, 45, BELVEDERE ROAD, LONDON, S E 1
And at LIVERPOOL and BRISTOL

Samples and Descriptive Pamphlet forwarded on application

A PRODUCT OF DISTINCTION

ETHER SOLUBLE TAR PASTE



INDICATED IN

ECZEMAS, PRURITUS,
PSORIASIS, etc.

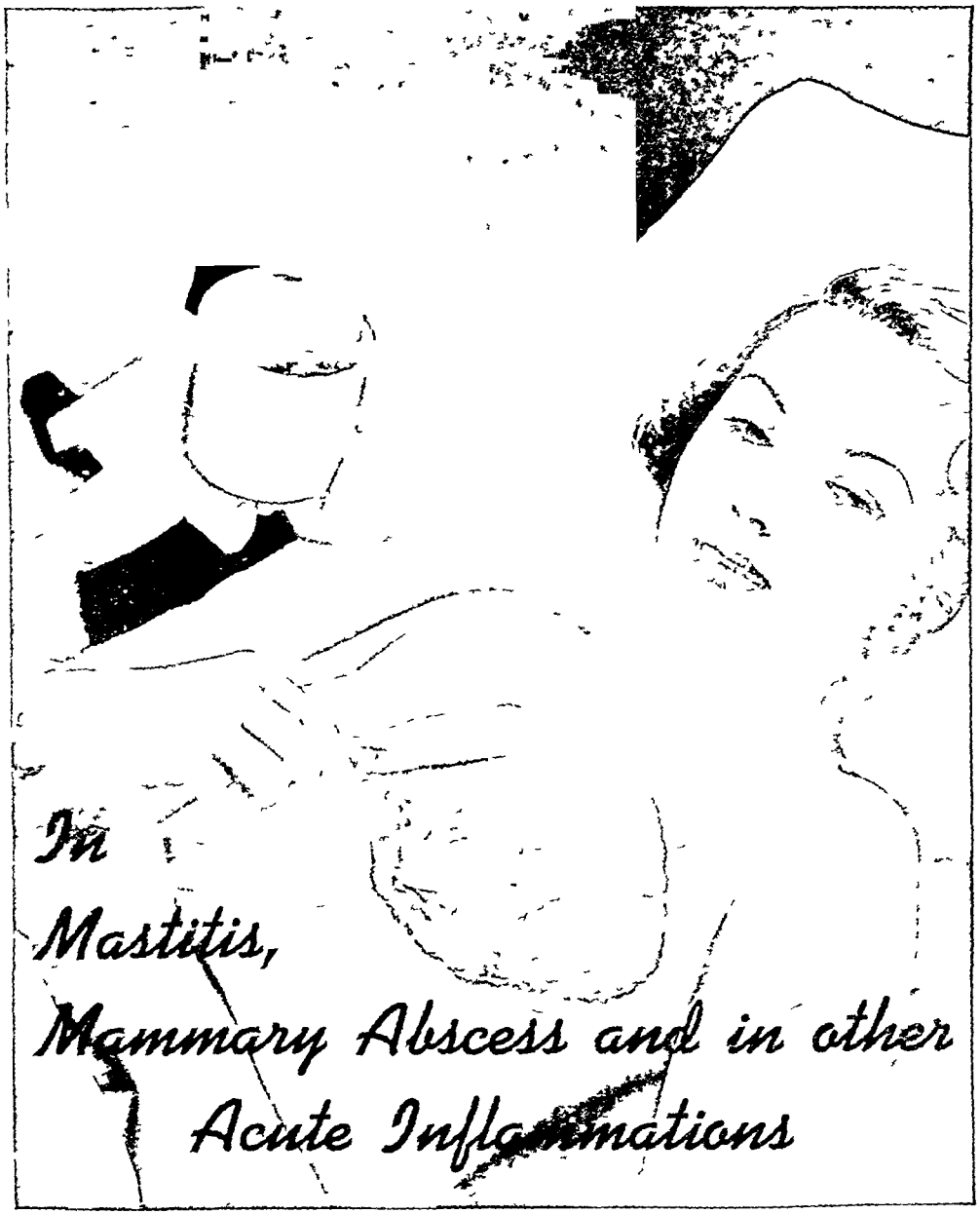
PRESCRIBE AS

"E.S.T.P." (Martindale)

Issued in 2, 4 and 8-oz pots

Literature and clinical samples on request

W. MARTINDALE
75, NEW CAVENDISH STREET, LONDON, W 1



the use of ANTIPHLOGISTINE BRAND DRESSING quickens the action of the capillaries and promotes more rapid healing Its sedative warmth is grateful to the patient It has a definite tendency to abort an incipient inflammatory process

Made in England

THE DENVER CHEMICAL MANUFACTURING COMPANY,
12, Carlisle Road, London, N W.9

INDICATIONS FOR 'SANATOGEN' No 12

INSOMNIA

The Part Played by Cerebral Congestion.

A distinguished neurologist recently characterised insomnia as presenting "one of the most exacting problems which confront the physician" The causes are so various that their removal or attenuation calls for considerable judgment and diagnostic skill Pain or discomfort consequent on organic disease naturally requires treatment—drug or other, and such common causes as morbid worry and anxiety demand psychologic knowledge and sympathetic understanding To quote an eminent physician "There is no use in telling a patient that it does not matter whether he sleeps or not He knows better than that"

In any event, as another physician has pointed out, "it is unwise to go to bed on an entirely empty stomach, since it is generally accepted by physiologists that cerebral anaemia plays some part in the mechanism of sleep" A temporary diversion of the blood to the organs of digestion and absorption is therefore desirable At the same time, foods difficult of digestion, slow absorption, or liable to fermentation, must be avoided Here 'SANATOGEN', taken shortly before bedtime, has been found of great value

'SANATOGEN' is a carbohydrate-free product of 95 per cent pure milk casein with 5 per cent of sodium glycerophosphate It is easily digested and assimilated It quickly promotes a feeling of physiological comfort and well-being, lays no strain on the digestive faculties, yet sufficiently withdraws blood from the "worrying centres" to bring about healthy and natural sleep 'SANATOGEN', unlike most narcotic drugs, is followed by no unpleasant reaction Nor is it habit-forming

I consider 'Sanatogen' is of undoubted benefit in cases of sleeplessness especially when the sleeplessness is the result of over fatigue
M D

I have much pleasure in stating that the tin of Sanatogen you sent me was very satisfactory, and that I have bought several others since In the case I used it for there was what is often called night starvation, the patient waking at 1 or 2 a m and being unable to sleep again A dose of Sanatogen in milk induced sleep in 20 30 minutes, not once, but as often as it was required i e until a full night s rest was obtained naturally The general health has correspondingly improved —M R C S, L R C P

I find a great deal of benefit is derived in cases of Insomnia by giving 'Sanatogen in the evening This is especially so in the nervous type of patient It is very good even in gastric ulcer and its allies — M R C S, L R C P

SANATOGEN'

(Trade Mark)

A brand of Casein and Sodium Glycerophosphate

Sold by all chemists price 2/3 to 19/9

DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants ½ teaspoonful added to each bottle feed

The word SANATOGEN is the Trade Mark of Genatosan Ltd and denotes their famous brand of Casein and Sodium Glycerophosphate
GENATOSAN proprietors Ltd
GENATOSAN Ltd Loughborough Leicestershire

Clinical samples and literature available on request to

GENATOSAN LTD., LOUGHBOROUGH, LEICESTERSHIRE

STREPTOCIDE

Sulphanilamide Evans

For Oral Administration

In PUERPERAL FEVER

The value of Streptocide was shown by the Report to the Therapeutical Trials Committee of the Medical Research Council (*Lancet*, Nov 27th and Dec 4th, 1937) concerning 106 cases treated at Queen Charlotte's Hospital Many *hundreds of favourable reports have since been received* from doctors the world over

In GONORRHOEA

Streptocide is well adapted to the specialised technique of administration described in the *Lancet* (Aug 13th, p 355) This report proves that sulphanilamide is more efficient than several of the compounds which have been suggested for the purpose The purity of Streptocide gives it the maximum of safety in the intensive dosage necessary for adequate treatment

Streptocide has proved equally successful also in

STREPTOCOCCAL and PNEUMOCOCCAL MENINGITIS ERYSIPELAS, and TONSILLITIS

Streptocide is issued in tablets	0·25 grm	0·5 grm
Bottles of 25	1/3 each	1/6 each
100	3/9	4/6
250	9/3	11/
500	18/	21/6
1 000	35/	40/
and in folded powder boxes of 12	2/6	3/3

Also as Streptocide Ointment and Streptocide Cream for topical application

Made at

The Evans Biological Institute

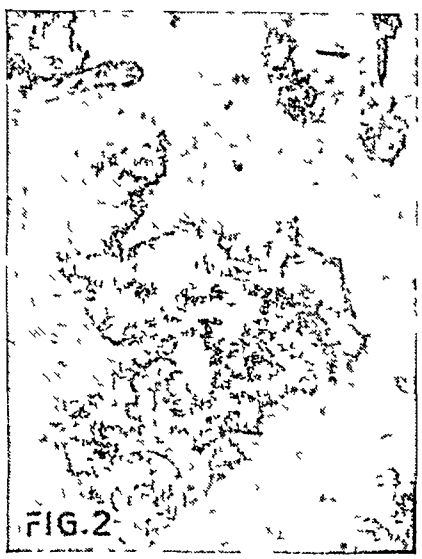
by

Evans Sons Lescher & Webb Ltd.

Liverpool and London

EXTRA-CELLULAR NUTRIMENT
for
MORE COMPLETE ASSIMILATION
IN INFANT DIETARY


FIG. 1


FIG. 2

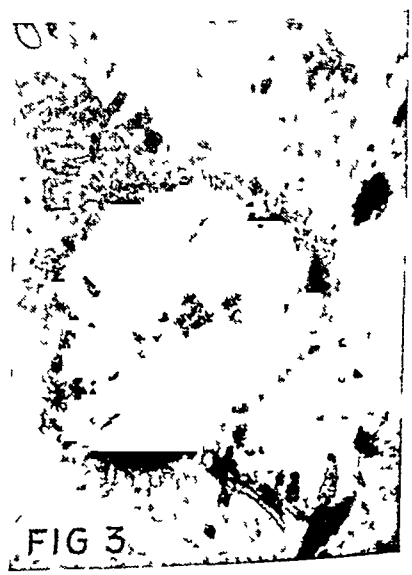
By the Libby process of Homogenization the tough walls of food cells are burst and broken up into fine particles The nutriment thus being extra-cellular is therefore rendered immediately accessible to the gastric enzymes and thoroughly assimilable without digestive strain

The break up of the fibrous tissue has the added advantage of providing smooth non-irritating bulk and obviating the incidence of intestinal disorders—particularly diarrhœa—primarily due to the passing of food cells through the digestive tract with their tough outer walls intact

Photographs show the comparative difference in *stools* after feeding with (Fig 1) Libby's Homogenized vegetable, (Fig 2) commercially strained vegetable and (Fig 3) home strained vegetable

Libby's Homogenized Vegetable Foods are eminently suitable for very young and weak digestions and can be prescribed with confidence in very early cases of nutritional anæmia They are prepared in six scientifically formulated combinations of Cereal, Vegetables and Fruit These can be prescribed as needed to provide the necessary balance of Vitamins, Minerals and other essentials

Samples together with clinical data and laboratory reports will be gladly supplied upon request to Messrs Libby, McNeill & Libby, Ltd, 15, Lime Street, London, E C 3


FIG 3.

Libby's
HOMOGENIZED FOODS
VEGETABLE - CEREAL - FRUIT - SOUP

LHB—8—L

ELI LILLY AND COMPANY LIMITED

Pharmaceutical and Biological Products



'LEXTRON'

Liver Stomach Concentrate with Iron and Vitamin B Complex

RAPID convalescence from many debilitating diseases can be brought about with 'Lextron' when secondary anaemia has assumed a conspicuous place in the clinical picture On 'Lextron' the patient receives all the materials essential for blood regeneration

'Lextron' brand liver-stomach concentrate with iron and Vitamin B complex is supplied in bottles of 42, 84, and 500 'Pulvules' brand filled capsules

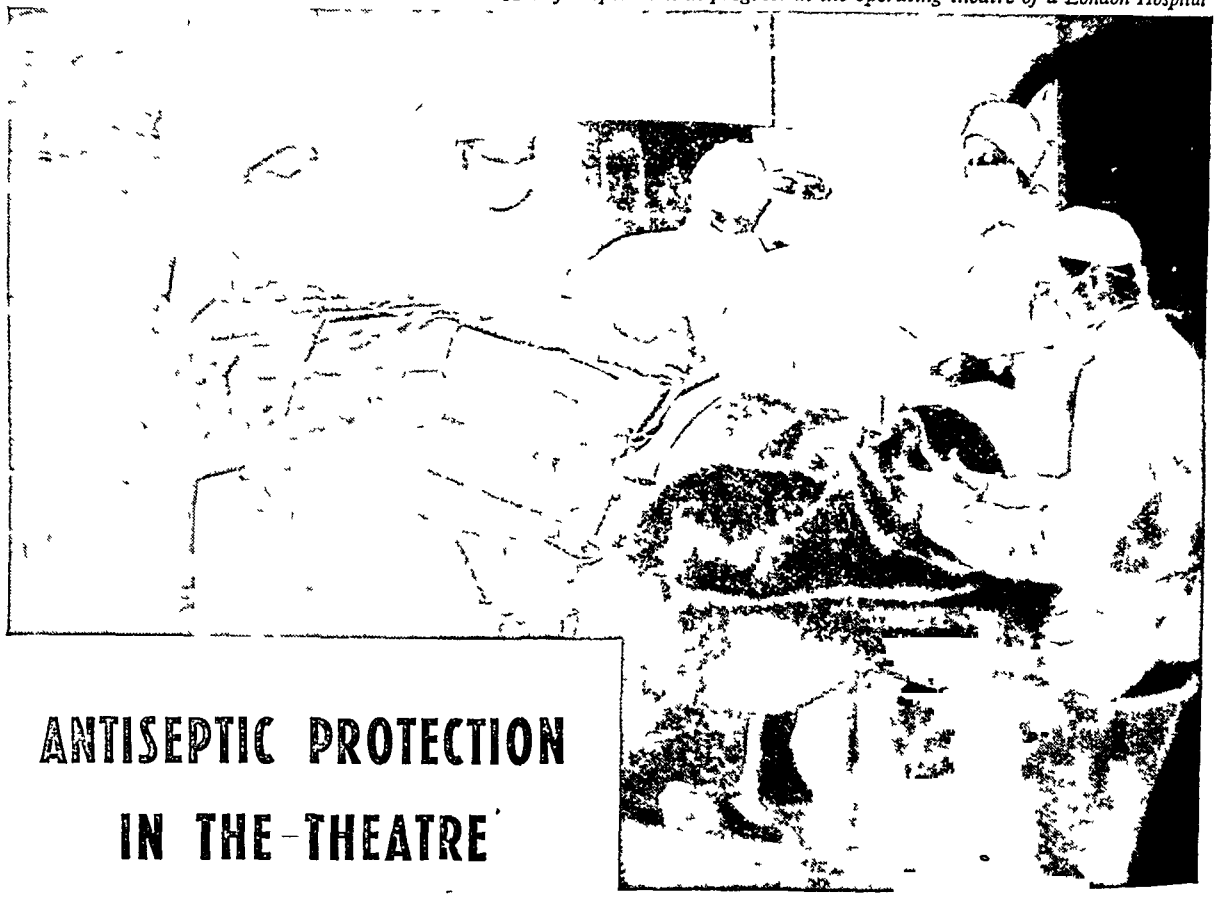
Prompt Attention Given to Professional Inquiries

2 3 AND 4 DEAN STREET LONDON W 1

Distributing Agent in Britain for

ELI LILLY AND COMPANY, INDIANAPOLIS, U S A

A major operation in progress in the operating theatre of a London Hospital



ANTISEPTIC PROTECTION IN THE THEATRE

THE greatest danger in any operation is the risk of introducing bacterial micro-organisms into the system Because of this, elaborate precautions are taken in the operating theatre to prevent infection Modern antiseptic methods have succeeded in eliminating sepsis — once the surgeon's greatest fear and problem

Risks of infection in everyday life, though less serious, are more numerous In ordinary hygiene prophylactic measures cannot, of course, take the elaborate lines of the operating theatre, but fortunately the simple use of soap and water usually affords adequate protection against most forms of infection But the degree of protection naturally depends on the antiseptic, antipruritic and germicidal qualities of the saponifying agent

Wright's Coal Tar Soap has enjoyed the confidence of the medical profession for purposes of general protection for over 70 years It has substantial antiseptic and antipruritic qualities, and to-day, besides being specified by leading bacteriologists as the ideal everyday safeguard against infection, is used (according to the 1932 investigation of the Institute of Industrial Psychology) by doctors themselves more than any other brand of toilet soap Wright's is the *only* soap to contain 'Liquor Carbonis Detergens' (Wright's), the valuable therapeutic used and recommended by eminent dermatologists You can have every confidence in using Wright's *in your* practice and recommending it to *your* patients

WRIGHT'S COAL TAR SOAP

The Safe Soap

Wright, Layman & Umney Ltd, 44 50 Southwark Street, S E 1

CRUNCHY FOODS

and mastication

It is generally accepted that improperly masticated food presents difficulties to the digestive system Mastication stimulates the flow of saliva in the mouth, and renders the food more acceptible to the stomach Many practitioners believe that this salivation makes the entire work of the digestive tract easier to perform, and therefore that hard foods, because they compel mastication, have an appreciable value to the digestion as a whole

Hard foods are now frequently prescribed as a desirable part of the regular diet Ryvita, a daily bread that is crisp and dry, is recognised to be a valuable addition to the normal diet of to-day

A complimentary carton of Ryvita will gladly be supplied on request

THE RYVITA COMPANY LIMITED

96-98 Southwark Street, London, SE1

Bakeries in Birmingham

GLANOID

GROWTH COMPLEX

OF THE

ANTERIOR LOBE OF THE PITUITARY GLAND.

Clinically the growth hormone is indicated in cases of stunted growth or dwarfism occurring before the closure of the Epiphyses

The preparation of "Glanoid" Growth Complex is practically free from gonadotropic and thyrotropic hormones and is especially suitable for children

Standardised physiologically, the assayed potency of the "Glanoid" Growth-Complex is 100 growth units per c c

"GLANOID" GROWTH COMPLEX IS SUPPLIED IN 5 c c RUBBER CAPPED VIALS

Write for literature to –

THE
Armour Laboratories
(ARMOUR AND COMPANY LTD)
ARMOUR HOUSE • ST MARTINS LE GRAND • LONDON E C 1

Telephone National 2424 *Telegrams* "Armosata Cent" London

For **RELIABILITY** *in Surgical and Orthopædic Appliances*

SEND YOUR PATIENTS TO

ALLEN & HANBURYS LTD
45, WIGMORE ST. LONDON, W.1
TELEPHONE:- WELBECK 5903 (4 lines)
TELEGRAMS:- ORTHOPEDIC, WESDO, LONDON

Milk can be monotonous

to the patient who is on a liquid diet, as the medical practitioner well knows



There is a delicious alternative!

Allenburys Diet

A preparation which made from full cream milk and whole wheat has a more varied composition than that of milk, is made easily assimilable by partial digestion during manufacture and has an attractive flavour. This delicate flavour may be varied by the addition of Coffee, Cocoa, etc., if required. In tins at 2/1, 4/-, & 7/6

ALLEN & HANBURYS LTD., London, E.2. Telephone Bishopsgate 3201 (12 lines) Telegrams "Greenburys Beth London"

"Vitamin B_1 deficiency an outstanding fault

in the diet of many millions of people"

(B M J, 16 O t, 1937, p 753)

The reduction in Vitamin B_1 intake, due to changes in dietary habits during the last hundred years, normally amounts to at least 50 per cent, and may be as much as 70 per cent It has been demonstrated, both experimentally and clinically, that a shortage of Vitamin B acts as a limiting factor in the maintenance of health and nutrition, and often results in gastro-intestinal disorders, loss of appetite, indigestion, constipation and, if long continued, to neuritis and arthritis

The logical way to rectify such shortage is to restore to the diet the Vitamin B-containing substance whose removal is responsible for the deficiency

This substance is available in the form of Bemax

For years it has been the policy of the proprietors of Bemax to ensure its Vitamin B_1 activity by biological assay of *every day's output* So far as is known, Bemax is the only food product for which such a claim is or can be made

The quantity of Vitamin B_1 supplied by the normal daily dose of Bemax—one tablespoonful—is 200 International Units, an amount sufficient to raise a deficient diet to an optimal level

The normal daily dose of Bemax supplies, in addition to Vitamin B_1, significant quantities of Vitamin B and B_2, Copper, Iron and Phosphorus as well as rich quantities of Vitamin E and other essential dietary elements

Bemax is an entirely natural product consisting only of stabilised wheat germs selected for their Vitamin B_1 activity with no addition whatsoever Clinical sample and literature on request The Bemax Laboratories, 23, Upper Mall, Hammersmith, W 6

Sterility and Habitual Abortion

The increasing use of Vitamin E for habitual abortion and sterility of dietary origin demands a wheat germ oil of proven high activity and of stable Vitamin value Such an oil is available for the medical profession in Fertilol

FERTILOL

Wheat Germ Oil Capsules

A highly active source of Vitamin E

A complimentary box of Fertilol Capsules and brochure sent on request

Vitamins Ltd.,
(Dept B 67), Upper Mall, London, W 6

CONVALESCENCE



To be able to recommend, in cases of convalescence, a tea which is readily assimilated by the weakest stomach is undoubtedly an advantage

There is such a tea with juices milder — much milder — than those which the astringent varieties contain

This pure tea, "TY PHOO" TEA, is grown upon the mountains of Ceylon and mainly consists of the delicate edges of the tea leaf, hence its difference.

Over 18,000 Doctors use "Ty-phoo" in their own homes and recommend it to their patients.

Here is a recent letter from a medical man

There is nothing to touch Ty phoo tea in quality flavour and easy digestibility I will always use it —M A

Write to:
Sumner's
"Ty-phoo" TEA Ltd
Dept BMJ
BIRMINGHAM, 5
for a FREE sample

(This offer applies only to the British Isles
We regret that we cannot send "Ty phoo" abroad)

BRITISH MEDICAL JOURNAL

LONDON SATURDAY SEPTEMBER 10 1938

THE OCCIPITO-POSTERIOR POSITIONS OF THE VERTEX AND THEIR COMPLICATIONS*

BY

CHASSAR MOIR, M D, F R C S Ed, F C O G

Nuffield Professor of Obstetrics and Gynaecology University of Oxford

In opening this discussion on the occipito posterior positions of the vertex it is necessary to define and limit the conditions about which we are to speak For the purpose of promoting a useful discussion I propose that we should consider the case of the patient at or about full term, in whom labour is unduly protracted and in whom the foetal head presents with the occiput in some position other than the anterior or antero lateral By choosing this definition we shall include the common occipito-lateral position, which if it persists until the head is driven low into the pelvis may give rise to serious difficulty, and is then often spoken of as deep transverse arrest of the head

Ere confining myself to the above limitations subsequent discussion may be clarified if a few words are said regarding ante natal examination Different authorities give widely differing estimates of the frequency of the occipito posterior position in the ante natal clinic I believe that the reason for this discrepancy lies in the fact that in the majority of women the occiput, before labour, points directly laterally, or lies within a few degrees of this position If the custom is observed of classifying the position according to one of four possibilities it becomes a personal matter whether such cases are classified as anterior or 'posterior Here I would make a plea for the freer use of the terms 'L O L ' and ' R O L " which more accurately describe the position in question

Not till labour starts does the head usually come to lie in one or other oblique diameter of the pelvis normally the occiput rotates forward, much more rarely it rotates backwards, and in exceptional circumstances it may even come to lie in the hollow of the sacrum It is convenient here to say that I view with much misgiving the habit which seems to be arising of trusting to abdominal examination to determine the position of the foetal head Such examination *may* give fairly reliable information in the ante natal clinic but it becomes increasingly inaccurate as labour advances and the head sinks into the pelvis Moreover it is sometimes mere guesswork to diagnose the position of the foetal head from palpation of the body I have seen a patient in whom the foetal occiput was situated well within the posterior half of the pelvis while the foetal back was still distinctly anterior, and x ray examination has also shown many instances of pronounced rotation of the foetal head on the neck Attempts to divine the position of the head are dangerous, and in dealing with a patient whose labour is unduly protracted a thorough vaginal examination is essential and nothing short of this can give the required information I shall refer to this matter again later

* Read in opening a discussion in the Section of Obstetrics and Gynaecology at the Annual Meeting of the British Medical Association Plymouth 1938

Frequency of Persistent Occipito posterior Position of the Head

It is common knowledge that the great majority of posteriorly placed heads rotate to the front during labour and that a spontaneous delivery is the rule rather than the exception we have here to discuss the case in which rotation does not occur and in which the labour is unduly prolonged Although such cases form but a small proportion of the whole they constitute a major problem in obstetrics At a meeting of this Section in 1928 Dr Douglas Miller read a paper on ' Unsuccessful Forceps Cases and presented an analysis of statistics gathered from various maternity hospitals which showed that the occipito-posterior position of the head—usually undiagnosed—was associated with nearly one third of the total number of cases Had the rachitic areas of the country been excluded from this analysis the proportion would doubtless have been even higher

Cause of Dystocia

The increased difficulty of labour associated with a posterior position of the occiput is usually ascribed to a larger diameter of the foetal head being forced through the pelvis No doubt there is truth in this belief but I confess that the more I study the actual foetus after delivery in such cases the less impressed am I with this explanation The real cause of the difficulty is I believe a simple one and is essentially a maladjustment of the shape of the foetus to the shape of the birth canal The baby after birth lies with the long axis of the head at an angle to the long axis of the body In other words the foetal contour is sharply angled or curved The birth canal through which this foetus is forced is also sharply bent at the lower end and it is only when the two curves coincide (as in the occipito anterior case) that easy delivery results To use an analogy if I force my foot and leg (which are angled to each other at the ankle) through a tall Wellington boot (which is also curved at the ankle)

my foot will slip into position only if the two angles or curves coincide ' Were I to attempt to thrust my foot down backwards, progress would be arrested at the ankle of the boot, and if great force were used either my foot would be sorely bruised or the boot would be ruptured If however, I now use skill and carefully rotate my foot round to the normal position, I am able to push my foot with ease to the bottom of the boot Essentially similar mechanical difficulties arise in the birth canal when the head descends with the occiput directed posteriorly This conception introduces the theory of the unequal foetal flexibilities, which I have fully discussed elsewhere (1932)

"Face-to-pubes" Delivery

It is true that delivery can sometimes be accomplished with surprising ease when the foetus lies with the face directed towards the pubes, but usually in such cases the mother's pelvis is abnormally large (a fairly common finding) or the foetus is small Occasionally, too, delivery is facilitated by a lax or absent perineum, which results in a virtual abolition of the normal curve of the birth canal To quote such cases as an argument against the need for rotation of a posteriorly placed head in obstructed labour is to my mind false reasoning I am aware that at least one school of midwifery holds views to the contrary, but I maintain that while a foetus *may* be born without difficulty in the face-to-pubes position, it is certain that delivery can be still more easily accomplished if the occiput is directed anteriorly and when in addition the *relative sizes of the foetus and pelvis are such that there* is likely to be slight dystocia, then the added handicap of the occipito posterior position becomes a serious matter, and is not infrequently the cause of complete obstruction to delivery

These remarks are commonplace, and must seem superfluous to anyone who, after unsuccessfully attempting to deliver the foetus in the posterior position, has rotated the head and reapplied the forceps correctly, for the ease with which delivery can then be accomplished is often astonishing and cannot fail to make a lasting impression on the operator Yet all too often one hears excuses made for omitting to rotate the posteriorly placed head as a preliminary to forceps delivery I believe that reluctance to perform this simple operation is due to the prevalence of a false idea regarding its supposed difficulty, which in turn finds origin in the fact that details of the correct manœuvres are seldom taught to and are still more rarely learned by, the average undergraduate student

Recently some new light has been thrown on the problems of the mechanics of labour by the use of radiological methods of study Some years ago Thoms (1933) of the Yale Medical School drew attention to the frequency with which occipito posterior positions of the foetus are associated with the dolichopellic pelvis—that is, the pelvis in which the antero-posterior exceeds the transverse measurement of the brim More recently Caldwell, Moloy, and D Esopo (1935 1936) of the Sloane Hospital for Women, New York using advanced methods of *x*-ray study, have confirmed this finding and in a personal communication expressed the view that in certain types of pelves delivery can be more easily accomplished if the foetal head lies with the occiput in the posterior position I respect the opinion of these workers and look forward with eagerness to their further contributions to obstetrics, but it is only right to say that the evidence so far presented by the latter group is not likely to lead to the general acceptance of the last-mentioned claim In any event such pelves are extremely rare, and their detection requires the use of *x*-ray pelvimetry, in the meantime it therefore seems unwise to complicate obstetrical teaching on this simple issue in order that the very exceptional case may be treated by methods of as yet unproved superiority

Cause of Non-rotation of Head

Non-rotation or malrotation of the foetal head may result from several causes I have already mentioned three—a large pelvis, a small foetus, and a deficient perineum In such cases there is usually an easy delivery Certain unusual postures of the foetus *in utero* or an increased inclination of the pelvis may both, in my opinion, favour a posterior lie of the head and hinder its forward rotation A poorly flexed foetal head is another important cause of non rotation In such a case the long axis of the head is no longer set at an angle to the long axis of the body, the forces which normally bring about rotation are therefore not evoked, and obstruction may result

Still more serious are the cases in which non rotation of the head is a manifestation of some other abnormality Not infrequently persistence of the posterior position is associated with a mild degree of pelvic contraction which delays or prevents the head from reaching the lower pelvis and reacting to the curve of the birth canal Serious obstetrical difficulties may then arise, for the combination of abnormalities is far more difficult to deal with than either taken separately Similarly, in the occipito posterior case there is often an early escape of liquor amnii, and this, together with the prolonged labour, favours abnormal retraction and moulding of the uterine muscle around the foetal neck—the so-called contraction ring of the uterus This condition is by no means unusual, and should always be looked for if difficulty is encountered in rotating the foetus Speaking from my own experience, I have no qualms in dealing with the uncomplicated posteriorly placed head, but I dread a narrowing of the lower pelvis or a contraction ring of the uterus, of both of which conditions the persistence of the posterior position of the occiput is sometimes merely the token

Danger to Mother and Foetus

The increased danger associated with non rotation of the head is strikingly shown by a table which I borrow from Douglas Miller's excellent paper on the subject (1930) The foetal mortality is deplorably high, yet, especially with regard to cases in which the child is forcibly extracted in the face-to-pubes position, the danger is actually underestimated, for many infants die in the first days of life or suffer from injuries of a non fatal variety The forceps blades do not take a kindly hold of the posteriorly placed head they are difficult to lock, and they easily slip, causing serious injury to the vagina Extraction is almost impossible without rupture of the perineum, and the tear may easily extend into the rectum

Table showing Danger associated with Non rotation of the Head (after Miller)

	Termination	
	Spontaneous Forward Rotation	Failure to Rotate
Maternal mortality	Nil	2·0
Foetal mortality	27/	22·3
Puerperal morbidity	65/	22·3

It is perhaps not sufficiently realized that the majority of babies which die during forceps extraction are killed because the forceps blades are wrongly applied the operator having omitted the preliminary step of rotating the occiput completely to the front It would be an exaggeration to say that injuries such as facial paralysis and tentorial tears never occur when the blades are correctly applied over each maxilla but I believe that such a statement would not depart far from the truth It is always instructive to examine the baby's head after forceps delivery too often the tell tale marks make it disappointingly evident that the blades have been applied not to the robust maxillae but to the yielding brow and occipito mastoid region and from this fact one may deduce that dangerous compression of the cranial vault has taken place It is not always easy to rotate completely the head which is in deep transverse arrest but with practice this manœuvre is usually successful and by its accomplishment the chances of safe delivery of the foetus are greatly improved

The Course of Labour and Diagnosis

I shall not do more than touch on diagnosis Late engagement of the head and early rupture of the membranes in the absence of disproportion between the head and pelvis is an ominous sign A foetal heart heard far on the flank or more especially one heard faintly over a wide area of lower abdomen may help in diagnosis but must not be relied on

The character of the uterine contractions is often peculiar They are short painful and unaccompanied by bearing down effort It might be supposed that such ineffective contractions are the primary abnormality and the cause of the slow advance of the foetus but I tend to the view that when the head descends into the occipito posterior position the vagina is not evenly distended and consequently the reflex which normally augments contractions and compels the patient to bear down is not evoked I am always suspicious of the patient who although she has started labour well has made little or no advance over several hours and about whom the nurse in charge querulously exclaims If only she would use her pains! Such a patient should be carefully examined and not infrequently it will be found that the foetal head has remained unrotated in the occipito posterior position

I have already referred to the frequency with which non rotation of the head is associated with obstructed labour yet in spite of the commonness of the condition many of these cases remain undiagnosed until too late The chief reason for this is that the suture lines are obscured by an oedematous scalp it is only by passing the fingers to a higher level and feeling the foetal ear that a certain diagnosis can be made To do this an anaesthetic is necessary and the whole hand suitably lubricated must be gently inserted into the vagina Such an examination should always precede forceps delivery in any case of doubt That grand old man of obstetrics Sir Halliday Croom used to speak of this procedure as the trump card of obstetrics I cannot do better than end with his famous words Gentlemen gentlemen I pray beg each one of you *when in doubt play trumps*

REFERENCES

Caldwell W E *et al* (1935) *Amer J Obstet Gynec* 30 763
—— —— (1936) Ibid 32 727
Miller D (1928) *British Medical Journal* 2 183
—— (1930) Ibid 1 1036
Moir C (1932) *J Obstet Gynaec Brit Emp* 39 34
Thoms H (1933) *Surg Gynec Obstet* 56 97

INTERRUPTION OF EARLY PREGNANCY BY MEANS OF ORALLY ACTIVE OESTROGENS

BY

A S PARKES, Sc D, F R S

(From the National Institute for Medical Research London)

E C DODDS, M D, D Sc, F R C P

AND

R L NOBLE, M D *

(From the Courtauld Institute of Biochemistry Middlesex Hospital London)

It was found many years ago that the injection of oestrogenic extracts after mating interfered with the establishment of pregnancy (Smith 1926 Parkes and Bellerby 1926) and subsequent work including numerous experiments carried out with pure hormone substances has amply confirmed this observation Small doses of an oestrogen prevent the ova of mice from passing down the tube (Burdick and Pincus 1935) while larger doses cause abnormal acceleration of transit (Burdick and Whitney 1937) Both types of disturbance cause death of the blastocyst In the rabbit the cleavage rate of the egg is not affected by the injection of oestrone after ovulation but the embryos die the maximum sensitivity to oestrone is on the third and fourth days after mating (Pincus and Kirsch 1936 Pincus 1936 may be consulted for further discussion)

The prevention of progestational changes in the uterus of the rabbit after ovulation by injection of oestrogenic hormones has been extensively studied by Courrier and his co workers Adequate doses of oestrone given in the early stages of the luteal phase will suppress endometrial proliferation and prevent implantation of the egg The administration of oestrone after implantation has taken place causes death of the embryo The rabbit is very sensitive up to the fourth day after mating less so on the fifth and sixth and more so again at the twelfth (Courrier and Kehl 1932 Courrier and Reynaud 1933 1934)

The action of oestrone in inhibiting progestational changes in the uterus is well shown and can be quantitatively assessed by experiments on immature or ovariectomized test animals sensitized with oestrone and then injected simultaneously with progesterone and varying amounts of oestrone (Hisaw and Leonard 1930 Allen 1932 Robson 1936 Zuckerman 1937)

In view of these facts it is clearly of the greatest importance to know whether oral administration of oestrogens can be made effective enough to prevent or disturb implantation of the blastocyst Recently a new derivative of oestradiol has been prepared by Inhoffen and Hohlweg (1938) This substance ethinyl oestradiol is reported to be seventeen times as active by mouth as oestradiol (Inhoffen Logemann Hohlweg and Serini 1938) Further the new synthetic oestrogen diethyl stilboestrol prepared by Dodds Golberg Lawson and Robinson (1938) the biological properties of which have been described by Dodds Lawson and Noble (1938) is reported to be highly active by mouth The capacity of these two substances given orally to suppress the progestational action of progesterone and to prevent the establishment of pregnancy has therefore been investigated

* Leverhulme Fellowship Royal College of Physicians of London

Administration

The substances were fed to rabbits in propylene glycol solution, which was swallowed readily Diethyl-stilboestrol was administered to the rats in oil solution by stomach tube under brief ether anaesthesia The concentrations were so adjusted that the maximum daily dose was 1 c cm

Inhibition of the Effect of Progesterone on the Uterus of the Immature Rabbit

Immature female rabbits were sensitized with three doses of 50 I U (0 005 mg) of oestrone according to the technique of McPhail (1934) They were then given a standard dose of 0 6 I U (0 6 mg) of progesterone in oil solution over three days by subcutaneous injection together with varying amounts of ethinyl oestradiol or diethyl-stilboestrol by mouth It was found that total doses of 0 15 mg, 0 3 mg, and 0 75 mg of the oestrogens very greatly decreased the progestational proliferation caused by the progesterone, while 1 5 mg and 3 mg abolished it It was difficult to assess accurately the slight proliferation occurring with the medium doses of the oestrogens, but it seems that diethyl-stilboestrol is slightly less effective than is ethinyl oestradiol in suppressing progestational proliferation

Inhibition of Implantation in Rabbits

Technique and Controls—Adult rabbits which had been isolated for several weeks were mated, and most of them were laparotomized one to three days later to ascertain if ovulation had taken place Of twenty-four so examined twenty-two were found to have ovulated Of twenty mated rabbits which received no treatment, or only control propylene glycol by mouth during the first week, implantation took place in eighteen The implantation rate, therefore, was good

Oral Administration of Ethinyl Oestradiol—Seven rabbits received ethinyl oestradiol during the first week after mating and were killed and examined at from six to nine days *post coitum* when progestational proliferation should have been well advanced The details are given in Table I The uteri of the four which were treated

TABLE I—*Effect of Ethinyl Oestradiol by Mouth on Implantation in the Rabbit*

No of Rabbit	Ethinyl Oestradiol given			Rabbit Killed Days after Mating	Normal Implantations	Progestational Proliferation of Endometrium
	Days after Mating (inclusive)	Daily Dose in mg	Total Dose in mg			
DNT 20	5–6	0 25	0 5	9	2	Normal
DNT 19	5–6	0 25	0 5	9	2	
DNT 23	2–6	0 25	1 25	6	0	Slight
DNT 3	3–4	1	2	8	0	Some
DNT 22	2–6	0 5	2 5	6	0	Slight
DNT 6	2–7	0 5	3	8	0	None
DNT 5	2–7	1	6	8	0	

for five or six days showed little or no progestational proliferation although the corpora lutea in the ovary seemed quite normal The two larger doses had caused tremendous oedema and hyperaemia of the uteri In the rabbit receiving two doses of 1 mg the endometrium had proliferated but the glandular development was poor for eight days after ovulation There were no signs of pregnancy in these rabbits In the two animals receiving doses of 0 25 mg on the fifth and sixth days after mating, implantation had not been entirely inhibited, though the number of embryos (two) found in each was much below the number of corpora lutea, suggesting that there was partial failure The results in general leave no doubt that ethinyl oestradiol by mouth is effective in preventing implantation after mating and ovulation

Oral Administration of Diethyl-stilboestrol—The results with diethyl stilboestrol are given in Table II It will be

TABLE II—*Effect of Diethyl stilboestrol by Mouth on Implantation in the Rabbit*

No of Rabbit	Diethyl stilboestrol given			Rabbit Killed Days after Mating	Normal Implantations	Progestational Proliferation of Endometrium
	Days after Mating (inclusive)	Daily Dose in mg	Total Dose in mg			
DNT 41	3–7	0 5 (twice daily)	5	8	1	Good
DNT 42	3–7	0 5 (twice daily)	5	8	2	Subnormal
DNT 24	3–8	1	6	10	0	Good
DNT 25	3–8	1	6	10	0	Subnormal
DNT 28	2–7	1	6	9	0	
DNT 35	3–7	2	10	8	0	Very slight
DNT 38	3–7	2	10	8	0	Slight
DNT 39	3–7	4	20	8	0	
DNT 40	3–7	4	20	8	0	

seen immediately that 1 mg daily given over a five day period after mating does not entirely prevent the occurrence of normal implantations, while the endometrial proliferation is not seriously interfered with A similar dose of ethinyl oestradiol caused profound uterine changes quite incompatible with implantation of blastocysts With larger doses of diethyl-stilboestrol normal implantations were not found, but a total of 10 mg was required before the progestational proliferation was mainly inhibited Not until 20 mg was given did the intense hyperaemia and congestion of the uterus appear which was found even with 3 mg of ethinyl oestradiol Both the microscopic and the macroscopic observations leave no doubt that diethyl-stilboestrol is effective in preventing implantation and progestational proliferation of the endometrium in the mated rabbit, but it is much less effective than ethinyl oestradiol In several of the animals receiving the smaller doses of diethyl-stilboestrol there were nodules in the uterus which were obviously not normal implantations and which seemed to consist of a decidual reaction with a degenerate vesicle It is likely that a degree of inhibition of progesterone had been attained incompatible with the continued survival of the blastocyst, but inadequate to prevent decidua formation

Inhibition of Implantation in Rats

Technique and Controls—Female white Wistar rats weighing 150 to 250 grammes were segregated after detection of mating by the presence of a vaginal plug Oral administration of diethyl-stilboestrol began one day later The total dose was dissolved in 3 c cm of oil and 1 c cm was given daily for three consecutive days The animals were killed on the eighth day *post coitum* Control animals received oil only

Oral Administration of Diethyl-stilboestrol—The results given in Table III showed that implantation occurred in eight of eleven control rats and in two of three rats

0·001 mg of the oestrogen. It occurred in only three of eleven rats receiving between 0·005 and 0·016 mg. and was completely absent in thirteen rats receiving larger

TABLE III—*Effect of Diethyl stilboestrol by Mouth on Implantation in Rats*

Total Dose gamma	No. of Rats	Pregnancy	Total Dose gamma	No. of Rats	Pregnancy
0	11	8	20	3	0
1	3	2	30	3	0
5	3	1	50	2	0
10	6	1	100	2	0
16	2	1	200	3	0

doses. It is thus evident that this new synthetic oestrogen given by mouth is highly effective in preventing implantation in rats.

Interruption of Established Pregnancy

Technique and Controls.—Fifteen rabbits were used for experiments on established pregnancy. A preliminary laparotomy under ether anaesthesia at eight to twelve days after mating was made in twelve of these to confirm the presence of normal implantation. Five of those laparotomized received control treatment with propylene glycol alone and all were subsequently found to have normal foetuses.

Oral Administration of Ethinyl Oestradiol.—Six rabbits were treated with ethinyl oestradiol by mouth beginning nine or ten days after mating and were killed at twelve to fourteen days. The details are shown in Table IV. All

TABLE IV—*Effect of Ethinyl Oestradiol by Mouth on Established Pregnancy in the Rabbit*

No. of Rabbit	Ethinyl Oestradiol Given			Rabbit Killed Days after Mating	Condition of Embryos
	Days after Mating (inclusive)	Daily Dose in mg.	Total Dose in mg.		
DNT 17	9–10	0·1	0·2	13	2 normal conceptions 5 resorbing
DNT 7	9–10	0·25	0·5	13	4 resorbing
DNT 8	9–10	0·25	0·5	13	9 "
DNT 15	10–11	0·25	0·5	14	8 "
DNT 10	8–9	0·5	1	12	7
DNT 2	9–11	0·5	1·5	13	2

the embryos in the rabbits receiving a total of 0·5 mg. or more were resorbed or undergoing resorption. In the remaining animal receiving 0·2 mg. two live foetuses were found in seven implantation sites. Observations on the state of the resorbing conceptuses seem to agree substantially with those made by Courrier and there can be little doubt that identical effects are produced by the injection of oestrone and the oral administration of ethinyl oestradiol.

Oral Administration of Diethyl stilboestrol.—A rabbit receiving 1 mg. of this oestrogen on the thirteenth fourteenth and fifteenth days after mating was found on the seventeenth day to contain ten embryos all being resorbed. A similar dose on the eleventh twelfth and thirteenth days and half this dose on the tenth eleventh and twelfth days in other rabbits did not disturb pregnancy. It is evident therefore as in the work on implantation that the denidatory effectiveness of diethyl stilboestrol is much less than that of ethinyl oestradiol.

Discussion

The above results indicate that small doses of orally active oestrogen administered by mouth will prevent implantation of the blastocyst if given soon after ovulation or may terminate established pregnancy. The effect is produced in what is essentially a physiological manner the luteal phase of the cycle is suppressed and another phase induced which though not abnormal in itself is unsuitable for the development of the embryo.

Everything we know about the menstrual cycle of primates suggests that its hormonal control is the same as in lower animals and it is extremely probable that the factors governing the implantation of the fertilized egg are fundamentally similar in women and in lower animals. The experimental conclusions arrived at above should thus be applicable to women though the fact that very large amounts of oestrogen are excreted by pregnant women makes it likely that the period during which oestrogen treatment might be effective would be relatively much shorter than in rabbits.

It would be unwise at the present juncture to make a comparison of the relative suitability of the two substances examined or of other orally active oestrogens for the purpose under consideration. Effectiveness in this kind of test must be greatly influenced by conditions of absorption from the alimentary canal and these conditions certainly vary from species to species. It is difficult to predict what type of substance would be most effectively absorbed by mouth in women. Further the intensive work at present being carried out on the artificial production of oestrogenic substances may well result in the production of a compound also active by mouth but more effective in suppressing the tubal and uterine changes necessary for implantation of the fertilized egg than either of those so far examined.

Summary

Experiments have been carried out on the inhibition of implantation and the interruption of established pregnancy by the oral administration of two new oestrogens—ethinyl oestradiol and diethyl stilboestrol. Both of these substances given by mouth inhibit the effect of progesterone and prevent implantation of the blastocysts in rabbits. Small doses of diethyl stilboestrol prevent implantation in rats while ethinyl oestradiol is highly effective in interrupting established pregnancy in rabbits.

We are much indebted to Sir Henry Dale F.R.S. for his critical interest in this work. The ethinyl oestradiol was kindly supplied by Dr. K. Miescher and Messrs. Ciba Limited.

References

Allen, W. M. (1932) *Amer. J. Physiol.* 100, 650.
Burdick, H. O. and Pincus, G. (1935) Ibid. 111, 201.
—— and Whitney, R. (1937) *Endocrinology*, 21, 37.
Courrier, R. and Kehl, R. (1932) *C. R. Soc. Biol. Paris*, 109, 877.
—— and Reynaud, R. (1933) Ibid. 115, 299.
—— —— (1934) Ibid. 116, 1073.
Dodds, E. C., Golberg, L., Lawson, W. and Robinson, R. (1938) *Nature*, 141, 247.
—— Lawson, W. and Noble, R. L. (1938) *Lancet*, 1, 1389.
Hisaw, F. L. and Leonard, S. L. (1930) *Amer. J. Physiol.* 92, 574.
Inhoffen, H. H. and Hohlweg, W. (1938) *Naturwissenschaften*, 26, 96.
—— Logemann, W., Hohlweg, W. and Serini, A. (1938) *Ber. dtsch. chem. Ges.* 71, 1024.
McPhail, M. K. (1934) *J. Physiol.* 83, 145.
Parkes, A. S. and Bellerby, C. W. (1926) Ibid. 62, 145.
Pincus, G. (1936) *The Eggs of Mammals*, New York.
—— and Kirsch, R. E. (1936) *Amer. J. Physiol.* 115, 219.
Robson, J. M. (1936) *J. Physiol.* 88, 100.
Smith, M. G. (1926) *Johns Hopk. Hosp. Bull.* 39, 204.
Zuckerman, S. (1937) *Proc. roy. Soc.* B, 124, 150.

OBSERVATIONS ON THE TREATMENT OF EMPYEMA IN CHILDREN *

BY

H L. WALLACE, M D., F R C.P Ed

Assistant Physician Royal Edinburgh Hospital for Sick Children Lecturer in Child Life and Health University of Edinburgh

It is with some misgiving that I open a discussion on the treatment of empyema in children, since it is perhaps doubtful whether a physician is qualified to pronounce judgment on a subject regarded by many as being essentially surgical And yet surely empyema is a disease which should vitally concern both physician and surgeon and which, almost more than any other, demands a close liaison between the two The belief has been stated that there is a wide field in medicine to-day for the operating physician, and if such a person were available on the staff of every large hospital it might well be that the treatment of empyema would be in relatively safer hands than it is at present There is perhaps a tendency to-day for the unfortunate child with empyema to fall between the two stools of medicine and surgery and, while conservatism and radicalism grapple with each other for pride of place in the scheme of treatment, the resulting delay and indecision may not react very favourably on the patient

When discussing a wide and somewhat controversial subject such as this it would seem advisable, so far as is possible, to avoid mention of personal preference or impressions regarding treatment, since these are apt so readily to assume the guise of personal prejudice, which can only tend to complicate and distort the issue I propose, therefore, to present a general review of the treatment of empyema as practised in the Royal Edinburgh Hospital for Sick Children during the past fifteen years By this means it is hoped to obtain a reasonably detached and unbiased view of the situation and to assess the relative merits of the several methods of treatment Before proceeding to details of these methods it is necessary to introduce an explanatory note to the effect that each type of procedure to be described was adopted by choice and not by expediency To appreciate this is of importance since it is common experience that children with empyema are sometimes admitted to hospital in such a low state of vitality that only the most conservative measures dare be employed, and even the minimum of intervention may be attended with grave risk These emergency cases constitute a separate problem, and are not included in the sections concerned with the various methods of treatment, although brief reference is made to them in a later section

During the fifteen-year period 1923 to 1937, inclusive, 363 cases of empyema were received into the wards of the Royal Edinburgh Hospital for Sick Children Fifteen arrived *in extremis* and died within forty-eight hours, these have been omitted, since they were almost certainly beyond the reach of any form of treatment The series under discussion therefore comprises 348 cases, and the various methods of treatment adopted will now be considered In the first place, procedures which may be classed as conservative will be briefly discussed and certain of the more radical measures then considered

* Read in opening a discussion in the Section of Diseases of Children at the Annual Meeting of the British Medical Association, Plymouth 1938

Conservative Treatment

REPEATED ASPIRATION

Drainage of the empyema by means of aspiration of pus from the thorax at frequent intervals was the procedure of choice in sixty cases, or 17 2 per cent of the total series As might be expected, this conservative method was favoured in very young children, one half of those treated in this manner being under 2 years of age The most successful results were obtained where the empyema was small in amount, and in six cases a single paracentesis sufficed to drain the cavity completely Where the effusion was large this mode of treatment could not be regarded as very satisfactory, since the mortality was high and, in the cases which did eventually recover the period of convalescence was often both long and difficult The average length of stay in hospital after the development of empyema in these cases was 8 8 weeks In three of those who survived, open operation had to be resorted to in the end in order to obtain adequate drainage, and it is at least a possibility that the fatalities would have been fewer if similar measures had been adopted with greater frequency and at an earlier stage in the illness

TABLE I—*Showing the Results of Treatment by Repeated Aspiration*

Age	Cases	Recoveries	Deaths	Mortality per cent
Under 2 years	30	10	20	66 6
2–5 years	22	19	3	13 6
5–12 years	8	8	0	Nil
Totals	60	37	23	38 3

In this, as in subsequent tables, the cases have been divided into three age groups, and the very striking variation in the mortality rate according to age will be noted The large number of fatalities which occurred during the period of infancy in this group is somewhat disquieting since the simple procedure of aspiration is apt to be the method of choice in infants and very young children on account of its comparative safety It would seem that in large effusions free and thorough drainage of the pleural sac is difficult to obtain by this method, and the resulting prolonged toxaemia may bring about a fatal issue before such drainage can be accomplished

The infecting organisms isolated in this group were as follows

Pneumococcus	55 cases	Streptococcus	1 case
Staphylococcus	3 "	*B influenzae*	1 "

The various causes of death in the twenty three fatal cases may be detailed thus

Toxaemia	8 cases	Pericarditis	4 cases
Pneumococcal septicaemia	4	Spreading pneumonia	4 "
		Lung abscess	3 "

The causal organism in these fatal cases of empyema was the pneumococcus in twenty cases, the staphylococcus in two cases, and the *B influenzae* in one case

DRAINAGE BY CANNULA ASPIRATION

In fifty-two cases, or 14 9 per cent of the total series, drainage of the empyema by means of a metal cannula was attempted

A short silver cannula was inserted between the ribs into the pleural cavity and retained in position by means of a [illegible] soaked in collodion after the manner described by Mc[illegible] (1930) A rubber tube was then attached to the mouth of the cannula and clipped and a thick pad of wool applied as a dressing By means of a syringe attached to the tube [illegible]

was aspirated through the cannula once or twice daily until the discharge became very scanty whereupon the cannula was removed and the small sinus was allowed to drain openly After each aspiration the usual practice was to inject into the cavity a small quantity of iodoform in liquid paraffin

The results of this method of treatment so far as actual mortality was concerned were more satisfactory than treatment by repeated aspiration but the extremely protracted convalescence associated with this procedure must detract from its success The average length of stay in hospital from the commencement of the cannula drainage was 14 4 weeks a figure which compares unfavourably with other methods of treatment Furthermore in nine cases cannula drainage proved inadequate and after a long illness recourse to open operation became necessary to empty the cavity completely

TABLE II —*Showing the Results of Treatment by Cannula Aspiration*

Age	Cases	Recoveries	Deaths	Mortality per cent
Under 2 years	21	13	8	38 1
2–5 years	20	16	4	20 0
5–12 years	11	11	0	Nil
Totals	52	40	12	23 0

It will be observed from Table II that cannula aspiration proved more successful in empyema of infancy than treatment by repeated aspiration and on this account alone it is certainly worthy of consideration The infecting organism was the pneumococcus in forty nine cases of this group the staphylococcus in two and the streptococcus in one case respectively The causes of death in those who failed to survive were as follows

Toxaemia	7 cases	Spreading pneumonia	1 case
Pericarditis	2	Scarlet fever	1
Pneumococcal septicaemia	1 case		

Of the twelve fatal cases the infection was due to the pneumococcus in eleven the remaining case being one of streptococcal empyema

DRAINAGE BY CLOSED SUCTION

This type of drainage was employed in only fourteen cases of the series and it is therefore difficult to assess its true value in the scheme of treatment For the sake of completeness however it is advisable that reference should be made to it The technique usually consisted in making a small intercostal incision through which a rubber drainage tube was thrust into the pleural cavity Suction was then applied to the tube by means of a Politzer bag or Bunsen bottles, the bag being favoured in the majority of cases

Unfortunately it cannot be claimed that the results of this method of closed suction drainage were encouraging although, as previously stated the number of cases in which it was employed was too small to allow of any definite conclusion being reached regarding its efficacy As was the case with other types of conservative treatment the main difficulty was the maintaining of adequate drainage for a period long enough to ensure thorough emptying of the cavity and in two instances open operation was ultimately required owing to the closed suction having proved quite inadequate to influence the size of the effusion seriously Of the fourteen cases belonging to this group the infection was due to the pneumococcus in ten the staphylococcus in three and the streptococcus in one case The results obtained are shown in Table III

TABLE III —*Showing the Results of Treatment by Closed Suction Drainage*

Age	Cases	Recoveries	Deaths	Mortality per cent
Under 2 years	3	0	3	100 0
2–5 years	7	6	1	14 3
5–12 years	4	4	0	Nil
Totals	14	10	4	28 6

The average length of stay in hospital of the cases treated by closed suction drainage was 8 7 weeks from the beginning of treatment of the empyema Of those who failed to survive the cause of death was stated to be spreading pneumonia (two cases) and pneumococcal septicaemia (two cases)

Radical Treatment

Reference will now be made to those cases of empyema which were subjected to a more radical form of pleural drainage than has so far been described In this group open operation was performed in every instance the adherents of this regime being of the opinion that only by such heroic measures will free and adequate drainage of the pleural cavity be assured in children with empyema When considering this group of cases it is important to bear in mind one significant fact—namely that operation was never undertaken wittingly during the synpneumonic phase of the illness It the diagnosis of empyema was made in the early stages aspiration of the thorax was repeated until the pus became thick and localized and immediate operation on admission to hospital was only performed when the history indicated that the disease was of long standing and exploratory puncture yielded thick pus In the large majority of cases treated by open operation resection of a portion of rib was considered desirable but in a small proportion open drainage was attempted without resorting to rib resection and it will perhaps be of interest to consider these latter cases separately

THORACOTOMY AND OPEN DRAINAGE

This method consisted in making a free incision in the intercostal space incising the pleura and in some cases aiding the evacuation of the pus and fibrin clots by means of a suction apparatus Thereafter a rubber drainage tube was inserted in the opening and the cavity was allowed to drain on to the surface without suction The results obtained in the thirty seven cases in which this mode of treatment was employed are summarized in Table IV

TABLE IV —*Showing the Results of Treatment by Thoracotomy and Open Drainage*

Age	Cases	Recoveries	Deaths	Mortality per cent
Under 2 year	7	1	6	85 7
2–5 years	20	16	4	20 0
5–12 years	10	9	1	10 0
Totals	37	26	1	29 7

It will be noted that the effects of this procedure in empyema of infancy were somewhat disastrous since only one of the cases at this early age survived The major difficulty associated with this method was the maintenance of free drainage from the pleural cavity since the space available between the ribs was rarely found to be

other forms of treatment Furthermore, the period of convalescence was found to be relatively short

The manner of drainage following rib resection did not appear to have any significant influence on the mortality, since a striking similarity was observed in the immediate effects of both closed suction and open drainage

The causal organism was proved to be the pneumococcus in 90 per cent of the cases in the series, the infection in the remainder being due either to the streptococcus or to the staphylococcus The immediate results of treatment were not significantly influenced by the nature of the infecting organism

I wish to record my thanks to the physicians and surgeons of the Royal Edinburgh Hospital for Sick Children for allowing me free access to their case records of empyema

REFERENCES

Brown H P (1923) *Ann Surg* 77, 401
McNeil, C (1930) *Practitioner* 125 219
Michalowicz M (1935) *Rev franç Pediat*, 11, 545
Rienhoff, W F, and Davison W C (1928) *Arch Surg* 17, 676
Steinke C R (1935) *Ann Surg* 101, 617

SYNERGY IN EXPERIMENTAL CHEMOTHERAPY OF STAPHYLOCOCCAL INFECTIONS

BY

S. P. DE, M.B.

AND

U. P. BASU, D.Sc.

(From the Bengal Immunity Research Laboratory Calcutta)

Since the observation of Trefouel *et al* (1935) that the therapeutic activity of the hydrochloride of 4-sulphonamido-2 4 diamino-azo benzol is due to the parent compound *p* aminobenzenesulphonamide itself, a considerable number of papers have been published referring to the use of this drug in the treatment of certain human infections of coccal origin in general and that caused by haemolytic streptococci in particular But in spite of these extensive investigations very little work has yet been carried out on the efficacy of this newly discovered drug in staphylococcal infection Of the literature which has special reference to its use in such infection the observations of Troisier *et al* (1937) and Thiers *et al* (1937), as well as that of Frank (1937), need only be mentioned The latter is again significant from the fact that the drug used was *p*-aminobenzenesulphonamide A knowledge of the protective action of this drug against staphylococcal infections seems now to be of considerable interest, as this coccus is also responsible for the development of virulent toxin in human beings

Accordingly a *Staphylococcus aureus* (local) strain was chosen and its toxicity was first ascertained The strain after eighteen hours' culture in broth was noticed to be lethal within twelve hours of infection for white mice, weighing from 10 to 12 grammes (the type of animals used for subsequent experiments), in doses varying from 0 1 to 0 15 c cm (each cubic centimetre containing about 1,000 million organisms)

The Experiments

In a preliminary experiment nine mice were infected intraperitoneally with approximately five minimal lethal doses of the above strain Six of the mice were given within half an hour 7 5 mg of *p* aminobenzenesulphonamide in a sterile aqueous solution by the subcutaneous route In order that no untoward symptoms might develop, as noticed in our previous experiments (De and Basu, 1937), a freshly prepared solution of the drug was always used The remaining three mice received no treatment, and served as controls The animals were then kept under observation, when all the latter animals were found to die within twenty-four hours, and only two of the former (treated) group survived after a period of seventy two hours

Thus the drug seems to possess no specific protective action, and consequently it was considered to be of importance to investigate the relative efficacy of *p* amino benzenesulphonamide and of a potent specific anti staphylococcus serum For this a staphylococcus anti toxic serum containing 600 international units per c cm and a sample of antibacterial serum were selected from the stock, and 50 units of the former and 0 5 c cm of the latter were injected into each animal after dilution with normal saline Forty eight mice of average weight—10 to 12 grammes—were taken and divided into four groups of twelve each

Group A—These were infected intraperitoneally with 0 5 c cm of broth culture of the above local strain The received no treatment, and served as controls

Group B—Each of these animals was given intraperitoneally 50 units of antitoxic and 0 5 c cm of antibacterial serum, diluted with normal saline, and after half an hour was infected with 0 5 c cm of the broth culture

Group C—The animals were first treated with 3 5 mg of *p* aminobenzenesulphonamide in sterile aqueous solution three hours later they were infected with 0 5 c cm of the culture, and 4 mg of the drug was again administered after three hours of this infection

Group D—This group of animals were given a combination of the treatment used in Groups B and C Thus each animal was injected with 3 5 mg of the drug, and after two and a half hours 50 units of the antitoxic and 0 5 c cm of antibacterial serum diluted with normal saline were administered Within half an hour it was infected with 0 5 c cm of the culture, and was again given 4 mg of the sulphonamide after three hours of this infection

All the animals were kept under observation over a period of ninety-six hours, and a post-mortem examination of those which died was made to find out the cause of death The table below gives the results of these investigations

	Hours				Necropsy and Blood Culture Report of the Dead M
	24	48	72	96	
Group A	All dead	—	—	—	Staph aureus
Group B	8 Dead 4 Alive	1 Dead 3 Alive	— 3 Alive	— 3 Alive	"
Group C	2 Dead 10 Alive	4 Dead 6 Alive	2 Dead 4 Alive	— 4 Alive	"
Group D	All alive	All alive	All alive	All alive	—

Average weight of mice 10 to 12 grammes Nature of strain Staph aureus (local) Number of organisms 1 000⁶ (18 hours broth culture) per c cm Infection dose 0 5 c cm

Next, to find out whether *p* aminobenzenesulphonamide possesses any bacteriostatic action *in vitro* upon broth cultures of *Staph aureus*, different amounts of the drug varying from 0 25 to 7 5 mg were added to 10 c cm of the broth cultures and left in an incubator for eight hours No inhibition of growth was noticed in any case

the tubes thereby indicating that the compound even in a concentration of 1 in 1,333 has no bacteriostatic action

Discussion

From the table it is evident that *p* aminobenzene sulphonamide when administered in the doses used in this investigation is capable of prolonging and in some cases of saving the lives of mice infected intraperitoneally with a strain of *Staph aureus* Thus four out of twelve mice (Group C) or 33 per cent were found to survive while 50 per cent were alive up to forty eight hours and 80 per cent up to twenty four hours after the infection A similar treatment with the combined antitoxic and anti bacterial serum (Group B) shows a 25 per cent survival among the infected animals It appears therefore that in the relative doses employed in the present investigation the efficacy of *p* aminobenzenesulphonamide is slightly greater than that of the specific serum The data from Group D again point to the fact that much better therapeutic results may be obtained by a combination of serum and drug as under this condition a 100 per cent survival among the infected animals occurred But as the drug has no bacteriostatic action in culture media it would now be of additional interest to discover the mode of action of the drug *in vivo* particularly as a combined chemotherapeutic and biological treatment has been found to be far more efficacious against staphylococcal infections in mice Work in this direction is already in progress

Conclusion

From the preliminary experiments it would be unwise to make any definite conclusions It may however be said that the subcutaneous administration of *p* amino-benzenesulphonamide is capable of prolonging and in some cases of preserving the lives of mice infected with staphylococci A better protection against staphylococcal infections in mice is obtained by combination of serum and the drug treatment

References

De S P and Basu U P (1937) *Indian J med Res* 25 467
Frank L (1937) *Budapest Orvosiujsag* 35 415
Thiers H Girard M and Jeune M (1937) *J Med Lyon* 18 247
Trefouel J and Mme Nitti F and Bovet D (1935) *C R Soc Biol* Paris 120 756
Troisier J Barnety M and Lesobre R (1937) *Bull Mem Soc med Hop Paris* 53 441

The second of the series of leaflets issued by the Department of Scientific and Industrial Research describing standard methods for the detection of toxic gases in industry deals with hydrogen cyanide vapour It is pointed out that the danger of the absorption of this gas through the skin is intensified by the presence of sweat or other fluid it may also be introduced into the body by inhalation Slight symptoms of prussic acid poisoning will be noticeable after several hours exposure to a concentration of 1 part in 50 000 while a concentration of 1 part in 500 will be fatal The faint almond like smell is quite easily missed and is therefore useless as a method of detection A sample of the suspected atmosphere should be drawn by a hand exhausting pump through a piece of specially prepared test paper impregnated with Congo red–silver nitrate or benzidine–copper acetate Two charts are supplied with the pamphlet to show the colorimetric reactions with various concentrations and in this way a sufficiently dependable index to the relative safety of the atmosphere can quickly be obtained It is remarked that this test will not indicate the danger in cases in which the oxygen content of a closed chamber is dangerously deficient The price of the leaflet is 5s 6d owing to the high cost of reproduction of the colorimetric charts It is obtainable from H M Stationery Office Kingsway W C 2

DAYLIGHT IN RELATION TO CLIMATE AND HEALTH*

BY

W R G ATKINS, Sc D, F R S

Head of the Department of General Physiology Marine Biological Laboratory Plymouth

Daylight is derived from the radiation of the sun as modified by the interposition of the earth's atmosphere and is perceived by the eye Much of the sun's radiation is not thus perceived but on account of its other effects may be properly considered here

Measurements have been made of the radiation from the sun throughout the whole spectrum by Dr C G Abbot and his co workers at the Observatories of the Smithsonian Institution of Washington When extrapolated to its value outside the earth's atmosphere what is termed the solar constant of radiation as received on a surface set normally to the sun's rays is 1 940 calories a square centimetre a minute the scale of radiation being that of the Smithsonian Institution of 1913 For the sake of uniformity, measurements continue to be given on this scale but the latest results of Abbot and Aldrich lead to a value which is 2 3 per cent less and closer to the Angstrom scale and agrees to one part in a thousand with that of the British National Physical Laboratory (Guild)

The value given for the solar constant of radiation relates to the mean distance of the earth from the sun The earth is closest early in January and furthest away early in July The variation in the square of the solar distance causes a 6 6 per cent increase in January as compared with July The solar constant however undergoes irregular fluctuations and periodic variations which usually amount to about 2 per cent but may be as much as 8 per cent of its mean value These are probably of great importance for the climate of the earth

Abbot Fowle and Aldrich determined the relative energy at various wave-lengths for pure sunlight These results have been extrapolated to give the curve outside the atmosphere and the fraction transmitted and received normally is given in Table I as calculated with the sun vertically overhead at each station Fig 1 has been constructed with the help of these data Wave lengths are

TABLE I—*Solar Energy—Spectrum (Abbot)*

Wave length	Mean intensity in Arbitrary Units k	Transmission Fraction of Column 2	
		Washington	Mt Whitney
0·39 μ	3 614	0 445	0 800
0 43	5 321	0 600	0.844
0 45	6 027	0 640	0 875
0 47	*6,240*	0 671	0.902
0.50	6 062	0 705	0 919
0 55	5 623	0 739	0.930
0 60	5 042	0 760	0 940
0 70	3 644	0.839	0.964
0 80	2,665	0 865	*0.976*
1 00	1 657	0 901	0.975
1 60	532	*0.930*	0 963
2.50	43	0 870	0 945

* Read in the Section of Physiology and Biochemistry at the Annual Meeting of the British Medical Association Plymouth 1938

... symbol μ)

... other than a vertical ... the coefficients given ... a power equal to the secant ... for the path of the light through ... proportional to this. The results are ... With a declining sun the more oblique ... results in the almost complete cutting off ... wave lengths this effect is often greatly ... caused by the presence of mist or dust, so that a low ... sun is apt to be fiery red

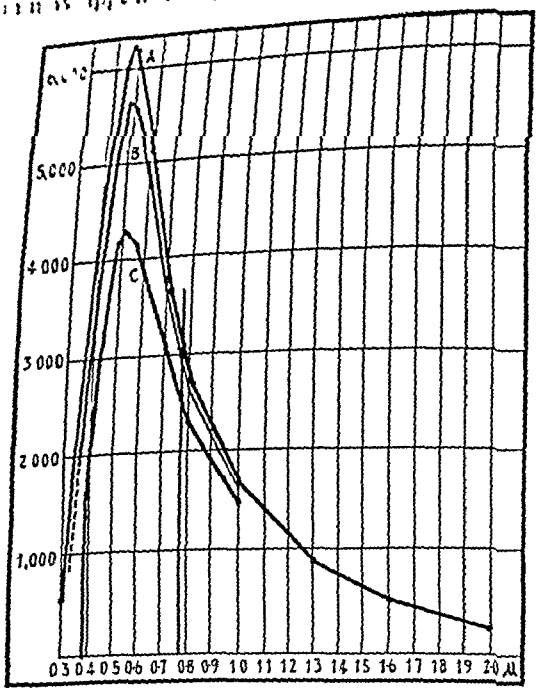


FIG 1.—The ordinates denote arbitrary energy units k_λ, and the abscissae wave lengths. The curves A, B, and C refer, respectively, to outside the atmosphere, Mt. Whitney, and Washington, and relate to zenithal sunlight received at normal incidence. The vertical lines denote the approximate limits of visible radiation.

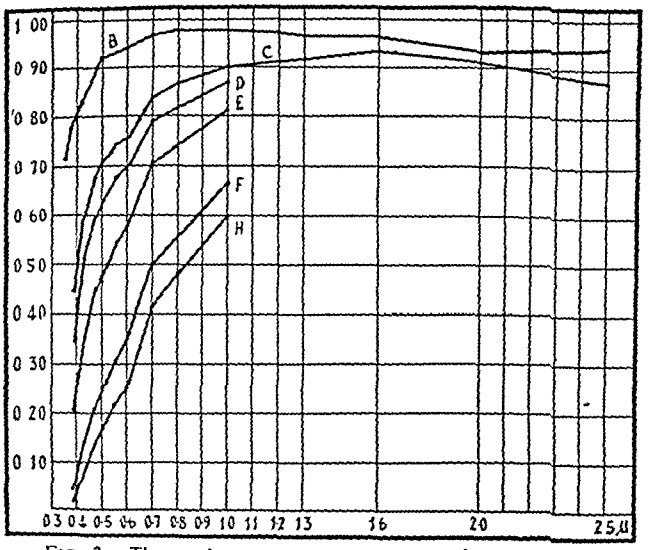


FIG 2.—The ordinates are transmission factors and the abscissae wave lengths. Curve B refers to Mt. Whitney and C to Washington at zero zenith distance. Curves D, E, F, H refer to Washington at zenith distances 40, 60, 75, and 78·5 degrees.

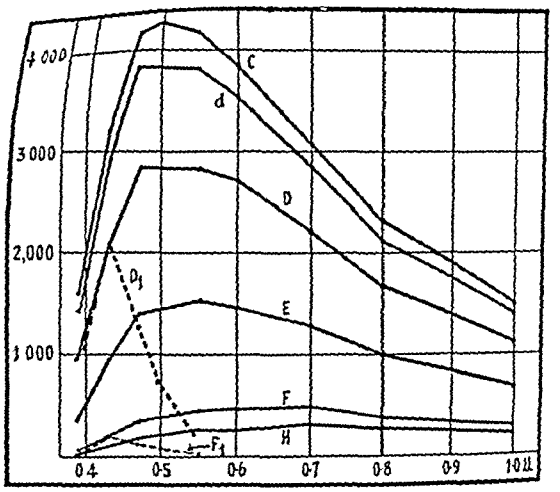


FIG 3.—Values of $k_\lambda f^{\sec z} \cos z$ plotted against wave lengths, for Washington at zenith distances 0, 20, 40, 60, 75, and 78·5 for curves C, d, D, E, F, and H respectively. Dotted lines using factors for potassium photo-electric cell.

In Fig. 3 the arbitrary energy units are taken as ordinates, and k_λ is multiplied by $f^{\sec z}$ to allow for the additional atmospheric distance traversed for different values of z, the zenith distance, the expression is then multiplied by $\cos z$ to correct to incidence upon a horizontal surface. The curves then are $k_\lambda f^{\sec z} \cos z$ and relate to Washington. For Plymouth, latitude 50 degrees, $z = 40$ degrees at noon on April 16 and August 21, $z = 60$ degrees at noon on February 23 and October 18, and $z = 75$ degrees approximately at noon on December 22, at 10 a.m. and 2 p.m. on December 17 to 27 inclusive $z = 78·5$.

It may be seen that in curves A, B, and C, Fig. 1, the maximum lies at 0·47, 0·47, and 0·50 $m\mu$ respectively, and in Fig. 3 the maximum becomes flattened and shifted towards longer wave-lengths, so that in E the maximum is at 0·55 in the green, and lies in the deep red at about 0·7 μ with $z = 75$ degrees. There is therefore in the course of the year a shift in the maximum from red to blue and back again.

The extra-atmospheric solar radiation may be thus divided between the limits 0·3 and 3·0 μ: ultra violet 0·3 to 0·4 μ, 6·6 per cent.; visible 0·4 to 0·76 μ, 52 per cent.; infra-red 0·76 to 3·0 μ, 41·3 per cent. There is radiation of longer wave-length, stopped by glass but transmitted by certain crystals, also radiation of shorter wave-length about which we know little, as its absorption by oxygen in the upper air causes a very abrupt falling off. According to the work of Fabry and Buisson, under the best conditions in the South of France the relative intensities in sunlight are as follows:

TABLE II

In $m\mu$	Relative Intensities
314	22·400
299	1·320
292	22
290	0·02

Diffuse Daylight

As sunlight passes through the atmosphere certain wave-lengths are absorbed and their energy used up in effecting a chemical change, as in the production of ozone from oxygen. Much of it is scattered and reflected. Drop[lets] of w[ater] ... relat[ively] large as compared with the wa[ve] ... *all* wave-lengths ... sun is white, as s[een] ... from a cloud is very ... lengt[h] ... a clo[ud] ... a sea

high according to Aldrich it amounts to 78 per cent as observed from a balloon above a level layer According to calculations made for the whole of the earth s surface no less than 43 per cent of the total incoming solar radiation is reflected by clouds (Simpson)

But scattering by particles small relative to the wavelengths of light affects the radiation inversely as the fourth power of the wave length Thus light of wave length 0 38 μ, which is taken as being the extreme limit of the visible violet is scattered sixteen times as much as light of 0 76 μ, the extreme limit of the visible red So the scattered light some of which reaches the earth, is relatively richer in blue violet and ultra violet as compared with sunlight Thus the unclouded sky looks blue

Measurements of the energy of a source as a whole may be made with electrical instruments having blackened receiving surfaces so that energy of all wave lengths is almost totally absorbed Of these instruments thermopiles are the most widely used, but bolometers, in which a change in resistance is produced by the energy absorbed, have found useful applications By reducing the dimensions and so the heat capacity of both bolometers and thermopiles a high sensitivity and a quick response have been produced By placing the receiving surfaces in a spectrum or by using light filters with due precautions, measurements can be carried out upon portions of the spectrum But for comparative measurements in certain portions of the spectrum photo electric cells have advantages inasmuch as they have an instantaneous response, a high sensitivity and a relatively low cost, coupled with a certain degree of wave length selectivity which can be rendered more highly selective by means of filters Photoelectric cells serve to compare radiation received on a horizontal plane surface from sun plus sky and from sky alone when direct sunlight has been shaded off The cells should be covered with a diffusing disk of opal flashed glass and colour filters if used, should be placed below this The spectral sensitiveness of several types of photocell are shown in Fig 4 (Atkins and Poole) in which is

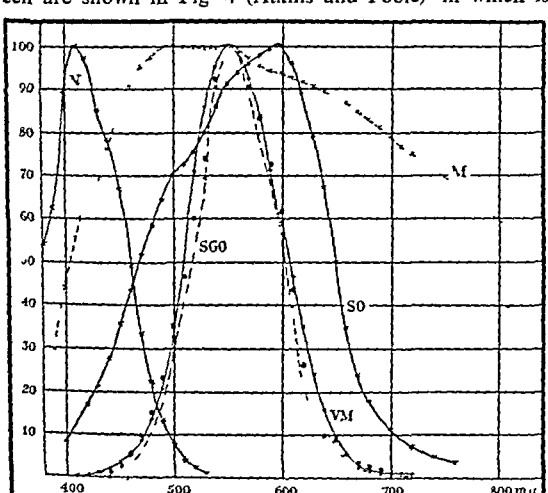


FIG 4—Curve M shows the distribution of energy in mean noon sunlight as a percentage of the maximum and all sensitivities relate to this spectral energy distribution N denotes vacuum sodium cell under opal SO denotes selenium cell under opal SG denotes selenium cell under special green filter as this lies so close to the VM and SGO curves it has been omitted but is denoted by the crossed circles SGO shows the foregoing under opal taking into account that the filter is now traversed by oblique light VM denotes the international relative visibility factor of the eye as for mean noon sunlight

also shown the spectral sensitivity curve for the light adapted human eye This is not very different from that of the selenium rectifier photo cell and may be closely matched by the latter under a special greenish filter The sodium cell on the other hand, is most sensitive in sunlight—around 0 41 μ where the eye is of low sensitivity It has been shown however that for mixed sunlight, white clouds and blue sky the ratio of the readings of a sodium to those of a selenium cell remains nearly constant over a wide range of intensities, but atmospheric conditions exist under which a considerable divergence becomes manifest

The difference between sunlight and sky light may be seen from the following At noon on May 26 in Dublin the blue light from sunlight was only 1 28 times as intense as that from the sky That for yellow was 3 4 times and for red 6 2 times as intense In the anti rachitic ultra violet of sunlight (namely from 313 mμ to the extreme limit received, about 297 mμ—frequently longer and rarely shorter in appreciable amount) Dorno has shown that the radiation from the whole sky exceeds that from the sun unless the altitude of the latter exceeds *45 degrees*

The Daylight Factor

When considering diffuse daylight the most useful index of the illumination in a room is the daylight factor It was shown by Paterson and Walsh that in absence of sunlight the illumination at a point inside a building bears a very nearly constant ratio to the illumination at a point outside the receiving surface being set horizontally in each case This percentage ratio is termed the daylight factor Owing to the great intensity of sky light situations with a factor of 1 per cent are adequately lighted for reading throughout the greater part of the day even immediately inside large north windows the daylight factor is only about 6 to 16 per cent Photo electric cells serve well for such determinations if the sun is shining its rays should be screened off from the open air photometer or a correction be applied by the determination of the sunlight/sky light ratio

It is obvious that a person exposed in the open for six minutes in the middle of the day will receive far more light than when inside for ten hours with a 1 per cent daylight factor It is therefore uneconomical to fit glass transparent to ultra violet light in windows other than those that receive direct sunlight, save in buildings specially constructed to admit a far larger proportion of sky light than is customary

Daily and Seasonal Changes in Light

As the altitude of the sun increases, the illumination received upon a horizontal surface rises from about 700 metre candles (lux) at sunrise to about 90 kilolux for 45 degrees and 145 kilolux for 90 degrees altitude with a clear sky (Atkins Ball and Poole) The illumination at various solar altitudes is shown in Fig 5 as obtained by using a selenium rectifier cell, corrected for curvature of the intensity–current relation The cell was standardized in artificial mean noon sunlight and as previously shown its scale is fairly close to that of the eye With the sun at 90 degrees its rays are less scattered in reaching the earth and its incidence is normal With the selenium cell sensitive throughout the spectrum the ratio of zenithal sunlight to sky light is usually between 4 and 8 whereas with a sodium cell sensitive only to the blue end of the spectrum the sun/sky ratio is about 2 to 4 The upper limits are far beyond what is found in England,

where the sun reaches an altitude of about 63 degrees in summer Owing to the variation in the scattering of light of different wave-lengths the daily and seasonal changes are not the same for different portions of the spectrum

An elaborate study of the alterations in the composition of daylight has been made by Ornstein, Eymers, Vermeulen, and Postma, measuring the energy in various narrow wave-length bands under different atmospheric conditions By means of a sodium cell daily records

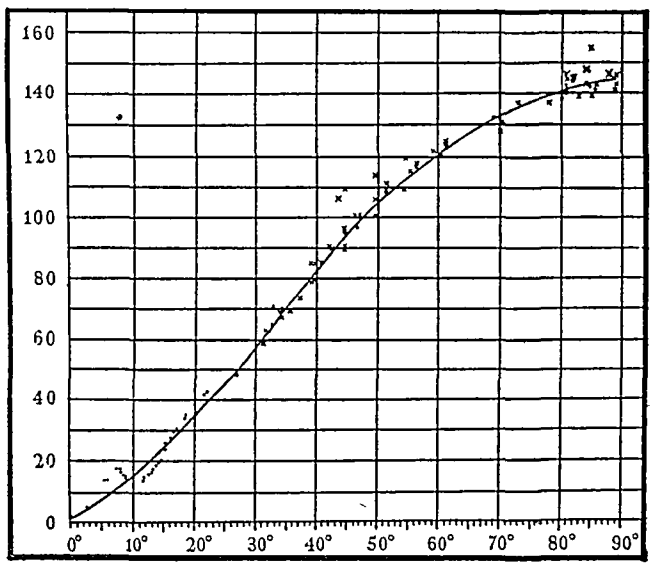


FIG 5—Vertical illumination at Colombo for different altitudes of the sun, with clear sky or but few clouds The ordinates denote vertical illumination in kilolux

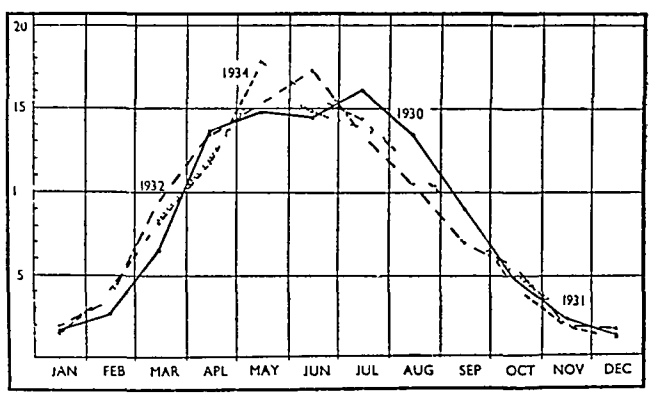


FIG 6—The ordinates denote percentages of the light received in each year, as measured in kilolux hours

have been obtained by the author for the last eight years at Plymouth, using a Cambridge Instrument Company 'thread recorder" The records are of the blue-violet end, around 0 41μ, and by measuring the areas of the daily curves the total amount of light received has been found, expressed in kilolux-hours—namely, that received when an illumination of one kilolux persists for one hour The daily illumination integral varied from 14 5 to 1,323 kilolux-hours, and the monthly means from 45 6 in December, 1934, to 781 in July, 1930, that year being exceptionally bright For it the daily average was 414 kilolux-hours, but five other years averaged 309 In Plymouth the six summer months receive from three-quarters to four-fifths of the annual daylight, of this the brightest month—May, June, or July—receives 15 to 18 per cent and December 1 5 per cent (see Fig 6)

The Physiological Effects of Daylight

The effects may be classified primarily under two headings

(*a*) The Purely Photo-Chemical, in which the resultant action is proportional to the energy of the effective wave length absorbed —Thus when ergosterol is irradiated and thereby converted into vitamin D the action is purely chemical, and exact proportionality exists unless too great an intensity or time of exposure introduces a secondary destructive action

(*b*) The Physiological Stimulation of Living Cells—In this the effect decreases with time, which is a perfectly general result from the application of any stimulus Thus the eye when exposed to bright light reduces its sensitivity first of all by decreasing the pupillary diameter This, however, only decreases the area of the pupil to about one-fourth or one-fifth, approximately the variation between the illumination on a horizontal surface from full daylight and that from sky alone when the sun is obscured by a small cloud There is then a slower diminution in sensitivity due to an alteration in the quantity of unbleached visual purple and to the variation in nervous response A similar decrease in sensitivity is observed when the skin is subjected to the extreme solar ultra-violet, which appears to be almost the same in range as the antirachitic region

The action of radiation takes place only where it is absorbed, so the effect of ultra-violet is primarily quite superficial, but a secondary result, such as increased calcification, may be found when the blood stream has carried away the activated products

The major successes of light therapy appear to be the treatment of rickets, including tetany, of lupus and "surgical" tuberculosis, also of certain types of wound and ulcer But on the healthy population the mental effect of bright daylight is so cheering that one is compelled to regard it as of significance for the body also, especially when—as usual in our land—it is a very variable stimulus

In the treatment of tuberculosis and of wounds it appears that the whole solar radiation is effective, and not the ultra-violet only The longer wave lengths penetrate more deeply, the maximum penetration being that of the deep red and short infra red, about 0 7 to 1 4 μ The longer infra-red is so heavily absorbed by water that its penetration is less and its causation of superficial burning is greater, though erythema is produced by the ultra-violet below 313 mμ without contemporaneous sensation

I am indebted to my brother, Lieutenant Colonel R R G Atkins, R A M C, for a discussion on heat stroke, commonly though less correctly termed sunstroke Its incidence is mainly confined to tropical and semi-tropical regions where the small amount of water vapour in the atmosphere allows much infra red to penetrate and where a dry earth, especially a sandy or rocky situation, is heated by the sun, were the ground moist much of the solar energy would be expended in evaporation Thus at Singapore, with the sun vertically overhead twice a year, heat-stroke is far less common than in the North-West Provinces of India and in Mesopotamia Thick turbans and sun helmets—especially those provided with thin aluminium foil as recommended by Crowe—serve to protect the head, but may fail unless whole skin is acting efficiently as an evaporating radiating surface There are descriptions in Lawrence's *Seven Pillars of Wisdom* of the extreme conditions

unmitigated sunlight, baked reflecting surfaces and hot winds in which well trained men can yet endure great muscular exertion and fatigue But they eat sparingly and drink water of varying degrees of brackishness which provides against salt depletion Moreover through long exposure their bodies are provided with larger skin capillaries than in the shielded bodies of Europeans In erythema the surface capillaries become dilated, but with constant exposure, as on faces and hands they become larger No one can see the splendid general tone of the skin of those who take even short regular sun baths on the sea front in Plymouth without realizing that an unsunned skin is unnatural and may consequently be expected to fail when extreme calls are made on its heat-regulating powers The function of the skin in heat regulation may be considered as of prime importance to health and we need probably look no further than a pure heat effect for the stimulation of the powers of the body resulting from exposure to sunlight, which is capable of raising the tissues to well above their normal temperature to a depth of over one centimetre as shown by Sonne also by Loewy and Dorno

Figs 4 5 and 6 are reprinted from the *Proceedings of the Royal Society* by permission

Clinical Memoranda

Volvulus of Pelvic Colon in a Young Person An Unusual Complication of Appendicectomy

Volvulus of the pelvic colon rarely occurs in young people L E C Norbury in an article on left iliac fossa pain describes a personal case of a girl aged 20 in whom the gut twisted a second time almost exactly a year after the first occurrence At her second operation the pelvic loop was resected after Paul's method A definite degree of megacolon was present Other cases are recorded complicating pregnancy and labour including Jellinghaus's case following Caesarean section, though the age of the patient was 37 Foote records volvulus of the pelvic colon in a mentally deficient male aged 22 My case is of interest not only from the point of view of the youth of the patient but also because it presented itself as an acute obstruction on the ninth day after an otherwise uncomplicated appendicectomy

Four months ago a domestic servant aged 20 was admitted and operated upon for an attack of acute appendicitis typical except for the lack of the initial central abdominal pain Through a lower right paramedian incision an acutely inflamed appendix stiffened with oedema and covered with lymph was removed The appendix was unperforated and the abdomen was closed without drainage and without exploration of any other viscus Convalescence was normal in every way until the ninth day—that is thirty six hours before her proposed discharge from hospital In the evening of that day she was seized with acute lower abdominal pain and had vomited some four times before I saw her five hours after the onset of the complication She was obviously ill and distressed with a subnormal temperature and a pulse rate of 116 Her tongue was furred and she had passed no flatus since the onset of the pain though the morning bowel action had been regular since operation The abdomen was tensely distended this seemed to be most marked beneath the incision which had by now healed The rectum was empty and even somewhat ballooned

Upon a diagnosis of acute intestinal obstruction probably from rupture of the deeper layers of the wound she was taken to the theatre and the original incision reopened It was soundly healed and the cause of the obstruction presented itself as the familiarly large loop of sigmoid colon The bowel was decompressed with a trocar and cannula and a twist of 180 degrees undone The attachment of the mesocolon did not appear unduly narrow and no fixation was attempted A long rectal tube was passed up to the splenic flexure and the peritoneum closed around a pelvic drain owing to the fact that free fluid was present in the peritoneal cavity The bowels acted copiously on the table and regularly after operation Peritoneal drainage was rather more copious than was expected and the peritoneal infection prevented an uninterrupted recovery The patient was transferred to the country eleven days after her second operation and she has remained symptom free since then

A radiograph of a barium enema taken after convalescence shows that the rectum and colon up to the splenic flexure are rather wider in calibre than normal and the haustrations are less well marked A condition of megacolon is not present

I am indebted to Mr Eric Crook on whose behalf I treated the case for his help in the after care following the second operation and for his permission to submit these notes

K L JAMES MS FRCS
London W C 2 Surgical Registrar Charing Cross Hospital

BIBLIOGRAPHY

Norbury L E C (1933) *Medical Treatment in General Practice* 4 304
Jellinghaus C (1932) *Zbl Gynak* 56 1289
Foote E M (1899) *Boston med and surg J* 140 233

Cervical Pregnancy

I would like to bring to notice two recent cases of cervical pregnancy on account of their rarity

Case 1—On December 11 1937 a patient was admitted with a history of four months pregnancy She was in a state of toxaemia with face drawn and haggard tongue coated brown and cracked a pulse of 140 and a temperature of 103 The bladder was distended and the urine on removal was found to be fetid and dark in colour containing traces of albumin blood and pus The level of the uterus was to just below the umbilicus and she was having violent contractions Examination showed a globular swelling, pressing outside the vagina and obliterating it A small dimple was visible about its centre representing the cervix The appearance was that of a typical haematoma A longitudinal incision was made over the cervix and a four months foetus and placenta were removed The placenta was found partly in the bulging cervix and partly in the uterus and the whole foetus was in the cervix The patient developed white leg, was treated with prontosil and sulphonamide P and left the hospital well

Case 2—On December 21 1937 this patient was admitted with a history of ten months pregnancy She was toxic and her tongue was furred her pulse was 130 and temperature 102 Her bladder was distended and the urine on removal contained pus On examination a large contracting uterus was found and in place of a cervix a globular mass was felt but no opening was apparent With a speculum a small dimple was seen in the centre of the swelling. A Caesarean section was performed The walls of the uterus were dark in colour thickened and almost fibrous in texture there was no bleeding on cutting into the uterus A large over mature dead child was removed The mucous membrane lining the uterus was thick and oedematous and the membranes had to be peeled off The placenta dark and sodden was found in the distended cervix down below The uterus contracted fairly well but owing to the septic condition of the walls of the uterus it was considered advisable to perform hysterectomy This was done An opening was made in the lower dilated portion of the cervix and a tube was left in position draining into the vagina The patient was treated with prontosil and sulphonamide P and after a fairly stormy convalescence returned home well

L TARLETON MRCS LRCP,
Jodhpur India Medical Superintendent Jaswant Female Hospital

Reviews

THE HYPOTHALAMUS

The Hypothalamus Morphological Functional Clinical and Surgical Aspects By W E Le Gros Clark D Sc, F R C S, F R S, John Beattie M D, D Sc George Riddoch M D, F R C P and Norman M Dott, F R C S Ed Published for the William Ramsay Henderson Trust (Pp 212, over 100 illustrations 12s 6d) Edinburgh Oliver and Boyd 1938

This splendid monograph is based upon four lectures, now elaborated and brought up to date, which were delivered in 1936 under the auspices of the William Ramsay Henderson Trust Each of the lecturers in his own sphere has long made a special study of the anatomical, physiological, clinical, or surgical problems presented by the hypothalamus—that tiny fraction (less than 1/250th) of the brain which is now known to exercise so profound an influence over the most fundamental of our bodily and psychic activities There is surprisingly little overlapping in the lectures as now published, and when repetition has been unavoidable the different angle of approach merely corroborates some earlier observation and helps the reader to fix important facts in his memory without the tedium inevitably produced by simple reiteration Furthermore, no attempt has been made to write a *big* book, the literary style is admirable throughout, for without wasting words the information gleaned from personal experience has been clearly set forth, and the involved problems have been referred to with the modesty and wisdom which characterize only those who appreciate the limitations of their knowledge

Professor Le Gros Clark deals with the histological structure of the mammalian hypothalamus, and discusses the comparative anatomy of these parts in the lower vertebrates, finally contrasting the features in the lower forms with those found in the human brain An extremely interesting section of this lecture deals with the rich blood supply to the hypothalamus, and the theory that the hypophysis may be functionally linked to the hypothalamus by a hypophyseo-portal system of blood vessels is thoroughly considered, though it seems to be impossible at present to arrive at a definite conclusion on this matter

The functional aspects of the hypothalamus are reviewed by Dr John Beattie, who puts forward his reasons for regarding the hypothalamus as having a dual mechanism, one part activating the parasympathetic and the other the sympathetic portion of the autonomic system, the two parts being antagonistic yet controlled so as to maintain a constant internal environment within the body As he justly remarks, if the complicated structure of the hypothalamus, with its numerous centres and tracts, does not seem to harmonize with such an apparently simple dual mechanism, then the only alternative is to regard the hypothalamus as a single unit, comparable to the cerebral cortex in its method of receiving, selecting, and transmitting nerve impulses to and from other parts of the nervous system It is difficult to decide which of these two conceptions approximates more closely to the truth, but the theory of the dual mechanism offers a satisfactory explanation for the response of the body to cold and heat

Dr Beattie discusses For the relationship of the hypophysis to the hypothalamus other nervous pathway connecting the two is regarded as more probable, the possibility that chemical substances pass more or less directly to the hypophysis from the hypothalamus cannot be denied, but the balance of evidence at the moment seems to be against a direct connexion by a system of "portal" blood vessels

The lectures by Dr George Riddoch and Mr Norman Dott on the clinical and the surgical aspects of hypothalamic disorders are full of interest, not only to the neurologist but to the general physician as well Every thoughtful surgeon must also find that these clinical records throw fresh light upon many of the yet unsolved problems of visceral disease, such as gastric ulceration, the sequelae of cerebral injury, and certain metabolic upsets In addition to a masterly description of the clinical manifestations of derangements of the hypothalamus, Dr Riddoch gives us a very clear account of an astonishingly large number of pathological processes which may be responsible

Mr Dott's contribution is a remarkable testimony to the value of surgery as an instrument of research, and a brilliant exposition of how much may be gained from the painstaking study of a comparatively small group of patients The monograph is beautifully illustrated, Mr Chesterman's photomicrographs and Miss Thom's drawings being particularly praiseworthy, and a full bibliography puts the finishing touch to a classical contribution to medical literature

BOOKS ON OBSTETRICS

A Manual of Obstetrics By Thomas Watts Eden M D, C M F R C P, F R C S Ed, F C O G and Eardley Holland M D B S, F R C S, F C O G Eighth edition (Pp 765 395 figures, 12 plates 24s) London J and A Churchill 1937

Obstetrics By Gibbon Fitzgibbon, M D, M Ch, B A O, F R C P I F C O G (Pp 484 167 figures 16s) Dublin Browne and Nolan 1937

Essentials of Obstetrical and Gynecological Pathology with Clinical Correlation By Marion Douglass, M D, F A C S, and Robert L Faulkner M D (Pp 187 148 illustrations 21s net) London Henry Kimpton 1938

A Textbook of Midwifery for Students and Practitioners By R W Johnstone C B E, M D F R C S Ed, F C O G Ninth edition (Pp 483 282 illustrations 18s net) London Adam and Charles Black 1937

This latest edition of Eden and Holland's manual contains several additional features of interest The general arrangement is the same as before, but many individual chapters have been rewritten, including those on the anaemias of pregnancy, pyelitis, and abortion There are many new illustrations, and though in some aspects, such as the chemotherapy of puerperal sepsis, even the most modern textbook becomes out of date almost coincidently with publication, the latest advances are described in the necessary detail The mature experience and judgment of the authors are evident everywhere throughout the book which adequately continues its original high standard

Written by one of the Rotunda's most distinguished Masters, Gibbon Fitzgibbon's *Obstetrics* provides in a concise and extremely readable form the main teaching of the Dublin School It has been written mainly for the medical student and general practitioner, and few manuals on the subject are so adequately designed to provide the balance of theoretical and practical knowledge required for this combination Many of the author's views are undoubtedly controversial, such as his advocacy of the induction of premature labour in primigravidae as the ideal treatment for disproportion, and his recommendation of pubiotomy for impacted brow presentations, etc It is also a little strange that in an authoritative treatise as this ergometrine is not even mentioned while radiographic pelvimetry is dismissed in a few lines The

of Willett's forceps is only mentioned to indicate that the author has no personal experience of the method a somewhat disarming admission in view of its almost universal adoption in this country at least With these exceptions however the book is a handy and concise compression of modern obstetric teaching and provides a happy medium between the better known but generally more cumbrous volumes and the usually too short synopses now in general use

Essentials of Obstetrical and Gynecological Pathology is the latest of the recent spate of textbooks devoted to obstetric and gynaecological pathology It differs however from most similar publications in that it is addressed particularly to the medical student and to the practitioner studying the problem for the first time In addition there is a considerable amount of space devoted to clinical diagnosis and treatment Each disease is thus described in all its aspects and the result is a very useful summary of modern gynaecological teaching The compression of so much matter into so short a space has made the book a somewhat elementary and therefore dogmatic one but this adds to rather than detracts from its original purpose The illustrations are simple and appropriate but as in so many recent American textbooks the English is so transatlantic in style that it is often difficult to understand without very careful perusal

The new edition of Professor Johnstone's *Textbook of Midwifery* maintains the high standard of its predecessors The general arrangement is the same with occasional additions of modern interest such as the recommendation of Calvert's urea range test in toxaemia in place of the glcbulin test the use of sulphonamide in puerperal sepsis etc One or two fallacies are perpetuated—for example the value of anti streptococcal serum—but the book generally adopts throughout the healthy conservatism characteristic of the best practice of midwifery

TINNED FOOD

Canned Foods and the Canning Industry By F Huntly Woodcock and W R Lewis B Sc With a foreword by George W Cadbury M A (Pp 119 23 illustrations 7s 6d net) London Sir Isaac Pitman and Sons 1938

The principles of and procedure for the canning of foods with a view to their preservation are included in courses at technical institutes where classes are held for the study of matters of this kind The methods used should be of interest also to manufacturers and purveyors to food inspectors in the discharge of their duty and to the general public who are the appreciative consumers of the finished product All such will find in Mr Huntly Woodcock's book an informative account of the canning industry which beginning with a note on Nicholas Appert the inventor near the close of the eighteenth century proceeds thereafter to exhibit in appropriate order how the tin plate containers are made filled and tested whence in the world the various foodstuffs originate and how they are graded prepared and finally processed in order that they may keep It is stated that traces of iron or tin derived by the foods from the tin plate of the cans are for practical purposes negligible The claim that ptomaine poisoning by canned foods is apocryphal will at once be conceded by the medical reader who will also recognize as entirely reasonable the author's pronouncement that the carefully selected cleaned and processed canned article is on the whole less likely than the ordinary run of more casually prepared foods to contain the principal infective agent in bacterial food poisoning—namely Salmonella As regards botulism it is quoted aptly enough that the only authentic outbreak in this country—that at Lochmaree in 1922—was traced to a meat product packed in glass not in a tin plate can Nevertheless since people are still so prone to suspicion it is recommended that distributors of canned foods should insure themselves against third party claims in respect of alleged food poisoning

A MANUAL OF HYGIENE

Hygiene By J R Currie M A Oxon M D Glas D P H Birm F R C P Ed Manual of Public Health (Pp 324 3- figures 15 tables 10s net postage 6d) Edinburgh E and S Livingstone 1938

Seeing that the great majority of medical students eventually undertake general practice and recognizing the increasing importance in such practice of a wide and detailed knowledge of personal domestic and industrial hygiene and of the extensive provision now made for attending to the public health there is ample room for a textbook dealing with such subjects from the point of view indicated rather than from that of a member of the public health service itself or from that of a candidate for a diploma with a view to entering that service Such a textbook is admirably provided by Dr J R Currie Henry Mechan Professor of Public Health in the University of Glasgow in a volume entitled simply *Hygiene* The author evidently intends it to be of use to the student in giving him the essentials of knowledge of the field which it covers in enabling him to meet satisfactorily any questions on these matters which he is liable to be asked in his final examinations and in aiding him to confront and understand many of the common duties and situations with which he will be concerned immediately he enters upon practice The details of public health law and administration are not dealt with but the book is informative and adequate in guidance on practical points the facts relating to which are not easy for a busy practitioner always to have in mind

The scope and scheme of the book may be indicated by some of its main chapter headings perhaps best arranged in three groups (1) inheritance maternity and child welfare school hygiene industrial hygiene social insurance (2) food ventilation heating lighting water supply waste disposal housing (3) personal hygiene infection and prevention infestation community diseases The proportion observed is judicious the arrangement easy of reference and the presentation interesting though at times perhaps too concentrated Opinions expressed on such subjects as eugenics and a maternity service are moderate wise and in conformity with general medical opinion A few detailed points may be noted In dealing with national health insurance the differences between Scottish and English requirements with regard to records especially might well be mentioned the disciplinary machinery as affecting practitioners might be somewhat more fully set out and the method of remuneration is not quite accurately stated when it is said to be at the rate of 9s per annum for each person on his list An exact understanding on these points is of real value to the young practitioner if misconceptions which sometimes give rise to trouble are to be avoided In the section on mental defect it might be emphasized that there is a continuous line of variability in mental power from the idiot up to the normal person and the reference to dull and backward children might be brought into closer association with this chapter In the section on vital statistics a description of fertility rates and some discussion of the

population question would be helpful The statement in reference to domiciliary attendance on public assistance patients that 'in large and densely populated cities with much aggregation of poor persons the only workable way' is by the appointment of whole-time district medical officers should be reconsidered, and experience of providing this by the "panel" or "open choice" method is now sufficient for its effects and advantages to be noted These are all minor points and are only mentioned so that Professor Currie may consider whether he would wish to make any alterations or amplifications such as those indicated if, as is quite probable, his book becomes one of the recognized textbooks on the subject for medical students and practitioners

ARTHRITIS, FIBROSITIS, AND GOUT

Arthritis Fibrositis and Gout A Handbook for the General Practitioner By C W Buckley M D, F R C P (Pp 153, 24 figures 7s 6d net) London H K Lewis and Co 1938

Dr Buckley has assembled his ripe experience of the 'rheumatic diseases" into a small volume founded on a series of postgraduate lectures For the general practitioner this book could hardly be bettered It is concise, practical, readable, and, above all, sane and well balanced Rheumatoid arthritis, chronic villous arthritis, osteoarthritis, spondylitis, fibrositis, and gout are dealt with, acute rheumatism and the specific arthritides being definitely excluded

The reader will find in this book a fair discussion of all the modern therapeutic methods, exposing the unguarded enthusiasm of certain pioneers who are apt to push a new treatment in these diseases, which are all too common and all too difficult to treat, because they see therein personal opportunity Thus, in the discussion of gold treatment stress is laid on the real risks and the precautions which ought to be taken to avoid them, while welcoming the very encouraging advance which has been made through these methods in the treatment of rheumatoid arthritis With the success of vaccines, which are all too easy to administer, Dr Buckley from his ripe experience is not very much impressed The best he can find to say about this very popular method of therapy is that vaccines will sometimes do good, and if the dose is small there is little or no risk As might be expected, the chapters on spondylitis are excellent and authoritative, for to this disease Dr Buckley has devoted great attention in recent years His book is a really valuable summary of present knowledge and is to be thoroughly recommended

Notes on Books

The *Life and Letters of Fielding H Garrison* is published by the Medico-Historical Press, Boston During his busy life of threescore years and five Fielding Garrison, author of the wonderfully complete and accurate *Introduction to the History of Medicine* was an official librarian in the Army Medical Library, Washington, from 1891 to 1930, where he carried on the tradition of J S Billings and Robert Fletcher and for the last five years of his life at the Welch Memorial Library Baltimore His colleagues have paid many tributes to his labours, and now Dr S R KAGAN of Roxbury, Massachusetts, has brought out this account of him as medical historian, bibliographer and biographer, as a man and as a cultivated musician a mathematician and a physicist More than this Dr Kagan has brought together the numerous tributes to this versatile but modest and very sensitive personality, and collected here many of the letters he wrote, especially to Dr E C Streeter, Dr F R Packard, Editor of the *Annals of Medical History* and Sir D'Arcy Power He was a great correspondent, and thus made friends whom he never saw, such as Sir Clifford Allbutt Professor Charles Singer, who had corresponded with him for sixteen years before they met in 1930 when Garrison paid his only visit to Europe, described him as "the most modest and retiring of scholars, but at the same time an acute and searching critic" It was, perhaps, characteristic of him that he omitted from the great Index Catalogue of the Army Medical Library many of his own valuable writings

The London Regional Advisory Council for Juvenile Employment appointed by the Minister of Labour has issued a revised edition of the *Guide to Employment for Boys and Girls in Greater London* first published in 1928 It should prove a useful handbook for all who are concerned with the vocational guidance of young persons, though it should not be regarded as a substitute for personal advice, which can be obtained from the juvenile advisory committees attached to employment exchanges and the juvenile employment committees established by local education authorities The Guide is published by H M Stationery Office, price 2s

Well within the intellectual and financial compass of all *A Guide to Human Parasitology*, by Professor D B BLACKLOCK and Dr T SOUTHWELL, is probably the best elementary textbook on the subject A third edition has now been published by H K Lewis and Co at 12s 6d Supplemented by a course of practical work it will provide a sound base from which the student may advance confidently to intelligent practice or future study in the field of disease caused by animal parasites

Preparations and Appliances

LACTOFLAVINE

Lactoflavine B D H (British Drug Houses Ltd) is a synthetic pigment identical with the naturally occurring substance Its formula is pyrimidine azine benzene dimethyl *d* ribose

Lactoflavine (vitamin B) occurs naturally associated with vitamin B (the rat anti dermatitis factor) and the pellagra-preventing factor, which is believed to be nicotinic acid In the body lactoflavine is phosphorylated and the compound is combined with a protein to form Warburg's yellow respiratory pigment The latter appears to be an essential portion of the respiratory mechanism of cells The effects of lactoflavine deficiency are uncertain, but it is believed to cause cataract and neural degeneration

The manufacturers suggest the trial of the synthetic product as an adjuvant in various forms of anaemia, cataract, and certain cyanotic conditions It is only a few years since vitamin B$_2$ was shown to be lactoflavine and the speed with which the synthesis of the latter has been achieved is remarkable This synthesis provides a supply adequate for clinical trials and we may reasonably hope for a rapid increase in knowledge regarding its therapeutic value

A BREAST RELIEVER PAD

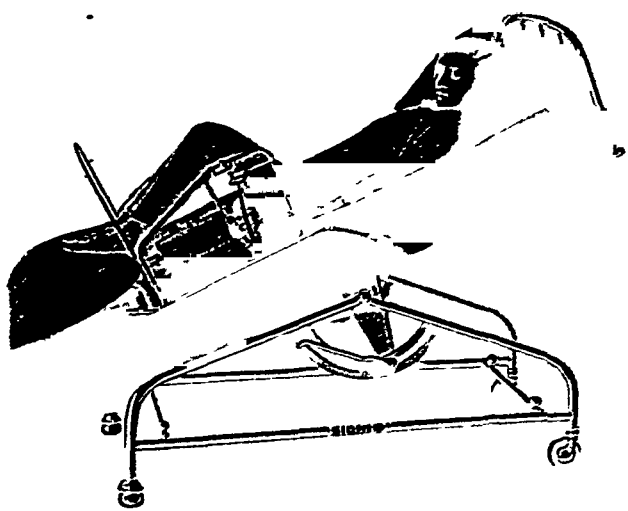
When a flushed and tender breast has to be evacuated during the puerperium the process is likely to be painful even with the modern type of breast pump To make things easier a special sponge filled rubber ring has been devised to fit over the nipple between the breast pump and the breast The makers, Messrs J G Franklin and Co, india-rubber manufacturers, 15, Colvestone Crescent London E, claim that their product the simplic patent breast relief pad' has proved on clinical testing to supply great comfort and relief The retail price is 2s 6d

USES OF A NEW TILTABLE BED WITH DONKEY

Dr F C EVE FRCP (Hull) writes

The illustration shows without verbal description the ease with which an effective and desirable tilt can be attained and clamped The *feet down* position is used in heart cases pneumonia asthma the Fowler position and in anasarca with puncture drainage (highly effective) the *head down* position in shock spinal anaesthesia bronchiectasis parturient haemorrhage to stop death rattle and to prevent deglutition pneumonia by the patient swallowing uphill (*Clin J* October 1937) Artificial respiration by my rocking method may be maintained for a few days by rocking the bed through 80 degrees a dozen times a minute and has saved life in diphtheritic paralysis of the diaphragm (*Lancet* 1933 2 740)

The tilting bed would be useless without the adjustable donkey which tied as it is to the bed frame prevents the tilted patient from slipping down at all Bedsores are avoided because the weight of the tilted patient is taken from the sacrum to the thighs Thigh length varies greatly hence the height of the arch of the inverted hammock is made variable by merely slackening two lateral straps The bare hot bottle



is placed under the arch of the donkey where it cannot touch the patient and whence the hot air circulates round the legs The donkey is also useful in an ordinary flat bed where it entirely prevents the usual slipping and hoisting of a propped up patient For phlebitis and swollen legs the donkey is reversed to encourage return circulation by an effective slope

In the post operative Fowler position the drainage tilt (intermittent if desired) is attained with a straight spine and a flat abdomen instead of the usual bent spine and bulging abdomen conducive to ileus and stretched incision This is an important gain A new lateral Fowler position is made possible (knees on mattress thighs on a pillow on the donkey) for dependent drainage after chest or kidney operations

The heels do not press on bed or donkey thus avoiding bedsore or the common heel pain An arched rod takes the pressure of the bedclothes The donkey—used on any bed or couch—produces an extraordinary feeling of complete relaxation due to its straightening the lumbar spine and semi flexing the three great leg joints

Gravity is the old enemy of the nurse and her toneless patient in bed these two devices are designed to convert gravity into a friend Experience has convinced me that they open up to the ingenious clinician and surgeon new opportunities of affording comfort and cure or of saving life

The manufacturers (Messrs Siddall & Hilton Sowerby Bridge Yorkshire) have been at pains to meet clinical requirements at low cost A fuller paper with illustrative cases is pending

USE OF A STRETCHER AS A SPLINT

Mr D G DUFF FRCSEd (Denbighshire Infirmary) writes

Under the stimulus of a letter describing their requirements from Dr C Paget Lapage chairman of the First Aid Committee of Mountaineering Associations I have worked out a stretcher system which may find a wider applicability in first aid work—for example in mines and in the Services It will be realized that in rock climbing and mountaineering methods of first aid treatment and transport are very fully tested A cross bar of mild steel (three quarters of an inch wide by a quarter of an inch thick) slides over the foot ends of the poles of a wooden stretcher (telescopic handled or standard) fixing in position by a strong screw through each pole at the site of an existing metal band This cross bar will be recognized as a modification of the usual suspension bar used for a Thomas splint It stands only five inches above the canvas and projects three inches beyond the foot of the stretcher It has two screw clamps on each side which can firmly grip the notched lower end of a Thomas splint previously fitted to the right or left leg of the patient A second light bar across at



canvas level gives a support under the foot of an uninjured limb

A twenty inch broad canvas band fixed to the stretcher pole at one side passes over the patient's pelvis abdomen and chest and straps to the opposite pole so as to secure him firmly a central lacing allowing the necessary expansion for stout patients Shoulder straps fixed to the canvas behind come over the shoulders to fix like braces to the canvas belt in front A broad band passing through eyelets in the canvas and normally in use to close the opening of the pillow pocket is used to secure the patient's head to the canvas in cases of cervical spine injury

A patient so splinted to the stretcher may be carried on a slope raised or lowered in a vertical position by ropes tied to the stretcher the Thomas splint being used for him to sit in as in a walking calliper whether there is a fractured leg (the usual injury) or not The patient is thus secured from painful movement even in the case of fractured spine chest wall etc during his transport from the site of accident no matter how difficult of access until his reception in a hospital bed The stretcher and apparatus illustrated have been cheaply made by local craftsmen It is 6 feet 3 inches long and handles extend 20 inches A criticism is of course in its reliance on the Thomas splint the use of which is not yet normally taught by ambulance associations It is hoped however that the apparatus described will help to alleviate physical pain and nervous shock

EFFICIENCY OF STEAM STERILIZERS

BY

H. R. RISHWORTH, F.R.C.S.

District Medical Officer, Indian State Railways Late Honorary Surgeon, St George's European General Hospital Bombay

Experiments recently published in the *British Medical Journal* (Hayes, 1937) indicate that surgical sterilizers may be dangerously inefficient Stress has been rightly laid on the mode of packing and the nature of the material sterilized It seems worth while inquiring, however, whether the usual method of pressure-gauge control and the system of timing the period of sterilization now used are satisfactory in these instruments Nearly all the published tables giving the properties of saturated steam have been constructed on empirical formulae based on the researches of Regnault on pure steam Table I (Low 1931) gives the figures for pure saturated steam at pressures and temperatures within a range applicable to the subject under discussion

TABLE I

P (lb)	PG (lb)	T (F)	T (C)
20	5 3	227 9°	108 8°
24	9 3	237 8°	114°
25	10 3	240°	115 5°
26	11 3	242 2°	116°
27	12 3	244 3°	118°
28	13 3	246 3°	119°
30	15 3	250 3°	121 5°

P = Absolute pressure PG = Gauge pressure T = Temperature
Absolute pressure = gauge pressure + atmospheric pressure (14 7 lb per sq in)

It is certain, however, that in the majority of sterilizers in use to-day we are not dealing with pure saturated steam but with a mixture of steam and air, and the inferential temperatures in these tables, therefore, cannot without modification be applied directly in practice

If the degree of preliminary vacuum in a chamber is known it is a simple matter to ascertain the true pressure of the steam in any given mixture of steam and air The usual pattern of ejector used in sterilizers cannot be expected, in a single operation, to produce a vacuum of more than 10 inches of mercury (Underwood) Suppose the preliminary vacuum to be 10 inches, the residual air will then be at a pressure of 10 lb per square inch (approx) If steam is now let in up to a gauge pressure of 15 lb the absolute pressure of the mixture will be 30 lb of which the steam accounts for 20 lb (Dalton's law) Steam at an absolute pressure of 20 lb can only attain a temperature of 227 9° F (see Table I), but it is not uncommon for a maker to assume that a gauge reading of 15 lb obtained in this way is sufficient evidence of safe working

Table II shows the possible temperatures of steam at different pressures for given mixtures of steam and air It can be seen from this table that a temperature above

TABLE II—*Temperatures at Different Pressures of Mixtures of Air and Steam*

Gauge Pressure in lb	Pure Steam	Steam and Air at 22 5 inches Vacuum	Steam and Air at 15 inches	Steam and Air at Atmospheric Pressure—that is no Vacuum
10	240°	230	220°	193°
15	250	242°	224°	212°
20	259	258	245	226°

240° F with a gauge reading of 15 lb is only possible in a chamber with a preliminary partial vacuum of 22 inches of mercury, a figure which is more than double the capacity of the average steam-ejector mechanism for a single working

The standards for effective sterilization given in surgical and bacteriological textbooks are not comprehensive enough The usual expression met with is "pure steam at a temperature of 240° F for twenty minutes," and while this is strictly accurate as a statement of fact it is of little use in practice to makers and operators, since pure steam is not used in the vast majority of sterilizers on the market to-day A practical and comprehensive standard should read as follows

A temperature of 240° F or 115° C obtained by pure steam under a pressure of 10 lb per square inch, or, if any mixture of steam and air is used at such additional pressure as will fully compensate for the partial pressure of the air"

In addition to the effect of residual air on temperature it is important to examine the time factor A pressure-gauge reading is the result of a comparatively rapid response of the instrument to any changes in pressure This condition, however, cannot obtain with regard to temperature Time is necessary to build up a given temperature, and a thermometer rise will always show an appreciable lag after a given pressure gauge reading It is thus clear that if the standard accepted is twenty minutes at 240° F, then it will be some appreciable time after the gauge reaches the desired pressure before the whole mass of dressings attains the required temperature That this period is not negligible has been experimentally proved, and the curves in Fig 1 show that it may be so prolonged that the standard of 240° F for twenty minutes is never fulfilled in what may be regarded as normal working conditions for many sterilizers on the market to day This temperature lag period, since it depends on many factors, cannot be arbitrarily fixed before the operation It will vary with different instruments In the same instrument, moreover, it will vary with different loads, depending on their nature and quantity, and also in summer and in winter Further, if the same instrument is worked more than once in succession, the second working in a warm apparatus will need a shorter time lag allowance than the first working A strong case exists therefore, for thermometric rather than gauge control of the time factor in sterilizers

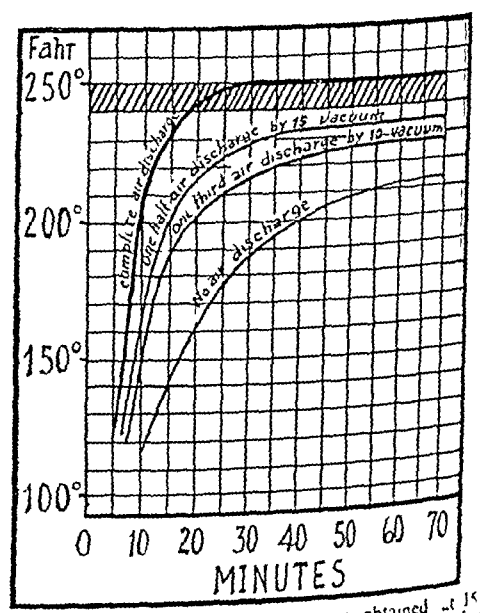


FIG 1 (from Underwood)—Temperature obtained at 15 lb gauge pressure, in a sterilizer with varying degrees of preliminary vacuum showing lag in rise of temperature and the degrading effect of residual air on the temperatures arrived from gauge readings

Numerous devices are on the market for insertion among the dressings which by fusion or a change of colour indicate that the desired temperature has been reached inside the drums These devices are not always reliable (Hayes 1937 Underwood 1934) and they have the grave defect, even when functioning accurately of not showing the precise moment when the required temperature has been attained They are of no value therefore in controlling the variable time lag factor The lag in building up the temperature may be so excessive from various causes that the fusion or colour change may actually occur just a moment before the period of sterilization is brought to an end and the sterilizer opened (Fig 1)

It now remains to discuss the means by which sterilizers can be efficiently worked and the maximum degree of safety ensured There are two ways in which the problem may be dealt with (1) the gravity discharge system, (2) the direct internal thermometer control system

The Gravity Discharge System

This is the name given by Underwood to his system of sterilizer operation It is applicable to any existing form of sterilizer provided the steam inlet and outlet are suitably placed The following is a brief description of the method Air is twice as heavy as steam and steam when run into a chamber containing air tends to float on a bed of air Gravity therefore tends to locate the air in the lowest parts of the chamber (see Fig 2) If

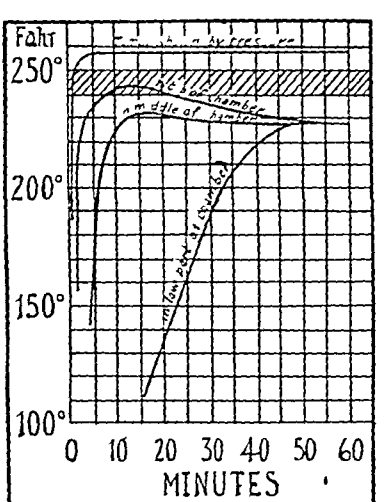


FIG 2 (from Underwood)—Curves showing differences in temperature readings in different parts of a sterilizer The coolest part of the chamber is at floor level No air has been evacuated The three lowest curves are by temperature readings the top curve by inferential gauge reading

now while steam is being run in the exhaust pipe from the chamber is kept open a discharge of air and steam and condensed water vapour will escape With the escape of air and steam there is of course a drop in the jacket pressure which at the start should have been at its maximum—that is, 10 lb The chamber pressure, owing to the fact that the exhaust is open will only rise slightly —about 3 or 4 lb It should not rise more than this If this process is continued long enough (five minutes recommended) the operator will notice a change in the nature of the escape It will at about the end of the period consist of a fine feathery discharge presumably of pure steam, as all the air inside the chamber will have been removed by the so called gravity displacement The exhaust outlet is at this stage almost but not quite shut off It is left open just enough to allow a continuous escape of this fine feathery steam vapour *throughout the entire operation of sterilization* As there is only a slight escape of steam the chamber pressure if the heating arrangement is strong enough should continue to rise until a pressure of 10 lb is obtained The operation of sterilization is timed to begin at this point and continued for twenty minutes the required pressure being maintained by the safety valve and the intensity of the heaters or burners With this method Underwood has found that with 10 lb pressure a temperature of 240 F can invariably be obtained inside the chamber as tested by potentiometer readings The temperature inside the chamber can also be deduced indirectly When all the air is out and the fine feathery vapour is continuously escaping from the outlet it is evident that a thermometer placed in the path of this vapour will give a reading which cannot be higher than the temperature of the steam in the chamber Underwood claims that a thermometer placed in this discharge vapour will record a temperature between 240 and 250 F for 15 lb pressure and by actual experiment I have been able to show a temperature of 239 F working at 10 lb pressure

It is important to note that it is not possible to prove this effectively by merely holding the thermometer in the steam current as it escapes from the outlet Steam released from a chamber under pressure expands almost adiabatically It thus becomes unsaturated and heats a thermometer very slowly (Watson 1926) To repeat the experiment correctly the thermometer bulb should be in the path of the steam in the outlet tube preferably on the proximal side of the exhaust valve

Some sterilizers have the outlet located at the top Steam is usually allowed to escape for five minutes and the exhaust completely closed before sterilization is started Owing to the relative densities of steam and air a complete evacuation of residual air cannot be effected in these sterilizers The essential requirements are an exhaust at the lowest level in the sterilizer an inlet at a high level in the chamber and a continuous escape of a fine stream of vapour during the whole process of sterilization

In actual practice the sterilizers made to Underwood's design have a thermostatic control at the outlet It expands when heated and contracts when cool The size is so adjusted to the outlet that at a given temperature it expands just enough to allow the slight continuous escape of steam essential to the correct working of this method In the path of the discharge a thermometer is inserted and in some models it may be connected with a recording device Automatic control with complete elimination of the personal factor is a comparatively simple engineering problem and is effected by operating a timing device from the discharge thermometer

Direct Internal Thermometer Control System

There are many obvious ways of working this The Cambridge Instrument Company Ltd produce a mercurial type of thermometer enclosed in a bulb of special heat and pressure resisting steel which is connected by means of a metal capillary tube to a dial or other recorder outside the chamber The range of temperature is from 50 to 300 F and such thermometers find many applications in trade and industry The capillary tube however is not a flexible arrangement so that the location of the thermometer is of necessity limited it would normally be fixed to the floor or wall of the chamber This disadvantage can be overcome by the use of a potentiometer such as a Leeds and Northrup potentiometer with flexible thermocouples which can be inserted through or under the door of the sterilizer Potentiometers are however delicate and costly instruments and not adapted to routine use A simpler and less costly device is that described by Rosenau (1903) and Hayes (1937) although with this instrument only a definite predetermined maximum reading of temperature can be recorded

Large and costly machines with patented fully automatic devices controlled from the pressure gauge alone may be seen in most hospitals and disinfection stations to day Unhappily it is not yet clearly appreciated that they are defective in two essential features and may be dangerous These defective features are first, the use of the pressure gauge as an inferential device for reading or recording temperature, and, secondly, the timing of the sterilizing process, which is regulated by clock to commence from the moment the desired pressure is attained on the gauge I have convinced a well-known firm of manufacturers of these real defects, and they have now produced an automatic control dependent on a mercurial thermostat located inside the chamber It must be remembered, however, that it is possible for a thermometer in one part to show the required temperature while another part of the chamber, depending on its position and the nature of its contents, gives a lower reading (vide Fig 2) To meet this difficulty and also to protect the thermostat from wear and tear it has been located in a suitable dummy drum placed low down and attached permanently to the door of the sterilizer This dummy drum is the model drum, and is packed with a sample of the most difficult type of material used, and the operator is instructed to see that no other drum in the load is packed more tightly Any temperature attained in this drum by reason of its contents, the method of packing, and its low level with reference to the outlet must be lower than or equal to that attained in any other drum in the load

It has been suggested that a thermostat located near the wall of the chamber is subject to radiation effects from the jacket, and may show a higher reading than the deeper contents of the chamber This objection is unimportant, as the jackets of sterilizers do not extend over the doors, and, if anything, that part of the chamber near the door is the coolest part so far as the walls are concerned, since it is subject to most loss by radiation to the metal door Smaller and cheaper sterilizers without automatic control which have little room for a dummy drum can be worked on the same principle, with a thermostat located in a small flat metal cage on the floor, the electrical connexions being carried through insulated openings in the jacket

The Two Systems Contrasted

I now come to the relative advantages of these two systems Both appear to fulfil the conditions which I have stressed in the foregoing paragraphs The choice will perhaps depend on cost and applicability to local conditions, or other features which have little bearing on their efficiency There are certain arguments, however, which should be given close attention before a final decision is arrived at It is claimed that in the gravity discharge system the control temperature at the discharge must be lower than any temperature which is attained in the chamber It is not certain, however, that the steam cannot on occasion make a rapid transit through an artificial channel among the dressings from inlet to outlet, leaving pockets of air in dead ends among the dressings The outlet temperature would then approximate to or even equal the inlet temperature, and yet appreciable areas of the chamber may be left at dangerously cool levels The case, therefore, for a reasonably high degree of preliminary vacuum which would assist diffusion of steam into the recesses of dressings remains a strong one This applies with special force when sterilizing containers with fluid media or saline, etc, which must of necessity stand with their openings upwards and thus offer the most adverse conditions for any gravity effects on their contained air Each container in effect acts as a miniature chamber, with its inlet in the worst possible position—namely, at the top

Another factor depending on the behaviour of gases when mixed should be taken into account when considering the value of a preliminary vacuum If we have a chamber from which all air has been removed, and by means of a steam pipe suddenly place it in communication with a boiler containing boiling water, the water will at once produce enough vapour to saturate the space, and the pressure will rapidly rise to a given value depending on the intensity of heat applied to the boiler (Watson, 1926) If, however, we have a chamber which has not been subjected to any preliminary vacuum and we place it in connexion with a steam boiler, the process of building up the pressure and temperature will be much slower Thus when the gravity method is used the total time during which surgical materials are exposed to heat is necessarily longer than if a vacuum process is used Although the earlier stages of heating in both methods will be represented by curves in which no point is higher than the final 240° F, nevertheless with a preliminary vacuum the rise of the curve to 240° F will be steep and rapid, but with the gravity displacement it must be slower and less steep, and the difference between the two curves will be accentuated the heavier the load and the more intricate the interspaces in the dressings The balance of economy in fuel, in time, and particularly in perishable rubber materials by reason of the additional baking period, is therefore in favour of a preliminary vacuum, since the variable time-lag factor will be less with this method

Another possible objection to the gravity discharge type of sterilizer is the use of the expansion thermostat at the outlet Even the best of these are subject to fatigue changes, and unless an adequate service department is available to effect an alteration in this device when necessary it may become a source of trouble and therefore not be so reliable as an internal mercurial thermostat with automatic control It is also possible, with a thermostatic control in the outlet, to have prolonged working without the desired temperature being attained owing to clogging of the restricted opening in the discharge valve, resulting in fuel waste and working troubles These objections lose their force in technically advanced countries, but may attain considerable importance under conditions of working in India and other places abroad, with less expert staffs They do not apply in the case of simple sterilizers without any form of thermostatic control With such sterilizers the gravity discharge system of working should be the universal method for ensuring the maximum possible air evacuation

Summary

1 Arguments are offered against the use of the pressure gauge for inferential readings of temperatures in sterilizers

2 Residual air and lag in temperature rise are two fundamental causes of inefficiency in working

3 No instrument designed to work at 10 lb pressure can be effective unless a preliminary vacuum of not less than 30 inches has been secured in the chamber, and if 15 lb is used the minimum vacuum necessary is at least 21 inches to secure a lethal temperature of 240° F

4 Two systems for ensuring maximum efficiency in sterilizers are described and their relative merits discussed

I have to acknowledge with thanks permission from W B Underwood to reproduce Figs 1 and 2 from his textbook

REFERENCES

Hayes S N (1937) *British Medical Journal* 2 86
Low D A (1931) *Pocket Book for Engineers* London
Rosenau, M J (1903) *A Practical Guide to Disinfection* London
Underwood, W B (1934) *Textbook of Sterilization* Pennsylvania USA
Watson W (1926) *A Text Book of Physics* London

The Middlesex County Council has resolved to rebuild the North Middlesex Hospital at a cost of £1,219,000 The original scheme for a building costing £1,680,208 did not receive with the approval of the Ministry of Health To provide hospital accommodation needed the Council will erect a new building at Theobalds Park and add 100 beds to proposed new hospital at Finchley

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY SEPTEMBER 10 1938

THE OCCIPITO-POSTERIOR CASE

Of the numerous conditions which give rise to difficulty in labour none has caused greater perplexity in the mind not only of the student but also of the teacher than the trivial modification of the usual foetal position known as 'occipito-posterior position of the vertex' The Section of Obstetrics and Gynaecology therefore did well to choose this subject for formal discussion at the recent Plymouth Meeting of the British Medical Association Professor Chassar Moir the first occupant of the recently established Nuffield Chair of Obstetrics and Gynaecology in the University of Oxford opened the discussion with a lucid and effectively delivered address which received a warm welcome from his hearers and will be found in the opening pages of the *Journal* this week The subsequent discussion which was strictly practical in character has been summarized already in a previous issue (July 30, p 240) It is interesting to examine this discussion from the point of view of the practitioner who, realizing the importance of the subject and its difficulties seeks guidance in the proceedings of our Scientific Sections With a unanimity unwonted in obstetric circles it was agreed that the best line of management was to correct the malposition of the head by manual rotation and deliver with the occiput in front the moment for this manipulative intervention must however, be chosen with care and judgment In only a minority of cases will it be necessary It should be further noted that by manual rotation is meant, not a mere twisting of the neck of the foetus but a complete rotation of the trunk and head so as to preserve the normal relation of the back of the head to the foetal spine This manœuvre is described and figured in every text-book of midwifery and demonstrated upon the dummy in tutorial classes, and the impression derived by the student usually is that it is a matter of no particular difficulty This impression will not be corrected until he first attempts to carry out the procedure himself upon a woman in labour and the correction of the impression may then cause him a shock which he is likely never to forget Difficulties may be said to have been the main preoccupation of speakers in the discussion at Plymouth

Accurate diagnosis which is naturally of prime importance, can only be made in Professor Chassar Moir's view when labour is in progress and then only by introducing the whole hand into the vagina, under full surgical anaesthesia Attempts to make ante natal diagnosis we learn are not of great importance since the head does not as a rule lie in an oblique pelvic diameter before labour starts it is more likely to lie somewhere between the transverse and an oblique diameter and may rotate in either direction when it settles into the pelvis Further abdominal examination is an unreliable method of determining the position for radiologists have shown that the neck of the foetus *in utero* may be so twisted as to make location of the back by abdominal palpation a misleading index of the position of the occiput In this respect views have evidently undergone some change for until recently considerable importance was attached to ante natal diagnosis and to the correction of the malposition by external manipulation before the onset of labour It now appears that the frequency with which manipulations are followed by a normal labour with delivery of the head in the anterior position may prove either that the method was successful or that the ante natal diagnosis was at fault Doubts were expressed during the discussion as to the possibility of correcting an occipito posterior position before labour by any known method and if this view is correct there is nothing to be gained by attempts at prophylactic treatment Precise diagnosis must then be postponed until it becomes possible to introduce the whole hand into the vagina without undue risk With a primipara this procedure calls for the exercise of great patience and gentleness on the part of the obstetrician, and for the establishment of full surgical anaesthesia because the vulval reflexes are often the last to disappear In the case we are considering the membranes usually rupture early moulding also occurs early and it may be found that identification of the cranial fontanelles and sutures is not the simple matter it appears to be when examining a dried specimen of the foetal skull How then in a difficult case is the position of the occiput to be finally determined? Some speakers in the discussion replied By passing the fingers far enough up to find the ear for the convexity of the helix is naturally directed towards the occiput Other speakers demurred pointing out that the external ear may be folded forwards on the face when the convexity will be directed towards the forehead Is there then nothing upon which the harassed practitioner can rely? Professor Chassar Moir says there is for by passing the fingers all round and above the head the smooth area at the back where the

occipital region passes into the nape of the neck can always be recognized and cannot be mistaken for any part of the face Diagnosis having been made the malposition is to be corrected, not by twisting the head round so as to bring the occiput forward, but by rotating the trunk with the fingers passed up behind the anterior shoulder Delivery can be effected without further delay, for the passages have been already stretched by the introduction of the hand

It cannot be denied that the Plymouth discussion is calculated to shake certain established beliefs In 1930 Dr Douglas Miller pointed out that from hospital statistics it appeared that 90 per cent of cases diagnosed ante-natally as occipito-posterior were delivered spontaneously when the membranes did not rupture early and uterine pains were effective This generally accepted view has brought comfort to many a worried mind in the past, as many other ill-founded beliefs have done in all walks of life We should all be reluctant to jettison it, because it implied that so long as labour was making normal progress it mattered little where the occiput lay It was not until the pace slowed down or labour was arrested that anxiety began, and nothing that was said at Plymouth invalidates this view If the patient is a multipara, with a pelvis of normal size or larger, and the uterine pains are regular and strong, spontaneous delivery of the head after posterior rotation of the occiput is often surprisingly easy, as was pointed out at Plymouth In the case of a primipara the difficulty of delivery is, of course, much greater and involves increased risk of injury to the child when the head reaches the pelvic floor in the face-to-pubes position One of the speakers in the discussion (Mr Bryan Williams) stated that in the Walton Hospital, Liverpool, there were in the year 1937 fifty-three cases of *persistent* occipito-posterior position, and of these forty-one were delivered spontaneously, there was no maternal or foetal mortality in the series of fifty-three cases The number of multiparae in this series was not stated, but in all lying-in hospitals they form a considerable majority Obviously then there are weighty considerations in favour of an attitude of hopeful expectancy when the existence of an occipito-posterior position is suspected before or early in labour Equally weighty considerations there are which urge that hopeful expectancy has its limits, and if these limits are exceeded disaster may result to both mother and child The unflexed and unrotated head may prove a real obstruction to delivery, and when, in the absence of pelvic contraction, there is clinical evidence of arrest of the head, action must be taken promptly and effectively The hall-mark of the experienced obstetrician is his ability to await the favourable moment for intervention, and not to let that moment slip

Obstetric experience and judgment are not easily acquired When a student obtains his qualification to practise midwifery the opportunities he has had to gain practical knowledge of this subject, while they vary in different medical schools, never adequately fit him to deal with the emergencies of midwifery, and the new regulations of the General Medical Council which become operative during the present year will not greatly improve matters although they constitute a welcome advance A certain number of men, endowed with rare qualities, may find it possible to become self taught in the rough school of actual practice with full responsibility, their number is probably very small Opportunities for instruction in midwifery, available to men already in practice, are gradually increasing in this country but are still very inadequate The day is perhaps not far distant when the choice must be made between the present policy of training all students more or less equally and inadequately, and the alternative policy of encouraging the development of a small class of fully trained and experienced practitioners into whose hands obstetric practice would inevitably gravitate

INDUSTRIAL HEALTH

The annual report of the Chief Inspector of Factories for 1937[1] is of special interest because of its relation to the new Factories Act, 1937 Owing to the additional requirements of the Act, which came into force on July 1 of this year, it has been necessary to increase the staff of the inspectorate substantially, and there are now 290 inspectors in all This number includes eleven medical inspectors, and it is difficult to believe that only thirty-six years ago the inspectorate included but *one* medical inspector In three years' time the inspectorate will total 332, and it is not unlikely that even this number will prove, in course of time, to be inadequate for its manifold duties It might be feared that the employers would resent the additional intrusion in their factories, but the Chief Inspector Sir Duncan Wilson, reassures us on this point when he states that "at no time in the history of factory legislation have the relations between the inspectorate and the two chief partners in industrial progress—employers and workers—been closer or more friendly" He is convinced that the spirit of reasonableness existing on all sides will cause the enforcement of the new Act to proceed smoothly, and conduce to the best interests of all engaged in industry

[1] Cmd 5802 London H M Stationery Office 19 (postage extra)

Unfortunately there has been a further increase in the number of accidents reported, the total accidents (causing absence of more than three days) amounting to 192 539 and fatalities to 1 002 These figures are 9 per cent in excess of those for 1936, and they are due partly to the increased production of steel needed for armaments Another factor of importance is the employment of large numbers of unskilled men consequent on the shortage of skilled and semi skilled labour The subject of accidents to young workers which was emphasized by the Chief Inspector in his report for 1934, is again discussed in detail It is still a common experience of the inspectors to find that employers and managers 'fail to understand that knowledge and appreciation of danger are not simply inborn and that young people cannot be expected to work safely unless they are properly and sympathetically instructed Statistics are adduced which show that in a large number of factories the accidents to young persons were about twice as numerous as to adults their frequency being specially great in the first year of employment However, excellent schemes of training and subsequent supervision are reported from some districts with a consequent reduction of accidents The Factory Department has issued a leaflet on "Accidents to Young Workers," while the National Safety First Association has published a pamphlet entitled "Starting Young Workers Safely in Industry"

In his report on health the Senior Medical Inspector, Dr J C Bridge discusses the medical aspects of the new Act An important provision empowers the Secretary of State to require reasonable arrangements to be made for medical supervision when he has reason to believe that cases of illness are due to the nature of the work or where there may be risk to health from the introduction of a new process or new substance for use in a process Another important change relates to certificates of fitness Young workers will now be examined not only for fitness but with a view to determining the work for which they are suitable The practitioners appointed for this purpose are to be designated "examining surgeons" in place of the old time title of "certifying surgeons" In his report on industrial diseases Dr Bridge notes that there has been some increase in cases of epitheliomatous ulceration brought to light by thorough medical examination Cases of carbon monoxide poisoning have likewise increased, and this was chiefly due to the larger number of blast furnaces now being worked Deaths from silicosis and silicosis combined with tuberculosis showed no sign of reduction, while the number of cases of dermatitis—which are voluntarily reported—was 12 per cent greater than last year Though the medical report is not encouraging that relating to 'welfare" is more pleasing and an increasing number of small employers show an appreciation of its practical value For instance it is found that in areas where the shortage of labour is acute factories with good welfare conditions have long waiting lists and are able to recruit the best workers while the less enlightened employers are left to scramble for the remainder The extraordinary advance made by the welfare movement in recent years is illustrated by the record of a firm which had been satisfied with two wash basins for the 2 000 men in the chromium plating department of its old factory but which has excellent washing accommodation in its new works Many new mess rooms and canteens are now being built throughout the country and the Milk in Industry" scheme is meeting with great success It is now in operation in nearly 7 000 factories employing 2¼ million workers

Under the new Act the hours of employment have been substantially reduced the legal hours of sixty per week in non textile factories and fifty five and a half in textile factories being reduced to a uniform forty-eight hours It is true that most trades had already adopted a week of forty-eight hours or less the printing trade having one of forty five hours the boot and shoe trade one of forty six hours and the flour milling trade one of forty two or forty four hours Nevertheless, certain groups of employers had retained a normal working week of fifty four and a half or fifty five and a half hours so it is well that they should be made to conform more closely with current custom Also a few of them were guilty of flagrant infringements of the hours legally permitted An instance is noted of the women and girls in a laundry who were compelled to work eighty four hours a week and another of a firm of bakers who in the week preceding the Coronation employed women and young persons from 6 a m to midnight on each day of the week Fortunately such occurrences are very infrequent and there can be no doubt that the great majority of employers will loyally endeavour to carry out the requirements of the new Act

INSURANCE FOR THE MEDICAL PROFESSION

The Representative Meeting of the British Medical Association at Belfast in 1937 instructed the Council to devise some method of impressing upon the recently qualified and the junior practitioner the importance of adequate life assurance The Council referred the problem to the Organization Committee which got in touch with the Medical Insurance Agency and the result is the appearance in this week's *Supplement* of the first of a series of three articles contributed by the

Honorary Secretary of the Agency, Dr Henry Robinson, which deal not only with life assurance but also with pensions, sickness, motor-car, and, in fact all the insurances needed by the profession The scope of the articles is necessarily elementary, but the series may be commended to the attention not only of those for whom it is primarily designed but also of more senior practitioners Especially to be noted is the insistence rightly laid upon the importance of transacting all insurances of every kind through the Medical Insurance Agency, which itself came into existence thirty-one years ago by a happy conspiracy on the part of the late Editors of the *British Medical Journal* and of the *Lancet*, Sir Dawson Williams and Sir Squire Sprigge The benefits which the Agency has rendered to the profession are outstanding, but even now they are not so widely taken advantage of as they should be, a state of affairs which it is hoped this series of articles may speedily improve

EXPERIMENTAL INTERRUPTION OF PREGNANCY

The clinician at present has at his disposal only such oestrogenic preparations as are derived from natural sources—namely, oestradiol, the hormone actually secreted by the follicle, and its two degradation compounds, oestrone and oestriol The scope of activity of these substances is fairly well defined The atrophic uterus of amenorrhoea may be restored to normal dimensions and oestrin withdrawal bleeding induced Spasmodic dysmenorrhoea, uterine inertia, and atrophic vaginitis may all be successfully treated, but injection of the material is usually required Oral effectiveness is limited to the relief of menopausal symptoms The principal measures introduced to prolong the effect of the injected hormone are esterification of the hormone with benzoic acid and the subcutaneous implantation of tablets of the pure crystalline material[1] The latter has been found to produce an oestrogenic effect which may last for six weeks to three months[2] Progesterone and testosterone have for some time been available in synthetic form *Oestradiol and its derivatives, on the* other hand, have not been synthesized During the past year or so, however synthetic compounds have been prepared which show oestrogenic properties to a varying extent These compounds, it should be emphasized, bear little relation chemically to the naturally occurring sex hormones, which are *cyclo*-pentenophenanthrene derivatives One such synthetic compound with potent oestrogenic properties, diethyl-stilboestrol, has been prepared by Dodds and his colleagues and is a derivative of the relatively simple aromatic substance stilbene It is highly active by mouth and can induce a number of oestrogenic effects The fact that it is chemically unrelated to oestrin, however, makes it possible that its effects may not exactly correspond either quantitatively or qualitatively to those of the naturally occurring hormone In the current issue of the *Journal* (p 557) Parkes, Dodds and Noble report on the potent anti-progesterone effect of the oral administration of this synthetic compound, which is capable of preventing nidation of the fertilized ovum and of causing interruption of established pregnancy in experimental animals The application of this work to the human female may open up the most important possibilities, and it seems likely that hormonal prevention and termination of pregnancy are within sight, though a considerable amount of careful clinical investigation, such as is being undertaken at the present moment, is needed before any definite statement can be made on this matter The other substance investigated by Parkes, Dodds, and Noble is ethinyl oestradiol The addition of the ethinyl group to the sex hormones has been found to increase their oral effectiveness very considerably Ethinyl oestradiol, for instance, is seventeen times more effective by mouth than oestradiol Ethinyl progesterone is also active by this route, though progesterone itself has to be injected to produce any result at all Oral administration of the ethinyl oestrogen appears to antagonize progesterone even more effectively than oral administration of diethyl stilboestrol The future application of these two compounds will be watched with much interest

[1] Parkes A S *British Medical Journal* 1938, 1, 371
[2] Bishop P M F Ibid 939

IMMUNIZATION AGAINST SCARLET FEVER

Active immunization against scarlet fever is not very popular, largely because many injections—usually five—are needed, because reactions which may interfere with work or school often occur, and because protection cannot be as fully assured as in the case of immunization against diphtheria Collins,[1] studying 8,000 families in eighteen States in the USA, characterized as "surprisingly large" the low immunization rate of 4 per cent of children aged 10 to 11 In Philadelphia, in a population of almost two millions only 5,500 children are recorded as having been immunized in four years Place[2] notes that in Boston from 1913 to 1924 eighty-seven nurses among a staff of 1,009—that is, 8 6 per cent—developed scarlet fever This figure agrees well with those collected some years ago for English hospitals and by the Drs Dick in the USA[3] From 1925 to 1936, when active immunization had been adopted 1 446 nurses served in the wards of the Boston Hospital and only 1 3 per cent contracted scarlet fever After elimination of those who did not undergo the full course of five injections three nurses alone remained who had been immunized" and yet developed the disease subsequently It is of interest that in the first twelve-year period 64 per cent suffered from streptococcal infections such as tonsillitis, septic throat erysipelas, and peritonsillar while in the second twelve-year "immunization" period no evidence of increase was found which suggested that scarlet fever was occurring in unrecognized form—and there was a reduction to 4 66 per cent Much effort has been spent in attempts to make immunization more popular Kern[4] and co workers aimed at the avoidance

[1] *Publ Hlth Rep* Wash 1938 53 409
[2] *Amer J publ Hlth* 1938 28 137
[3] *Edinb med J* 1934 41, 1
[4] *J Allergy* 1938, 9 132

of reactions by giving small doses intracutaneously they state that no disability was experienced after the injection but describe swellings from one to three inches in diameter and occasionally larger Of 140 children receiving from three to ten doses 90 per cent became Dick negative yet curiously enough only 40 per cent of forty children available for re test six months later remained negative Two children who developed 'miniature scarlet fever' with rash and pyrexia after injection did not rapidly become negative Formalinization of toxin promised to be helpful though the results obtained by Toyoda and his collaborators suggested that one cannot turn toxin into 'toxoid' without lowering its immunizing power and Dr and Mrs Dick[6] were of opinion that whatever immunizing power 'toxoid' possessed was derived entirely from remnants of unaltered toxin Anderson recalls that Veldee reported that 80 per cent of children became Dick negative after three injections of his toxoid Anderson observed some 8 000 children injected with three doses of 'toxoid' *Discussing reactions he notes a "really* popular acceptance' owing to the rarity of reactions Incidentally he says that the immunization produced no more severe reactions than followed the use of diphtheria toxoid the reaction rate for which by the way is generally quoted as being about 10 per cent However only 52 per cent of the 4 783 Dick positive children became negative the variations in different groups being from 21 per cent to over 60 per cent Medical men will feel that a 50 per cent conversion is not high enough to justify the work and cost necessary to persuade the public to adopt eagerly or even willingly the use of toxoid but will continue to hope for some new discovery that may yield an improved immunizing agent It may be that Farago[8] has begun this promising journey with purified toxin adsorbed on aluminium gel given in three doses and yielding a high conversion rate to the Dick-negative condition About half the children showed no reaction but in ½ per cent scarlatinal rashes developed

PHARMACOLOGICAL ACTIONS OF ANALEPTICS

Both coramine and cardiazol particularly the former have attained clinical popularity in this country and have to a large extent replaced strychnine as analeptics Those familiar with pharmacological literature will know that the evidence regarding the action of these drugs is very contradictory and confusing A review of this evidence compiled by Professor Hildebrandt of Giessen is therefore of exceptional interest The names coramine and cardiazol suggest a direct action on the heart but with both drugs the weight of reliable evidence for such an effect is doubtful if not definitely negative Both are stimulants of the central nervous system This is clearly demonstrated by the convulsive action of toxic doses while therapeutic doses stimulate the respiratory and vasomotor centres This stimulant action has been measured in a semi quantitative manner by determining the dose needed to antagonize narcotics and particularly barbiturates The evidence as summarized by Professor Hildebrandt shows that cardiazol is a more powerful antagonist to narcotics than is coramine The summaries of the literature suggest that Swiss authors have tended to support coramine while cardiazol has found favour in Germany To several American workers however cardiazol is apparently superior to coramine and picrotoxin to both The clinical popularity of analeptics seems therefore to bear little relation to the results of pharmacological analysis of their actions

CATARRHAL JAUNDICE

Dr C E Lakin's opening paper in the discussion at Plymouth on toxic and infective jaundice reported in our issue of August 27[1] gives cause for much thought and renews interest in that important and elusive condition—catarrhal jaundice Even the name is under a cloud Though some authorities still speak of catarrhal jaundice either sporadic or epidemic others would do away with this name entirely and substitute for it that of subacute infective hepatitis or hepatic necrosis Dr Lakin considers the possibility of separating two forms of catarrhal jaundice as has been suggested by Hurst but finds it difficult to distinguish between a type due to blocking of the common bile duct secondary to a gastro duodenitis and a type due to a true hepatitis Many observations suggest that the majority of cases of so called catarrhal jaundice are in fact of the nature of a mild subacute hepatic necrosis In a very few patients the clinical and pathological picture of an acute yellow atrophy appears to supervene directly upon what at first begins as a simple catarrhal jaundice In catarrhal jaundice—or epidemic hepatitis —there appears to be an incubation period of about twenty one days and fever at the onset suggests an infective cause In support of this view come some careful and interesting studies from Copenhagen by Drs Anderson and Tulinius These workers have investigated hepatitis in pigs and other animals as well as in man By feeding to healthy pigs the liver from pigs suffering from porcine hepatitis they have been able to cause gross changes in the livers of the animals tested together with jaundice such transmission was possible from pig to pig and occurred consistently in nine experiments The next step in these researches was the withdrawal of duodenal juice from patients suffering from clinical epidemic jaundice Of seventeen pigs to which this juice (from thirteen different patients) was fed ten showed changes corresponding exactly to those of porcine hepatitis in one the result was doubtful and in six it was negative Retransmission of this human hepatitis to a second pig has hitherto been successful in only one case The occurrence of liver changes in

Exper Res Scarlet Fever 1929 Dairen Manchuria
J Amer med Ass 1934 **103** 1362
Amer J publ Hlth 1938 **28** 123
Z ImmunForsch 1938 **92** 220

British Medical Journal 1938 **2** 437
[8] *Acta med scand* 1938 **95** 497
[1] Ibid 1937 **93** 209

these experiments seemed to depend upon the liver or duodenal juice being taken from the jaundiced pig or patient early in the disease Careful bacteriological examinations appear to have excluded any known species of bacteria as a cause Weil's disease was excluded serologically, and in nine control experiments with healthy pig's liver and normal human duodenal juice no comparable hepatic changes were found Similar transmission appears to be possible in the rat, and this work is perhaps the first which has shown direct transmission of "hepatitis" from one animal to another Anderson suggests that epidemic hepatitis in man is probably an infective condition acquired through the alimentary tract, possibly from an animal jaundice, as in the jaundiced pigs used in his experiments This work is undoubtedly of great interest, and gives hope of further investigation and study of a condition in man which, though often regarded as trivial, may nevertheless in some cases be attended by serious sequelae and complications

"INFLAMMATORY CARCINOMA" OF THE BREAST

"Inflammatory carcinoma" is one of the many terms applied to carcinoma of the breast with inflammatory signs in the overlying skin, the well-known "peau d'orange" is one of its manifestations Taylor and Meltzer[1] give a comprehensive account based on thirty-eight personally observed cases and a review of the literature In their experience inflammatory carcinoma is not rare, constituting about 4 per cent of all cancers of the breast It has much the same age distribution as other cancers of the breast but is rare over the age of 70 An association with pregnancy and lactation, responsible for the term "lactation cancer," is far from constant At least two clinical varieties of the disease are distinguishable In one variety a cancer of the breast and inflammatory signs in the skin become evident at the same time, in another, inflammatory signs appear abruptly in a breast which has long contained a scirrhous carcinoma, or in the other breast, or sometimes after mastectomy for scirrhous carcinoma The inflammatory signs consist of redness, heat, oedema, orange-peel appearance of the skin, diffuse and ill-defined swelling, and sometimes pain and tenderness, but all are not observed together in every case These signs, and some histological features which have been described as "inflammatory," are almost certainly attributable to lymphatic blockage There is general agreement that the essential process is a continuous permeation of subepidermal lymphatics by cancer cells There is no true inflammation, and, in the absence of complications, there are no signs of toxaemia The term "inflammatory carcinoma," therefore, is not entirely satisfactory The disease commonly develops in obese women with fatty pendulous breasts Pregnancy and lactation predispose to it, but there is no evidence that the action of hormones can be impugned Lymphatics are abundant and fibrous tissue is relatively sparse in the lactating breast, and similar conditions obtain in less degree in the large fatty breast, it is probably these which predispose to inflammatory carcinoma Early and extensive lymphatic dissemination occurs within the breast and beyond it, and the sclerosing lymphangitis which accompanies ordinary cancer of the breast is notably lacking The histological type of the cancer is not constant It seems that the distinctive behaviour can be impressed on all kinds of mammary cancer If it be true that some women's tissues, especially the lymphatics, are so constituted that cancers which are not intrinsically exceptional behave in a peculiarly dangerous way, it is equally true that the obstacles in the way of successful treatment are formidable and complicated beyond the ordinary Hitherto the results have been almost always bad Radical excision has cured isolated cases Irradiation produces excellent immediate effects and valuable palliation, but the later course is invariably bad, and multiple irradiations must be given cautiously on account of their liability to produce severe, even fatal, reactions The potentialities of combined irradiation and surgery have not been fully explored, and radical excision after a preliminary irradiation is perhaps the most hopeful method, but with present resources the chances of curing this type of cancer of the breast are distressingly small

[1] *Amer J Cancer* 1938 33 33

THE WELTMANN REACTION

In 1930 Weltmann introduced a serum coagulation reaction which in his view indicated whether a pathological process was exudative or fibrotic, he did not claim that the reaction was specific for any particular disease It is performed by adding 0·1 c.cm. of unhaemolysed serum to each of ten tubes containing 5 c.cm. of a calcium chloride solution of decreasing strength—from 0·1 per cent to 0·01 per cent The tubes are shaken and placed in a boiling-water bath for fifteen minutes The contents of the tubes are then inspected and may be found clear, turbid, or showing flocculation The number of tubes in which coagulation occurs is known as the "coagulation band" of the serum tested In normal serum the first six tubes show flocculation, and the normal coagulation band is therefore 6 If the coagulation band is less than 6 the reaction is said to show a shift to the left, and if 7 or greater, a shift to the right S A Levinson and R I Klein[1] conclude that, in general, acute inflammatory and exudative conditions give a shortened coagulation band or a shift to the left whereas in chronic diseases characterized by fibrotic changes, in the healing stage of acute infections and in parenchymal liver damage, the band tends to lengthen or shift to the right It does not always run parallel with the sedimentation rate In tuberculosis the authors found the Weltmann test "a guide in the course of and in the prognosis of the disease," but they admit that "when exudative and fibrotic changes occur in the lung at the same time as happens frequently in tuberculosis, the Weltmann reaction may not be of great assistance" A correlation was found between the blood *p*H and the reaction.

[1] *Amer Rev Tuberc*, 1938, 37, 200

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

DISLOCATIONS AND FRACTURES OF THUMB AND FINGERS

BY

DAVID TREVOR, M.S., F.R.C.S.

[*Concluded from August 27 p. 462*]

Fractures of the Phalanges

All three phalanges of the fingers and either phalanx of the thumb are liable to be broken, the terminal and proximal being more commonly affected than the middle phalanx. Indirect violence generally accounts for fractures of the proximal phalanx, while direct violence is the common method whereby the terminal phalanx is fractured. Further, as the terminal phalanx is fairly close to the dorsal surface of the finger, the fracture is often an open or compound variety.

The proximal and/or the middle phalangeal fracture is sometimes angulated anteriorly. In the case of the proximal phalanx the deformity is due to the action of the lumbricals and interossei muscles, while fractures of the middle phalanx are angulated by the pull of long flexor tendons.

In the treatment of phalangeal fractures it is important to realize the anatomical fact that the posterior osseous wall of the flexor tendon sheath of the fingers is formed

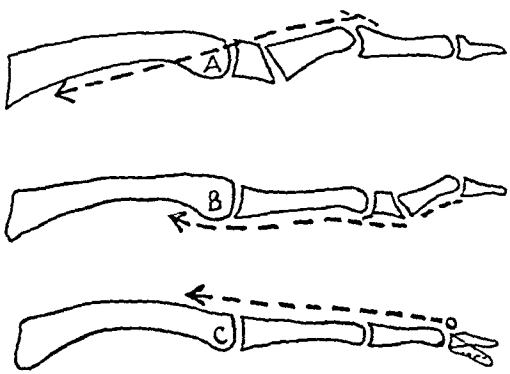


FIG. 1.—A, Fracture of proximal phalanx. Forward angulation caused by pull of the interossei muscles together with the lumbricals. B, Fracture of middle phalanx. Forward angulation caused by the pull of the long flexor tendons. C, Avulsion of a piece of bone from the dorsal aspect of the base of the terminal phalanx; this will cause a type of mallet finger.

by the anterior surface of the proximal and middle phalanges; thus it will be obvious that any forward angulation will diminish the space of the tunnel and cause serious interference with the working of the flexor tendons. This anterior angulation if present *must* be fully corrected.

Any fracture of the proximal or middle phalanx and dislocation or fracture-dislocation of the interphalangeal joint should be treated with the affected finger immobilized in flexion. Study of the anatomy of the knuckle-joint supplies the reason. On either side of the metacarpo-phalangeal joint there is a strong lateral ligament attached nearer to the narrower dorsal aspect of the head of the metacarpal bone than to its wider palmar aspect. With the finger in a straight position these ligaments are relaxed, allowing it to have much lateral mobility and rotation; but when the finger is flexed the lateral mobility and rotation practically cease on account of the lateral ligament becoming stretched by flexion of the metacarpo-phalangeal joint. Again, when a finger is immobilized with the metacarpo-phalangeal joint in a straight position the lateral ligament becomes contracted in a relaxed position; this gives rise to stiffness of the knuckle-joint in an extended position, and flexion is regained very slowly, often full flexion is not restored, with the result that some partial permanent disability remains.

Treatment

In the treatment of a fracture of either the proximal or middle phalanx with displacement local or general anæsthesia is used as the occasion demands. Reduction is effected by long axis traction of the affected finger, and this must be maintained throughout until the fracture is securely fixed; an assistant applies countertraction to the upper part of the forearm. This will correct an *overlap* of the fragments, while local pressure laterally and antero-posteriorly at the site of fracture with the finger partially flexed will correct any *displacement*. An unpadded plaster of Paris slab is then applied to the dorsal aspect of the forearm from the region of the elbow to just distal to the knuckles; the slab is fixed to the limb with a circular plaster of Paris bandage so that the wrist joint is securely immobilized but no plaster fills the palm of the hand. A padded metal splint about three-quarters of an inch wide suitably bent to the front of the distal three-quarters of the forearm, the wrist and the affected finger is then incorporated in the plaster. The finger is finally fixed to the bent splint by either adhesive strapping or plaster of Paris so that the middle phalanx is nearly parallel to the metacarpal bone, the tip of the finger should be uncovered so that the circulation through the finger can be observed (Fig. 2). There

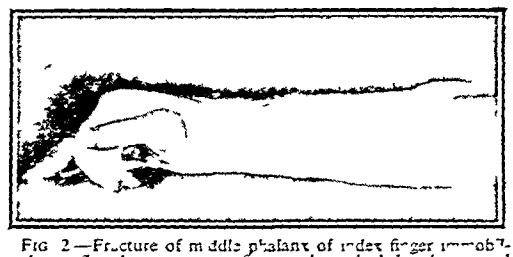


FIG. 2.—Fracture of middle phalanx of index finger immobilized in a flexed position in a finger splint which has been fixed to the forearm by plaster of Paris.

is no need for continuous traction exerted through the pulp of the finger, the danger occasionally seen resulting from the use of this continuous traction method is over-extension with separation of the fractured surfaces.

In terminal fracture the phalanx is immobilized on a straight thinly padded metal splint slightly wider than the finger and extending on the palmar surface from just beyond the tip up to but not including the metacarpo-phalangeal joint. The splint is attached to the finger by means of adhesive strapping. Occasionally a small

"chip" fracture of the dorsal aspect of the base of the terminal phalanx occurs, giving rise to a type of mallet-finger Here the finger should be immobilized with the distal interphalangeal joint slightly hyperextended (Fig 3)

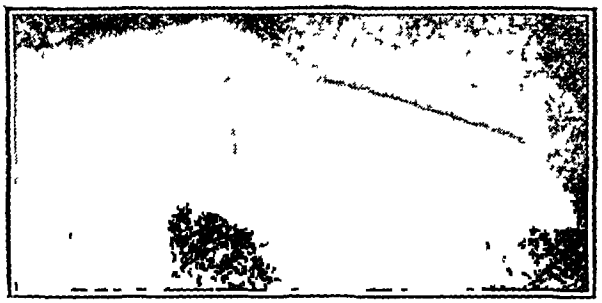


FIG 3—Avulsion of a piece of bone from the dorsal aspect of the terminal phalanx treated on a straight splint with the terminal interphalangeal joint hyperextended

Chip fractures of either condyle of the head of the proximal or middle phalanx should be treated on a straight splint in the same fashion as an ordinary fracture of the terminal phalanx

The period of immobilization for these phalangeal fractures varies from four to six weeks During this period the unaffected fingers are freely used to their full extent it is important to impress upon the patient that the more the unsplinted fingers are used the quicker the function of the hand and of the splinted finger—or fingers, as the case may be—will be regained

Dislocation of the Metacarpo-phalangeal Joint

Any of the metacarpo phalangeal joints may dislocate that of the thumb is the commonest The injury occurs from indirect violence, and the usual resultant deformity is backward displacement of the base of the proximal phalanx, while relatively the head of the metacarpal bone goes forward The dislocation can be reduced by the manipulative manœuvre of long-axis traction, against resistance, of the thumb, which is then strongly flexed at the knuckle while the traction is maintained Fixation of the thumb should then be performed by applying plaster-of Paris for two to three weeks, including the wrist-joint, and up to, but not including, the interphalangeal joint of the thumb Adhesive strapping may be used instead of plaster, but it is not so effective

Occasionally reduction cannot be effected this is said to be due to the head of the metacarpal bone being firmly gripped by the two heads of the flexor pollicis brevis an equally likely explanation is interposition of the thickened anterior part of the capsule between the metacarpal head and the phalanx If reduction by the closed method fails, then there must be resort to an open operation

The area of operation is prepared with ether and 2 per cent solution of iodine for at least twenty-four hours A small incision is made on the palmar aspect of the joint and the capsule incised and strongly retracted, the dislocation is then reduced easily Post-operative fixation of the thumb is carried out, as described, for three to four weeks—about a week longer than by the closed method

Dislocation of the Interphalangeal Joint

The interphalangeal joints are often dislocated a dorsal dislocation usually results, but occasionally a lateral dislocation occurs Reduction of the dislocation is easy, especially the lateral, for frequently, in this type, the patient himself places the finger back in position before seeking advice Dorsal dislocation is reduced, under anaesthesia if necessary—often it is not—by long axis traction followed by strong flexion of the joint, subsequent immobilization is carried out by several layers of adhesive strapping round the finger in a flexed position for about two to three weeks The lateral dislocation is reduced by long-axis traction and immobilized by adhesive strapping in a straight position

Occasionally an interphalangeal joint is the site of a fracture-dislocation in this case the dislocation is reduced and the treatment then follows on the lines of a phalangeal fracture The prognosis in this type of injury is not good, and a certain amount of residual stiffness of the affected joint is usual

Open or Compound Fractures

A word or two may be said about these fractures All patients with compound fractures—even compound fractures of the fingers—should be admitted into an institution they should not be treated as out patients Appropriate doses of anti-tetanic and anti-gas gangrene serum should be given The skin edge of the wound should be carefully excised, the wound rid of any foreign bodies and cleaned with *mild* antiseptics—for example, hydrogen peroxide, flavine, 1 in 1,000, eusol—all haemorrhage arrested, and the wound lightly approximated with interrupted silkworm-gut stitches If the tendons have been divided, suture with fine catgut No 0 should be done, as secondary suture is disappointing When both flexor tendons of a finger have been divided only the profundus tendon should be sutured so as to leave enough room inside the sheath The affected part should be immobilized on a splint in the manner described for a closed fracture, with the exception that observation of the wound can be observed without disturbing the splint The wound should be kept as dry as possible the best dressing for this purpose is iodoform powder or iodoform gauze

If a piece of bone is protruding through the skin in an open fracture it may be removed so as to allow the wound to be closed, but no extensive 'bone operation' should be performed—conservatism is the key note This applies especially to open fractures of the terminal phalanx, where bone is often exposed in a crushed fracture in the region of the nail secondary amputation can be performed successfully at a later date if necessary

---

At the end of 1936 there were in Canada 43,080 persons registered in the fifty seven institutions for the care and treatment of persons suffering from mental diseases of whom 39 833 were resident patients and 3,247 on parole The net increase in resident population during the year was 1,582 The total number of patients under care was 53,326—an increase of 2,592 patients over the number under care in 19 Of the 39 833 patients in residence, 31,268 were classified as insane, 7,711 mental defectives, 603 epileptics and 251 all with types The ratio of insane resident patients per 100,000 of the mean general population at the end of December 19 6 was 282 2, and for the total resident patients 359 5 First admissions numbered 9,002 or 74 4 per cent of the total admissions 2 121, or 17 5 per cent of the total Of the admissions 5,443, or 71 7 per cent, were Canadian born or 13 4 per cent were British born and 1,128, or cent, were foreign born The staffs of all mental numbered 7,538 and the total expenditure during the year $14,222,138

MALNUTRITION AMONG SCHOOL CHILDREN

The Children's Minimum Council whose purpose it is to ensure that no child shall by reason of the poverty of its parents be deprived of at least the minimum of food and other requirements necessary for full health has lately published a couple of pamphlets which make rather disturbing reading. They are calculated to pink official complacency on the subject of school feeding. If anybody is inclined to believe that with free meals and milk rations generally available at elementary schools malnutrition among school children has been reduced as far as is practically possible he should at least acquaint himself with the new perspective in which this council puts the matter. One of the pamphlets is entitled *Malnutrition among School Children* and the other *School Feeding in England and Wales*: both are reprinted from the Nutrition Report of the British Association for Labour Legislation and are the work of Miss Marjorie E. Green who is the secretary of the Council. They are published from the Council's office (72 Horseferry Road, S.W.1).

The Extent of Subnormal Nutrition

Of the children examined at routine medical inspections in 1936 the Chief Medical Officer of the Board of Education reported that 10·5 per cent. showed slightly sub-normal nutrition and 0·7 per cent. bad nutrition. But do the children in these categories include all whose health or physique is suffering from lack of proper food? Miss Green speaks of the deceptive air of mathematical exactitude which hangs about decimal places. The detection of the early signs of subnormal nutrition in clinical examination is acknowledged to be extraordinarily difficult. As Sir Robert McCarrison has pointed out, malnutrition is not itself a state of ill health so much as the cause of many states of ill health. In its early stages it may not give rise to any of the clinical symptoms enumerated in the Board of Education's Administrative Memorandum (No. 124) and yet it may be the cause of later disease and disability. One of the worst effects of prolonged malnutrition is that it decreases the resistance to infection and destroys the recuperative power of the body, but this is not a registrable symptom.

The writer of these pamphlets points out the significance of the fact that wherever a more thorough examination of school-children has been possible than the routine inspection (which averages only about six minutes for each child) the results show a higher percentage of defect. She instances the investigation into the health of 125 pre-school children from poorer homes in Newcastle. When they were tested by height, weight and general appearance, twenty-five were found to be unhealthy or physically unfit, but when blood and *x*-ray examinations were undertaken the number was brought up to forty-five. In some places—Wigan for example—special nutrition surveys which have been started on the Board of Education's recommendation have resulted in a substantial increase in the number of children judged to be in need of free feeding at school. The difficulty with these nutrition surveys however is that many children suffering from malnutrition may be missed in the first selection of children for the further examination. This selection is made in the classrooms and is based largely on facial expression, the least reliable of all physical signs of undernutrition.

Absence of a Normal Standard

Another difficulty in accepting the official estimates of subnormal nutrition is the absence of an objective standard of general well-being and the different interpretations put upon the word normal. To most medical officers the word probably means some sort of average, but the way in which personal factors may influence the scale is shown in one area where the number of children classified as below normal nutrition was more than twice the number of the previous year. Economic conditions in the meantime had improved, but the reason for the different assessment was that a new medical officer had been appointed from a less distressed district. How is it that Wiltshire shows 155 times as many children in the bad category as the adjoining Berkshire? Why have 48·3 per cent. of the children in Smethwick excellent nutrition and only 1·7 per cent. of the children in Reading?

Figures from various sources are brought forward by Miss Green to suggest that the number of children who suffer from dietary deficiencies is much larger than the 11·2 per cent. of subnormals in the official assessment. She also argues very convincingly on her statistics that, unless they are having school meals, children of unemployed families are very probably undernourished as an adequate diet cannot be purchased on the domestic budget no matter how carefully planned. She believes that perhaps 15 per cent. of school children are not only deprived of a sufficient quantity of protective foodstuffs but are also going short of calories or bulk food and that probably another 20 per cent., while they have a diet ample in amount, are not getting the first-class proteins, vitamins and salts necessary for growth, good health and resistance to disease. By simple dietary means the health of the school child could be raised to above its present level but to bring this about a start will have to be made with the mother and the pre-school child.

School Feeding

In the other pamphlet on the feeding of school children Miss Green traces the development of school feeding from the haphazard efforts of the nineteenth century to the Education (Provision of Meals) Act 1906 which gave local authorities powers to organize school feeding—powers which have remained practically unaltered to this day. Out of the 316 education authorities in England and Wales 172 make no arrangements for meals and sixty-nine do not provide free milk. The number of children who receive free meals or free milk or both averages 8·18 per cent. all over the country. In London it is 6·46 per cent. and the average in the county boroughs is 9·47 per cent. It is a miserably inadequate provision by whatever standard it is judged. A large-scale inquiry has shown that over 25 per cent. of children live in families in which the weekly income is 10s. or less per head. Sir John Orr found that in a sample of such families the diet was deficient for full health in every constituent examined and especially deficient in first-class protein and the protective foodstuffs.

Even among the authorities which do give free meals or milk the proportion of children fed does not always bear relation to the probable economic need. In the areas of thirty-five authorities with exceptionally severe unemployment the proportion of children obtaining free solid meals in 1935–6 was 2·7 per cent. the same as for the country as a whole but much lower than for other urban areas. Miss Green remarks that when one sees the barriers which have been set between the child and the provision of school meals the wonder is that so many children have them not that so few do.

The cheap milk scheme so far as it goes has been successful but it does not go far enough. Less than one-half the children are obtaining the milk; one-third of a pint a day is a miserable allowance and in the great majority of schools it is available only on schooldays which cover less than two-thirds of the year. Miss Green's proposals—which presumably have the endorsement of her council—include as a first step the provision of free milk for all children both on schooldays and holidays. Up to a pint a day should be given to children who can take it. She estimates that the annual school consumption of milk in Great Britain would be

140 million gallons (compared with 25 million gallons at present), and that if the industry could supply the milk at one shilling a gallon the cost to the Exchequer would be about £6,500,000 per annum, as compared with a State contribution at present limited to half a million She considers that there is a strong case also for the provision of free dinners—making the midday meal a part of the ordinary school routine and abolishing the need for any income or nutritional test The gross cost of such provision, estimated at £36,000,000 a year, might be regarded by some as beyond the realm of practical politics at present, but on the other side must be put the saving in the cost of medical services and the gain from increased economic efficiency She also insists that the services of trained dietitians working under the medical officer should be used as far as possible in drawing up the menus and organizing the service

Nova et Vetera

THE MEDICAL HISTORY OF MOZART

The recent publication by Reichner of Vienna, and its forthcoming translation by the Oxford University Press, of a facsimile edition of Mozart's own catalogue of his works recalls the sad fact that the composer died in penury and was buried hastily in a pauper's grave, having dissipated both his money and his health Wolfgang Amadeus Mozart (1756–91) forms a fascinating medical and psychological study, all the more intriguing perhaps because so many features of his story are obscure and may never be elucidated A precocious child, at the age of 4 he began to compose melodies which his father, a victim of gout, wrote from his dictation Two years later he made his first professional tour through Europe He had at least five attacks of infectious diseases, of which the first, in 1762, was probably scarlet fever In 1765, while in Holland, he suffered from what is described as *an inflammatory fever' followed by a relapse—probably* typhoid At the age of 11 he contracted small-pox during an epidemic in Vienna he was seriously ill and lay blind for nine days His quick recovery from these diseases and his apparent enjoyment of travelling, so fatiguing in those days, indicates a strong constitution Though physically healthy, Mozart was extremely nervous and highly strung He had a dread of the sound of a trumpet, becoming alarmed even to see this instrument handled At its first blast he turned deathly pale and fell to the ground in a faint Subject to colds, he was at times greatly irritated by neuralgic toothaches

Small and frail in body, Mozart possessed a comparatively large head and an enormous nose His face was pale and exceedingly mobile, changing its expression every moment, though frequently he wore a vague, distracted look An intense playful genius, he was fond of life and of the pleasures of living He loved dancing, billiards, and the society of fair women Though his character on the whole was fickle, and though towards the end of his life between fits of terrible depression he indulged in wild pursuits of sensual happiness, reports of his conjugal infidelity are exaggerated He is described as having drunk to the point of exhilaration but not beyond Overworked and underpaid, he kept late hours composing and gradually ruined his health

Pathological Speculations

In his illnesses he was attended by Dr Sigmund Barisani, a connoisseur in music, and by Gerhard van Swieten who is said to have been a great friend of the poor, but a poor friend to the great Mozart In 1791 the composer wrote his famous Requiem Mass in the conviction that he was dying having been poisoned by his enemies and rivals He was but 30 years old, and already his days were numbered He complained of headache, and his hands and feet began to swell At times he was unable to move, and he vomited a great deal Several times he swooned, losing consciousness for a few minutes, but whether these attacks were simply in the nature of syncopes or were uraemic fits is debatable Though the late Dr James Collier included Mozart in his list of the famous who have been provedly or reputedly epileptics, for this the evidence which would satisfy the scientific mind is meagre in the extreme His last illness has been variously termed "malignant typhus," "rheumatic fever," and "consumption," and in the official records it appears as a "cerebral fever" The post mortem examination showed nothing remarkable beyond inflammation of the brain No mention is made of the kidneys, which may have been overlooked or only cursorily examined It is possible, therefore, that Mozart might have been a victim of uraemia, his kidneys having been damaged by the attack of scarlet fever in childhood

His pauper's grave was left without a memorial, and the legend is circulated that his corpse had been violated so that a certain physiognomist might add this interesting skull to his collection This rumour recalls a similar fate which befell the mortal remains of Josef Haydn Two days after Haydn's burial Johann Peter, superintendent of the imperial prisons at Vienna, amateur phrenologist, stole the composer's head in order to study the "musical prominences" at the temples, and on his death bequeathed it to the Museum of the Anatomical Institute, revealing its identity Later it passed into the hands of the city's Society of the Friends of Music, and has recently been given to Prince Paul Esterhazy, in whose family estate at Eisenstadt Haydn's headless body has lain buried for 118 years Next spring a mausoleum will be completed in the parish church in which the remains of the composer are to be united 129 years after his death

W R B

MEDICINE IN ICELAND 100 YEARS AGO

At a meeting of the Academie de Medecine on August 4 1838, reported in the *Gazette Medicale de Paris* of August 11, Dr Wortenson, a distinguished practitioner of Iceland, gave the following information concerning his country The most frequent cause of death was catarrhal fever and acute and chronic bronchitis Phthisis, on the other hand was very rare The next commonest disease after catarrhal fever was chronic hepatitis, which often ended in suppuration Recovery however, was fairly frequent The most remarkable circumstance in the medical topography of Iceland was the excessive and sudden variability of the temperature which accounted for the frequency of catarrh in all diseases Rheumatism was extremely common, and often showed an epidemic prevalence with catarrhal fever and was in no way improved by bleeding In spite of the habitual humidity of the atmosphere and chronic enlargement of the liver, intermittent fevers were unknown in Iceland and, strange to say foreigners suffering from them were cured without the aid of drugs A very frequent and severe disease in Iceland but confined to one part of the island was tetanus neonatorum which usually appeared on the sixth day after birth and was not often fatal Puerperal fever was rarely seen Hydatid cysts sometimes of considerable size, were fairly frequent, and were situated in the neighbourhood of the liver or other part of the abdominal cavity Venereal diseases were quite unknown Leprosy was fairly common Plague had twice visited Iceland, but on both occasions was confined to one part of the island

One hundred and fifty years ago David Pitcairn (1749–1809) physician to St Bartholomew's Hospital first drew attention to the relationship of rheumatism and heart disease As he never published anything himself it fell to Matthew Baillie to record this original observation in 1797

Local News

ENGLAND AND WALES

Royal National Hospital for Rheumatic Diseases

A ball will be held on Tuesday October 18 in aid of the rebuilding fund of the Royal National Hospital for Rheumatic Diseases Bath when the Duchess of Kent will attend This hospital was founded by Beau Nash about two centuries ago and the original buildings are now dilapidated and unsuitable for modern requirements A new site has been obtained in the lower part of the city, and a sum of £200 000 is required for building and equipping the new institution It is stated that only 3 per cent of the patients come to it from the city of Bath whereas one fifth of the total are received from South Wales and one sixth from the London area The ball will be held in the historic Assembly Rooms, Bath which have been closed and are now to be reopened The last occasion on which a member of the Reigning House was present at a ball in Bath was in 1796 when the then Prince of Wales afterwards King George IV, attended a ball in the Upper Rooms (the Assembly Rooms), and 1 200 people were present a number which it is hoped to approximate on the coming occasion in view of the fact that the hospital is truly national in respect of the wide area from which its patients are drawn The price of the tickets is £3 3s it bought before October 1 or six for £15 15s They may be obtained from the Registrar's Office at the Royal National Hospital for Rheumatic Diseases Bath An eighteenth century interlude will be staged during the evening as an attempt to recapture the glamour of old Bath when the Rooms were originally opened

Liverpool Psychiatric Clinic

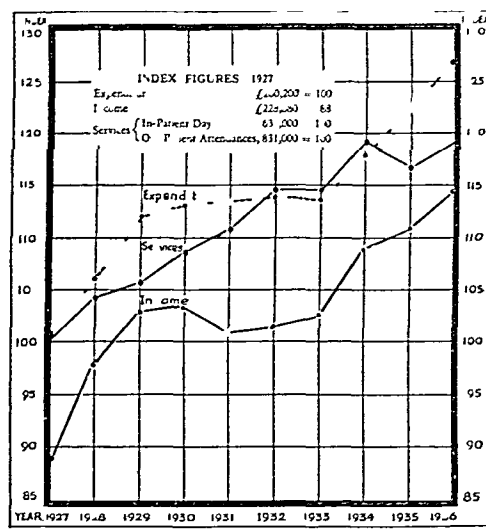
The report (1937–8) of the Liverpool Psychiatric Clinic states that the period under review has been progressive and eventful The transference of the institution to new premises more spacious, pleasant and well equipped at No 1 Abercromby Square has facilitated a considerable expansion in the number of cases treated Attendances reached the record total of 2 813 including 300 new patients The report records an important addition to the medical staff in the person of Dr Elizabeth Berndt of Berlin a distinguished German psychiatrist and an expert in the methods of psychotherapy practised by Professor Jung of Zurich During October 1937 a course of lecture discussions was delivered at the clinic dealing with psychological medicine from the standpoint of the general practitioner Weekly clinical demonstrations were also arranged It is hoped further to extend the teaching services of the clinic in the near future Among the conclusions drawn in the report it is pointed out that the high proportion of cases of adolescent instability indicates that this is a social problem for which special provision as regards diagnosis and treatment requires to be made that a large number of the cases for which social organizations are seeking help are those of behaviour disorders in girls, and that parental loss and illegitimate birth appear to play an important part in adolescent instability

London Hospitals Street Collections

By means of flag days organized in the streets by individual hospitals citizens of London have in the past been in the habit of contributing large sums chiefly in pennies for the upkeep of their hospitals These have now been combined, and by means of the scheme that has evolved under the London Hospitals Street Collections Central Committee both in 1937 and in 1938, so far as the collections have been completed more money has been obtained for the hospitals The general hospitals organized their combined Flag Day in May and arrangements for the special hospitals section on October 11 next are now being made Already Lord Luke chairman of the central committee has received many valuable offers of help Posters are being displayed by most of the local public authorities situated in the Metropolitan Police District which comprises the area to be covered and many large advertisers are giving similar assistance Further publicity has again been promised through cinema theatres Many West End hotels business houses and other centres have granted facilities for selling depots and collections on their premises This year fifty-seven special hospitals are combining their flag days on October 11 as compared with thirty three last year nearly one hundred general hospitals combined in the May collections Suggestions and offers of service will be welcomed by Lord Luke, at 36 Kingsway London W C 2 the headquarters of the London Hospitals Street Collections

The Merseyside Hospitals

A complete survey of the activities of the Merseyside Hospitals Council is contained in the annual report for 1937 (Merseyside in this context means Liverpool, Birkenhead Bootle and Wallasey) Some idea of the extent of the work may be obtained from the fact that the council handled last year an income of £194 000 A vital part of its operations indeed the very basis of them is the penny in the pound fund and the increase in the contributions under this heading was £12 656 Not the least of the activities is that connected with what is known as reciprocal agreements hospital contributory schemes in 122 other cities and towns have entered into written agreements with the Merseyside Hospitals Council to ensure



Graph depicting the increase in hospital services income and expenditure of the Merseyside Associated Voluntary Hospitals 1927–36

that the contributors on Merseyside and in the reciprocating cities and towns may have free hospital service if they need it when away from their home surroundings Excellent results too have been achieved by the 700 voluntary receiving depots established in the premises of shopkeepers whereby 45 000 people unable to contribute to the penny in the pound fund through places of employment have been enabled to buy weekly stamps near their homes and so secure the right to free maintenance on admission to hospital But every increase in the fund adds to the responsibilities of the council and there

is little improvement in the proportion of the cost of maintenance which it can contribute to the associated hospitals in return for the increasing volume of service they in turn give to contributors and their dependants So long as the employed population contribute less than the cost of the service they receive from voluntary hospitals the balance must, if possible, be found by legacies and private subscriptions The problem of hospital finance is becoming more and more acute, notwithstanding the contribution from the council s funds, amounting in 1937 to £104,656, an increase of £8,592 over 1936 In addition to this the council allocated £8,446 to the hospital visiting medical staffs in recognition of their services to contributors The report suggests that if the voluntary hospitals system on Merseyside is to continue there must be a substantial increase in the ordinary revenue, or an upward trend in the receipt of legacies, or a curtailment of the work undertaken by the associated voluntary hospitals

Supervisors of L C C Midwives

Hitherto the L C C has employed four medical officers in connexion with the supervision of midwives and allied work One of these officers has recently retired, and another is due to retire shortly The volume and character of the work have been considerably affected by the introduction of the council's midwifery scheme The supervision of the domiciliary midwives appointed by the council is necessarily more complete and systematic than in the case of the independent midwives, and more detailed than formerly in the case of midwives employed by voluntary organizations It is not possible at present to indicate the supervisory staff which will ultimately be required, but it is proposed that for the present two positions of non-medical supervisor of midwives be created in substitution for the two positions of assistant medical officer referred to above Under the revised arrangements the two remaining assistant medical officers will each become responsible for the general supervision of the midwives in one-half of the county area The non-medical supervisors are to receive a salary of £375-£25-£475, but if they have special experience of the specific duties concerned the first two appointments will be at the commencing salary of £400

Medical Society of London

The first half of the session 1938–9 of the Medical Society of London will open on Monday, October 10, with the annual general meeting at 8 p m, followed by Dr C E Lakin s presidential address at 8 30 p m On Monday, October 24, at 8 30 p m, a discussion on sulphanilamide, its use and its misuse, will be introduced by Sir William Willcox and Mr Eardley Holland A discussion on hormone therapy in gynaecological conditions will be opened by Mr Douglas H MacLeod, Dr P M F Bishop, and Mr W R Winterton on Monday, November 14 at 8 30 p m A clinical meeting will be held on Monday, November 28, at 8 p m On Monday, December 12 at 8 30 p m Mr E Pearce Gould and Dr T L Hardy will introduce a discussion on preliminary investigation in cases of malignant disease of the breast and stomach The Lettsomian Lectures, on the surgery of the gall-bladder and bile ducts will be delivered by Professor G Grey Turner on February 20 and March 1 and 6, 1939 Professor John A Ryle will deliver the annual oration on "Clinical Sense and Clinical Science" on Monday, May 8

A new illustrated pamphlet on Torquay as a health resort and residential centre is issued by the Baths and Publicity Committee of the Corporation with the approval of the Torquay Division of the British Medical Association Copies may be had free of charge from the general manager, Marine Spa Baths Torquay

Correspondence

Convalescent Serum in Infantile Paralysis

SIR —The dogmatic statement made by Drs Donald Paterson and Macdonald Critchley in their letter to the *Times* of August 8 seems imperfectly justified They state "The disease [infantile paralysis] is not one that yields to any known treatment which needs to be applied within the first few days of onset" As an orthopaedic surgeon I see so many of the tragic results of this disease that I regret this out-of-hand condemnation of early treatment, including treatment by serum, which alone seems capable—once the disease has provoked the "spinal sign"—of aiding natural resistance *I have dealt with* the advantages of early absolute immobilization elsewhere (*Proc roy Soc Med*, 1922, **15**, 59) I feel that the value of convalescent human serum, which has under certain conditions (Macnamara, J, and Morgan, F G, *Lancet*, 1932, **1**, 469, 527) given results suggesting great potency, has not been lessened by records of subsequent series of cases treated under different conditions and with different techniques, although the later series were larger and more evidential *qua* controls My own experience with convalescent serum used on the lines suggested by Dr Macnamara has been very happy, though relatively small and without controls For these reasons I asked a distinguished bacteriologist if he would review the literature He has been good enough to do so, and he writes in a covering letter "There is little doubt that complete finality in the matter has not been achieved The reading has shifted my view somewhat in the direction of reserved scepticism, and I think it justifiable from the clinical point of view to continue the use of serum I think I should feel glad if it were available for any person in whom I was interested" His report is as follows

1 In the light of the published facts any individual is justified in holding the personal opinion that convalescent serum is ineffective, because those tests that have aimed at and approximately achieved experimental conditions, with controls truly comparable to the treated cases, have failed to prove its efficacy a positive proof was to be expected if serum really 'works' No other reports have much evidential value since they all make comparisons of essentially dissimilar groups of cases and are coloured by enthusiasm for a new remedy

2 Since none of these tests actually achieved perfect 'experimental conditions, owing to the enormous difficulties and the multitude of variable factors involved, it also remains open to any individual to refuse to accept them as final This, in fact, was the attitude of almost all of those who carried out the tests

3 Examples of these uncertainties are the uncontrollable variation in the potency of serum samples, differences in the size of the dose and in the time and repetition of administration, and variably correct diagnosis of the pre paralytic stage Thus success might be dependent on these factors being exceptionally favourable and failure inevitable if they are less favourable This, though only a surmise, is a justifiable one

4 The fact that each of the several determined attempts to prove scientifically the efficacy of the serum failed to do so has necessarily induced an unbelieving attitude in most detached observers including myself to whom the balance of *probability now seems against* the serum But nothing short of a new large scale and very perfect experimental test would justify a dogmatic statement that the serum has no value in the disease

In my view variations such as those enumerated in paragraph 3 may well prove to be of critical importance the following points should also be mentioned

(*a*) The examination of muscular power should be carried out very carefully and thoroughly by someone experienced in this work if one is to be sure that the case was truly at a pre paralytic stage

(*b*) The serum to be used must be fresh and must have been obtained from fairly recent (say less than four years) convalescents from indubitable acute anterior poliomyelitis due to the same type of poliomyelitis virus—that is it must be potent in antibodies to the existing infection

(*c*) The serum is probably better without antiseptic preservation because large intravenous doses of this low titre serum must be given and to avoid meningeal irritation from the intrathecal dose

(*d*) There must be no delay between the diagnosis and the administration of serum The needle used in the diagnostic lumbar puncture should not be withdrawn until if the bedside cell count confirms the clinical diagnosis a volume of serum a little greater than that of the cerebrospinal fluid withdrawn has been injected

(*e*) A massive dose of this low titre human convalescent serum must be given by intravenous administration if the antibody value is to be comparable to the dose of tetanus antitoxin recommended by Cole (*Proc roy Soc Med* 1937 **31** 59)

Daily contact with victims of the greatest of all physical disasters that can happen to a healthy child has made me venture momentarily out of my proper sphere but I do appeal for a further use of potent serum without post puncture delay and in massive doses—I am, etc

Oxford September 1 G R GIRDLESTONE

"A Mere Examining Body"

SIR—In the *Journal* of September 3 (p 483) Sir Walter Langdon Brown in the course of a would be destructive criticism of examinations in general writes We had already travelled far from the point of view which underlay the original attitude of London University indeed it seems incredible to day that a mere examining body should ever have been regarded as a university The enormous building now rapidly rising in Bloomsbury shows how far London University itself has left such an attitude behind His thesis would seem to be that because the senate house and other portions of the new headquarters of the University are approaching completion demonstration is afforded that the attitude of the University towards its traditional examination system has radically altered Was there ever a more absurd *non sequitur*?

I can assure Sir Walter categorically that the University's attitude in this respect has in no wise changed since its foundation a hundred years ago with the express purpose of bringing higher education to large sections of the community then debarred from admission to the older universities by sex creed or race That it has fulfilled this high purpose to admiration throughout a century of activity is clear from the volume of appreciation from all parts of the world which it received in the centenary celebration in 1936 It is an ironical comment on Sir Walter's contemptuous reference to the University—before its reconstitution in 1900—as a mere examining body that it is precisely in medicine that that mere examining body achieved its greatest success Its medical degrees (and all London graduates of more than forty years standing are graduates of the examining body which for the past twelve years has given both the Royal Colleges their presidents) rapidly won such an outstanding prestige both at home and in our Dominions overseas, that the older universities, which a hundred years ago had allowed their medical degrees to become merely farcical as tests of professional competence * were obliged to change their attitude to examinations in conformity with the methods and example of the new London University The only change that the reconstitution in 1900 effected was that certain London schools were made part of the new dual University which however in no sense relinquished the function previously exercised of granting degrees on examination to students whom it had not taught This function continues to be discharged uninterruptedly by the external side of the present dual University under the general direction of the External Council In the current year 12 800 matriculated students have been registered as pursuing courses of study for external degrees of the University—a total considerably larger than the combined student body of Oxford and Cambridge estimated in the University Grants Committee's latest return as 10 813 (Oxford 4 920 Cambridge 5 893) If Sir Walter objects to this principle how does he justify the medical qualifications given by the Royal Colleges in London—which remain mere examining bodies—or indeed the practice of the older universities in granting qualifications in medicine to students whom they have not trained in the most important part of the curriculum—namely the clinical subjects—for which the older universities uniformly send their students to the schools of London University? Sir Walter himself was taught his medicine in a London University school he was examined at Cambridge—I am etc,

E GRAHAM LITTLE M D
Ramsgate September 4 Chairman of the External Council London University

* See Halevy *A History of the English People in 1815* Pelican Books vol 3 pp 178 *et seq* Neither University educated doctors If future doctors spent a short period at Oxford or Cambridge it was either under the compulsion of the rules of their profession [only graduates of the ancient universities were admitted to the Fellowship of the Royal College of Physicians of London] or because it was the correct thing to do from the social standpoint

At Oxford and Cambridge a medical faculty was for all practical purposes non-existent the lectures mere monologues of oratory the examinations a farce The two Royal Colleges in London were exclusive and reactionary corporations in close alliance with Oxford and Cambridge not for the encouragement but on the contrary for the obstruction of scientific progress

SIR—In the course of his article on the medical curriculum, Sir Walter Langdon Brown writes We had already travelled far from the point of view which underlay the original attitude of London University indeed it seems incredible to day that a mere examining body should ever have been regarded as a university Oddly enough when the incredible University of London was chartered the University of Cambridge was also a mere 'examining body The Colleges had already revived serious education but the university officers as such had little or nothing to do with teaching they effected their reforms by improving the system of examination When the great scholar Porson was professor of Greek at the end of the eighteenth century his sole duty was that of examiner (see Clarke's *Life of Porson* 1937 p 40) Indeed so far as concerns a large majority of its medical students down to our own day Cambridge University has confined itself to testing their clinical proficiency It is good fun to heave bricks at early Victorians but more intelligent to try to understand their incredible actions An article on London University published seventy years ago by one of her most distinguished graduates, Walter

Bagehot, is less known than it should be (see his *Collected Works* vol vii, pp 286 *et seq*)

'Every generation is unjust to the preceding generation,' wrote Bagehot It respects its distant ancestors but it thinks its fathers were quite wrong Just so with London University We who were educated at it grumble at much of it I at least have often done so, and have often heard others But yet I know well how much the founders of the University have done how difficult in their case was every sort of success how easy every sort of failure Thirty years ago it was a great step to establish an independent and examining University That improvement was a purely English idea, but like so many English ideas, it existed only in solution, it was there but it was hidden

He goes on to explain why this was a great step, and why it was impossible to do more

In 1938 we can do things which were impossible in 1836 and difficult in 1868, but that is no reason for sneering at what was done in 1836 Horses are not incredible means of transport because we have aeroplanes, people did travel, and travel far, on horses before we had aeroplanes, and there are still parts of the world where one must travel on horseback or not at all Nobody with educational experience needs to be reminded of the defects of 'mere examinations, but the educational system of a great Empire presents simultaneously different levels of development At one level an impartial system of "mere examinations is a valuable instrument of progress That level exists in many places still, and education still owes much to the incredible system of 1836—I am, etc

Loughton, Sept 5 MAJOR GREENWOOD

Bennett's Fracture

SIR—Two communications published in the *Journal* of August 27 were of personal interest to me The one on fractures of the thumb and fingers by Mr David Trevor (p 461) was useful and instructive for others in addition to those for whom it was intended It was particularly so to myself for I sustained a Bennett's fracture of the thumb in 1931, which disabled me for twelve months The other communication was from Mr J C Nicholson on fracture of the neck of the femur with an account of his personal experiences during treatment (p 464)

At the time of my comparatively trivial accident I thought as Mr Nicholson thinks, that the personal experience of a surgeon as a patient is helpful in the treatment of others and I published "the case Mr Nicholson believes as I did that it is of value if treatment is approached from the patient's rather than from the surgeon's point of view He describes vividly his reactions to sandbags to weight extension plaster-of-Paris, and nailing He makes interesting comments on the various stages of a prolonged and trying ordeal We read recently from the pen of a surgeon, the tragic sequence of events after he had undergone treatment with radium for carcinoma I hope we will have further opportunities to study the comments of patients who belong to the ranks of the medical profession By such a study our judgment is reinforced and our methods of treatment become more elastic and adjusted to suit the individual case To emphasize the importance of matters which are often regarded as side issues during the treatment of our patients I give a short account of my own experiences after sustaining a fracture-dislocation of the thumb Following the accident I realized that permanent incapacity as a surgeon might result The literature teemed with references to permanent disability even when reduction of the fracture was complete

The displacement was reduced under local anaesthesia, and subsequently was readjusted under a general anaesthetic The treatment was undertaken by an expert, who obtained perfect reduction and for whom I have the greatest regard The thumb was held in orthodox fashion—abduction and extension—by plaster-of-Paris in which a wire gallows was incorporated About a fortnight later, probably through some fault of my own the plaster lost its grip and the fragments slipped The plaster was removed The thumb felt now as it did before reduction as if a pair of scissors could never be employed, as if the tying of ligatures would prove impossible, and as if securing a vessel with forceps was out of the question Attempts to oppose the thumb to the other digits were futile The tip of the thumb could just approach the side of the index finger and no more I reflected on the many times I had taught students that a hand without a thumb was little better than a hook We forget, but the patient cannot do so that disablement of one thumb reduces the utility of the other hand by about 50 per cent Collar studs bootlaces, and braces were among the many trivial items which become unmanageable No further attempts were made at reduction Hope eternal rested upon occupational treatment The hand was immersed in a basin of water at a high temperature in which lay various surgical instruments Feeble efforts were made many times a day to open and close forceps to tie ligatures, and to divide them with scissors In the intervals, with the support of a tight elastic dressing the thumb was coaxed to perform other duties After seven weeks with the support in situ reinforced by two rubber gloves a minor operation was attempted with the aid of a colleague It was a child like performance Pain and awkwardness persisted for six months, but after twelve months all disability had disappeared

I can well understand Mr Nicholson's strong objection to a big hip plaster, and I was impressed with the emphasis of his condemnation In a minor way I suffered from similar discomforts

At one time, about thirty years ago, I saw plaster applied to all and sundry, and it was used largely for the ambulatory treatment of fractures In recent years there was a revival owing to the obvious merits of the methods described by Bohler Nevertheless experience has encouraged me to employ more frequently the splints and appliances recommended by the late Sir Robert Jones The contraindications to the use of plaster became more apparent At the time of my injury I knew of no efficient splint for Bennett's fracture I designed a simple apparatus, which has proved useful in practice Briefly, it is an aluminium gutter splint with a large aperture at the distal end It is applied laterally to the forearm with the thumb protruding through the aperture A wire gallows is attached which maintains the thumb in extension and abduction The method of reduction and application of the splint has been described (*Med Pr* July, 1933, p 90, *J Bone Jt Surg*, **19**, April 2, 1937) The treatment advocated by Mr Trevor has powerful support, but as a patient I would have pleaded with him against the stirrup transfixing the pad of the thumb as a means of extension These stirrups are made to perfection, but I have always disliked skeletal traction, extension from the finger-nails, or transfixion of the soft parts, as regards the thumb and fingers Transfixion of the thumb may give an eerie feeling to a surgeon when he is the patient Simple adhesive strapping and tapes, or one of the many finger extension traps, suffice as a rule—I am, etc,

London, N W, August 28 W I DE C WHEELER

Treatment of Ganglion

SIR—I read with great interest and profit Mr E Peake Gould's excellent article on the treatment of tenosynovitis and ganglion in the *Journal* of August 20 (p 415) The

are a good number of cases of ganglion which do not respond to the thumb pressure method and the patients object to the scar of a dissection I have found that the old fashioned seton is most useful Depending on the size of the ganglion one two or three silkworm gut sutures are passed through the ganglion at intervals of about a quarter of an inch Each suture is knotted to form a loop of about 1 inch in diameter and is drawn through about half its circumference daily A good deal of the jelly comes away on passing the sutures and leaks into the dry dressing afterwards The sutures set up a reaction in the tissues of the ganglion and the space is obliterated Whether this reaction is a septic or aseptic one I do not know, but I have never seen pus formation Failures are few The silkworm gut is usually removed about the seventh day, and the only scar is a white puncture mark at the site of the stitch holes I have never seen a simple ganglion in the front of the wrist, so the above remarks do not apply to that site —I am etc

Longtown Cumberland August 20 R RUTHERFORD

Reduction of Backward Displacement in Colles's Fracture

SIR —I was much impressed with Mr R A Fitzsimons s article dealing with Colles s fracture (*Journal* August 13 p 357) He rightly stresses that the majority of unsuccessful attempts at reduction are due to the application of insufficient force rather than to insufficient skill, but he then goes on to say There is no danger of over reduction of backward or outward displacements Strengthened with this statement I reduced in this hospital under a local anaesthetic a severe Colles s fracture with much backward and outward displacement, and after a plaster had been applied a radiograph was taken which showed the fracture had been over reduced, and had in fact, been converted into a Smith s fracture Hence I would point out there is a danger of over reduction —I am, etc

M F MAGNIER M B, B Ch,
Eastbourne August 22 House surgeon Fracture Clinic Princess Alice Memorial Hospital

Sulphonamide Chemotherapy in Gonorrhoea

SIR —I was greatly interested to read the observations of Dr G L M McElligott and Mr A J Cokkinis in the *Journal* of August 20 (p 424) on the comparative results of treatment of gonorrhoea with sulphanilamide, uleron and M & B 693 I have used all these drugs in a fairly large number of patients suffering from acute gonorrhoea mostly in male cases My experience has shown that sulphanilamide is much the most toxic of the three drugs that uleron is relatively non toxic and that M & B 693 is only slightly toxic With all three drugs I have never seen a case of toxic neuritis but then, like Dr Hanschell s, most of my patients have been seafarers, and possibly they may have developed neuritis after their return to sea

In my experience sulphanilamide produces toxic reactions of varying degrees of severity in a high percentage of cases so much so that many patients have to stop taking the drug or drastically reduce the dosage The usual dosage which has been adopted is that advocated by Dees and Colston—5 grammes daily for two days, 3 5 grammes daily for the next three days, and 2 5 grammes up to the thirteenth day

Uleron was used in another series of cases using the stoss dosage of six tablets daily for four days repeated after an interval of six days The results were for the most part disappointing, relapse being quite common In many cases the discharge cleared rapidly but the urine contained many pus threads from infected Littre glands Toxic reactions were almost non existent and when present were very slight

M & B 693 was used in a further series of cases the dosage being six tablets daily for five days If a good response was not obtained in this time further treatment with the drug appeared to be of no avail Toxic reactions were more frequently seen than with uleron but much less frequently than with sulphanilamide The commonest was severe headache which persisted for at least twenty four hours after stopping the drug The results obtained were definitely superior to those obtained with either of the other two drugs

With all these drugs results vary considerably and it is difficult to explain why two cases of acute early gonorrhoea should respond so differently to the same treatment One can never be sure that any particular case will respond at all It would appear that littritis is much more frequently seen as a complication in patients treated with these drugs alone than in those cases who are given irrigations in addition Perhaps after all the ideal method may prove to be irrigation for the first couple of weeks followed by one or other of these drugs The diversity of the published results would appear to suggest that much more research has still to be done —I am, etc

Liverpool August 22 ERNEST E PREBBLE

SIR —We are both grateful for and gratified by Dr H M Hanschell s kind appreciation of our paper in the *Lancet* of August 13 (*Journal* August 27 p 474) The already inordinate length of this article was the only reason why we did not add an account of our uleron cases but we hope soon to be in a position to publish a comparative analysis of our cases treated by sulphanilamide uleron and T 693 However we feel we must rise to the fly (or is it red herring?) so aptly cast by our friend Dr Hanschell to the extent of giving a few figures of our first hundred consecutive cases treated with uleron

Of the hundred cases eighty showed initial improvement amounting to apparent cure while twenty failed to respond at all to the drug Coming to final figures, and excluding eighteen who defaulted or were transferred during tests of cure or the follow up period 44 per cent were discharged as cured while 56 per cent proved to be final failures While not attempting a detailed analysis in a letter our total experience indicates that the response of gonococcal infections to uleron is much more capricious than that to sulphanilamide The stage of the disease the daily dosage the length of continuous administration the number of stosses or the intervals between them, appear to play little part in determining the final result Indeed some of our most spectacular cures have occurred under unfavourable circumstances (first week of disease) and with minimal dosage while there were many disappointing failures after adequate dosage given in multiple stosses, in the subacute and chronic stages of the disease

With regard to our five cases of peripheral neuritis one occurred four days three in the third week and one in the fourth week after cessation of uleron treatment —We are etc

A J COKKINIS
London W 1 September 2 G L M MCELLIGOTT

Complications of Chemotherapy

SIR —The annotation on chemotherapy in gonorrhoea in the *Journal* of August 6 (p 294) stressing the inherent

risks in the uncontrolled use of modern drugs of the sulphanilamide type is most timely To all those who have studied recent articles on their clinical application it will be apparent that the incidence of generally recognized complications is invariably higher in ambulatory patients This suggests that it might be desirable—although under actual working conditions it is probably impossible—to restrict the use of these drugs to patients confined to bed As a first step it might be more practical to suggest clinical research into the best methods of preventing or neutralizing these toxic effects A further point which has been apparent to me during recent work on chemotherapy concerns the cerebral depression which, in a few days or weeks not infrequently follows the therapeutic use of sulphanilamide in patients normally possessing, and requiring, a high degree of mental acuity That this phenomenon is just the after-effect of a severe illness is hardly likely since cases have occurred after relatively mild conditions, such as streptococcal sore throat, for which sulphanilamide has been used, and the depression is most pronounced following ambulatory treatment So far I have not seen any published account of this rather disquieting complication, but I hope in time to collect adequate statistical evidence to demonstrate the point more conclusively than is possible in a letter—I am, etc,

Norwich, August 27 W R THROWER M D, M R C P

Orthopaedics in Rheumatoid Arthritis

SIR—In Mr Norman Capener's paper under this title in the *Journal* of August 20 (p 391) reference is made to the correction of flexion deformity of the knee

Mechanical or splinting methods can be best applied to contractures of only mild severity In cases of severe degree the chief risk is of pressure sores Manipulation, if used at all is best used as a tentative adventure in skilled hands and only in the mild cases That manipulation is not without danger is attested by instances of fracture I have known of a fatality presumably from fat embolism occurring after a gentle attempt to extend a flexed rheumatoid knee Recurrence of the contracture is always to be feared if complete extension is not achieved In my own experience I have found the operation of posterior capsuloplasty as described by P D Wilson (*J Bone Jt Surg* 1929 **11**, 40) of great service in certain selected cases of resistant and severe flexion contracture It should be done only after the disease process has become quiescent and when the general physical condition is good Supracondylar osteotomy of the femur is also a recognized method for the correction of fixed contracture of the knee It allows the condyles of the femur to be rotated forward, thus bringing the knee into complete extension It does not increase the rate of movement but places it at the point of greatest functional value The method of Osgood (*Amer J orthop Surg* 1913 **11** 336) is to be recommended If there is much atrophy of bone osteotomy is inadvisable

Arthroplasty excision of the elbow can be a very satisfactory operation A Kocher incision is made The lateral ligaments are preserved as far as possible An ample amount of intervening bone is removed To preserve lateral stability the lower end of the humerus is cut in the form of an inverted U or V leaving the lateral epicondyles and enough bone beneath to give them strength Horsley's wax may be rubbed into the raw surfaces or a double layer of fascia lata employed In the after care there is no need to hurry in obtaining motion My practice is to keep the joint quiet for seven to ten weeks in a posterior moulded plaster splint This gives time for all reaction to settle down The movements quickly return it may be by the initial assistance obtainable from putting the joint very gently through its movements under an anæsthetic The disease process should be quiescent before the operation is attempted

Rheumatoid arthritis generally occurs in the slender congenital visceroptotic type of individual One must suppose that this type, for a number of reasons, is less able to withstand the many stresses of life than the normal or the sthenic type of individual Whether it be cause or effect, one notices that almost invariably such cases have very poor posture and tone In treatment I regard it as important that the "deranged mechanics of the physiology should be corrected During their institutional care, in suitable centres, a gradual process of reconstructive rest should be instituted, aiming, above all, at restoring a spreading out of the subcostal angle and proper diaphragmatic action

Thrice daily for an hour a pillow is placed beneath the thoracic spine and the patient lies thus with the hands clasped behind the head The mattress should be firm Instruction is given in the correct methods of breathing and also in simple lying-down exercises so that the patient may obtain a sense of active voluntary control of the muscles of the lower back abdomen, and trunk Gradually the whole appearance of the body improves, and the patient begins to lay on fat in the upper abdomen with improvement of visceral and muscular tone A posterior moulded plaster shell is made for the trunk to support the loins and to maintain the improved statics When the patient gets up she is instructed in the control exercises necessary to preserve an habitually improved posture being assisted at first by a light posterior spinal brace and corset

The orthopaedist should do much more than prevent or correct the deformities of joints in rheumatoid arthritis His knowledge of the correlation of the structure and function of the body is needed to-day in framing a national policy of physical education, so that susceptible subjects, and indeed everybody, may have their lives wisely guided in this and in other respects, in particular, as to how to use their bodies, not in a constant state of physiological deformation, but at the highest potential of right use It is the orthopaedist who should understand and encourage the technical measures required in the physical reconstruction of the chronic patient, by restoring the faulty posture and poor tone so frequently existing This is a complete art in itself, consisting of measures of reconstructive rest, re-education, and support until right use has been re established It is not to be left to the physiotherapist The chronic patient remains a perpetual challenge and reproach to us, and I would submit that he will remain so until there is an appreciation of the value of employing the medical orthopaedist combined with the physician in the treatment of these cases These matters are well understood in certain parts of America, as in Dr Loring Swaim's clinic at the Robert Bent Brigham Hospital Boston One rarely hears the matter discussed in our country, and yet the results under such conditions can be most satisfactory Our own orthopaedic surgeons should give a lead in regard to physical education and the broad reconstructive measures required in the chronic medical class of case Is this not preventive and curative orthopaedics in the best sense?—I am, etc,

Edinburgh, August 26 W A COCHRANE

Rheumatoid Arthritis and Jaundice

SIR—The following case may intrigue those who are interested in the treatment of rheumatoid arthritis with vaccines

A male patient of mine has suffered from rheumatoid arthritis of gradually increasing severity for some four years (he is now 62), and has been under every possible treatment—including spa therapy, physiotherapy various vaccines etc not to mention a host of infallible advertised remedies—except gold In February of this year Dr W M Crotton saw him with me and had an autogenous polyvalent vaccine made for him The patient was extremely

sensitive to his vaccine and I had great difficulty in getting him going but by Tuesday April 5 I had reached a dose of 4 millions The result of this dose I had better give in the patient's own words

Nothing happened on Wednesday but I woke up on Thursday with a severe headache and aching pains all over and with great lassitude—as if I were in for an attack of influenza By evening the muscles of my chest felt contracted and I had a feeling of suffocation as if I were tightly bound with ropes or in a vice and I could only speak in shortish gasps

Friday—No change and no alteration

Saturday—Very little better

Sunday—Felt pretty well done in and horribly sick but did not vomit I could not eat but wanted to keep drinking I noticed my skin looking yellow

Monday—I was a deep yellow colour all over including my eyes The feeling of constriction gradually went off but for several days I felt too ill to eat and did not feel my usual self for a good fortnight The jaundice disappeared entirely

I had another injection on May 3 and in another two days had a repetition of the reaction I have described and another attack of jaundice but in a milder degree and with more rapid recovery Since these two attacks of jaundice I have been very agreeably surprised at the very steady and definite progress I have made towards recovery there has been a decrease in pain and an increase in flexibility I am quite satisfied that I was improving under this treatment before the attacks of jaundice but not to anything like the same extent as I have since

I have continued with his vaccine very slowly and carefully and have reached a dosage of 7 millions without any reactions beyond slight focal effects He is still making steady and practically uninterrupted progress which after forty years is to say the least of it, encouraging —I am etc,

Chippenham August 29 GEO LAURENCE

SIR—We have read with great interest the article by Dr Philip S Hench on the effect of spontaneous jaundice on rheumatoid arthritis in the *Journal* of August 20 (p 394) Dr Hench discusses various ways in which experimental jaundice may be produced but he does not mention the toxic jaundice which is often seen in gold treatment In our experience of nearly 1 500 cases treated with gold salts jaundice has occurred in 119 We are not here concerned with the mechanism of the jaundice If however the claims of Dr Hench are valid our own series should provide evidence in their favour and one would expect that those patients who develop jaundice would show greater improvement than those who do not Our experience has been the reverse and is summarized in the following paragraphs quoted from our papers in the *Lancet* of October 2 1937 (p 784) and October 9, 1937 (p 838)

There is however a significant difference in the results in cases that have had toxic jaundice as compared with cases having had no jaundice The differences are statistically significant the most important part of the discrepancy is shown to be in the no improvement or worse class In this connexion it is of interest that five cases developing jaundice after one to four gold injections showed no clinical improvement These cases are not included in the above table as they had not completed one full course Our figures show therefore, that the results of cases having toxic jaundice are worse than in those having no jaundice and our experience does not support the claims of Hench (1935) that jaundice is a valuable therapeutic measure in rheumatoid arthritis

These figures were concerned with seventy-four cases of jaundice arising in 671 cases of rheumatoid arthritis treated with gold salts In all cases the jaundice was of considerable severity and varied in duration from three to twelve weeks In view of the size of this series of cases it is rather unfortunate that no reference was made to it in either Dr Hench's paper or your annotation—We are etc,

STANLEY J HARTFALL
HUGH G GARLAND
Leeds August 27 WM GOLDIE

Treatment of Malaria

SIR—Your annotation in the *Journal* of July 30 (p 227) on the treatment of malaria comments that in primary infections a mean daily dose of 15 grains of quinine may bring about the disappearance of trophozoites of benign tertian or quartan malaria on an average on the third day although relapses occur in a percentage of individuals which may be as high as 50

There is no doubt that many relapses are due entirely to the fact that 5 or 10 grains of quinine are prescribed thrice daily after meals no regard being paid to the time of onset of the rigor and to its duration It has been shown however that during the rigor the trophozoites are to a large extent free in the blood and unprotected by the capsules of the erythrocytes For a period of three to ten hours the parasites are vulnerable to quinine therapy and are destroyed readily if the dosage is adequate After they have entered the red blood cells —that is during the period between rigors—they are very little affected by small doses of quinine—to wit 5 to 10 grains daily

A method of administering quinine that is very effective is to give 15 grains orally three hours before the onset of the chill followed by two further doses of 15 grains at intervals of two hours after the first In consequence the quinine content of the blood rises just before the trophozoites disrupt from the red blood cells and is maintained at a high level for eight to ten hours No quinine is given on the days between rigors since small daily doses retard the development of schizonts and may convert a primary infection to a chronic relapsing form Continuous quinine therapy may also encourage the parasites to inhabit the spleen, while very little splenic enlargement is found with the above shock method No mention was made in the annotation of the use of neosalvarsan in chronic forms of benign tertian and quartan malaria so it appears that no reference was made to it in the League of Nations Bulletins This is somewhat surprising—I am, etc,

Port Royal Jamaica August 15 KENNETH ROYES

Tuberculosis Dispensaries or Chest Clinics?

SIR—In the report in your issue of August 6 (p 312) on the Section of Tuberculosis at the Annual Meeting of the British Medical Association I noted with interest that Dr G S Todd deprecated the use of the term T B dispensary and suggested that to call such a dispensary a chest clinic would encourage more people to attend I have for some years urged that the present title is most unfortunate militating against the fullest use of these institutions and should be replaced by chest clinic

In a paper read to the Tuberculosis Association at Cambridge some years ago I dealt in detail with this subject and then stated that the prevention of tuberculosis depended upon four factors (1) The so-called tuberculosis dispensary controlled by the local authorities public health organization and fully equipped for clinical pathological and radiological investigation (2) The part played by the general practitioner (3) The education of the layman in the principles of hygiene (4) The education of the medical student and therefore

the general practitioner, in tuberculosis in particular and diseases of the chest in general

The tuberculosis dispensary can and should be of the greatest service, but I am convinced that in the interests of patients, practitioners, and the public health service alike there is great need for its reorganization and readjustment Experience shows that at most properly equipped dispensaries at least 50 per cent of new cases sent for diagnosis at each session, after routine clinical and radiological examination of the chest and bacteriological examination of the sputum, prove to be either free from disease or suffering from some other form of pulmonary or extrapulmonary mischief The large variety of non-tuberculous pulmonary and extrapulmonary diseases seen at these centres, and the fear which the word tuberculosis still excites in the minds of many laymen, lead one to ask, Is the title 'tuberculosis dispensary" as a centre for early diagnosis and prevention an ideal one to induce practitioners and patients alike to make the fullest use of it? Many general practitioners have told me that the average new patient dreads nothing more than the idea that he must attend a 'tuberculosis dispensary and the injunction to go to it may be strongly resented Some patients after tactful explanation will reconcile themselves to the idea, others, possibly less intelligent, fear the worst, they suspect that the doctor considers them 'social lepers' (as one patient put it to me) and from the moment of entering the dispensary, should they consent to go there, they are commonly a mass of nerves, enduring anxious nights until the diagnosis is made for good or for bad How can such an atmosphere favour preventive work or encourage complete co operation by the general practitioner—the pillar of any successful tuberculosis scheme? If the centre were renamed 'municipal chest clinic,' as in the county borough of East Ham, these difficulties would not arise The clinics, if linked up with medical schools could serve also as valuable teaching centres both for students and for practitioners—I am, etc,

London, W 1 August 22 PHILIP ELLMAN

Prevention of Blindness

SIR—At a recent meeting of representatives of local authorities in the North of England whose special interest is the administration of the Blind Persons Act, 1938, and Section 176 of the Public Health Act, 1936 I drew attention to two factors in the administration of these Acts which call for special consideration (1) local authorities in England and Wales are spending over £2,000,000 a year on the welfare of the blind, (2) they are relying almost entirely on the devotion of such leisure time as may be found possible by ophthalmic surgeons already engaged in teaching and in private ophthalmological practice, for the reduction of this expenditure The present policy, which apparently views with equanimity the payment of this heavy annual charge in perpetuity is a bad one Also a policy which accepts responsibility for this annual charge and relies for its liquidation upon such meagre voluntary efforts as are possible by ophthalmic surgeons, whose time is almost fully occupied in the prevention and cure of blindness by such orthodox methods as are known to us to day is a bad one

My recommendations to the local authorities representatives were (1) That the present public health administration should be utilized to its fullest extent especially in regard to statistics infectious diseases which lead to blindness congenital blindness etc (2) That an effective organization for clinical and laboratory research be initiated

With regard to (1) little need be said, as its possibilities are well known Recommendation (2), being comparatively new so far as local authority administration is concerned, needs elaboration Local authorities should be asked to contribute not more than 1 per cent of their annual expenditure on blind welfare to a central research fund for the prosecution of research (clinical and laboratory) into such conditions as lead to blindness Such a scheme has been started in a small way by voluntary effort in Edinburgh In my opinion, Sir, this effort, while admirable so far as it goes, is totally inadequate, having in view the importance of the problem and the annual cost of blind welfare to the taxpayer

It is suggested that similar research centres, adequately financed by local authorities collectively, should be established, say, one in the North of England, one in the Midlands, and two in London The establishment of such centres would imply the closest co-operation with existing ophthalmological teaching arrangements Each centre should have on its staff two whole time research ophthalmic surgeons, appointed for, say, five years at a salary which would attract highly qualified men, who would be specially selected for their suitability for research work The centres and funds available should be controlled by a central research board, on which, it is hoped, there would be representation of the British Council of Ophthalmologists, the Joint Committee on Blind Welfare of the Association of County Councils and Municipal Corporations, the National Institute for the Blind, and the Ministry of Health (Prevention of Blindness Committee)—I am, etc,

Leeds August 23 C G KAY SHARP M D

Undescended Testicle

SIR—It is surely bad logic to argue, as Mr Denis Browne does in his letter in the *Journal* of August 27 (p 473), that because gonadotropic extracts may induce descent of a testis, which subsequently remains in its new—and natural—position, some undesirable result of a mysterious gonadotropic influence, which has for many years lain dormant, may manifest itself in the remote future The action of the gonadotropic hormone is "transient" in so far as if the injections are not repeated two or three times weekly for some months the desired effect—namely, descent of the testis into the scrotum—will not be obtained The fact that this result is, we hope "permanent" provides no justification for supposing that the agent which induced it continues to exert an influence which may become obvious many years later The trailers of the red herring to which I referred in my letter in the *Journal* of August 13 (p 374) manage to suggest that some sinister disaster may in the remote future overtake the unfortunate patient who in his youth has received gonadotropic therapy This "gipsy's warning" intrigues me, and I wish that one of these sceptics would tell me just exactly what it is that may happen to the wretched patient

Mr Browne believes that doubts as to "the complete harmlessness of pregnyl" are "fairly widely held" (Incidentally, it would be better to refer to this substance as gonadotropic hormone, since "pregnyl" is merely a trade name for a preparation of this material distributed by a certain commercial firm) I would be grateful if he would introduce me to his authorities, as most of the endocrinologists I know would agree with me, I think in saying that such preparations used in therapeutic doses and over a reasonable period of time give rise to no adverse effects Here let me repeat what I pointed out in my previous letter—that in my experience descent of the testis occurs in 50 per cent of the successful cases within three months

of starting endocrine treatment In such circumstances I have encountered no adverse effects and I consider that Mr Browne has been unfortunate in observing genital hypertrophy often after such treatment

Apparently Mr Browne is afraid of using insulin and thyroid extract Surely he underrates his own clinical common sense for he admits that it is only the rash use of these substances which may be attended by harmful effects It does not need an endocrinologist nor Mr Browne to realize that the rash use of morphine or chloroform may lead to fatal results and yet both he and I have used them with perfect equanimity for hypnotic and anaesthetic purposes His conception of the growth hormone—or to read him correctly as he continually asks his critics to do growth hormones (I did not know that more than one had yet been demonstrated)—is rather like Lewis Carroll's conception of the effects of Alice's cake labelled Eat Me I only wish it were possible to increase skeletal growth appreciably even in dwarfs—that is persons suffering from growth hormone deficiency—let alone in a developing child who is presumably being supplied with a sufficiency of this hormone and from whose body any excess given in the form of injections would therefore be rejected unutilized

Mr Denis Browne regretted that someone who knows more about hormones than he does had not answered my letter to disagree with my conception of the effect of gonadotropic preparations It apparently has not occurred to him that someone who knows more about hormones than he does might possibly agree with me and not with him—I am etc

London S E 1 August 29 P M F BISHOP

A Strict Vegetarian Diet

SIR—In answer to W H S (*Journal* August 27 p 480), the parents live on a vegetarian diet—for example turnips for the evening meal—but the father eats bread-and butter and drinks tea and wine He does some work in the City but lives very largely a sylvan life A daughter goes to a boarding school and eats there an ordinary diet but starts the holidays with a fast and then goes on to the strict vegetarian diet The school complains that she loses some pounds in weight each holiday The family are all thin but the father says all wild animals have no fat on them The boy lives a sylvan life walking to school in a neighbouring small town I think the open air makes the meagre diet possible and that he must get more calories in his diet than are reported to me but I have not been able to find out how

The Press referring to my article wrote about the perfect boy but all I wished to show was that he was holding his own on an astonishingly limited diet I tell his father that I think the boy's growth will be stunted The Press showed an extraordinary desire to secure the boy's address which I refused to divulge Reporters visited me in Norfolk my chauffeur's home my son who was staying in Suffolk my daughter in London and the secretary of the St John Clinic Finally one reporter by some means—such as asking the postman where a man lived in a bungalow in a wood in the district round my home—secured photographs of the mother and children Fortunately his paper followed this up by illustrations of jolly children living on an ordinary diet in a London creche —I am, etc,

St John Clinic London S W 1 August 28 LEONARD HILL

SIR—Sir Leonard Hill's figure (*Journal* August 20 p 417) of 28 grammes a day for the protein intake of a vegetarian boy aged 9 years is about half the average daily protein intake amongst vegetarians as a whole The figure which I obtained some years ago in a week's experiment on 118 vegetarians given a varied diet with a wide choice of foods was 81 grammes per man per diem This is equivalent to an intake of 57 grammes a day for a boy aged 9 using a scale of man values supplied by Professor Cathcart who kindly read through and criticized the summarized results On the other hand the deviation in protein intake among different vegetarians is such that some probably do not consume much more in proportion to their size than Sir Leonard Hill's subject

Turning to the source of protein in vegetarian diets in my experiment the average daily intake per man was distributed as follows dairy protein 33 grammes cereal protein 27 grammes nut protein 8 grammes vegetable and fruit protein 13 grammes The intake of dairy protein was considerably higher than that of Sir Leonard Hill's subject The vitamin C intake although not accurately determined was certainly several times the normal intake since the diet contained large amounts of fresh fruit (especially oranges and apples) and salads (especially lettuce and tomatoes)

In view of Sir Leonard Hill's remarks on the excellent physique attained by his subject on a low protein diet it may be of interest to refer to experiments carried out by Wishart in Professor Cathcart's laboratory on a vegetarian cyclist who was tested on diets of widely varying protein content (*J Physiol* 1934 82 189) Wishart's results showed that the athletic performance of his vegetarian subject did not seriously diminish until the protein intake fell below 40 grammes a day In a boy of 9 years this would be equivalent to 28 grammes a day Thus it would appear that the protein intake of Sir Leonard Hill's subject was the minimal for satisfactory physical development and a somewhat higher protein intake would probably be preferable for the average subject—I am etc

London W C 1 August 29 FRANK WOKES Ph C, B Sc

Stomach II Operation for Prostatic Enlargement

SIR—Mr Kenneth Walker's assumption (August 20 p 423) that although clinically my two patients were much improved the prostate remains enlarged seems to be correct Now fifteen and ten months after operation respectively both prostates feel larger than normal on examination per rectum In the first patient (with residual urine 1¾ oz) the gland feels very big in the other the enlargement seems slight I have no written record of how they felt before operation but my impression is that to the examining finger there is little appreciable change If I have another case this is a detail to which I shall pay special attention—I am etc

T HUNTER C I E, M D
Ludlow August 25 Lieutenant-Colonel I M S (ret)

Prolonged Occipito-posterior Presentation

SIR—There has in recent years been a good deal of discussion in the *Journal* regarding the management of cases of occipito posterior presentations Most authorities advise rotating the head and shoulders forwards one practitioner stated that his practice was to put on the forceps push the head back a little and then rotate it with the forceps One of the Dublin books considers the delay is chiefly due to weak pains and advises a sleeping draught so that the patient gets a few hours rest and when she wakens up refreshed she is able by strong pains to expel the child

Galabin in his book strongly recommends the vectis to be applied over the occiput and to pull it down thus

flexing the head and making delivery easy The vectis is a sort of artificial hand I have on one occasion in my early days, in a very troublesome case, put the woman on her elbows and knees across the bed, and slipped my fingers up the rectum and pulled down the occiput, with delivery following soon thereafter It appears that women who adopt the squatting position in labour are not much troubled with occipito-posterior presentations Theoretically if the head can be well flexed there should be no more difficulty in delivering it whether it be occipito-posterior or occipito anterior, just as an egg when placed upright will slip easily into an egg cup but not if placed transversely The forceps are very apt to slip off the head when the occiput is to the back, as the blades point forward The os does not dilate readily in cases of occipito-posterior presentations and the 'waters' are apt to break too soon

The following case may help young practitioners

A multipara took ill at 2 p m and at 12 midnight sent for the nurse The nurse sent for me at 6 a m with a note saying the patient was exhausted the os rigid and only partially dilated The patient had been suffering severely for sixteen hours I found the os partially dilated the lips thickened and rigid The smooth back of the child could not be felt but an irregular outline and evidently the hands were felt through the wall of the abdomen The lozenge-shaped fontanelle was easily felt forwards I at once gave the patient a hypodermic injection of morphine gr ¼ In half an hour the os had thinned out and had dilated a good deal I then directed the nurse to administer chloroform in small doses to ease the pains and dilate the os This was successfully accomplished in the next half-hour I then applied the forceps burying them deeply to prevent them slipping off the head and pulled at first rather backwards I had no difficulty in bringing the head down to the perineum when I removed the forceps and with the fingers of my left hand pushed at short intervals the head forwards so as to favour its flexion round the pubis The shoulders were then turned round into the antero posterior diameter and cautiously extracted These measures saved the perineum so that no stitching was required

This case teaches the great advantage of using morphine and chloroform in such prolonged labours The woman was delivered within one and a half hours after my arrival

In all cases when chloroform is administered in labour there is a great tendency for the uterus not to contract properly but to be relaxed, allowing blood clots to accumulate in it and giving rise to more haemorrhage than is natural To prevent this a hypodermic injection of pituitrin should be given at once after the extraction of the placenta —I am, etc,

Dornoch August 25 JOHN T MACLACHLAN M D

*** An article on occipito-posterior presentation by Professor Chassar Moir appears at page 555 of this issue and a leading article at page 577

"Psychosomatic Illness"

SIR —In the *Journal* of August 27 (p 475) Dr P Lionel Goitein states that he examined over one hundred unemployed men (presumably not on the sick-list) and found that 'less than a quarter showed actual neurotic illness In a previous inquiry to which Dr Goitein evidently refers, I examined 1 000 insured persons who had been on the sick list mostly for a period of months and I noted that the incapacity in a third of these could best be attributed to psychoneurotic illness Because of the difference in these rates of incidence (his being one-quarter while mine was one third) Dr Goitein immediately concludes—or as he phrases it he has reason to believe"—that my allocation of patients was of doubtful psychological validity However, he omits to point out that the two samples examined (his patients being able bodied, while mine were unfit) are not comparable, and that it also would be "reasonable to believe' that the incidence of "neurosis proper" in persons who are able bodied would probably be appreciably lower than that in persons in receipt of certificates of incapacity for work This is not to say that I may not have made mistakes but I am not aware that I did err, at least in the rather obvious directions hinted at by Dr Goitein Further, the demonstration of the rising incidence of psychosomatic illness given in my paper of July 2 (p 11) is in no way invalidated even if, for the sake of argument, my previous contributions are omitted from consideration, its findings are supported by the evidence of many other independent workers, the soundness of whose methods has not so far been challenged by Dr Goitein

The concept formulated by the term "psychosomatic illness promises to be one of considerable practical importance to general and preventive medicine For this reason all pertinent criticism must be welcomed and met I have therefore tried to meet fairly what is objective and relevant in Dr Goitein's letter, and have confined my comments solely to this one aspect of his psychographic behaviour —I am, etc,

Glasgow August 29 JAMES L HALLIDAY

Medical Evidence at Inquests

SIR —Dr J L Barford's experience (*Journal* August 27 p 475) is not quite so exceptional as he imagines A short time ago I was called urgently to the home of an insured patient, upon whom for many weeks previously I had been in constant attendance, on account of severe mental depression following an operation for gastric ulcer I arrived to find him lying dead on the kitchen floor, he had hanged himself by means of a cord thrown over the door The cord had been cut by his son and the body released and laid on the ground only a few minutes before my arrival I attended the post-mortem examination and gave material information regarding the case to the medical man from a distance who had been asked to make the examination and who gave evidence at the inquest I, who had known and treated the patient in life and who saw him immediately after death, was not called An incidental result of the absence of medical evidence regarding his final illness was a paragraph in a local paper headed "Suicide's Imaginary Illness,' which distressed his relations —I am, etc

Purley Surrey, August 28 A LANKESTER

SIR —I am also very ignorant of the habits of coroners but I have reason to feel that the treatment Dr J L Barford has received is not unusual

In my instance I was summoned to a case of death from gunshot wounds The incident occurred on a very wet night in mid winter, and my examination of the body had to be conducted in a dark and dirty shed by the light of a small electric torch After making a thorough examination I was asked to make a statement to the police officer in charge of the case This I did and expressed my willingness to help further if this was needed The following day the police officer called again and I gathered that he was acting as coroner's officer He requested me to make a further statement as to the probability of the wounds being self-inflicted for the information of the coroner I gave him the information required A day later I was informed by the police that I should not be required to attend the inquest

Some time later I wrote to the coroner and also to the superintendent of police for the district with a request for a fee for the assistance and opinion I had given The coroner replied to the effect that he could not allow a fee as I had not been called to give evidence while the police replied to my request by a telephone conversation when they made it quite clear that they could accept no responsibility

I was later informed that no medical evidence was given at the proceedings before the coroner but only that of the police officer who was present at the time of my examination of the body

This incident appears to me to be a little more than unusual and raises the question as to whether a medical man who is not a police surgeon should give his services in such cases, and if he does is he expected to do so without recompense or even thanks? It also raises a further point as to the actual value of medical evidence at inquests since in this case the evidence of the police constable was considered to be sufficient—I am etc

Monk Sherborne August 27 J J DAVIS

Vitamin C in Milk

SIR—Apropos your important annotation on this topic in the *Journal* of August 27 (p 458) as an alternative to freeing milk from dissolved oxygen as suggested by the American workers, would it be easier to distribute the milk in coloured bottles? Could some authority suggest a suitable colour for the glass?—I am etc

Llandilo August 27 J H LLOYD

Sequelae of War Gas Poisoning

SIR—With reference to the correspondence in the *Journal* concerning sequelae of war gas poisoning Mr H Ramsbotham (quoted in the *Journal* of July 2 p 39) is correct in that the mortality statistics for ex service men quoted by me as regards Great Britain the United States and South Africa are his own figures and do not refer exclusively to cases of chemical injury My statement that the mortality rate for respiratory diseases in ex-service men in New Zealand is 30 per cent above normal is based on an official communication from the Pensions Department of New Zealand This states that the proportion of ex soldiers who have died from various diseases of the respiratory tract is very high although the proportion in receipt of a pension as at March 31 1931 was only 15 per cent yet the total deaths from chest diseases in the last ten years up to March 31 1931 represents a percentage of 42 4 over that period The mortality for respiratory disease for New Zealand as a whole during that period is given as 32 per cent

As regards Sir Henry Morris Jones's statement concerning the high incidence of chronic respiratory disease following exposure to war gases he may be interested to know that a statistical investigation of ex service men who appeared before the War Pensions Appeal Board of New Zealand at Auckland in 1937-8 has been undertaken Owing to the fact that gas was not used at Anzac or in Palestine it is possible to compare this group, as regards the incidence of chronic lung degeneration and disease with men who saw service in the gas areas in France Of 240 men in the gas exposed group 135 showed clinical and radiological evidence of cardiac rotation associated with pulmonary degenerative changes as compared with only ten men in a group of seventy who could not have been so exposed—56 per cent as compared with 14 per cent (Pulmonary tuberculosis and occupational factors were excluded)

While such an increase is very striking (400 per cent) it is fortunately no indication of the incidence of chronic lung diseases in ex service men as a whole since many of the men had appealed solely on the ground of chest disabilities There is good reason to believe that sequelae following chemical injury only occur in cases of lesser exposure when certain constitutional factors are present

A full account of the statistical investigation referred to could be obtained from the Medical Research Council of Great Britain—I am, etc

W N ABBOTT
August 5 War Pensions Appeal Board Auckland

London Emergency Bed Service

SIR—In connexion with the London Emergency Bed Service there is one point I would like to make known When the service was first opened the telephone number was not put in the directory for fear of its being used for bogus calls In consequence a number of doctors who have read the appreciative letters in the issues of the *Journal* of August 20 and 27 have been unable to obtain the number which is Metropolitan 8781 The number will appear in future issues of the directory The Service has now been going for just over two months, and I hope that by the end of this week we shall have received our one thousandth call—I am etc

R E PEERS
Secretary Voluntary Hospitals
London E C 2 August 29 Emergency Bed Service

The Science Museum has recently acquired on loan from Professor E O Lawrence of California an example of the cyclotron an apparatus invented by Professor Lawrence and his associates which accelerates individual atoms to very high speeds without the use of very high voltages It is used for bombarding the nuclei of other atoms with high speed atomic projectiles from the study of the disintegrations and transmutations which take place under these conditions a great deal is being discovered about the structure of atomic nuclei (An annotation on the cyclotron appeared in the *Journal* of July 2 p 25) The late Lord Rutherford was the first to show in 1919 that the nuclei of atoms could be broken up by bombarding them with the alpha particles emitted from radium and its products In 1932 Cockcroft and Walton in Cambridge succeeded in breaking up atomic nuclei without the aid of radio active materials by bombarding them with hydrogen nuclei or protons accelerated to a high speed in a vacuum tube to which about 500 000 volts was applied their original apparatus may be seen in the Science Museum Lawrence's cyclotron is able to achieve similar results without the use of these very high voltages which lead to great practical inconveniences The instrument which he has lent to the Science Museum was constructed in 1931 and with an applied voltage no greater than 4 000 volts it was capable of accelerating protons to a speed which would require 1 200 000 volts directly applied With its aid Lawrence and his co workers were able to confirm and extend Cockcroft and Walton's results Professor Lawrence has also presented to the museum a series of photographs showing the development of the cyclotron The 1931 model has now been superseded by a larger instrument which can accelerate atomic particles to a speed which would require 16 million volts directly applied and with this instrument results of great importance are being obtained in California Cyclotrons are also being put into operation in Great Britain and their performance will be watched with the keenest interest

Obituary

SIR DAVID WILKIE M.D., M.Ch., F.R.C.S.Ed. and Eng.

Professor of Surgery, University of Edinburgh

The news of the sudden death on August 28 of Sir David Wilkie at the age of 56 must have come as a shock to the medical profession and especially to the many who heard him speak at the Annual Meeting of the British Medical Association at Plymouth in July of this year. The profession has sustained the loss of a great surgeon, one whose work was ever characterized not only by skill and courage but also by great kindness of heart. Thereby he endeared himself to all who came under his influence and probably no surgeon in recent years has had more members of the medical profession and their relatives under his professional care.



David Percival Dalbreck Wilkie was born in Kirriemuir, in Angus, the Thrums of J. M. Barrie, Wilkie's intimate personal friend. From his home in the north-east of Scotland he proceeded to the Edinburgh Academy, a school of which he often spoke and for which he had a fond affection. From the school he went to the University, where he graduated M.B., Ch.B. in 1904, he took his M.D. in 1907 and the Ch.M. in 1909, receiving a Gold Medal for his thesis. He became a Fellow of the Royal College of Surgeons of Edinburgh in 1907 and of the Royal College of Surgeons of England in 1918. He was made an Honorary Fellow of the American College of Surgeons in 1926. After qualifying he held the posts of house physician and of house surgeon in the Royal Infirmary, Edinburgh, and was also house surgeon at Chalmers Hospital and the Royal Hospital for Sick Children, Edinburgh. He was a member of many important scientific committees and boards—having served for example on the Medical Research Council and the Scientific Advisory Committee of the British Empire Cancer Campaign—and was an active and much-valued member of the British Medical Association. He was Vice-President of the Section of Surgery at the Annual Meeting at Cambridge in 1920 and of the Section of Proctology at the Newcastle Meeting in 1921, he was President of the Section of Surgery at the Edinburgh Meeting in 1927 and was a Vice-President of this Section at the Centenary Meeting in 1932. He received a knighthood in 1936. To the British Dominions, the U.S.A. and to various European countries he went as an invited orator and from them he received many honorary distinctions.

Early in his postgraduate career Wilkie began to reveal those characteristics which rapidly brought him to the forefront of his profession. He was a natural surgeon, endowed with qualities of thoughtful and careful judgment, brilliant manual dexterity, courageous decision, and fearless execution. These were the gifts with which he approached his life's work, and fortunately his early training went far to foster their successful fruition. He was house surgeon to Francis Mitchell Caird, later Regius Professor of Clinical Surgery in Edinburgh University. All who knew that great master of surgery and Lister's most devoted disciple will have some understanding of the lessons Wilkie learned from him. Herein probably, unconsciously, were planted the seeds of the love of research. When Wilkie worked as house surgeon to Sir Harold Stiles in the Children's Hospital and in Chalmers Hospital he came under the influence of a very great surgeon of the modern school, one trained in anatomy and imbued with the spirit of Kocher and William Mayo. His resident days in hospital over, and a period of study in Germany and Austria completed, Wilkie, keen to get out into the world and work among men, paid a hurried visit to Canada, scouring the land as a possible field in which he might practise his profession in the future. Fortunately for his native land he returned again to Edinburgh, rapidly advanced from post to post and instituted those researches in experimental surgery with which his name was associated throughout the surgical world. For his researches in abdominal surgery he was awarded the Liston Victoria Jubilee Prize in 1913.

Before the outbreak of war Wilkie and his two academical friends, Lorimer and Hugh Reid, joined the Royal Naval Volunteer Reserve. They were mobilized when war broke out. It was Wilkie's fate to be drafted to the Naval Barracks at Portsmouth and here one found him happy and contented with the minor post he occupied, with leisure on his hands he studied for his primary Ex-

Fellowship From Portsmouth he was appointed medical officer in charge of the hospital ship *Saint Margaret of Scotland* which proceeded to the Mediterranean and ultimately was located in Salonika On his return from there he was detailed for service in France as a surgeon with a casualty clearing station The war over and civil work again restored to its customary routine Wilkie returned to his work in Edinburgh as an assistant surgeon to the Royal Infirmary and to Leith Hospital and to research work in the Royal College of Physicians Laboratory Already he was a man marked out from his fellows and even before the war when the Provincial Surgeons a surgical club created by Moynihan and having within its ranks many of the foremost surgeons of the day looked for one to join their select number their choice lighted on a youngster from Edinburgh they selected Wilkie

After a short period of teaching surgery in conjunction with Sir John Fraser in the Extra Mural School he was appointed to the Chair of Surgery in Edinburgh University as Professor Alexis Thomson's successor The terms of this appointment were so modified as to put upon Wilkie a burden greater than almost any man could bear but he welcomed the post cheerfully as it gave him the opportunity of developing a school of surgical research which has since formed the model on which others have been framed He charmed his students with his eloquent tongue as a lecturer directed his surgical research department discharged his duties as a surgeon in ordinary to the Royal Infirmary and a teacher of clinical surgery and still found time to be a very busy surgeon in private practice Later the Medical Research Council and other important bodies sought his services and there were added weekly visits to London, when he had to travel overnight and return overnight to take up again the full daily routine, a strain upon his strength that many felt was unduly severe It was not surprising therefore that on more than one occasion a temporary breakdown in health took place to be quickly recovered from after a short rest in his country home at Gullane Wilkie was deeply interested in social questions and some years ago presented premises to Edinburgh University Settlement for use as an educational institute for working class people Known as Kirk o Field College, this institute was formally opened by Sir James Barrie

When it became known less than a month ago that he had again been ordered a complete rest by his physician Wilkie's friends were grieved but not unduly concerned Fuller investigation, however revealed a situation of great gravity At first it looked as if the heroic measures found necessary were to prove successful but this promise was not fulfilled and he passed over grateful for the happy life he had been granted and the many friends he had been given

A narrative however, of Wilkie's daily life and the steps that led up to the pinnacle he came to occupy would leave unsatisfied those who knew him as a man who realized that wonderful personal fascination that he possessed a great surgeon, a leader of research an eloquent orator and a true Christian gentleman has gone one comparatively young in years but with a rich record of good work done and leaving behind a name which will for long endure

Sir John Fraser Regius Professor of Clinical Surgery in the University of Edinburgh writes

Kirriemuir a country town in the northern portion of Angus is proud of the records of two distinguished men, J M Barrie and David Wilkie Some months syne Barrie passed from the sight of men and to day we mourn the death of David Wilkie, a surgeon of superb ability a man of wide sympathies and high achievements

I do not know to what extent Wilkie and Barrie were acquainted at an earlier stage of their lives but in later years and particularly after the latter's appointment as Chancellor of Edinburgh University a friendship developed between them which was mutual and sincere and which was to some extent centred round a common bond of interests and ideals Wilkie had many stories to tell of his visits to Barrie, and of the whimsical figure whom he found sitting in the inglenook by the fire and I imagine that part of their talk would be of Thrums and of the window through which the world and his wife were measured From Kirriemuir Wilkie went to school at the Edinburgh Academy It was a time of awakening interests and new friendships and it is a testimony to his sense of good fellowship that the links which were forged at that time have in great part persisted to the present day

I believe he was one to whom the choice of a profession presented little difficulty He was a man of high ideals and warm sympathies and where could he find a better field for the exercise of these qualities than in the profession of medicine? He pursued his way with the interest and enthusiasm of a devotee and he passed into the ranks of his profession well equipped for the future and with a keen appreciation of the opportunities and the privileges which lay before him Surgery made the strongest possible appeal to him and he entered the career to which he gave such devoted and distinguished service After a period of post-graduate study in Bonn Berne and Vienna he returned to Edinburgh where he became associated with Professor Caird as his private assistant and clinical tutor

It was at this time that he began the researches with which his name is so intimately associated He was particularly interested in acute abdominal conditions probably owing to his association with Caird and when one reviews the work which he did at this time one is filled with admiration of the wide field which he covered, for the originality which he displayed and for the accuracy with which his work was checked and controlled His name will always be associated with advances in our knowledge of acute appendicitis and it has an equal claim in connexion with such conditions as peritonitis, gastric and duodenal ulcer intestinal obstruction, and the surgery of the spleen and the biliary tract When therefore he was elected Professor of Systematic Surgery in 1924 it was a particularly fitting and appropriate appointment for it afforded him the opportunity to organize and develop both the systematic and the research aspects of the Chair That he was successful in the highest measure the years have shown and to-day the departments which his genius created are a fitting tribute to his ability and his judgment

Wilkie's genius as a teacher was outstanding He possessed the faculty of presenting his subject in language which could not fail to attract and in a manner which made one feel the living reality of the problem with which he was dealing The popularity of his classes was a testimony to the success of his methods It was in the operating theatre however that he was seen at his best There with a technique which was faultless with a dexterity that was equally complete he operated and demonstrated in a manner that called forth sincere admiration Those who witnessed his work will understand

something of the impression which I have attempted to convey

Amidst these various responsibilities it might seem that his opportunity for other interests would be limited, but such was his energy and his enthusiasm that his activities extended into various spheres It was characteristic of the man that whatever service he undertook was carried through to the utmost of his ability It was the same in his University interests he sat on Court and Senate and Faculty, each of these benefited from his wisdom, and in an amazing way he kept in closest touch with their multitudinous activities It was a work in which he took particular pleasure, and it was done with an enthusiasm that gave inspiration to his associates His administrative abilities had fuller scope when he became director of the surgical section of the municipal hospitals, a post which particularly appealed to him because it implied opportunity for new ventures and the development of a scheme of far-reaching possibilities

Among these many claims he yet found time to lend a helping hand when aid was needed He was Chairman of the Edinburgh University Settlement, and the Kirk o' Field College, the educational section of the scheme, owed its inception to his generosity and to his sympathy with those in distress His association with the student body was in some respects unique, for, while he was a teacher to whom they gave the fullest measure of admiration and regard, he was at the same time as one of them, sharing their troubles and their difficulties, and rejoicing with them in their triumphs He lived his life in the fullest and the best sense, and I believe he enjoyed every moment of it—the crowded hours of service, and the all too brief moments of leisure in his garden at Gullane or playing a round of golf at Muirfield On the casket which bore him to his resting-place lay the flowers of late summer—gladioli, red roses, and sweet peas, they were probably culled from his own garden, and to those of us who saw them lying there they were a symbol not of death but of victory, for in their beauty and the glory of their colours there was that which said, "Life's battle won, now cometh rest'

Sir W I de C Wheeler writes The news of the death of Sir David Wilkie has come as a shock to the surgical world I knew him intimately, and saw him often during the last twenty-five years Ill-health had dogged his footsteps for more than twelve months, but they never faltered What Wilkie has done for surgery and the Edinburgh school is universally recognized His work will endure Those in close touch with him will look back on days of inspiration in his presence, and an atmosphere of purity in the surroundings when he was at work His religion included ceaseless endeavour (alas! persisted in during illness) to obtain results in the advance of science, for the good of the school and for the benefit of all His efforts were crowned by recognition at home and abroad His memory will be perpetuated by those whom he taught and by the affection of his friends

[The photograph reproduced is by Elliott and Fry Ltd]

DR HENRY HOWARD WHITEHOUSE New York dermatologist and syphilologist died at his summer home in Connecticut on August 24 in his seventy-fifth year Associated with the New York Skin and Cancer Hospital for thirty eight years he was professor of dermatology at the New York Postgraduate Medical School from 1914 to 1925

ALEXANDER MACPHAIL, M D, F R F P S G

H M Inspector of Anatomy for England and Wales

Dr Alexander Macphail, the distinguished anatomist, died on August 28 at the age of 65 He was born in Glasgow, the youngest son of Dugald Macphail, in 1872, and entered Glasgow University in 1890 As a student he was editor of the *Glasgow University Magazine* He graduated M B C M, with high commendation, four years later, and was soon Senior Demonstrator of Anatomy, an appointment which he was to hold until his election as Dean of the Faculty of Medicine at St Mungo's College in 1900 In this same year Dr Macphail became a Fellow of the Royal Faculty of Physicians and Surgeons of Glasgow Only in 1907 did he leave Glasgow to take up a lectureship in anatomy at Charing Cross Hospital and King's College In 1910 he was secretary for England of the second International Congress of Anatomy, which was held at Brussels His appointment as lecturer in anatomy at St Bartholomew's Hospital took place in 1912, and terminated on his transfer to the Ministry of Health in 1821, during the great war he served as a captain in the R A M C



Dr Macphail was Emeritus Professor of Anatomy of St Mungo's College, and was at one time chairman of the Board of Studies in Human Anatomy and Morphology of the University of London He had been an examiner in anatomy for the Universities of Cambridge, London, Aberdeen, Glasgow, and St Andrews He acted as secretary for England and Scotland, and later as vice president, of the Anatomical Society of Great Britain and Ireland, and was a former president of the Glasgow University Medical Chirurgical Society He was secretary of the Section of Anatomy at the Annual Meeting of the British Medical Association in 1910, vice-president of the Section in 1912, and in 1922, as president of the Section at the meeting in Glasgow, he opened a discussion on the administration of the Anatomy Act (*Journal* 1922, **2**, 787) In the year following this meeting he proceeded to the M D of his old university He published several articles in the *Journal of Anatomy* and other special journals, but from 1921 onwards his interests were largely administrative In that year he was appointed H M Inspector of Anatomy for England and Wales and a medical officer of the Ministry of Health After the war the anatomy schools were faced with a difficult situation, the arrangements for obtaining subjects for dissection having partly broken down under the stress of changed conditions The Minister of Health therefore agreed to ask boards of guardians to co operate in the working of the Anatomy Acts It was Dr Macphail's task, on behalf of the Ministry to secure the assistance of the boards of guardians and, later of the public assistance committees No better appointment could have been made for this purpose Dr Macphail was held in the highest esteem by his professional colleagues, and his frank and attractive character soon won the regard of the officers of local authorities Arrangements were made to co ordinate the supply of subjects in accordance with the needs of the various medical schools

and their smooth working now over many years indicates that they were established on sound lines

Macphail's heart was in his work and he lost no opportunity of furthering anatomical studies Since 1934 he had held the appointment of Professor of Anatomy at the Royal Academy of Arts—an honour which he valued highly His health began to fail this year and he resigned his appointments in July His death so soon afterwards is a great loss to his colleagues and the many friends who appreciated his work and character

Professor F G Parsons writes

Alexander Macphail was lecturer in anatomy at St Bartholomew's at a time when I held a similar appointment at St Thomas's Unfortunately though we were always the best of friends I did not come nearly so closely in touch with him then as I did when we were associated in the secluded but necessary task of finding the material without which the medical schools could not teach anatomy and surgery It was then that I learnt to appreciate the infinite tact and forbearance with which he treated the people who formed the old boards of guardians He persuaded them to see how necessary it was in the interests of the poor that students should have the opportunity of taking to pieces the human body and so learning how it is constructed, before attempting to treat the living Often we talked of the importance of inducing well to do people to bequeath their bodies to science as an answer to the demagogues who accused us of cutting up the friendless poor while those who had money and friends could feel sure of a last sleep undisturbed Macphail felt that until an anatomist had himself been dissected we should have no real answer to these people, and we agreed that while there was no difficulty in securing the consent of medical men to leave their bodies to the schools for dissection—indeed it had been done many times—the real difficulty lay in gaining the consent of their relations who by giving it, would have to face the disapproval of others

I knew well enough that it was Macphail's wish that he should be dissected when he died but it was a surprise to me that the two relations who had nursed and cared for him so lovingly during his last illness should have agreed to carry out his wishes So far from caring little what became of his remains their action shows that they understood and took their part in this noble gesture Macphail's body is to go to Oxford a place chosen by himself I think because of his friendship for the late Professor Arthur Thomson

That his brother anatomists will think of some fitting means of showing their deep regret at losing him and their sympathy with his last act and with the loyalty of his relations I do not doubt

Mr A L Moreton writes

It was while Macphail was a student at Glasgow University that Lord Lister visited the scene of his former labours to address the students After the meeting the students unharnessed the horse of Lister's cab and drew it themselves to Sir Hector Cameron's house where he was staying Macphail used to relate that he took part in this affair and directed operations from the box seat of the cab Some years later he came to London to succeed his friend Lord (then Dr Christopher) Addison as lecturer on anatomy at Charing Cross Hospital when Addison went to St Bartholomew's When Charing Cross Hospital gave up teaching preliminary and intermediate subjects Macphail was offered the post of principal of the University of Hong Kong and had about three days in which to make his decision He decided not to go and was for a time lecturer on anatomy at King's College before succeeding Dr Addison again at St Bartholomew's As a teacher of anatomy to students both of medicine and of pictorial art Macphail was in the first rank a clear and simple expounder of his subject and an excellent blackboard artist rivalling his old friend Arthur Thomson of Oxford whom he succeeded as professor of anatomy at the Royal Academy Above all, Macphail had a real genius for friendship both with members of his own profession and with others His students and demonstrators all knew that in him they had a real friend to whom they could come with their difficulties and troubles well knowing that they would always receive sympathy and the best of advice Apart from his work, he was an ideal companion for a walk through the streets of the City through the countryside or among the hills and lochs from which came his forebears

[The photograph reproduced is by Elliott and Fry Ltd.]

THOMAS DAVIES HARRIES, F R C S M R C P

Honorary Surgeon Aberystwyth Infirmary and Cardiganshire General Hospital

We regret to announce the death on July 14 of Dr Thomas Davies Harries He qualified L S A in 1871 afterwards taking the F R C S in 1877 and the M R C P in 1892

A friend and colleague writes Dr Harries entered Guy's in 1867 and brought with him all the sporting characteristics of his native county of Pembroke He was an expert fisherman a good judge of horseflesh and an excellent rider to hounds Whilst at Guy's he became prominent as a boxer He had an exceedingly fine bedside manner and invariably won the confidence and affection of his patients His practice was a very extensive one and at one time included the largest consulting practice in Mid Wales Patients whom he treated at Aberystwyth frequently wanted him for consultation and that before the days of motor cars

Among his closest friends at Guy's was the late Sir Samuel Wilks who advised him to settle down at a seaside resort As a consequence Aberystwyth became the place of his choice and for sixty years and upwards until his death he resided there taking an active interest in all phases of public life and contributing his share to the management and government of the town by serving as town councillor alderman of the borough and mayor of the town on more than one occasion Not the least of his remarkable characteristics was his wonderful versatility His interests were not entirely confined to his practice, but included a close study of lead mining and engineering problems connected therewith

He married Miss Annette Benson of Royal Avenue London When they celebrated their diamond wedding on December 5 1937 they received a telegram of congratulation from the King and Queen

The following well known foreign medical men have recently died Dr SOREN HOLTH an eminent ophthalmologist of Oslo who was awarded in 1919 the Fridtjof Nansen prize for glaucoma, aged 74 Professor WILHELM BERGER lecturer on medical aspects of air travel, from an aeroplane accident, aged 43, Dr HERMANN STRAUB director of the medical clinic at Gottingen aged 55, Dr ERNEST CURCHOD of Lausanne president of the Swiss Society of Oto rhino laryngology Dr GEORGES MALOENS an eminent Brussels larvngologist Professor HANS CLAUS an eminent Berlin oto rhino-laryngologist aged 64 Dr LUIS CALVO MACKENNA of Chile one of the most notable paediatrists in South America and Professor GIUSEPPE FRANCHINI founder and director of the clinic for tropical diseases at Bologna

No 34

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended August 27, 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 13 principal towns in Eire (e) The 10 principal towns (9 in 1937) in Northern Ireland

A dash — denotes no cases, a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929-37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	13	2	7		1	13	2	5		1		
Deaths		—	2				—	—				
Diphtheria	963	112	137	50	18	910	108	167	54	20	838	141
Deaths	21	6	3	3	—	23	1	10	1	—		
Dysentery	32	9	25		1	23	7	11		—		
Deaths				—	—				—	—		
Encephalitis lethargica, acute	4	—	—	1	—	5	—	—		—		
Deaths		—					—					
Enteric (typhoid and paratyphoid) fever	47	8	10	11	1	57	8	14	44	1	62	
Deaths	3	1	—	—	—	5	2	—	1	—		
Erysipelas			46	2	1			62	5	3		
Deaths		—					1					
Infective enteritis or diarrhoea under 2 years												
Deaths	55	11	2	13	4	34	7	12	17	8		
Measles			38		4			18		—		
Deaths	4	—	1	—	—	4	—	1	1	—		
Ophthalmia neonatorum	84	6	22		—	115	8	49		—		
Deaths												
Pneumonia influenzal†	267	15	3		2	318	25	6		5	414	34
Deaths (from Influenza)	10	—	—	—	—	14	2	—	—	—		
Pneumonia, primary			70	1				107	2			
Deaths		8		2	7		10		4	4		
Polio encephalitis, acute	5	—				4	1					
Deaths		—					—					
Poliomyelitis, acute	71	9	10	2	2	40	10	—		1		
Deaths		—					—					
Puerperal fever	2*	2	17	2		46	4	18	5			
Deaths		—					—					
Puerperal pyrexia	126	12	20		—	139	18	19		—		
Deaths												
Relapsing fever	—	—			—	1	—	—		—		
Deaths												
Scarlet fever	1,224	90	291	43	56	1,195	88	307	37	42	1,432	227
Deaths	1	—	—	—	—	3	2	2	—	—		
Small pox	—	—			—	—	—	—		—		
Deaths	—	—		—	—	—	—		—	—		
Typhus fever	—	—	—	—	—	—	—	—	—	—		
Deaths				—	—				—	—		
Whooping-cough			72		11			69		11		
Deaths	9	—	3	1	2	18	3	4	—	—		
Deaths (0-1 year)	274	38	33	29	15	254	41	59	30	18		
Infant mortality rate (per 1 000 live births)	46	31				43	34					
Deaths (excluding stillbirths)	3,728	640	480	175	111	3,579	661	486	150	103		
Annual death rate (per 1 000 persons living)	9 2	8 2	9 8	11 8	9 8	8 8	8 3	9 9	10 2	9 1		
Live births	6,721	1,240	821	362	242	6 628	1 178	865	414	225		
Annual rate per 1 000 persons living	16 5	15 8	16 7	24 5	21 5	16 4	14 8	17 7	28 2	19 9		
Stillbirths	269	38				268	44					
Rate per 1 000 total births (including stillborn)	38	30				39	36					

* After October 1 1937 puerperal fever was made notifiable only in the administrative County of London

† Includes primary form in figure for England and Wales, London (administrative county) and Northern Ireland

EPIDEMIOLOGICAL NOTES*

Acute Poliomyelitis

The incidence of acute poliomyelitis in England and Wales continues to decline the numbers for the last three weeks for which figures are available being 81 77 and 71 (week under review) respectively while in London during the same period slight increases were noted the numbers being 3 7 and 9 respectively In Scotland the notifications fell from 14 to 10 and in Eire from 4 to 2 while in Northern Ireland 2 cases were notified (*nil* in the previous week) Notifications of two or more cases were received from Ashford 2 Blackburn 2 Braintree and Bocking (Urban) 5 Braintree (Rural) 2 Cuckfield (Urban) 2 Cuckfield (Rural) 3 Southend 2 Swansea 4 Worthing 2 The London cases were distributed thus Kensington 4 and 1 each in Lambeth Lewisham St Marylebone Shoreditch and Wandsworth In the week following 4 fresh cases were reported at Braintree bringing the total at the time of going to press in the outbreak to 91 The Essex outbreak continues to cause concern despite the action taken in postponing the reopening of the schools and in discouraging gatherings of persons of susceptible age at parties and cinemas It does not appear that immune serum convalescent or horse has been used on any scale in either prophylaxis or treatment

Reports have come to hand of a number of cases of poliomyelitis in Holland and in many centres reopening of chools has been postponed for one or two weeks The German authorities have forbidden the crossing of the frontier at some places to all children under the age of 14 years In Germany itself an outbreak at Frankfort on Main is reported in which 27 children have died from the disease this year The chief measures taken to check the epidemic have been prohibition of all meetings and assemblies of children and closure of schools until further notice

Typhoid Fever

Notifications of typhoid fever have risen in the last three weeks the numbers being 24 34 and 47 (week under review) respectively during the same period the figures for London were 1 4 and 8 respectively Notifications of two or more cases were received from Axminster 2 Birmingham 2 Colchester 2 Driffield 2 Farnworth 3 Okehampton 2 Thurrock 5 York 2 In London the cases were distributed thus Bermondsey 2 and 1 each in Battersea Camberwell Chelsea Islington Lambeth Southwark The Farnworth outbreak seems to be at an end no new cases having occurred in the last fortnight the total number has been 44 cases with 7 deaths The 2 cases notified at Axminster in the week under review were referred to in these columns last week

Reports have come to hand of an outbreak of typhoid fever among Europeans in Simla India in which more than 200 cases have occurred in the last month

Diphtheria and Scarlet Fever

Notifications of diphtheria in England and Wales during the week were practically stationary 963 (961) cases being recorded but in London there was an appreciable drop—112 compared with 144 Deaths in the 126 Great Towns of England and Wales fell from 25 to 21 but in London they rose from 3 to 6 of the 21 deaths in the 126 Great Towns 3 (3) occurred in Liverpool and 2 (0) in Cardiff There was a rise in the notifications of scarlet fever both in England and Wales and in London during the week the figures being 1,224 (1 067) and 90 (76) respectively the chief centres in England and Wales in which increases were recorded are Birkenhead 6 (3) Stockport 9 (6) Poole 5 (2) Darlington (Durham) 5 (2) West Ham 14 (8) Romford 10 (5) Bristol 17 (6) Liverpool 44 (28) Manchester 32 (27) Southport 6 (1) Edmonton 14 (3) Finchley 12 (2) Norwich 4 (1) Newcastle upon Tyne 7 (3) Ipswich 5 (1) Croydon 7 (2) Birmingham 28 (21)

Measles and Whooping-cough

During the week there were 4 deaths from measles in the 126 Great Towns—1 each in Blackburn Gateshead Sheffield and Birmingham—compared with 2 in the previous week The average daily admissions to the L C C fever hospitals were 3 (3) in the metropolitan boroughs in which measles is notifiable *notifications were lower in five remained the same in four* and rose in two—Battersea 3 (0) and Stepney 1 (0) In Scotland notifications fell from 42 to 38 during the week of the 38 cases 12 (4) occurred in Dunfermline 10 (2) in Zetland and 8 (2) in Glasgow There was 1 death (in Paisley) from measles in the 16 principal towns of Scotland during the week In the 126 Great Towns of England and Wales 9 (7) deaths from whooping cough were reported—2 (0) in Liverpool and 1 each in Bradford Leeds Manchester Middlesbrough Bath Plymouth Acton In Scotland 72 (62) cases of whooping-cough were notified 58 (47) of which were in Glasgow and 3 (5) deaths—2 (3) in Glasgow and 1 (0) in Paisley

Cholera

During the week ended August 27 586 cases of cholera and 165 deaths were reported in Shanghai and in Hong Kong 21 cases with 15 deaths Tientsin in North China has been added to the list of ports with cholera The Japanese Foreign Office is co operating with the Japanese Medical Association for China in the organization of travelling hospitals for the treatment of cases and in providing facilities for prophylactic inoculation of those at risk In British India 7,314 cases with *3 648 deaths were notified in the Central Provinces 612* cases with 218 deaths in Bombay (Presidency) 222 cases with 86 deaths in Madras (Presidency) 243 cases with 107 deaths in the North West Frontier Province 378 cases with 198 deaths in the United Provinces

* Except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

Medical News

The Central Council for Health Education has decided to make a new appointment of a general secretary to act as chief officer of the Council at a salary of £750 rising to £900 per annum The terms of the appointment will be found in our advertisement columns It will be noticed that the appointment is open to both medical practitioners and laymen

In our advertisement columns this week the University of Birmingham invites applications for the Chair of Anatomy at a stipend of £1 000 per annum

The new Early Treatment Centre Berwick House attached to St Luke's Hospital Grove Hill Middlesbrough will be officially opened on Wednesday September 14 at 3 p m by Sir Hubert Bond D Sc M D F R C P Senior Commissioner Board of Control

At the annual congress of the National Veterinary Medical Association of Great Britain and Ireland held in Glasgow this week papers were read by Professor Edward Hindle on filterable viruses with special reference to immunity and by Drs Tom Hare and R M Fry on clinical observations on the beta haemolytic streptococcal infection of dogs

A neo Hippocratic congress will be held at Marseilles on September 29 under the presidency of Dr Cornil dean of the medical faculty when the following papers will be read The Hippocratic Doctrine and Induction in Medicine by Professor Laignel Lavastine Hippocrates and the School of Cnidos by Professor Guiart The Pre clinical Period of Diseases by Professors Marañon Guy Laroche Delore and Cornil and Dr Morlaas The Treatise on Fractures by Dr Poucel and The Professional Tradition in Hippocrates by MM Benoit and Foeta Further information can be obtained from Dr Martiny 10 Rue Alfred Roll Paris

The September issue of the *Practitioner* is devoted to disorders of sex contributors being Drs Havelock Ellis H Crichton Miller J A Hadfield Laura Hutton Desmond Curran and Mr Kenneth Walker

Mr J P Lockhart Mummery's Mayo Foundation lecture on the operative surgery of the colon delivered at Rochester Minnesota in October last is published in the *Proceedings of the Staff Meetings of the Mayo Clinic* for August 3

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL B M A House Tavistock Square W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone, unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names, not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary, B M A House Tavistock Square, W C 1 on receipt of proofs Authors overseas should indicate on MSS if reprints are required as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary, B M A House, Tavistock Square, W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are

EDITOR OF THE *BRITISH MEDICAL JOURNAL* *Articulate Westcent London*

SECRETARY, *Medisecta Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Cumann Doctuiri na h Eireann (I M A and B M A) 18, Kildare Street, Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Origin of the Laryngoscope

Dr R A D POPE (Chester) writes Your reference on August 6 under Nova et Vetera to Crampton Smyly and the laryngoscope prompts me to ask a question which has puzzled me lately Who invented the laryngoscope? Most medical and musical works, I believe credit it to Manuel Garcia about 1850 Yet Bryant (*Surgery* 1884) says The first laryngoscope was introduced in 1829 by B G Babington of Guy's Hospital under the term 'glottiscope Can anyone settle the point?

*** On March 18 1829 a rude 'glottiscope" was exhibited to the Hunterian Society of London by Benjamin Babington of Guy's Hospital and in 1837 the Edinburgh surgeon Robert Liston described his mode of exploring the larynx Babington's invention is recorded in the *London Medical Gazette* 1829 3 555 As Fielding Garrison notes in his *Introduction to the History of Medicine* these efforts passed without remark and the modern laryngoscope came to be invented by Manuel Garcia a Spanish singing teacher in London who sent an account of his instrument to the Royal Society in 1855 Three years later his method of examining the throat was made a permanent part of laryngology by J N Czermak of Prague and Ludwig Turck of Vienna

Chronic Uric Acid Dermatitis

'A B writes Will someone recommend the best treatment both externally and internally for a case of chronic uric acid dermatitis of the hands of some years duration Various treatments have been tried without success

Treatment of Superficial Glossitis

'O M N writes Could anyone advise me as to the treatment of a case of obstinate superficial glossitis? The patient is a woman aged 45 There is no anaemia a relapse of old standing bacilluria has been treated and digestive troubles dealt with her dentures have also been seen to and her general health seems good at present The condition healed completely while she was away on holiday but has returned after two days at home and is now as bad as ever

Income Tax

Service Gratuity

D D S P has completed five years as surgeon lieutenant R N and has received a gratuity of £1 000 on transfer to the Permanent List He has been informed officially that the sum is part of the officer's income for the year in which it is paid' and he inquires whether it should not be spread over the five years of service

*** Official pay is assessable under Schedule E and tax is chargeable 'in respect of all salaries, fees, wages perquisites or profits whatsoever for the year of assessment The language might perhaps be clearer on the point raised, but in recent years judicial dicta have shown an increasing tendency to approve of taxability as at the moment when the income becomes due If the amount in question becomes due as at the end of the five years—for example, so that no part of it could be claimed on prior resignation—it would we consider, be unwise to carry to appeal a contention that it accrued from year to year, and therefore should be spread But we agree that in the result some hardship may be inflicted when rates of tax are rising

Allowance for Wife's Earnings

"C H' understands that as his wife assists to a considerable degree in the management of his practice he can obtain some special allowance for any salary paid to her In the past he has "not paid her any sums specifically labelled as salary,' but has made substantial payments in bills and gifts of money, etc

*** Section 18 of the Finance A[illegible]t, 1920, provides that if a wife has any earned income the [illegible]usual married ' personal allowance, now £180, shall be [illegible]ncreased by four fifths of that earned income but not ex[illegible]eeding £45 If therefore a practitioner enters into a bind[illegible]ng arrangement with his wife to pay her, say £50 per an[illegible]num for assistance in his practice, he can deduct that a[illegible]mount as a professional expense but as four fifths of £5[illegible]0 = £40 is less than the maximum £45 special allowance [illegible]his wife will not be liable to payment of tax thereon The [illegible]revenue authorities usually require some evidence that the [illegible]£50 was paid as between employer and employee and not [illegible]8 as part of the domestic financial arrangements between h[illegible]usband and wife—that is that a sum was agreed as pa[illegible]—able for services to the practice, that some duties were in[illegible]—h fact performed and that the agreed payments were made[illegible]— and duly recorded in the books of the practice Retrospec[illegible]— tive effect to such arrange ments will not be given

LETTERS, NOT[illegible]ES, ETC.

Modern Art for th[illegible]e Hospital

Framed pictures are cheerful but[illegible]collect microbes Hence the yawning bareness of hospital[illegible]walls In New York City the W P A (Works Progress Adm[illegible]n tration) has lately com missioned some artists to paint m[illegible]urals—all examples of the modern school—for some of the C[illegible]ty hospitals The results are interesting both artistically an[illegible]d from the point of view of their possible psychological effe[illegible]ct upon the patients At the Queens General Hospital the r[illegible]e a striking mural in the panorama Medicine through the Ages[illegible]s one entitled Foibles of Medicine Historical accuracy is[illegible] the keynote of the Lister mural, in which the great surge[illegible]on is shown washing his hands in carbolic acid solution, w[illegible]ile a nurse devotedly sprays the operating theatre with t[illegible]he antiseptic In the Willard Parker Hospital's Men of Med[illegible]icine series the Louis Pasteur mural is somewhat domineerin[illegible]g but effective

Medical Postage Stan[illegible]ps

A new French 55+45 centimes charity [illegible]stamp cardinal red in colour and impressively simple in de[illegible]sign depicts a central monument with the inscription 'A la[illegible]gloire du service de sante," and in the top right-hand c[illegible]orner the serpent of Aesculapius entwining a staff

In honour of the 'Journees Medicales' [illegible]held at Beirut last May, Lebanon has issued a set of [illegible]our postage stamps depicting the medical school (2 piastre[illegible], light green 3½ orange 5 slate, and 10 light red)

Corrigendum

Dr JAMES A LISTER (Glasgow) writes I re[illegible]gret that an er[illegible]ror has crept into a letter of mine published in [illegible]the Supple[illegible]ment of August 27 (p 169) The phrase but [illegible]that of co[illegible]urse is the penalty of such a democratic Gover[illegible]nment own' should have read but that of course [illegible]is the penalty of such a democratic government as that [illegible]does to loaf o[illegible]n the Association

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Canadian Medical Association Journal

Montreal vol 38 Jan 1938

Attempt to inhibit Development of Tar Carcinoma in Mice Effects of Vitamins on Tumour Threshold —J R Davidson
Fracture of Maxillary Zygomatic Complex and —J W Gerrie
Indicators for Pulmonary Lobectomy —R M Janes
Lung Abscess —W P Warner
Maternal Mortality in Country Practice —J H Duncan
Administration of Bismuth —G H W Lucas
Whooping-cough —N Silvertherne D T Fraser and G Hendren
Paratyphoid B Carrier Successfully Treated with Sulphanilamide —A T Bazin
Psychoneurotic Onset of Some Organic Syndromes —N Viner
X Ray Therapy of Acute Inflammatory Diseases —R W Boyd
Eyestrain —J V V Nicholls
Fractured Patella —F R Scott
Early Diagnosis of Anencephaly —V E Harteson
Case of Dissecting Aneurysm of Thoracic Aorta with Haematuria Nephrolithiasis and Pyelonephritis —W O Stevenson
Toxaemia of Pregnancy —H S Good and B Kanee
Inversion of Uterus —W J P MacMillan
Treatment of Epidermophytosis —J F Burgess
Some Physical and Clinical Characteristics of Short Waves —R B Taylor
Use of Peptone Broth in Ruptured Appendix Cases —C G Bain
Nutritional Requirements during Pregnancy —E M Watson

Vitamins and Tar Carcinoma in Mice —Davidson who has conducted numerous experiments claims that he is able to prevent the development of tar carcinoma in a large proportion of susceptible mice by the administration of a diet of high vitamin content He also describes in detail six cases of patients suffering from various types of malignant disease in whom this form of treatment resulted in improvement in health reduction of suffering and prolongation of life

Paratyphoid B Carrier —Bazin reports the case of a woman who had a heavy infection of the liver bile as demonstrated by a pure culture of *B paratyphosus* B ten days after a cholecystectomy and drainage of the common duct On August 2 the drain was removed shunting all the bile into the intestine On August 4 treatment by sulphanilamide was begun the dose being increased gradually up to 90 grains per day On August 25 the duodenal bile culture was negative Five months after the treatment the stools were cultured with negative findings

Deutsche Medizinische Wochenschrift

Berlin vol 64 June 24 1938

Specific Active Immunization against Pneumonia among Workers in Thomasschlacken Mills —M Gundel and E Homann
Present-day Objectives of Scientific Plant Therapy —R F Weiss
Plant Studies I Contribution to Problem of Increasing Potency of Therapeutic Plants —G Madaus
Significance of German Therapeutic Plants in Causal and Symptomatic Treatment of Bone Diseases —H Seel
Leonurus cardiaca a Potent New Cardiac Plant —R F Weiss
Native Tea Plants —C Mayer
Eye Disturbances following Severe Abortion Anaemia —H Mittelstrass
Treatment of Obesity in Cardiac Patients with Apondon —W Schulze

Specific Active Immunization against Pneumonia —Remarkable results are claimed by Gundel and Homann for the prophylactic action of a vaccine in which Types I II and III of the pneumococcus are represented in the proportions of 40 40 and 20 per cent respectively

Edinburgh Medical Journal

London vol 45 June 1938

Observations on Carbonic Anhydrase of Blood in Anaemia and in Other Pathological Conditions —C G Lambie
Clinical Recollection and Reflections Dietetic Treatment of Average Diabetic —D M Dunlop and R Pybus
Diet and Dyspepsia —J D Comrie
Thoughts and Afterthoughts about Specialists and Others —W I de C Wheeler
Endometriosis as a Pathological and Clinical Problem —D Dougal

Journal of the American Medical Association

Chicago vol 110 June 25 1938

Supposed Role of Adrenals in Hypertension —J Rogoff and E Marcus
Cutaneous Histamine Reaction as Test of Peripheral Nerve Function —L Loeser
Recurrent Diarrhoea due to Dysentery Organisms —S Portis
Air-conditioning and Industrial Health —L Bristol
Weil's Disease —S Glotzer
Idiosyncrasy to Paraldehyde —J Kotz G Roth and W Ryon
Chemistry of Vitamin D —C Bills

Klinische Wochenschrift

Berlin vol 17 June 25 1938

Vitamin B_1 Content in Blood and Urine and its Variations in Hyperthyroidism and Cancerous Cachexia —E Schreiber and A Burger
Important Diagnostic Sign for Recognition of Open Ductus Arteriosus of Botalli —H Bohn
New Exact Method for Demonstration of Presence and Fate of Iodized Contrast Media —W Lutz and H Seyfried
Rapid Bacteriological Diagnosis of Diphtheria —W Helmreich
Haemoglobin Metabolism during Febrile Episodes in Schizophrenic Psychoses —K F Scheid
Blood Picture during Uleron Therapy of Gonorrhoea —H Weber
Carcinomatous Lymphangitis of Lungs —H Hippe and K Hahle
Hypotensive Pneumothorax and Cardiac Failure with Pulmonary Stasis —E Pott

Diagnosis of Diphtheria —This is a description of a culture medium and of a method for the rapid bacteriological diagnosis of diphtheria Of seventy nine positive cases tested this method of bacteriological diagnosis was positive in sixty four cases after two to three hours and in all the seventy nine cases after eight to twelve hours

Lancet

London vol 1 June 25 1938

Natural History of Strawberry Naevi —W A. Lister
Intra-ocular Pressure in Nephrotic Oedema and its Bearing on Nature of Aqueous Humour —J D Robertson
Effect of Poor Social Conditions in Production of Neuroses —W L Neustatter
Acute Lymphatic Leukaemia in Childhood —F D Hart
Production of Diabetes in Dogs by Anterior Pituitary Extracts —J Campbell and C H Best
Therapeutic Effect of Vitamin P in Schonlein-Henoch Purpura —T Jersild

Strawberry Naevi —The literature concerning strawberry naevi—cavernous angiomata—in infants is surveyed and from study of seventy seven children watched for one to seven years it is concluded that expectant and conservative treatment usually suffices Naevi growing rapidly during the early months of life always regress spontaneously later

Medizinische Klinik

Berlin vol 34 June 24 1938

Foot and Mouth Disease in Man —H Curschmann
Possibility of Spread of *Haemoptoë parasitaria* into Middle Europe —L Freund
Transportability of Patients involved in Accidents —C Habler
Surgical Treatment of Different Types of Fracture —N Anagnostakis
Contribution to Diagnosis of Renal Disease —A Herzog
Polarographic Investigation of Serum of Cancerous Patients —R K Felkel
Dental Treatment as Part of Convalescence Benefit —K Hausmann and L Petrik
Treatment of Affections of Liver and Biliary Passages by Curcumen —W Zengerling
Latest Publications on Diseases of Children —F Goebel

Polarographic Diagnosis of Cancer —Felkel claims that the serological diagnosis of cancer by means of the polarograph was possible in seventy six out of eighty histologically proved cases of cancer and in thirty nine out of forty eight

cases of recurrence of cancer The test was negative in thirty seven out of forty two normal cases or cases suffering from gynaecological affections Patients suffering from a febrile disease show a positive reaction during the febrile stage

Medizinische Welt

Berlin vol 12 June 25 1938

Carbon Monoxide Poisoning —H Engel
Modern Views on Vitamin Research —E Oldemeyer
Complications of Tubal Pregnancy —W Benthin
Vitamin C in Human Placenta —R Ammon
Tumours of the Ear —J Berendes
Treatment of Mammary Cracks with Unguentolan —B Ottow

Munchener Medizinische Wochenschrift

Munich vol 85 June 24 1938

Prescription of Spectacles —G W Freytag
Literature on Treatment of Psoriasis —H W Siemens
Tonsillectomy in Septic States after Tonsillitis —H Pilgramm
Climatic Conditions in Germany and Summer Camps for Hitler Youth —E Flach
Health Value of Summer Camps for Hitler Youth —Joppich
Treatment of High Blood Pressure with Cholparin —K Steinlechner
Principles and Technique of Physical Therapy in Febrile Patients —H Kreuss
Boarding Schools for Spoilt Children —E Maurer

Nature

London vol 141 June 25 1938

Christie Hospital and Holt Radium Institute Manchester
Quantitative Measurement of Vitamin B_1 by Thiochrome Reaction —Magnus Pyke
Scotopic Luminosity Curve and Absorption Spectrum of Visual Purple —E Ludvigh
Irregular Mitosis and Meiosis induced by Acenaphthene —D Kostoff

New England Journal of Medicine

Boston vol 218 June 23 1938

*Treatment of Pneumococcal Meningitis —M Finland J W Brown and A E Rauh
Operative Mortality of Cholecystitis —P L Boyd
Failure of Nicotinic Acid in Treatment of Anaemia —O C Hansen Pruss

Pneumococcal Meningitis —The essentials of the method of treatment described in this article are (1) administration of large doses of sulphanilamide and maintenance of this dosage (2) intravenous injection of specific anti pneumococcal serum (3) intraspinal injection of the patient's own fresh serum after the establishment of a balance of antibody in the blood or of small doses of specific antiserum together with fresh human serum and (4) frequent drainage by lumbar puncture Ten cases were treated with sulphanilamide alone or in various combinations with specific serum and complement Six of the patients recovered the most rapid recoveries being in four cases treated as outlined above

Policlinico

Rome vol 45 June 13 1938 (Sez Prat)

Recovery after Trans-diaphragmatic Massage of Heart following Stoppage at End of Operation —V Chiasserini
Clinical Features of Chronic Catarrhal Conditions of Digestive Organs I —P Alessandrini

Rome vol 45 June 20 1938 (Sez Prat)

Clinical Experiences in Treatment of Trachoma —E Cicchitto
Clinical Features of Chronic Catarrhal Conditions of Digestive Organs II —I Alessandrini
New Apparatus for Transfusion of Whole Blood —A Bauer

Trachoma —Cicchitto reviews the incidence of trachoma in North Africa and states that it is found in some 30 to 65 per cent of natives of Libya and in a corresponding proportion of certain other races He reports encouraging results especially in hypertrophic forms of trachoma of the palpebral conjunctiva following the instillation of 10 per cent quinine bisulphate solution

Presse Medicale

Paris vol 46 June 22 1938

*Arterial Hypertension due to Renal Ischaemia —Pasteur Vallery Radot S Blondin R Israel and Ch Cachin
*Pyretotherapy of Pure Lipoid Nephrosis —R Clément
*Mental Forms of Acute Syphilitic Meningitis Medico-legal Significance —A Donnadieu
Cold Abscess of Thyroid Gland —A Uraz

Arterial Hypertension and Renal Ischaemia —As a result of their experiments on eight dogs in which the renal arteries were compressed after removal of the nerve supply to the kidneys the authors maintain that arterial hypertension can result from interference with the blood supply to the kidneys

Pyretotherapy of Nephrosis —Clement describes a case of pure lipoid nephrosis in a lad of 15 which was successfully treated by pyretotherapy after all the more usual methods had failed He discusses the mode of action of pyrexia (natural or artificially induced) in nephrosis

Syphilitic Meningitis —The author describes a case in which a native of Morocco attempted to murder another for no apparent reason and was proved to have done so while in a confusional state following an acute syphilitic meningitis Donnadieu stresses the necessity for early examination of the cerebrospinal fluid in such cases

Paris vol 46 June 25 1938

Symposium on Hungarian Medicine

From Hungary

*On Old Age —Alexandre Koranyi
Morphology of Hyphomycosis Pedis —Tibor de Verebely
*Thyroid Gland and Pernicious Anaemia —G Mansfeld
*Therapeutic Properties of Vitamins —Albert Szent Gyorgyi
Recent Experimental Investigations on Obesity —Aladar de Beznak
Problem of Lichen Moniliformis —Louis Nekam

From France

Whooping-cough Lung and its Radiographic Picture —Robert Debré Maurice Lamy Marcel Mignon and J J Welti
Histological Lesions of Gonococcal Arthritis —H Mondor and Mlle Gauthier Villars
Round celled Rhabdomyoma of Tongue —J Ducuing L Ducuing and Bassal
Pili Torti (Twisted Hairs) —A Touraine and H Bour
Calcified Hydatid Cysts —Pierre Goinard
Radiological Appearances of Orderly Trabecular Dissociation in Paget's Disease —H Tillier R Raynaud and G Marill
Radiographic Dissociation of Intrathoracic Shadows in Anterior Position —B Enquin and J A Aguirre

Old Age —Koranyi, in a detailed discussion on old age publishes a chart showing graphs of the normal relative curves for intellectual life sexual life, muscular strength and metabolism from birth till the age of 90 According to him the greatest development of the intellect is not reached until the age of 60

Thyroid and Anaemia —Mansfeld gives an account of his investigation of the relations between the thyroid and pernicious anaemia produced in rabbits by injections of saponin and collargol He found that the thyroid is not necessary for the formation of the anti pernicious anaemia principle in the liver since preparations made from the livers of thyroidectomized animals were as potent as those from normal animals On the other hand, the presence of the thyroid appears to be necessary for the utilization of the anti pernicious anaemia principle since it was found that this principle was quite ineffective in thyroidectomized animals Preparations of the stomach were fully active, which would seem to show that the anti-pernicious principles in the liver and the stomach cannot be the same since the former needs to be activated by the thyroid while the latter does not It activation was found to be due not to thyroxine but to another hormone which had not hitherto been isolated which Mansfeld calls the myelotropic hormone of the thyroid

Vitamins —Szent Gyorgyi thinks there is an ever wide field for the therapeutic use of the vitamins quite apart from diseases due to definite avitaminosis He is of the opinion that the true criterion of the amount of any vitamin

needed by the body is not the quantity which will cure or prevent a definite deficiency disease such as scurvy but the amount required to keep the animal in perfect health which is probably the amount required to saturate its tissues and to raise its resistance to such an extent that no addition of vitamin will have any further effect If vitamins are given in these really adequate doses the author foresees a brilliant future for them in the treatment of various diseases and in particular for vitamin C in the therapy of febrile diseases

Proceedings of the Staff Meetings of the Mayo Clinic

Minnesota vol 13 June 1938

Tumours of Adrenal Cortex Diagnosis Treatment and Case Report —E J Kepler W Walters and M C Pfeifer
Menstruation in Child aged Nineteen Months as Result of Tumour of Left Adrenal Cortex Successful Surgical Treatment —E J Kepler W Walters and R K Dixon
Myotonia Dystrophy (Myotonia Atrophica) Case Report —H F Bullen

Minnesota vol 13 June 15 1938

Recent Advances in Treatment of Pneumonia —H C Hinshaw
Mutation of Poliomyelitis Virus into Encephalitis Virus —E C Rosenow
Anaesthetic Procedures used at Mayo Clinic H For Neurological Surgery —E B Tuohy
Metabolic Processes influenced by Certain Ductless Glands —E C Kendall

Minnesota vol 13 June 22 1938

Chronic Ulcerative Colitis with Arthritis and Deficiency State Treatment by Colectomy Case Report —S J Campbell
Re-establishment of Function in Chronically Non-functioning Kidney following Removal of Obstruction —H J Gaudin and H Cabot
Hepatitis Resulting from Inhalation of Carbon Tetrachloride —G F Madding and H R Butt
Place of Physiology in Clinical Teaching —W H Onsley
Cardiac Climax L Appraisal of Therapeutic Effort —F A Willius

Minnesota vol 13 June 29 1938

Infarction of Prostate Its Clinical Significance —J W Hubly and G J Thompson
Recurrent Protrusion of an Intervertebral Disk —J G Love
Index of Prognosis in Thrombo-ulcerative Colitis —P M Vickers and J A Bargen
Historical Sketches from Seminar on Physiology of Institute of Experimental Medicine Lazaro Spallanzani (1729 99) —J G Rushton

Schweizerische Medizinische Wochenschrift

Basle vol 68 June 25 1938

Extrapleural Pneumothorax —A Brunner
Haematogenous Extrapulmonary Tuberculosis in Switzerland from 1911 to 1935 —F Kaufmann
Treatment of Bone and Joint Tuberculosis —M Saltzer
Clinical Importance of So-called Primary Serous Pleurisy —M Jaquerod
Nerve Paresis complicating Pneumothorax Treatment —St. J Lehrer

Extrapleural Pneumothorax —Reasons for the recent revival of extrapleural pneumolysis are discussed and it is concluded that thoracoplasty is in general preferable especially since *the former needs two to three years of very careful after* treatment The extrapleural operation has however useful applications chiefly in cases of early cavitation or as a transitory measure in preparation for a thoracoplasty

Science

New York vol 87 June 24 1938

Chemistry and Biological Significance of Thiamin —R R Williams
Anaphylaxis in Liverless Dog and Observation on Anticoagulant of Anaphylactic Shock —E T Waters J Markowitz and L B Jaques
Growing Yeast Medium for Cultivation of Haemophilic Bacilli and of an Organism causing Bronchitis in Chickens —J P Delaplane and H O Stuart

Wiener Klinische Wochenschrift

Vienna vol 25 June 24 1938

Endometriosis —J Lartschneider
Modified Method of Determining Diastase —S Malkoves
Whole Gland or Chemically Pure Hormone —E Preisseckel
Influence of Large Doses of Digitalis on Paroxysmal Tachycardia —L Reichenfeld
Case of Closed Infected Double Ureter —J Hohenwallner
After treatment of Brain Operations —L Findeisen
Relief of Pain in Parturition —L Kraul
Dietetic Treatment of Oedema in Childhood —H Flesch
Relief of Pain in Cancer with Intravenous Alcohol Infusion —D Thurz
Role and Indications of Balneotherapy in Rheumatic Diseases —E Mallwa

SPECIAL JOURNALS

† Acta Medica Scandinavica

Stockholm vol 95 April 5 1938 Fasc 1

Experimental and Clinical Investigations of Action of Histaminase Contained in Extracts of Intestinal Mucous Membrane on Histamine (Eng) —J Felix
Contribution to *Explanation of Sino-auricular and Atrio-ventricular Heart* block (Eng) —F S P van Buchem
Case of Cardiac Aneurysm with Rare Localization (Ger) —R. Berlin and L Hallen
Duration of Life of Red Blood Corpuscles (Eng) —E Schidt
Mean Erythrocyte Diameter during Remission of Pernicious Anaemia due to Liver Treatment (Eng) —E Kirk
Note on Thickness of Megalocytes in Pernicious Anaemia (Eng) —E Kirk
Case of Benign Lymphogranulomatosis (Sarcoid Boeck Schaumann) of Lymph Glands Tonsils and Salivary Glands without Any Demonstrable Affection of *Skin Mucous Membranes or Osseous System (Eng)* —T K With and P Hellweg Larsen
Complication with Pulmonary Tuberculosis (Primary?) (Eng) —T K With and P Hellweg Larsen
Serviceability of Power of Distinction in Examinations for Vitamin Deficiency (Eng) —E Groth Petersen

Histaminase and Histamine — Torantil is a dried extract of the mucous membrane of the small intestine and it counteracts the contraction of the guinea pig uterus caused by histamine Torantil only inactivates histamine after the incubation of mixtures for twenty four hours the optimum *pH* being 7 to 8 The histaminase contained in torantil appears to have a favourable effect in cases of allergic skin eruptions

† In this and the following periodicals the language in which each paper is presented is indicated as follows English (Eng) French (Fr) German (Ger) and Italian (It)

Stockholm vol 95 April 29 1938 Fasc 2-4

Source of Error in White Blood Count (Eng) —I Engelbreth Holm and C C Winkel Smith
Haemorrhagic Thrombocythaemia (Eng) —U Uotila
Physiological Mechanism of Decrease in Acidity in Gastric Contents (Eng) —W N Boldyreff and W F Martin
New Investigations on Effects of Insulin (Ger) —H Schur and E P Spreafico
Multiple Myelomata XII (Ger) —A Magnus-Levy
So-called Isolated Chronic Myocarditis (Ger) —K Lindberg
Studies on Haemoglobinuria (Fr) —K L J Jordan
Studies on Urinary Sediment I Technique II Normal Counts III Effect of High Protein Diet upon Course of Nephritis with Special Reference to Urinary Sediment IV Urinary Sediment in Men Riding a Six-day Bicycle Race (Eng) —A Naeraa
So-called Aleukaemic Megakaryocytic Myelosis (Ger) —G A Lindeboom
Anti anaemic Function of Small Intestine (Eng) —U Uotila

Source of Error in White Blood Cell Counts —A considerable error may arise if blood withdrawn for the counting of white cells is not diluted immediately with Turke's fluid Within a few hours the number of leucocytes may fall markedly (10 to 20 per cent) As a diluting fluid which prevents this fall in the white blood count the following solution is recommended saponin 0 2 gramme methyl violet 0 1 gramme sodium fluoride 2 grammes and distilled water 200 c cm

† Acta Orthopaedica Scandinavica

Copenhagen vol 63 1938 Fasc 1

Subluxation of Hip Treated by Stabilizing Operation (Eng) —A M Lance and F Therkelsen
Deformity of Joints of Foot (Ger) —K H Koester

Five Cases of Tuberculosis of Symphysis Pubis (Eng)—E Greger
Investigations on Leucocytic Blood Picture Determined by Arneth Schilling Method in approximately 100 Patients with Bone or Joint Diseases chiefly Tuberculous (Eng)—E Greger
*Investigations on Skin Temperature of Patients with Diseases of Joints (Eng)—E Greger
Three Cases of Fracture of Sternum (Eng)—S Hallgrimsson

Subluxation of Hip—Sixty one patients were submitted to plastic operations on the acetabulum The indications are discussed and the late results—one to nine years after operation—are analysed Only in a small number of patients did the operation result in a complete cure, but thirty three hips showed a good result and fourteen hips were improved Painlessness and greater stability of the joint may be expected to follow these plastic procedures

Skin Temperature in Joint Diseases—The author has investigated the temperature of the skin overlying normal joints and joints affected by various diseases Symmetrical readings are taken Tuberculosis of joints produces a fairly pronounced elevation of the skin temperature which becomes apparent as a difference between the temperatures of symmetrical places Such differences were found to be less in arthritis of other than tuberculous origin It is suggested that the method may be of some value in the diagnosis and differential diagnosis of joint affections

† Acta Paediatrica

Upsala vol 22 1938

Fourth International Paediatric Congress Rome 1937

Popular Education by Medical Profession for Promotion of Prophylaxis of Psychopathic Affections of Children (Ger)—I Jundell
Authority and Leadership in Relationship to Neuroses of Childhood (Ger)—E Glanzmann
Psychiatric Problems in Paediatrics from Clinical and Social Point of View (Eng)—F H Allen
Treatment of Educational Difficulties (Ger)—J Siegl
Role of Syphilis in Occurrence of Epilepsy (Fr)—L Babonneix
Paediatric Neuropsychoses in Clinical and Social Relationship (Fr)—A Gareiso
Prophylactic Considerations of Neuropsychic Conditions (Fr)—A Gareiso and F Escardo
Constitutional Disposition to Spasmophilia (Ger)—E Holzmann
Enuresis and Motor Difficulties (Fr)—Mme Roudinesco
Contribution to Treatment of Chorea with Adrenaline (Fr)—G Popovitiu
Mental Blindness in Infants (Fr)—F Schwarz
Importance of Encephalography in Diagnosis of Infantile Neuropsychoses (It)—R Ruggeri and S di Frisco
Eugenic Reflections on Infantile familial Form of Schilder's Disease (It)—M Bergamini
Significance of Body Water and Certain Electrolytes in Infant Nutrition (Eng)—I McQuarrie
Salt and Hydrogen Metabolism in Infancy and its Relationship to Problem of Hand Feeding (Ger)—J Csapo
Hydro saline Metabolism (Fr)—M L R Dumas
Mineral and Hydrogen Metabolism (Fr)—E Gorter
Mineral Metabolism during Infancy and its Relation to Problem of Artificial Feeding (Eng)—K F Toverud
Importance of Sodium Retention in Physiology of Premature Infants and in Pathology of Infants (Ger)—F Goldmann
Acid base Equilibrium in Dystrophics (Fr)—C S de Sousa
Contribution to Study of Glycaemia in Dystrophics (Fr)—C S de Sousa
Observations on Water and Alkali Metabolism in Relation to Practical Paediatrics (It)—A Mugria
Contribution to Pathology of Sodium Chloride Metabolism (Ger)—Fanconi
Experimental Researches into Infantile Feeding Calorically Sufficient but Qualitatively Restricted (Ger)—A v Chwalibogowski
Contribution to Copper Metabolism in Infants (Fr)—E Lesné and S Brisk
Comparative Study on Chlorine Content of Red Blood Corpuscles (It)—H Kaulbersz Marynowska
Fluid Economy in Atrophic Infants (Ger)—E Hamiss
Protein Metabolism and Perspiratio Insensibilis (It)—J Duzar and P Lyaghy
Disturbances of Central Regulation of Fluid Economy in Infancy (Ger)—J Kramar and S Blazso
Correlation between Sulphur Metabolism and Nutrition (Fr)—A Blaszo
Exsiccosis due to Thirst and Lack of Salt (Ger)—E Kerpel Fronius
Calcium Variations in Serum of Infantile Tetany irradiated with Ultra violet Rays (It)—G Careddu
Hydraemia and Elimination of Sodium Chloride in Breast and Hand fed Infant (It)—G Careddu
Variations in Hydraemia Amount of Blood and Plasma and Proteinaemia of Normal Child under the Influence of Ultra violet Ray (It)—C Careddu and M T Pelino
Calcium and Phosphorus in Alimentary Intoxication (It)—M Radici
Relationship between Iodaemia and Basal Metabolism in Children (It)—C Careddu

Observations on Hydraemia and Function of Hydrogen Metabolism (It)—G C Bentivoglio and E Sartori
Importance of Relationship of Organic and Inorganic Phosphorus in Blood for Physiology and Pathology of Infancy (It)—G de Toni
Observations on Mineral Components of Blood in Breast and Hand fed Infants in First Three Months of Life (It)—G A Piana
Tuberculosis Problem in Infants in Relation to Modern Study of Ultra virus Infection (Fr)—A Dufourt
Question of Filterable Virus of Tuberculosis (Fr)—Cohen
Granuloma Virus (It)—G Fiore
Filterable Virus and Anti tuberculosis Prophylaxis in Child (It)—G Frontali
Comparative Behaviour of Intradermal Reactions of Tuberculin and Tuberculous Filtrates (It)—D Corda
Clinical and Experimental Observations on Association between Filtrates and Tubercle Toxins and Encephalo-meningeal System (It)—A Racugno
Infectivity of Tuberculosis in Childhood (Ger)—A Wallgren
Intrathoracic Tuberculosis in Childhood (Eng)—N Capon
Infectivity of Tuberculosis in Childhood (Ger)—H Rietschel
Infectivity of Pulmonary Tuberculosis in Infants (Fr)—E Lesne G Dreyfus Sée and A Saenz
Role of Bovine Bacillus in Aetiology of Tuberculous Meningitis in Children (Fr)—E Lesné and A Saenz
Possibility of Tuberculous Infection by Children (Ger)—A Viethen
Infectivity of Occult tuberculous School Children (Ger)—G Petranyi
Tuberculous Contagion between Man and Dog or Cat (Ger)—C W Herlitz
Diagnosis of Ulcerating Pulmonary Tuberculosis in Infancy (It)—P Fornara and L Greppi
Researches on Presence of Koch's Bacillus in *Gastric Contents* and Faeces in Infantile Tuberculosis (It)—U Monaco
Infant as a Possible Source of Tuberculous Infection (It)—L Auricchio
Infantile Anti tuberculosis Prophylaxis (It)—E Mensi
Researches on Koch's Bacillus in Series of 1 000 Children Convalescent from Tuberculous Infection (Fr)—F Tissot
Contagion on Part of Child (Eng)—H P Wright and U W McLellan
Child and Doctor in Organized Campaign against Tuberculosis (Ger)—C Noeggerath
Prevention and Treatment of Tuberculosis (Eng)—C A Stewart
Prophylaxis and Treatment of Infantile Tuberculosis (Fr)—Armand Delille and C Lestocquoy
Vaccine Prophylaxis of Tuberculosis (Fr)—B Weill Halle
Prophylaxis of Malignant Generalized Tuberculosis (Ger)—H Kleinschmidt
Prophylaxis of Tuberculosis (Ger)—E Nobel
Anti tuberculous Prophylaxis (It)—R Jemma
Curative Action of Moderate Altitude in Bronchial Gland Tuberculosis in Childhood (Ger)—E Wieland
Mineral Metabolism in Prophylaxis and Treatment of Infantile Tuberculosis (Fr)—G Popoviciu
Tuberculosis of Childhood of Unknown Origin and its Prophylaxis (Eng)—G Gali
Anti tuberculous Vaccinotherapy in Relation to Infantile Tuberculosis (It)—A Gentili
Papulo necrotic Tuberculides (Ger)—L S Vulovic
Permanent Life in High Altitudes in Treatment of Infantile Pulmonary Tuberculosis (It)—M Gerbasi
Indications for Artificial Pneumothorax in Children (It)—M Umberto
Bilateral Artificial Pneumothorax in Pulmonary Tuberculosis in Young Children (It)—S Barberi
Clinical and Statistical Contribution to Calmette's Vaccination (It)—G Guidi
Lipiodol Therapy in Infantile Tuberculosis (It)—M del Giudice
Finzi's Tuberculin in Cure of Infantile Tuberculosis (It)—G Tacone
Tuberculous Endotoxins and Specific Serum in Treatment of Human Tuberculosis in Adults and Children (Fr)—E Grasset
Petragnani's Antituberculin (It)—G Salvioli
Latent Secondary Infection in Tuberculosis (Ger)—G Weber
Haemato encephalitic Barrier in Tuberculous Meningitis (Fr)—D Moritz and B Wollek
Erythema Nodosum in Tuberculosis (Fr)—K Lewkowicz
Agglutinins in Blood Serum of Tuberculous Children (It)—B Musa
Modified Groer Reaction (Ger)—T Szabó
Tuberculous Infection through Teeth and its Prophylaxis and Treatment (It)—A Reissner
Granulomatous Lesions due to Tubercle Bacillus (It)—A Grassi
Prognosis of Occult Infantile Tuberculosis (Ger)—G Herlitz
Post natal Development of Child's Lung (Eng)—St Engel
Prognosis of Tuberculosis in Infants (It)—O Maggia
Familial Tuberculous Infection in Children (It)—V Debenedetti
New Conception of Course of Tuberculous Process (Fr)—K Lewkowicz
Complement fixation Reaction in Rheumatic Disease (Ger)—H Brokman
Transitory Anaemia Neonatorum (Ger)—H Lehndorff
Measles Virus (Fr)—K Papp
Comparison of Organic Acids and Sulphanilamide as Urinary Antiseptics (Eng)—H F Helmholz
Loss of Weight due to Parasites (Fr)—P Veghelyi
Relation of Urinary Infection to Chronic Nephritis in Childhood (Ger)—V J Schaffer and D Remsen
Exogenous Lichen Urticatus (Ger)—Hamburger and Dietrich
Agar Treatment in Dyspepsia (Ger)—K Scheer
Rickets in Monkeys (Eng)—H J Gerstenberger
Essential Familial Lipaemia (Eng)—L Holt F Aylward and H F
Digestive Disturbances in the Thin Child (It)—G Surányi
Cooley's Anaemia in Childhood (It)—I Fornara and G D
Functional Examination of Vegetative Nervous System and Electrocardiogram (Ger)—V Nadrai

Periosteal Reactions in Non luetic Children in First Three Months of Life (Ger)—O Chiari
Functional Treatment of Congenital Hip Dislocation (Ger)—F Bauer
Abortive Forms of Acute Glomerulonephritis (Ger)—J Gerlach
Vaccine Therapy and Early Diagnosis of Pertussis (Ger)—J Leitner
Tendinitis and Infantile Rheumatism (Ger)—J Zierdt
Hormone-vitamin Treatment of Grave Infectious Diseases (Ger)—J v Gyorgy
Diphtheritic Antitoxin (Fr)—J Frohlzka
Malaria Cure in Acute and Chronic Malaria in Children (It)—F Jerace
Treatment of Acute Polyarticular Rheumatism (Fr)—J Marcy
Alkaline Reserve in Chorea (It)—S Moschini
Gaertner's Bacillus in Infantile Gastro-enteritis (It)—V Cape
Haemorrhagic Blood Dyscrasias and Dyspnoea (Eng)—H I Goodall

American Journal of Cancer

Lancaster Pa vol 33 June 1938

Prognostic Significance of Intracellular Mucicarminophilic Material in Carcinoma of Female Breast—V K Frantz
Tumour of Jaw having Structure of Mixed Tumour of Salivary Glands—L C Simard
Relationship of Malignant Amelanotic Melanoma (Nevocarcinoma) to Extramammary Paget's Disease—A P Stout
Malignant Tumours in Dogs Description of Nine Cases—H B Roedeck and R A Willis
Adenocarcinoma in Uterus of Rat following Trauma and External Hormonal Stimulation—C R Halter
Comparative Pathology of Cancer of Alimentary Canal with Report of Cases in Mice Studies in Incidence and Inheritability of Spontaneous Tumours in Mice Forty-third Report—H G Wells M Slye and H F Holmes
Effect of 1 2 5 6-dibenzanthracene on Growth of Brown-Pearce Rabbit Carcinoma—M Appel A V Strauss C Kolischer and H Nebeles
Significance of Amino-acids for Growth in vitro of Human Fibroblasts II Growth in Media containing Various Amounts of Glycine—J P McVeigh and E Erlichman
Transmission of Animal Tumours by Isolated Cells I Transmission to Mice and Rats—N Krotkina
Action of X Rays on Nucleated and Non-nucleated Egg Fragments—P S Henshaw
Morphology of Stomach and Gastric Secretion in Malays and Chinese and Different Incidence of Gastric Ulcer and Cancer in these Races—C Bonne Ph H Hartz J V Klerks J H Posthuma W Radsma and S Tjokronegoro

Cancer of the Alimentary Canal in Animals—In 142 000 mice of Miss Slye's stock all dying of natural causes and mostly of cancer age there were only fifteen primary malignant tumours of the stomach and none in the oesophagus There were primary intestinal tumours in nineteen mice in eleven of which the tumour originated in a prolapsed rectum The authors discuss the comparative rarity of cancer of the alimentary canal in animals and provide a valuable list of ninety references

Gastric Ulcer and Cancer in Java—The incidence of gastric ulcer and gastric cancer is extremely low in the natives of Java but in the Chinese living there it is much the same as in Western countries The authors investigated the anatomy, histology and function of the stomach in the two races Gastric function was not more active in Chinese than in Javanese Chronic atrophic gastritis and goblet cell metaplasia were more frequent in the Chinese while gastritis in general and erosions were about equally frequent The rarity of ulcer in the Javanese was attributed to the absence of a factor which in Europeans and Chinese causes ulcer formation on the basis of erosion The aetiological significance of differences in diet and habits cannot yet be assessed

Annales d'Oto-laryngologie

Paris No 2 February 1938

Technique of Audiometer Hearing Tests—R Caussé
Radiography of Larynx in Frontal Plane—Bouchet and P C Huet
Chronic Maxillary Sinusitis—C Larroude

Paris No 3 March 1938

Anatomical and Clinical Study of Cylindromas—Y Lemaitre
Aetiology and Treatment of Recurrent Nerve Paralysis—H Gutzmann
Elastema of Vocal Cord—R Argaud and J Calvet
Ton I Enucleation by Sluder Ballenger Method in 100 Cases with Slight Modification of Technique—S I Duyd I
Abnormal Vestibular Reactions observed in Course of Extramedullary Lesions in Cervical and Cervico-dorsal Regions of Vertebral Column—J Helsmoortel and L van Bogaert
Chronic Maxillary Sinusitis—C Larroudé

Paris No 4 April 1938

Acute Non-suppurative Encephalitis of Auricular Origin—J Piquet and J Minne
Post-operative Meningitis through Latent Labyrinthitis—A Gaston.
Persistence of Thyro-lossal Canal Median Cervical Fistula—S Soru L Popp G Ioanitescu and H Neumann
Medical and Surgical Treatment of Syphilis of Larynx—J Rebattu and P Mouret-Kuhn

Auricular Encephalitis—Acute cerebral oedema without pus formation is a rare complication of middle ear suppuration The authors look upon this condition as a pathological entity and do not agree with those observers who consider that oedema of the brain is simply an early stage of abscess formation The lesions appear to be caused by an acute thrombosis of cerebral vessels either of a small artery or more often thrombosis of the transverse sinus which has spread into some of the cerebral or cerebellar veins An acute oedema of a limited area of brain tissue is the result and this may go on to necrosis The term encephalitis is not correct because there is no infection of brain substance—only a vascular lesion A further factor to be considered is an embolus or a cerebral vessel with a vasomotor effect at a distance from the embolus

Archives of Dermatology and Syphilology

Chicago vol 37 May 1938

Early Epidermal Neoplasia Description and Interpretation Theory of Mutation in Origin of Cancer—R L Sutton jun
Henry Granger Piffard Great Factor in Progress of American Dermatology—P E Becker
Aplastic Anaemia following Use of Neoarsphenamine—M Kadin
Treatment of Chronic Dermatitis by a Cataphoretic Method—F P Lowenfish
Syphilitic Asthma with Atrophic Cirrhosis in Acquired Syphilis Case Report—E W Klinefelter
Sclerocdema Adultorum (Buschke) Its Relation to Trophoedema and its Pathogenesis—M Helfand
Syndrome of Spoon Nails Anaemia Cheilitis and Dysphagia—N P Anderson
Cutaneous Manifestations of *Trichophyton purpureum* (Barg)—G M Lewis and M E Hopper
Treatment of a Pemphigoid Eruption with Sulphanilamide Case Report—E S Lain and J H Lamb

Early Epidermal Neoplasia—R L Sutton presents an illuminating paper on small epidermal neoplasms and suggests that these should be classified according to the rate of growth of the altered cells and their coherence Neoplasms with strong coherence and slow growth do not metastasize and include senile keratoses leucoplakic neoplasms with no coherence and a rapid rate of growth form carcinomata and metastasize easily The author suggests a division into six types of neoplasm based on the rate of growth of the altered cells and the tendency of the cells to cohere He considers the description precancerous illogical and supports the somatic mutation theory of the origin of cancer

Archives of Ophthalmology

Chicago vol 19 May 1938

Anomalous Projection and Other Visual Phenomena associated with Strabismus—F H Verhoeff
Cancer of Eyelids I Basal-cell and Mixed Basal-cell and Squamous-cell Epitheliomata—H L Birge
Superficial Punctate Keratitis Its Treatment with Iodine Solutions—A Cowan and T H Cowan
Avertin Anaesthesia for Ophthalmic Operations—J Laval
Net Average Yearly Changes in Refraction of Atropinized Eyes from Birth to Beyond Middle Life—E V L Brown
Moulded Contact Lenses—T E Obrig
Strength of Epinephrin Compounds in Ophthalmotherapy New Epinephrin Ointment—J D Weintraub

Cancer of Eyelids—Of 464 cases 230 were examined histologically 60 per cent were basal cell and 14 per cent were mixed basal cell and squamous-cell carcinomata The basal cell type occurred in the sixth and the mixed cell in the fifth decade of life 29·5 per cent of the former and 31·2 per cent of the latter were associated with chronic irritation Treatment consisted in exenteration of the orbit excision diathermy and cauterization or operation and irradiation

The mortality in the basal cell lesions was 11 per cent, and 68 per cent in the mixed growths 46 1 per cent of the patients with basal cell epitheliomata and 75 per cent of those with mixed epitheliomata lived fifteen years or more after treatment Only 20 per cent of the patients sought adequate treatment in the first year of the disease

Biochemical Journal

London vol 32 May 1938

Presentation to Sir Arthur Harden
Investigations of Sources of Error in Estimation of Tyrosine and Tryptophan in Complex Materials which are associated with Hydrolysis —J W H Lugg
Fat Composition of Milk fed Rats —H E Longenecker and T P Hilditch
Component Fatty Acids of Some New Zealand Fish Oils —T B Shorland and T P Hilditch
Metabolism of *Aspergillus tamarii* Kita Kojic Acid Production —B S Gould
Studies in Biochemistry of Micro-organisms LVIII Synthesis of Spinulosin (3 6-dihydroxy 4-methoxy 2 5 toluquinone) a Metabolic Product of *Penicillium spinulosum* Thom —W K Anslow and H Raistrick
*Studies in Stability of Vitamins A and D I —F A Robinson
Determination of Fructose in Blood —T K Herbert
Variation of Extinction Coefficient of Vitamin A with Solvent —A E Gillam and M S el Ridi
Action of Arginase upon Carbamidoarginine —A Hunter
Action of Sulphites on Cystine Disulphide Linkages in Wool I Influence of pH Value on Reaction —F F Elsworth and H Philips
*Experiments with Pigs on Pellagra producing Diet II —H Chick T T Macrae A J P Martin and C J Martin
Wet crushing Mill for Micro-organisms —V H Booth and D E Green
Malaic Acid as Inhibitor of Enzyme Reactions induced by SH compounds —E J Morgan and E Friedmann
*Influence of Gonads on Protein Metabolism V Effect of Testicular Urinary and Anterior Pituitary Preparations on Urinary Creatinine of Normal and Castrated Rabbits —R E S Cheetham and H Zwarenstein
Studies in Detoxication I Influence of (*a*) Dose and (*b*) O M and P substitution on Sulphate Detoxication of Phenol in Rabbit —R T Williams
Biochemistry of Electric Organs of *Raia clavata* —E Baldwin
Nitrogen Metabolism of an Insect (*Lucilia sericata* Mg) I Uric Acid Allantoin and Uricase II Ammonia and Other Metabolites —A W A Brown
Effect of Insulin on Oxidations in Isolated Muscle Tissue —H A Krebs and L V Eggleston
Reaction between Metaphosphoric Acid and Egg Albumen —G Perlmann and H Herrman
Preparation of Crystallized Egg Albumen Metaphosphate —G Perlmann
Apparatus for viewing Varying Thicknesses of Solution with Direct vision Spectroscope —G A Harrison
Anaerobic Oxidations Ferricyanide as Reagent for Manometric Investigation of Dehydrogenase Systems —J H Quastel and A H M Wheatley

Stability of Vitamin A —When heated at 100 C in oxygen vitamin A takes up oxygen Its ultra-violet absorption iodine value and acetyl value fall and some aldehyde is formed Its biological activity is reduced The results suggest that the hydroxyl group of vitamin A is oxidized to aldehyde and the unsaturated linkages to peroxides which are immediately destroyed by disruption or by reaction with other unsaturated linkages to form polymerides The presence of oxidized vitamin A in some concentrates may be responsible for their low biological values

Experimental Pellagra in Pigs —The substance necessary to prevent the ill effects of feeding young pigs on a maize diet is contained in the fuller's earth absorbate from an autoclaved yeast extract in the baryta eluate of this and in the alcoholic extract of dried yeast nicotinic acid and wheaten straw were also effective but riboflavin (lactoflavin) had no effect Since nicotinamide occurred in considerable quantities in the eluate from the absorbate used it seems probable that nicotinic acid or its amide is the substance lacking in the diet used and present also in wheaten straw Rats thrived on the maize diet on which pigs sickened and died their requirement of nicotinic acid must therefore be small

Gonads and Urinary Creatinine —Injection of a lipoid extract of testes into normal adult rabbits and recent castrates increased the urinary creatinine but reduced that of long standing castrates to pre castration level Injection of saline suspensions of testes reduced the urinary creatinine in normal and ill castrated rabbits Anterior pituitary extracts increased the urinary creatinine only in normal and recently castrated rabbits The effects of injections of testosterone androsterone and adult male urine were also studied The results suggest the presence of two different active principles in the testes and that the response to testicular extracts depends on the state of the anterior pituitary following castration

British Journal of Dermatology and Syphilis

London vol 50 June 1938

*Cutaneous and Subcutaneous Calcinosis —F R B Atkinson and F P Weber
Case of Seborrhoeic Sycosis with Recovery after Tonsillectomy —N Burgess
Case of Ehlers Danlos Syndrome —J F Smith
Treatment of Warts —J Avit Scott

Calcinosis —Atkinson and Weber give a very full review of calcinosis circumscripta and calcinosis universalis In the former the lesions may be painless or painful, and are so small as to be only demonstrable radiologically, and usually symmetrically distributed on the fingers, thumbs, and extensor aspect of the elbows In the latter universal type the flexor side of the limbs is implicated, the fingers escape The presence of lesions in the tips of the fingers differentiates calcinosis circumscripta from gout The blood chemistry aetiology and results of treatment are conflicting but the writers support the view that there is first a sclerosis associated with a local vascular disturbance, followed by a degeneration of the connective tissues giving rise to a special physiochemical affinity for the salts of calcium

British Journal of Ophthalmology

London vol 22 July 1938

Lymphoid Tumour of Lacrimal Gland —H V Cookson and Alex MacRae
Photochromatic Interval in Glaucoma and Cavernous Atrophy —R Pickard
Experimental Data of Problem of Permeability of Cornea I Experiments on Excised Pigs Corneae and Living Rabbits Eyes with Iodide and Nitrite —M Klein
Experimental Data on Problem of Permeability of Cornea II Permeability of Excised Cornea with Respect to Water and Chloride Ions —M Klein and J Sarkány
*New Developments in Pharmacological Treatment of Primary Glaucoma —M J Schoenberg
Binocular Fixation for Scotometry at One Metre —J Foster
Notes on Optical Instruments and Devices —J Foster

Treatment of Glaucoma —A full description of the latest physiological views on the actions taking place at the junction between the nerve terminal and the effector cell in the case of the parasympathetic and sympathetic systems of the eye is followed by a detailed account of the effect of the various drugs used to modify such actions In some cases of primary glaucoma there is failure of the parasympathetic in others a preponderance of sympathetic activity and in a third type a mixture of these two factors It may be possible in the future to differentiate these types clinically and to employ with greater discretion the appropriate medicament So far as is known at present, drugs that have a beneficial effect in primary glaucoma act either upon the esterase or upon the effector cell

Bruns Beitrage zur Klinischen Chirurgie

Berlin and Vienna vol 168 July 13 1938

Experimental and Clinical Investigations on State of Gastric Secretion after Functional Suppression or Operative Removal of Gall bladder —H Bernhard and Th Eck
Blood Transfusions and Supply of Blood Donors at University Department of Surgery at Gottingen —H Wille Baumkauff
Treatment of Injuries to Ureter occurring during Pelvic Operations —V Kalk
Value of Tomography in Surgery —G Arndt
Part of Thyroid concerned in Disease Process of Rickets —W Haase
Formation of Metastases by Benign Tumours of Thyroid —F Bayer
Total Resection of Stomach —K E Herlyn and K Stock
Soft Tissue Tumours of Foot of Traumatic Origin —W Dreyer
Primary Cavernous Haemangioma of Cranial Bone —G Scarff
Late Results of Gastric Reaction —V Struppler
Cervical Rib Syndrome —D v Klimko

Bulletin de l'Association Française pour l'Étude du Cancer

Paris vol 27 March 1938

Prophylactic Excisions in Treatment of Cancer of Upper Lip—J Dumas
Do Tumours use Glycogen for their Growth?—A Brault
Two Cases of Epithelioma of Bladder—G Severac Peyron Perreau Delbet and Milker
Anatomo-clinical and Pathogenic Considerations on Two Cases of Cancer of Male Breast observed in Natives of Madagascar—G Mouriquer
Mechanism of Suppression of Reaction to Gonadotropic Hormone by Tumour—J Flaks and V Ber
Morphological Peculiarities of Foetal Organs Embryomas Presence of a Lumbar Region and Testes in a Congenital Sacro-coccygeal Tumour—Peyron Bernard and Lalay
Histological Diagnosis of Embryonic Leprosy—G Chevrel
Morphological Plasticity and Sebaceous Metaplasia in Mammary Fibro-adenomas of Rat—Ch Oberling P Guerin and M Guinn
Radiosensitivity of Jensen Sarcoma Contribution to Study of Direct and Indirect Radiotherapy—B Gryshkewitsch and J Flaks
Variations in Activity of Isolated Heart and of Smooth Muscle System in Cases grafted with Murray's Liposarcoma—P Menoret
Investigation of Sensitizing Fraction in Macerations of Rat Tumour—E Peyre and H Mortcourt

Indian Journal of Medical Research

Calcutta vol 25 April 1938

Attempts to Cultivate *Mycobacterium leprae murium*—Dharmendra and J Lowe
Serological Study of Actinomycosis—R K Goyal
Relative Amounts of Protein and Non-protein Nitrogenous Constituents occurring in Foodstuffs Their Significance in Determination of Digestibility Coefficient of Proteins—M Swaminathan
Further Studies on Factors affecting Vitamin A Activity of Animal and Vegetable Products—N K De and B N Majumdar
Nitrogen Complex of Indian Foodstuffs Condiments Part II Chillies (*Capsicum annuum*) and Coriander Seed (*Coriandrum sativum*)—G Narasimhamurthy
Availability of Phosphorus from Indian Foodstuffs—K V Giri
Flavine and Vitamin B (Anti-dermatitis) Content of Indian Foodstuffs—H E C Wilson and G K Roy
Available Iron in Indian Foodstuffs—H Goswami and U P Basu
Observations on Basal Metabolism of Indian Boys in Calcutta—H E C Wilson and N C Roy
Enzyme Method for Estimation of Adrenaline in Suprarenal Gland—K Bhagvat
Role of Formalin in Estimation of Nitrogen in Body Fluid—P De and C C Chatterjee
Comparative Study of Glycolysis in Normal and Diabetic Blood—P De and S Bhattacharyya
Glycolysis in Drawn Blood in Twenty-four Hours—P De and S Bhattacharyya
New Colorimetric Test for Plasmoquine—B K Nandi and B B Dikshit
Haematological Investigations in South India Part III Mean Red Cell Diameter—G Sankaran and M V Radhakrishna Rao
Haematological Investigations in South India Part IV Haemoglobin in Normal Pregnancy—M V Radhakrishna Rao
Haematological Investigations in South India Part V Effect of Altitude on Haemoglobin Content—G Sankaran and K Rajagopal

Protein and Non-protein Nitrogen—Swaminathan has estimated the relative amounts of protein and non-protein nitrogenous constituents occurring in certain cereals pulses nuts oilseeds condiments vegetables and in milk by the Stutzer method The average amounts of non-protein nitrogen expressed as percentages of the total nitrogen occurring in the different groups of foodstuffs were as follows cereals 5 per cent pulses 9 per cent nuts and oilseeds 5 per cent condiments 6 per cent, vegetables 14 per cent and milk 9 per cent Swaminathan also draws attention to the fact that if the protein content of a food is determined by multiplying the nitrogen content by 6·25 the digestibility coefficient of proteins may be under-estimated owing to the presence of varying amounts of non-protein nitrogen

Journal of Pediatrics

St Louis vol 12 June 1938

Vitamin A Research and its Clinical Applications in Paediatrics—A M Yudkin
Comparative Values of Various Carbohydrates used in Infant Feeding—F W Schultz E M Knott J L Gedgoud and I Loewenthal
Sensitivity to Cows Milk in Infantile Eczema—L W Hill
Allergy in Childhood I Modes of its Acquisition II Prophylaxis—B Ratner
Treatment of Paradoxical Incontinence of Urine associated with Spina Bifida—C D Creevy
Enuresis in Children—H Bakwin
Foreign Bodies in Urogenital Tract of Children—P Rosenblum and A E Jones
Orthostatic Hypotension—D L Gillespie and N W Barker
Endemic Typhus Fever—H A Reisman and I Sabloff
Sedimentation Time and Other Blood Factors in Newborn Infant—S Hurwitz A S Malay and D S Lazarus
Comparative Value of Cod liver Oil and an Emulsion of Percomorph-liver Oil in Prevention of Rickets—M R Reynolds.
Conduct of a Paediatric Prophylaxis Clinic—M Huschka and O S Oden
Candy-coated Tongue Depressor—F Hall

Vitamin A—The great importance of an adequate amount of vitamin A in the diet of infants and children is emphasized Cows milk contains only a small amount of this vitamin and there is also a seasonal variation It is pointed out that the administration of an excess of this vitamin does not produce an increased protection from infections the growing organs of early life need a varied diet which contains a good supply of all vitamins for health

Paradoxical Incontinence in Spina Bifida—The possible presence of spina bifida should be borne in mind in cases of incontinence of urine as it disturbs sensation and leads to loss of vesical expulsive power This condition may often be remedied by training the child to increase the expulsive power of the bladder and thus to compensate for the loss of sensation Cases are described which illustrate the training and the results of treatment

Journal de Radiologie et d'Électrologie

Paris vol 22 July 1938

Effect of X Rays on Eye and Ear—A U Desjardins
New Device for Demonstration of Optic Canal—A P Lachapelle
Teaching Radiology to Medical Students Personal Experiences—R Gilbert
New Method for Localization of Foreign Bodies—R Grandgerard and F Karcher
Case of Large Low Abdominal Hernia with Gastro-intestinal Contents—I Wolthelet
Tenth Congress of French Association of Gynaecologists and Obstetricians (September-October 1937)—M Dehenne and Mme Faure-Beaulieu

Optic Canal—This is a description of a very simple and ingenious device which allows the x ray examination of both optic canals under identical conditions The examination is carried out with the patient sitting and the whole procedure should not take more than a minute

Localization of Foreign Bodies—Army radiologists should be particularly interested in the simple quick and accurate method of localization of foreign bodies here described

Journal d'Urologie Medicale et Chirurgicale

Paris vol 45 May 1938

Transurethral Resection—J Cibert
Chemotherapy of Gonorrhoea by 1162 F—P Barbellion and A Garicaldi
Treatment of Chronic Gonorrhoea by Gaseous Dilatation—H Mercier
Case of Gynandroidism—C Lepoutre
Retrograde Catheterization in Tight Tubular Structures of Posterior Urethra—N Hortolomei

Transurethral Resection—Transurethral resection is especially suited for those patients who because of their age or general condition seem otherwise doomed to a catheter life or a permanent cystostomy In ninety two cases of resection it was performed for prostatic adenoma (thirty nine cases) dissectasia of the bladder neck (thirty six) prostatic cancer (eleven) bad result after prostatectomy (four) and once each for hypertrophy of Merciers bar and for the sequelae of a prostatic abscess Seventy nine patients had one resection twelve had two and one three the maximum amount of tissue resected being 25 grammes Six of the ninety two patients died three of them being cases of cancer of the prostate Post operative complications included haemorrhage (this was abundant in twelve patients being immediate in three and secondary in nine from the seventh to the sixtieth day) epididymitis (six cases one of which suppurated) urethral stricture (two cases) and incontinence nearly always transient (eight cases) these last were usually in cases in which the loop was carried too near the verumontanum due either to inattention or to poor visibility

Chemotherapy of Gonorrhoea—1162 F is para amino phenylsulphamide The maximum dose is 3 grammes a day for not more than five to eight days Toxic effects, if they occur call for a reduction in the dose or an abandonment of the drug Such effects may be general (headache asthenia, indigestion nausea, jaundice) cutaneous (morbilliform, scarlatiniform purpuric, or urticarial rashes), or nervous (sub-comatose condition, polyneuritis hallucinations, optic neuritis) Further, the blood may show sulphaemoglobinaemia methaemoglobinaemia, agranulocytosis or anaemia while the kidneys may be affected as shown by the presence of casts in the urine elevation of Ambard's constant, and diminished elimination of phenolsulphonephthalein

Monatsschrift fur Kinderheilkunde

Berlin vol 73 April 25 1938

Creatine Creatinine Metabolism in Myotonia Congenita and its Reaction to Glycocol and Prostigmin—J Dieckhoff
Types and Prognosis of Obesity in Children—S Hering
Diverticula of Gall bladder—W Catel
Normal Qualitative Thrombocyte Blood Picture in Infants—J Arneth
Quantitative and Qualitative Condition of Leucocytes in Infants—J Arneth
Electrocardiographic Findings in Infantile Spasmophilia—O Cammann
Clinical Manifestations of Polysarcosis—M Mancke
Spastic Ileus in Newborn—Lichti
Influence of Food Intake on Morphological Constituents of Erythrocytes in Blood of Premature Children—G Kinkel Diercks and H Kinkel
*My Tuberculin Paper Test—Y Hiro
Influence of Ultra sound Waves on Poliomyelitis Virus *in vitro*—M Kasahara S Ogata H Kambayashi and K Yoshida
Tuberculotoxic Meningitis—E Knopf
Multiple Myelomata in Childhood—P Laurentius
Spino cerebellar Ataxia in Childhood—H Hempel

Tuberculin Paper Test—Hiro cuts up ordinary filter paper into small pieces wets them with old tuberculin dries them in a clean atmosphere and stores them in a brown bottle ready for use When a tuberculin test is desired the filter paper is stuck to the sternum with adhesive plaster and left for forty eight hours When positive the skin is reddened underneath the filter paper To prepare 120 pieces of paper (0·5 by 0·5 cm) requires only 1 c.cm of old tuberculin

Policlinico

Rome vol 45 June 15 1938 (Sez Chirurg)

Bilateral Thromboses of Common Iliac Arteries in Typhoid Fever—E Fontanesi
Chronic Encapsulating Peritonitis—E Guppoini
Oblique Incision for Laparotomy in Right Abdomen—P Rossi

Chronic Encapsulating Peritonitis—An account is given of some four new cases and some thirty five described in the literature of this condition—which has also been called serositis or chronic fibrous peritonitis and is the *Zuckergussdarm* of German writers Not always does it follow operations and a tuberculous or syphilitic causation is unproved in most cases The finding common during a subacute abdominal crisis of a circumscribed pseudo cystic swelling giving a tympanitic percussion note is said to be of diagnostic importance

Public Health

London vol 51 June 1938

Operation of Midwives Act 1936—C Berkeley T N V Dott and E W C Thomas
General Practitioner and the Midwifery Service—F Grundy
Notes on Dental Condition of 200 Cases of Pulmonary Tuberculosis—H G Fraser

London vol 51 July 1938

Health We Must Nurture—E H Wilkins
The Child Kept Apart from Parent—Ethel Cox
Notes on Some Memorandums of Evidence submitted by Society of Medical Officers of Health to Inter-departmental Committee on Nursing Services

Assessment of Nutrition—The author severely criticizes the usual haphazard methods of classifying school children as well or 'ill' nourished The absence of any biological standard and the "general impression" method lead to discordant results, and there is no clear distinction between positive health and the mere absence of defect The author advocates a much higher standard of assessment than that at present generally practised

Child Apart from Parents—This paper deals with the problems presented by the child (1) under institutional care (2) boarded out (3) brought up by foster parents, and (4) daily-minded' while the mother goes to work The difficulties of finding suitable environment and care for the child separated from its parents temporarily or permanently, are discussed at some length No definite solution is given, but foster parentage is favoured

Strahlentherapie

Berlin vol 62 June 24 1938

In Memory of Hermann Gocht—H Meyer
Radiobiology and Radiotherapy—A Gunsett
General Biological Effect of X Rays—H Holthusen
Hereditary Transmission of Injurious Effects of X Rays—A Pickhan
Results of Treatment of Uterine Carcinoma from 1931 to 1937 at St George's Hospital Hamburg—A Hamann and A Gobel
Treatment of Carcinomatous Metastases in Cervical Lymphatic Gland—I Jovin
Value of Inherent Filtration in Shock proof Tubes—H Eschbach
Effect of X Rays on Reticulocytes in Mice III Communication—H Langendorff
Specific Effect of Long Ultra violet Waves on Man—I Haussler
Brown Pigmentation of Skin of Frog under Influence of Ultra violet and Visible Light—I Haussler and A Ueberle
*X Ray Therapy of Ulcus Callosum Ventriculi and of Post operative Penetrating Gastro jejunal Ulcer—K Breitlander
Cardiovascular Injury and its Prevention during Treatment of Upper Air Passages and of Oesophagus with Multiple Divided X Ray Doses—H Bartsch and G Wachner
Measuring of Smallest X Ray and Radium Doses by Greinach Spark-counter—A Lacher
New Carbon arc Lamp (Albertus Lamp) Measurements of Carbon arc Light with New Bioclimatic U V Dosimeter—R Bottler and O H Knoll
New Source of Ultra violet Light (Vitalux U)—A Rittenauer
Effect of X Rays on Malignancy of Cancerous Tissue—A E Rollo
Case of Carcinoma of Pylorus investigated by New Method—K Stauder and J Lobering
Effect of Short wave Therapy on Malignant Tumours—S Baumeyer
Field Problems in Short wave Therapy—Laszlo Rosi
Problem of Heavy Output Deep X Ray Therapy Tubes—C H Ewer and P Ott
Division of Carcinoma of Cervix into Four Stages according to Clinical anatomical Spread of Tumour Proposed by Health Committee of League of Nations (*Radiological Subcommittee for Study of Cancer*)—H Meyer

X Ray Treatment of Gastric and Gastro jejunal Ulcer—The author claims 90 per cent successes from X ray treatment of ulcers of the lesser curvature (forty eight cases treated) and 100 per cent cure in cases of post operative gastro jejunal ulcer (two cases treated) The technique of the treatment is described and the importance of divided small x ray doses is stressed

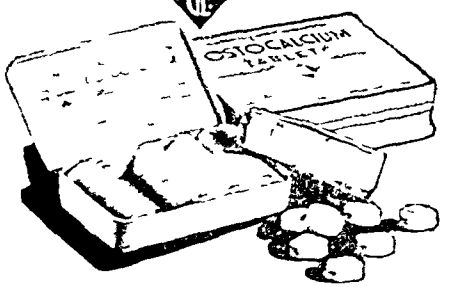
Zeitschrift fur Urologie

Leipzig vol 32 1938 Heft 7

*Necrosis of Papillae—C E Alken
Intracytoplasmic Inclusion Bodies (Type Miyagawa) in So-called E[illegible] Non specific with Positive Frei Reaction—W F Co[illegible] J I Herrera
Renal Aneurysm—J Kastner
Hydatid Cyst of Kidney—A Schmidt
Differential Diagnosis of Renal and Spondylitic Abscesses—H Wa[illegible]
Complete Sarcomatosis of a Whole Kidney—L Rathke

Necrosis of Papillae—Attention is drawn to a syndrome occurring in patients suffering from diabetes [illegible] pyelography is necessary to establish the diagnosis Two characteristic cases are analysed and the differential diagnosis and treatment of this condition are discussed

OSTOCALCIUM TABLETS



IN URTICARIA

AND

ALLERGIC CONDITIONS

CALCIUM & VITAMIN D

TO BE *EATEN*

WHEREVER calcium is indicated Osto calcium provides the mineral in its most eatable form Improved flavour and friability make the tablets readily acceptable to patients The doubled calcium content now yielding 1' grs (0 1 gm) per tablet is an appreciable advantage for effectiveness and economy Utilisation of the calcium is made certain by the Ostelin vitamin D incorporated (500 international units per tablet)

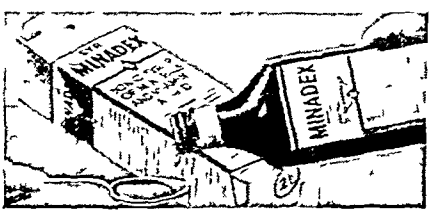
Prices (except in Eire) Tins of 0 -/3 100 -/5 60 Reduced from 1 6 to 10/ Less usual professional discount

Product of GLAXO LABORATORIES LTD GREENFORD MIDDX BYRon 3434

THE UNIVERSAL TONIC UNIVERSALLY EFFECTIVE UNIVERSALLY ENJOYED

THE success of Minadex is largely traceable to the fact that it achieves its reconstructive effects without raising the bogey of nasty medicine in the mind of the child or weakened adult Experience in large hospitals for children has shown that the pleasant lemon flavour of Syrup Minadex is thoroughly enjoyed But more important still is the sound *constructive* basis on which Minadex is built Devoid of temporary stimulants, Minadex builds *positive* health It *is* stimulating, of course—often dramatically so But the effect is gained by rebuilding the blood and neuro-muscular systems with vitamins and minerals, and not by temporary reactions which create an illusion of returned vigour

For these reasons Minadex is as effective for treating, say, post-operative debility in an elderly patient, as it is for rebuilding a child convalescing from measles In fact one of its most valuable uses is in the treatment of adults who complain of being run-down or off-colour



Each fluid ounce of Minadex contains

1 Ferri et Ammon Cit , 13' grs , Mang Glycerophosph , 1 25 gr , Cupr Sulph 1 25 gr *To produce normal haemopoiesis*

2 Calc. Glycerophosph., 2 grs Pot. Glycerophosph , 1,5 gr , Sod Glycerophosph , 1 10 gr , Vitamin D 3 000 international units *To correct derangements of calcium metabolism To restore neuro-muscular tone To normalise the body functions*

3 Vitamin A, 18,000 international units *To renew the natural powers of resistance to disease by fortifying the epithelial linings of the body*

Syrup

MINADEX

In 6-oz. bottles 2 6 12 oz 4 6 80-oz winchesters reduced from 2- 6 to 20 -

Prices (not applicable in Eire) are subject to usual professional discount

Product of GLAXO LABORATORIES LTD GREENFORD MIDDX BYRon 3434

ILFORD
ILFEX

the film for

RADIOGRAPHY OF EXTREMITIES
for use only without Intensifying Screens

ILFEX FILM has met with great success since its recent introduction, and has proved to be of great value in cases where fine detail and high contrast are essential

It has been realised that a faster film would, however, be definitely advantageous Accordingly, the speed of ILFEX FILM has been greatly increased At the same time the contrast has been slightly improved whilst the definition remains unimpaired

Ilford Limited are confident that the latest ILFEX FILM marks a very definite advance in the effort to meet the needs of the discriminating Radiologist

For Extremity Work order

ILFEX DOUBLE-WRAPPED X-RAY FILM

Supplied only on Acetate (Safety) Clear Blue Base

ILFORD LIMITED · ILFORD · LONDON

THE NEWEST IDEA IN HEARING AIDS

"The most beneficial and the essence of convenience"

"As a sufferer from deafness for many years, and one who has tried practically every instrument evolved," writes T G N, Littlehampton, "I find that the V P Maxade is definitely the most beneficial and really is the essence of convenience"

Unobtrusive and reliable, the new V P Maxade consists of three compact units *each as easy to conceal in the clothing or handbag as a cigarette case* It comprises a 3 valve amplifier, and sensitive crystal microphone, for either bone or air conduction hearing, miniature or disc type earpieces, and combines the important advantage of "invisibility" with the efficiency only possible in an electrical valve instrument Maxade is entered upon the Approved List of the National Institute for the Deaf and consistently used and prescribed by the principal hospitals and clinics A Model will gladly be sent for free clinical test Details of the V P Model, and other reasonably priced Maxade Models from Mr W Scott Worthington, F R S A PETO SCOTT Co, Ltd, 77, City Rd, E C 1 (*Acoustical Engineers since 1919*)

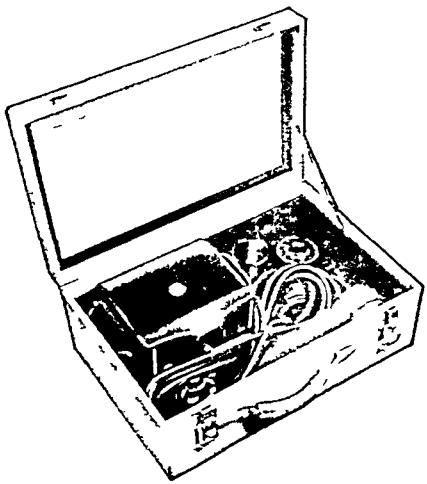
On view at the Empire Exhibition, Glasgow —Hall of Industry (North Section), Stand No T 106

The New V.P.

MAXADE

"Invisible" *Hearing Aid*

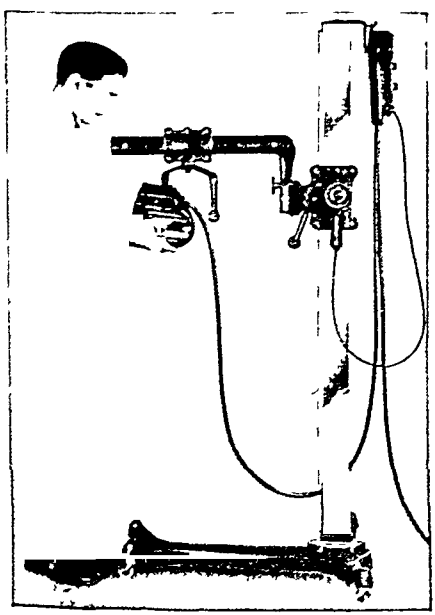
Experienced Radiologists Will Marvel . . .



at the surprising amount of useful x-ray energy packed in so small a unit as the inexpensive new VICTOR Model F-3

While it is the newest thing in x-ray, the F-3 is new only in refinements that make for greater power, for greater convenience in use The experience gained in making hundreds of the original Model F showed us where even that world-famous design might be improved

So here is the F-3 with 3 2 times more radiographic power for even shorter exposures Kilovoltage is now variable for optional techniques And for those who wish to use the unit alternately as portable and mobile x-ray equipment, a revolutionary new tube stand has been provided Despite all this, the interestingly low price remains unchanged



For practical, efficient and convenient portable and mobile x-ray service, the new, more powerful F-3 is worthy of your fullest consideration Your written request will bring you full particulars, or a demonstration, without obligation

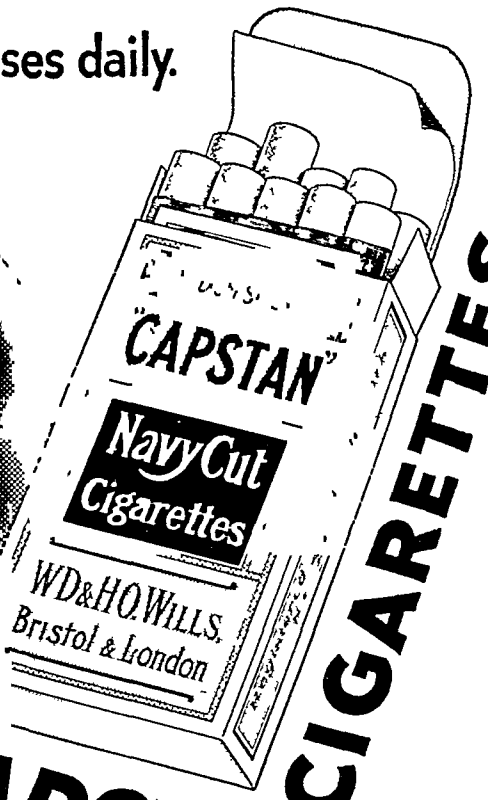
VICTOR X-RAY CORPORATION, Ltd

15 19 CAVENDISH PLACE LONDON / 1

BELFAST BIRMINGHAM BRISTOL CARDIFF DUBLIN EDINBURGH
GLASGOW LEEDS LIVERPOOL MANCHESTER NEWCASTLE PORTSMOUTH
AW1

The demand for CAPSTAN increases daily.

HAVE A
CAPSTAN
they're blended better



CAPSTAN CIGARETTES

10 for 6D 20 for 11½D
PLAIN OR CORK TIPPED

Issued by The Imperial Tobacco Co (of Great Britain and Ireland) Ltd C.C.6311

GUARDIAN ASSURANCE CO. LTD.

Established 1821

LIFE ASSURANCE
BY
MONTHLY PREMIUMS

A safe and systematic way of accumulating funds as a provision for the future needs of yourself and your family

Full particulars will be forwarded upon application to the Company's Head Office **68, King William Street, London, E.C4,** or to the **Medical Insurance Agency, B M A House**

Company transacts all the principal classes of Insurance business and also acts as Trustee or Executor.

Question . . . . .

What gives the most effective abdominal support?

Answer DIRECT anterior posterior pressure

Question *Why so?*

Answer It gives even positive pressure where the body most needs it

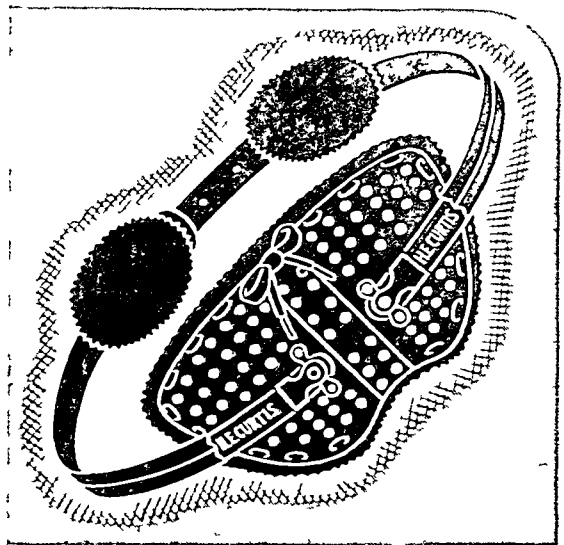
Question *Where is this form of support found at its best?*

Answer In the Curtis Abdominal Support No 1

Question *What are its outstanding features?*

Answer No undue constriction of the lower abdomen Extremely light Maximum support is combined with complete freedom of the hips Medically approved in the treatment of all forms of abdominal ptosis—visceroptosis, enteroptosis and gastroptosis—and for the support of scar tissue during consolidation

H F CURTIS & SON LTD,
Manufacturers of Curtis Abdominal Belt and Corset Elastic Hosiery Trusses Colostomy Appliances etc Telegrams Curtis, Wilbeck 2021
Telephone WELbeck 2021



CURTIS LTM
ABDOMINAL SUPPORT NO 1

Modern Iron Therapy

Iron Jelloids are an elegant and reliable means of administering the protocarbonate of iron The preparation has none of the disadvantages of Pil Blaud The iron content remains fresh and unoxidized indefinitely and injury to teeth is avoided

The Jelloids are highly effective in the treatment of achlorhydric anaemia and indeed in all the simple anaemias in which massive iron therapy is indicated

Iron Jelloids

You are cordially invited to apply for samples for clinical test
The Iron Jelloid Company Ltd King George's Avenue Watford Herts

INTESTINAL SUBINFECTION

SALVITAE is the key whereby the physician may control elimination and alkalinization thus dealing fundamentally and effectively with Intestinal Subinfection Toxæmia Acidosis Uricacidemia Constipation and a large number of disorders characterized by

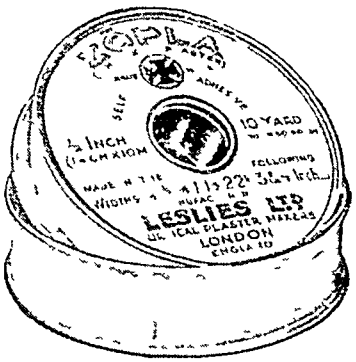
SALVITAE

and more or less dependent upon faulty metabolism imperfect elimination and disturbances of the acid base equilibrium of the body



Professional samples and literature gladly sent on request

COATES & COOPER LTD, 94, CLERKENWELL ROAD, LONDON, EC1



LESLIES ZŌPLA STRAPPING

CLOTHS—ORDINARY AND ELASTIC

WHITE OR FLESH

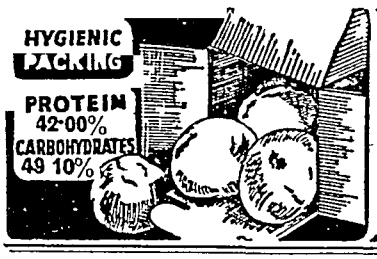
A SURGEON'S PLASTER—ALWAYS GOOD

ZŌPLA-BAND (Elastic Plaster Bandage)
Ideal for varicose ulcers, etc

ZŌPLA ON WHITE FELT.
Becoming very popular among surgeons for padding and protection Makes long-lasting pads

SAMPLES ON REQUEST

Manufactured by
LESLIES, LTD, Higham Hill Road, Walthamstow, London, E.17



— ERGO —

HEALTH BREAD, ROLLS AND CRACKNELS

Widely Used in Diets for Diabetes, Gastric Ulcer, Indigestion, Obesity

Free Sample, Diet Plans and Analysis sent post free on request

POLLEY & COMPANY LTD
(Dept B) Plymouth Road, London, E 16

ERGO
Regd Trade Mark

ALUZYME

NON-AUTOLYSED YEAST

Professional samples descriptive matter and prices on request

ALUZYME PRODUCTS,
PARK ROYAL ROAD LONDON N W 10

TOTAL VITAMIN B ACTION

In Vitamin B deficiency conditions the best results may be anticipated from administration of the *entire* B Complex, as each factor contributes to the corrective action This stabilised non-autolysed yeast supplies *all* the members of the B Complex in the fully active state Guarantees of efficacy B_1 Potency, 1140 International Units per ounce Glutathione test, brilliant magenta Active response to tests for nicotinic acid and flavin Indications Avitaminosis B and resulting conditions, anaemias, furunculosis and many nervous and skin affections

FINANCE

for the acquisition
by

PAYMENTS OUT-OF-INCOME

of

Surgery and Other Furniture
Surgical Instruments
Medical Text Books
X-Ray Apparatus
Laboratory Equipment

The above list is illustrative only Under its Equipment Purchase Plan the Company is prepared to assist doctors to acquire ANY article and spread the cost over a period

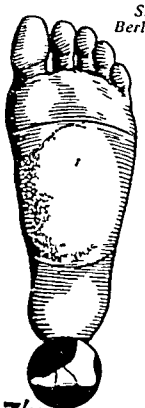
BRITISH MEDICAL FINANCE LTD.
Tavistock House South,
Tavistock Square,
London, W C 1

BMF

"THE OMNIPED ELASTIC FOOT CUSHION

is an efficient remedy and a commendable aid to those who suffer from any sort of foot troubles"

States a recent Report from the Berlin Orthopaedic University Clinic



The Omniped Foot Cushion is a resilient cushion which relieves and supports overstrained muscles without producing the pain which is so frequently inseparable from arch supports and foot correctives With every step Omniped Foot Cushion automatically massages the muscles giving them new strength and gradually easing back the whole structure of the foot to its normal position

Letters from Doctors and relieved patients alike are testifying to the success of this valuable new treatment for fallen arches metatarsal pains and the various consequent foot troubles

Full information and sample pair will be gladly sent on application

3/11 *per Pair*

OMNIPED

MASSAGING FOOT CUSHION

International Foot Appliances Ltd Dept B M 3
92 Baker Street London W 1

A GENTLEMAN ALWAYS LOOKS WELL DRESSED IN SAVILE ROW CLOTHES



NEW OVERCOATS LOUNGE DRESS SPORTS SUITS etc by all eminent tailors viz Scholte Lesley & Roberts Kilgour etc

OUR PRICES 3 to 8 Gns

Alterations on Premises

REGENT DRESS CO
2nd Floor Piccadilly Mansions 17 Shaftesbury Av Piccadilly Circus W 1 (Next Cafe Monico) GER 7150
LADIES DEPT on 1st FLOOR

FREQUENT MICTURITION

"YBWET" ABSORBENT BAGS
Male day pattern 35/
New Model Female day pattern 47/

"DUPLEX" BAGS
Male or Female day and night 70/

"SANITUBE"
For helpless bedridden patients 10/

Our bags catch all leakage easing mind and body Invisible under clothing and easily emptied Now worn world wide Special patterns for motorists and aviators

Diagrams etc on request from
HILLIARD 123 Douglas Street Glasgow C

BROCHURE SKETCHES & ESTIMATES FREE
CANonbury 3077

NAMEPLATES

BRONZE · STAINLESS STEEL BRASS

COOKE'S (FINSBURY) LTD
FINSBURY PAVEMENT HOUSE
LONDON E.C 2
Est 1877

D C to A C
ROTARY CONVERTERS
All sizes
Suitable for X Ray Work
UNIVERSAL ELECTRICAL CO.
221 City Road London E C.1

NAME

IN BRONZE ENAMEL OR BRASS

Free Sketch and Booklet will be sent on receipt of detail

Phone Clerkenwell 3441

S J & A Herd, 30 Clerkenwell Rd E C 1

PLATES

NAME PLATES Brass Bronze Stainless Steel

REDUCED PRICES

all to Let 10 to the Metal Makers

F OSBORNE & Co, Ltd Tel Euston 4824

117 Gower Street London W C 1

NAMEPLATES

Send for Illustrated Brochure and Price List

F B HALL & CO 443a New Cross Rd, S E 14 TIDeway 3818

NAME PLATES in Bronze and Enamel

Stainless Steel Brass or Chromium

Actual Makers Quick Delivery Low Prices

The WHITE BRONZE Co 100 Leander Rd, CROYDON

THE GRANGE,

near ROTHERHAM

A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental Disorders Both certified and voluntary patients received Approved for temporary Patients This is a large country house with beautiful grounds and park 6 miles from Sheffield Tel No 40630 Ecclesfield Res Phys GILBERT E MCLED L R C P I R C S Station Grange Lane L & N E Rly

TORQUAY

GRESHAM COURT HOTEL

RECENTLY OPENED A small luxury Hotel 2 mins Sea almost on level Luxurious comfort combined with an earnest desire to please

The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure M TEL 3658

HOME FOR EPILEPTICS

MAGHULL (near LIVERPOOL)

FARMING and OPEN AIR OCCUPATION for PATIENTS

A few vacancies in 1st and 2nd Class Houses FEES 1st Class (men only) from £3 p w upwards 2nd Class (men and women) 32/ p w

For further particulars apply

C EDGAR GRISEWOOD A C A, Secretary 20 Exchange Street East Liverpool 2

NORMANSFIELD

For Mental Defectives of either sex

Under private management

Apply to Dr Langdon Down, Normansfield Teddington

ECCLESFIELD," Shipbourne, Kent

(Removed from Ashford Middlesex)

PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large mansion beautifully situated in 100 acres of park land Extensive views Home farm R C Chapel Under the management of the Sisters of the Good Shepherd Apply Rev Mother Tel Shipbourne 61

Smedley's

Great Britain's Greatest Hydro

Matlock

Full range of Hydrotherapeutic Treatments Electrical Treatments Turkish and Plunge Baths Artificial Sunlight Dowsing Douches Manipulative Exercises Remedial Electricity Galvanic Faradic Ionic Diathermy Short Wave Therapy Infra Red Ultra Violet Light Actinotherapy Massage Medical Electrical Baths Radium Emanation Inhalations Fango Paraffin Packs Artificial Sunlight Department Dowsing Douches Massage Electrical Treatments Medical Staff in Attendance Resident Physicians Nurses Masseuses Attendants

Terms 13/ to 18 6 per day inclusive board Illustrated Brochure M.J on request.

Resident Physicians

C C R HARBINSON M B B Ch B A O (R U I) R MacLELLAND M D C M

Phone No 17 Grams Smedleys Matlock

A SPA UNDER ONE ROOF

In Rockdene are combined all the amenities of a modern palatial building treatment rest and entertainment

SHELTERED SITUATION SPACIOUS GROUNDS HIGHLY QUALIFIED STAFF

The Bath and Treatment Rooms occupy a special wing access being by lift from all floors and are fully equipped for every form of physical treatment including the most modern hydrotherapeutic and electrical methods massage and remedial exercises dietetic and occupational therapy Terms £4 4s 0d to £6 6s 0d

Inclusive terms for institution fees treatment board residence and attendance from £6 6s

Write for Prospectus to the Secretary

Consulting Physician

C R LESTRANGE ORME M B B Ch (Cantab) M R C P (Lond)

ROCKSIDE PHYSIOTHERAPEUTIC ESTABLISHMENT MATLOCK

SUNFIELD

CHILDREN'S HOME

Clent Grove, Clent, Stourbridge, Worcestershire

PRIVATE APPROVED HOME for backward and retarded children of both sexes up to 12 years of age Curative educational treatment on RUDOLF STEINERS Methods Home like surroundings individual attention House and grounds uniquely situated on Clent Hills Illustrated prospectus terms etc from the Secretary

Phone Hagley 253

BARNWOOD HOUSE

GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS Within two miles of the G W and L M & S Railway Stations at Gloucester the Hospital is easily accessible by rail from London and all other parts of the United Kingdom It is beautifully situated at the foot of the Cotswold Hills and stands in its own ground of over 100 acres Voluntary patients of both sexes also are received for treatment Special accommodation is also provided at five villa residences all of which stand in their own ground and are entirely separate from the main hospital For particulars as to terms etc apply to G W T H FLEMING M R C S L R C P D P M Physician Superintendent. Telephone No 6-07 Gloucester

WYE HOUSE BUXTON, AND CLINIC

for the PREVENTION and TREATMENT of NERVOUS and MENTAL DISORDERS in both sexes Large country house beautifully situated in its own grounds Croquet lawns hard tennis courts billiards wireless installation throughout Every facility for specialised modern treatment including psychotherapy occupational therapy ultra violet light diathermy Private rooms with special nurses if required Voluntary Temporary and Certified patient received —For terms, apply to the Medical Superintendent HELEN S E MURRAY M D Nat Tel 130

HALLIFORD HOUSE UPPER HALLIFORD, SHEPPERTON *Established in 1901*

This home for ladies and gentlemen is situated in a park of 6 acres situated 16 miles from London It is intended for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affection

Voluntary or certified cases received Terms moderate Patients are under the constant personal care of the Resident Medical Superintendent Dr R A Stewart from whom full particulars can be obtained Tel Sunbury-on-Thames 70

RUSSELLS

HEMEL HEMPSTEAD RD., WATFORD

Telephone WATFORD 3317

A convalescent home for the care and treatment of mild and recoverable nervous conditions in both sexes The house is situated high up in 30 acres of ground 17 miles from London at the termination of the Watford by pass One Medical Officer is in residence and two others are in daily attendance Fees from ten guineas a week in suite.

Apply RESIDENT MEDICAL OFFICER.

SPRINGFIELD HOUSE

Near BEDFORD (Phone 3417)

For Mental Disorders with or without Certificates

Resident Physician CEDRIC W BOWEP

Ordinary Terms Fee 6 guineas per week (including separate bedrooms where suitable)

Interview in London by Appointment

HERMOSA, TEIGNMOUTH, S DEVON PAYING GUESTS

Highly recommended Restful home Good garden tennis courts Hot and cold in bedrooms South aspect. Terms from 3 guineas weekly Phone 84

BISHOPSTONE HOUSE BEDFORD

A select Private Mental Home for Ladies Certified and Voluntary with separate House and Garden for Voluntary Boarders Under personal supervision of Resident Mental Specialist and Psychiatrist—Medical Supt Dr J LANGHAM MACAULAY Tel Bedford 2708

CITY OF LONDON MENTAL HOSPITAL, DARTFORD KENT

Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upward

THE GROVE HOUSE, CHURCH STRETTON SHROPSHIRE

A private Home for the care of and treatment of a limited number of Ladies mentally afflicted Voluntary and Temporary Patients received under the new Mental Treatment Act 1930

Medical Superintendent, Dr McCLINTOCK

Tel and Telegram Haynes Brentwood 3

LITTLETON HALL, BRENTWOOD ESSEX

Large ground 400 ft. above sea HOME for Ladies Mentally Afflicted Voluntary Boarders received Station Brentwood and Shenfield 1 mile Liverpool St 26 min Apply Dr HAYNES

LONDON, CORA HOTEL,

Upper Woburn Place near B M A Headquarters. Accommodates 235 Visitors Modern Comforts. Excellent table A A and R A C recommended. Room Bath and Breakfast from 8 6.

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date Lovely house and grounds (18 acres) Certified and uncertified cases taken Facilities for going to the seaside

ESTABLISHED OVER 200 YEARS

Apply to Med Supt for illustrated brochure Tel SALISBURY 2612.

CHEADLE ROYAL HOSPITAL

CHEADLE, CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay N Wales is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES

The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary

In addition to the Main Building there are separate villas Extensive grounds Hard and grass tennis courts cricket and croquet grounds and a court for badminton There are also wireless installations Golf may be had within easy distance Occupational therapy

VOLUNTARY TEMPORARY AND CERTIFIED PATIENTS received

The Hospital is nine miles from Manchester 50 minutes by rail from Liverpool and 3½ hours from London

For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT

Telephone GATLEY 2231 (3 lines)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds Detached Villas Chapel Garden and dairy produce from own farm Terms very moderate

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds with tennis courts etc which Voluntary Temporary or Certified Patients may visit by arrangement for long or short periods

Illustrated Brochure on application to the Medical Superintendent The Old Manor Salisbury 'Phone Salisbury 2301

CALDECOTE HALL

NUNEATON

WARWICKSHIRE

(Phone Nuneaton 241)

Residential treatment of

FUNCTIONAL NERVOUS DISORDERS

Including Alcoholism and other Addictions

(Certifiable Cases are not received)

This beautiful mansion situated in the heart of the country (less than two hours from London by L M S R) and surrounded by charming pleasure grounds in which games and outdoor occupational therapy are available is devoted to the treatment of Functional Nervous Disorders by psychotherapeutic and ancillary methods

Illustrated brochure and particulars obtainable from I E CRIVER M D D P M *Resident Medical Superintendent*

CAMBERWELL HOUSE, 33, Peckham Road, London, S.E. 5.

Telegrams PSYCHOLIA LONDON

FOR THE TREATMENT OF MENTAL DISORDERS

Telephone RODNEY 4 4? (? lines)

Also completely detached villas for mild cases, with private suites if desired Voluntary patients received Twenty acres of grounds Hard and Grass Tennis Courts Putting Greens, Bowls, Croquet, Squash Rackets, Recreation Hall with Badminton Court and all indoor amusements, including Wireless and other Concerts Occupational Therapy, Callisthenics, and Dancing Classes X ray and Actino therapy, Prolonged Immersion Baths, Operating Theatre Pathological Laboratory, Dental Surgery, and Ophthalmic Dept Chapel Senior Physician Dr HUBERT JAMES NORMAN assisted by three Medical Officers, also resident, and visiting Consultants.

An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary

The Convalescent Branch is HOVE VILLA, BRIGHTON and is 200 feet above sea level

PECKHAM HOUSE, 112, Peckham Road, London, S.E. 15.

Telegrams "Alleviated, London" Telephone Rodney 2641 2642

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders Certified voluntary and temporary patients are received Separate houses for treatment and accommodation of special cases adjoin the Institution Occupational therapy, physical drill, and other forms of modern treatment There is a seaside branch, Kears ey Court near Dover to which patients may be sent for treatment or on holiday Motor drives are arranged when required Tennis courts Entertainments dances, and indoor amusements held throughout the year Terms from £3 3s per week. Illustrated prospectus and further particulars can be obtained from the Medical Superintendent

CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy Cases of alcoholism and drug addiction are admitted The Physiotherapy Department has separate units fully equipped for X ray work heliotherapy short wave therapy electro-therapy and hydrotherapy (swimming bath prolonged baths Scotch and Vichy douches Plombières treatment electric and Turkish bath cabinet etc) There is a fully equipped gymnasium under qualified instructors Facilities are provided under special recreational therapists for all indoor and outdoor games including golf course cricket football and hockey grounds lawn tennis and squash courts croquet and bowling greens

The Hospital has its own Cinema Library and Hairdressing Saloon Terms include regular motor drives

Private rooms suites or villas are available and special nurses can be provided

The Hospital grounds extending to nearly 1 600 acres are situated in delightful country and include an attractive farm (Ayrshire herd) gardens and orchards

As the Hospital is well endowed terms are exceptionally moderate e g First Department 3 to 10 guineas per week Second Department 2 and 2½ guineas per week Voluntary and certified patients are admitted Medical Certificates given anywhere in the British Isles are valid for admission of patients For further particulars terms and further information apply to

Superintendent P K McCOWAN J P M D F R C P D P M Barrister at Law

Tel Dumfries 1119

THE MAUDSLEY HOSPITAL,

DENMARK HILL, S.E.5

Telephone RODney 3 41

A CLINIC instituted by the London County Council for treatment of Nervous and Mental Disorder Voluntary patients only

New Out patients—MEN Mondays 3 to 5 days 2 p m WOMEN Tuesdays and Fridays 2 p m CHILDREN Mondays and Fridays In patients (a) 235 beds (both sexes) in separate rooms including 35 beds in a temporary annexe of the Maudsley Hospital (b) 30 beds in a special ward (including some private beds) for those patients of each sex who can pay a moderate cost and are otherwise suitable for admission to the Maudsley but in case of patients who are normally resident in the County of London a fee is charged according to means

Terms include (with certain exceptions) all forms of treatment for which the Hospital provides facilities as there is at present no charge for Out patients and the Central Laboratory of the London County Council Mental Hospitals is available for In patients

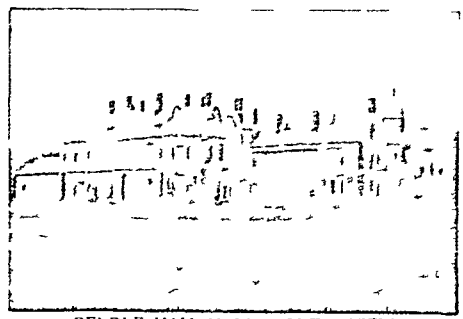
In duties of EDWARD MAPOTHER M D and F R C S Medical Superintendent

THE RESIDENTIAL TREATMENT OF ALCOHOLIC & DRUG ADDICTION

RENDLESHAM HALL

(Postal Address) — **WOODBRIDGE, SUFFOLK**

Rendlesham Hall, which is open to receive patients is essentially a Sanatorium Its daily life and routine are that of an ordinary comfortable holiday or health resort, or of a large country house Each patient has all the privileges of a guest consistent with the prescribed medical treatment



RENDLESHAM HALL—SOUTH VIEW

Rendlesham Hall has 45 bedrooms and about 450 acres of gardens and park It has also a private nine-hole golf course, tennis and croquet lawns, and bowling green

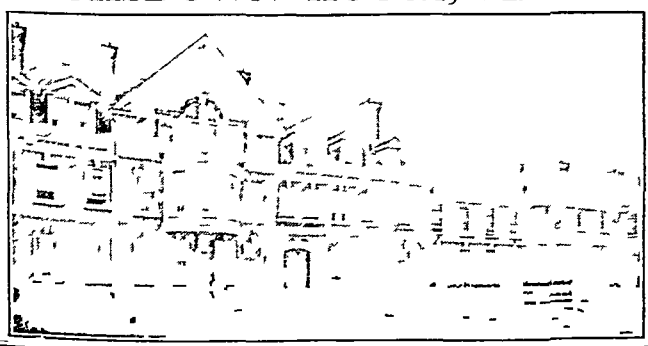
Illustrated booklet giving particulars as to terms etc can be had on application to the

RESIDENT MEDICAL SUPERINTENDENT

Telegrams and Telephone WICKHAM MARKET 216 (Toll Call from London)

Proprietors The Norwood Sanatorium Limited

ROOKSDOWN HOUSE, NEAR BASINGSTOKE, HANTS.



FOR THE RECEPTION and TREATMENT OF

NERVOUS AND MENTAL ILLNESS

A Superior Modern and Attractive Building situated in a charming and bracing locality 400 ft above sea level

Extensive pleasure grounds with croquet tennis bowling and putting greens

Occupational Light and Hydro Therapy

ONE HOUR RAIL JOURNEY FROM LONDON

Ladies and gentlemen can be received as private patients on a voluntary basis or with certificates written application a order is required for the former

FEES including all necessaries except clothing from THREE to FIVE GUINEAS A WEEK

Booklet and information may be obtained from the MEDICAL SUPERINTENDENT

Telephone 107 Basingstoke

RUTHIN CASTLE, NORTH WALES

A Private Hospital or Clinic for the diagnosis and treatment of Internal Diseases (except Mental or Infectious Diseases) The Clinic is provided with a full staff of doctors bacteriologists chemists radiologists dietists nurses masseurs and masseuses

The surroundings are beautiful The climate is mild There is central heating throughout. The annual rainfall is 30.5 inches that is less than the average for England

The inclusive weekly fees are from 15 guineas a week according to the room occupied rooms with bathroom are from 21 guineas The charges include all chemical bacteriological X ray or other examination advised by the doctors and all the usual forms of treatment in addition to board and lodging There are no extra charges except for alcohol (when ordered) and laundry An examination and consultation fee of 15 guineas is charged on the first visit.

Address THE SECRETARY Ruthin Castle North Wales *Telegrams* Castle Ruthin *Telephone* Ruthin 66

ST. ANDREW'S HOSPITAL

FOR MENTAL DISORDERS

NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

President THE MOST HON THE MARQUESS OF EXETER C M G A D C

Medical Superintendent THOMAS PENNEY M D M R C P D P H D P M

This Registered Hospital is situated in 120 acres of park and pleasure grounds Voluntary patients who are suffering from incipient mental disorders or wish to prevent recurrent attacks of mental trouble temporary patients and certified patients of both sexes are received for treatment Careful clinical biochemical bacteriological and pathological examinations Private rooms with special nurses male or female in the Hospital or in one of the numerous villas in the grounds of the various branches can be provided

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders It contains special departments for hydrotherapy by various methods including Turkish and Russian baths the prolonged immersion bath Vichy Douche Scotch Douche Electrical bath Plombieres treatment etc The e is an Operating Theatre a Dental Surgery an X ray room an Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment It also contains Laboratories for biochemical bacteriological and pathological research

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres Milk meat fruit and vegetables are supplied to the Hospital from the farm gardens and orchards of Moulton Park Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves in farming gardening and fruit growing

BRYN-Y-NEUADD HALL

The seaside house of St Andrew s Hospital is beautifully situated in a park of 3 0 acres Llanfairfechan amidst the finest scenery in North Wales On the North West side of the Estate a mile of sea coast forms the boundary Patients may visit this Branch for a short seaside change or for longer periods The Hospital has its own private bathing house on the seashore There is trout fishing in the park

At all the branches of the Hospital there are cricket grounds football and hockey grounds lawn tennis courts (grass and hard courts) croquet grounds, golf courses and bowling greens Ladies and gentlemen have their own gardens and facilities are provided for handicrafts such as carpentry etc

For terms and further particulars apply to the Medical Superintendent (Telephone No 2356 and 2357 Northampton) who can be seen in London by appointment

THE COPPICE, NOTTINGHAM

HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted Occupational Therapy Voluntary and Temporary Patients received

Tel 64117 *For terms etc apply to the Medical Superintendent*

HAYDOCK LODGE

NEWTON-LE-WILLOWS LANCASHIRE

Teleg Street Ashton in Makerfield *Phone* Ashton in Makerfield 7311

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntary temporarily or under Certificate Patients are classified in separate buildings according to their mental condition

Situated in park and grounds of 400 acres Self supported by its own farm and gardens in which patients are encouraged to occupy themselves Every facility for indoor and outdoor recreation For terms pro pectus etc apply MEDICAL SUPERINTENDENT

NORTHUMBERLAND HOUSE,

GREEN LANES FINSBURY PARK, N 4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses Conveniently situated and easy of access from all parts Six acres of ground highly situated facing Finsbury Park Voluntary and Temporary Patients received without certification Occupational Therapy Psychotherapy and other modern forms of treatment

Telephone STAMFORD HILL 2688 Telegrams SUBSIDIARY LONDON

Convalescent Home KEARSNEY COURT DOVER For further particulars apply to the Medical Sup

COURT HALL, KENTON, near EXETER,

for the treatment of eight Ladies voluntary, temporary, or certified patients
Large gardens and own dairy

CLIFTDEN TEIGNMOUTH for early and convalescent cases A well appointed House with spacious balconies and extensive views of the South Devon coast Sun roof tennis gardens own dairy in 25 acres Private road to beach

Telephones

Resident Physicians BERTHA M MULES M D B S Starcross 59
ANNES MULES M R C S, L R C P Teignmouth 289

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS
(20 miles from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on modern lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital Convalescent or mild cases can be treated in a delightful country mansion with extensive grounds known as

HIGHFIELD HALL,

situate about a mile away from the Hospital FEES TWO TO THREE GUINEAS PER WEEK

For further particulars apply to the Medical Supt W J T KIMBER L R C P D P M

ST ALBANS, HERTS

CHISWICK HOUSE, PINNER, MIDDLESEX

Telephone PINNER 234

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes

A modern country house, 12 miles from Marble Arch in beautiful secluded grounds

Fees from 10 guineas per week, inclusive Cases under Certificate Voluntary and Temporary patients received for treatment

Douglas Macaulay, M D, D P M

STRETTON HOUSE,

Church Stretton, Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provisions of the Mental Treatment Act 1930 Bracing hill country See *Medical Directory* p 2328 —Apply to the Medical Superintendent Phone 10 P O Church Stretton

FENSTANTON,

CHRISTCHURCH ROAD,
Streatham Hill, S W 2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders Certified Voluntary and Temporary Patients received Large Mansion with 12 acres of grounds (*See Medical Directory* p 2312) Apply Resident Physician *Telephone* Tulse Hill 7181

BAILBROOK HOUSE, BATH.

For sufferers from Nervous and Mental Disorders with or without certificates

The house is gloriously situated in well wooded grounds of 20 acres with magnificent views of the City and the Avon Valley (*See Medical Directory* page 2372)

For terms apply A CUTHBERT M A D M B Ch D P M Resident Physician

Telephone Bathcaston 8159

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded grounds For Ladies and Gentlemen suffering from Nervous and Mental Illness Voluntary Patients Temporary Patients and Patients under Certificate are received Treatment Fees from 4 guineas a week upwards according to requirements A few vacancies for Ladies and Gentlemen at reduced fees by recommendation of the Patients own Physician Apply to Dr J A SMALL Telephone Norwich 50 Telegrams Small 50 Norwich

TYKEFORD ABBEY,

NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDER MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest standing in 15 acres of grounds and is situated 14 miles from Northampton and 12 miles from Bedford on the London to Northampton Road fifty minutes by train from London Both sexes are accommodated Psychic treatment is used as indicated in suitable cases Radiant Heat X ray Actinic Light Diathermy and Foam Baths Tennis etc

Apply Dr D E M DOUGLAS Telephone Newport Pagnell 283

HOLLOWAY SANATORIUM VIRGINIA WATER

A Registered Hospital for the Treatment of MENTAL DISORDERS of the EDUCATED CLASSES Founded by THOMAS HOLLOWAY in 1885

This Institution is situated in a beautiful and healthy locality within easy reach of London It is fitted with every comfort Patients can have Private Bedrooms and Special Nurses as well as the use of General Sitting Rooms at moderate rates of payment Voluntary Patients can be admitted

There is a Branch Establishment at CANFORD CLIFFS BOURNEMOUTH where Patients can be sent for a change and be provided with all the comforts of a well appointed home

For Terms apply to

The Resident Medical Superintendent, St Ann's Heath, Virginia Water, Surrey

The MUNDESLEY SANATORIUM

The central building makes the Mundesley Sanatorium the best equipped building in England for the cure of Tuberculosis All the bed rooms have hot and cold running water electric light, and wireless headphones The public rooms are spacious and comfortable

Resident Physicians
S VERE PEARSON
M D (Cantab) M R C P (Lond)
E C WYNNE EDWARDS
M B (Cantab) F R C S (Edin)
GEORGE H DAY
M D (Cantab)

For all information apply
The Secretary
THE SANATORIUM MUNDESLEY
NORFOLK
Telephone Mundesley 94 and 95 (2 lines)

The buildings face S S W and are sheltered from the sea by a pine-clad ridge The sunshine record and dry air complete a perfect site The medical equipment is of the latest kind and there is a day and night nursing staff

TERMS FROM 7½ GUINEAS WEEKLY

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S S W sheltered from North and East elevation 800 feet. Pure bracing air Special Treatment by Artificial Pneumothorax (X ray controlled) Tuberculins and Ultra-violet Rays are available when necessary without extra charge X ray plant. Fully equipped Dental Department Electric light Radiators hot and cold basins and Wireless in all rooms Up to date main drainage

Full day and night Nursing Staff Term 5 gns to ⁷½ gns a week In July

Med Supt GEOFFREY A HOFFMAN B A M B T C Dub *Asst Phys* MARGARET A HARRISON M B B S Lond *Pathologist* EDGAR N DAVEY M B B Ch *Consult Laryngologist* G N BARKER F R C S Edin D L O *Consulting Dental Surg* GEORGE V SAUNDERS L D S R C S Lond Apply Secretary The Cotswold Sanatorium Cranham Gloucester *Tel* 81 and 8 WITCOMBE *Grams* HOFFMAN BIRDLIP

THE CORNISH RIVIERA SANATORIUM

ROSEHILL PENZANCE

For the treatment of patients suffering from tuberculosis

The Sanatorium stands in its own grounds of 13 acres of garden lawn and woodland and is well sheltered from cold winds The climate is mild in winter cool in summer Artificial pneumothorax and other modern forms of treatment are available Day and night nursing staff Electric light Wireless in all rooms

Medical Supt Francis Chown M B Lond D P H Consulting Physician (late Med Supt) Cornwall County Sanatorium

Terms 5 to 7 guineas weekly Phone Penzance 598

THE CLINIC

20 Devonshire Place
London, W.1

Tel Welbeck 4444 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns to 18 gns per week (Average—14 gns)
8 Operating Theatres
150 State Registered Nurses
2 Resident Medical Officers (for emergencies)
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary



THE
HOTEL GREAT CENTRAL
Marylebone Road N W.1

The Hotel Great Central is within a few minutes walk of the London Clinic and Harley Street
Special terms for friends visiting Nursing Homes in vicinity
Apply Manager Telephone Padd 1220

MONTANA HALL, Montana, Switzerland

OPEN ALL THE YEAR

THE ONLY SANATORIUM IN SWITZERLAND UNDER BRITISH OWNERSHIP AND CONTROL AND WITH A DAY AND NIGHT STAFF OF BRITISH TRAINED NURSING SISTERS

INCLUSIVE TERMS—from 7 guineas (terlin) per week.

Med Supt HILARY ROCHE M D (Melb) M R C P (Lond) Tuberculous Dis Dip (Wales)

MINERAL 88 SPRINGS

HARROGATE specialises in the treatment of Disorders of the Liver—congestion, cirrhosis, jaundice, cholecystitis, cholelithiasis, and tropical liver Also in Diseases of the Skin — eczema, psoriasis, the coccal infections of the skin etc Other types of cases suitable for Harrogate treatments are — The Chronic Rheumatic Diseases — Arthritis, Fibrositis, Neuritis, Gout, Hyperpiesis, Mucous Colitis, Functional Disorders of the Heart, Pelvic Disorders of Women, Convalescence from acute illness

At Harrogate a wide range of Sulphur waters, strong and mild, and of Iron waters, both saline and pure chalybeate, is available for dealing with the large group of disorders amenable to Spa treatment The Royal Baths at Harrogate is one of the finest Spa establishments in Europe, and the Corporation has embarked upon still further extension at a cost of £66,000

DIET Prescribed diets for Spa patients may be obtained at hotels and boarding houses without extra charge **Complimentary and reduced price facilities for the Cure, Accommodation, and Amusements are available for Members of the Medical Profession**

Full details of Harrogate for Cure and Holiday will be sent free upon application to Spa Manager, Information Bureau, Harrogate, I

"IT'S QUICKER BY RAIL"
Cheap monthly return fares to Harrogate from all parts Any train any day

HARROGATE

HOTEL MAJESTIC, HARROGATE

THE FINEST SPA HOTEL IN THE WORLD

Stands in its own grounds of ten acres
Suites complete with private bathrooms
Every room fitted with hot and cold running water
Central heating and telephone

Every facility for visitors taking the cure
Two Squash Courts
Tennis Courts in grounds
Garage

WRITE MANAGER FOR ILLUSTRATED TARIFF

Telegrams Hotel Majestic, Harrogate *Telephone Harrogate 2261*

RHEUMA SPA KINMEL HALL

ABERGELE N WALES

Modern Spa Treatments including Continental Pistany Mud and Scotch Douche for rheumatic and similar disabilities First class cuisine special diets
RESIDENT PHYSICIAN

Excellent amenities—magnificent mansion in 1000 acres of parkland and golf courses near ... Hill ... Riding fishing shooting dancing

IDEAL AUTUMN AND WINTER QUARTERS

R. J. R.

THE CHOICE OF a suitable resort for convalescence and recuperation will be made easier by frequent reference to this section of the Journal

Please mention the B.M.J. when writing to advertisers

Westminster Medical Hospital School (University of London)

NEW MEDICAL SCHOOL BUILDING, OPENED MAY, 1938

Hospital Centrally Situated (opposite Westminster Abbey) Extensive Sports Ground Entrance Fee £13 13s Annual Composition Fee £46 4s Valuable Entrance Scholarships awarded annually

The Dean will be pleased to arrange for intending students and parents to inspect the Hospital and Medical School at any time Only male students are admitted

A prospectus and full particulars may be obtained on application to the Dean

ADOLPHE ABRAHAMS, O B E M A M D F R C P, Westminster Hospital Medical School, 17, Horseferry Road S W 1

Telephone Victoria 6041

POST-GRADUATE COURSES

Open only to members Annual Subscription £1 1 0

M R C P CHEST AND HEART (Royal Chest Hospital Mons Weds & Fris 8 0 p m Sept 12th to 30th) M P C P NEUROLOGY (West End Hospital afternoons Sept. 19th to Oct 1st) RHEUMATISM (Royal Bath Hospital Harrogate Sept. 16th 17th & 18th) OPHTHALMOLOGY (Royal Westminster Ophthalmic Hospital week end Sat. & Sun Sept. 24th & 25th) PLASTIC SURGERY (all day Wed & Thurs Sept 14th & 15th) CHILDREN'S DISEASES (all day Sept. 19th to 24th Infants Hospital) PROCTOLOGY (all day Sept. 26th to Oct 1st Gordon Hospital) M P C P TUBERCULOSIS (all day Sat Oct. 1st & 9th Preston Hall) FEVERS (week end all day Sat & Sun Oct 1st & 2nd Park Hospital) CARDIOLOGY (all day Oct 3rd to 15th National Heart Hospital) MEDICINE SURGERY & SPECIALITIES (all day Oct. 3rd to 8th Metropolitan Hospital) DERMATOLOGY (afternoons Oct 3rd to 31st St John's Hospital)—Apply FELLOWSHIP OF MEDICINE 1 Wimpole Street, London W 1 (Langham 4266)

Chartered Society of Massage and Medical Gymnastics

CHARTERED MASSEUSES and MASSEURS receive Hospital Training They are qualified to administer MASSAGE, REMEDIAL EXERCISES ELECTRICAL and LIGHT TREATMENTS

The Society was granted a Royal Charter in 1920 in recognition of the high standard of work maintained C.S.M.M.G Members do not advertise individually and pledge themselves to treat patients only under medical direction All members of the Society are eligible for enrolment on the National Register of Medical Auxiliary Services

Name and address of member practising in any district in the Country or abroad can be obtained from

THE SECRETARY C.S.M.M.G TAVISTOCK HOUSE (NORTH) TAVISTOCK SQUARE, LONDON W C 1

Phone Euston 1676-7-8

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)

CITY ROAD E C 1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Dental Clinics and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Residential) Nearly 4,000 patients annually

RALPH B CANNINGS Secretary

QUEEN CHARLOTTE'S MATERNITY HOSPITAL

MARYLEBONE ROAD N W 1.

Medical Students and Qualified Practitioners admitted to the Practice of this Hospital Unusual opportunities are afforded of seeing Obstetrical Complications and Operative Midwifery (about one half of the total admission being primiparous cases) Over 2,700 patients are admitted to the Wards annually and in the Antenatal department there are over 40,000 attendances per annum Clinical demonstrations are given by the Staff daily

For rules fees etc apply H B STOKES Secretary Superintendent

DIPLOMA IN PUBLIC HEALTH

The Royal Institute of Public Health and Hygiene

The Course of Instruction can be commenced at any time Special provision is made for students who can give only part time to the work

A prospectus and further particular can be obtained from the Secretary

Telephone Langham 4731/4

28 Portland Place London W 1

MASTERY OF MIDWIFERY

M C O G

D C O G

Short intensive Postal and Oral Revision Courses in preparation for these Diplomas

Apply SECRETARY Medical Correspondence College 19 Welbeck Street W 1

41st ANNUAL EDITION

PATON'S LIST OF SCHOOLS

An aid to parents in the selection of Schools and Tutors

Crown 8vo 888 pages Price 5/ postage 6d

Contains particulars with illustrations of Preparatory Private and Public Schools for Boys and Girls Tutors Co-educational Schools Domestic Science Secretarial Training and Physical Training Colleges etc Schools on the Continent

J & J PATON Educational Agents

143 Cannon Street London E.C. 4

ADVICE ALSO GIVEN FREE OF CHARGE.

The method is scientifically correct and perfectly effective — Guy's Hospital Gazette.

Stammering Cleft Palate Speech Lisping

19 et MISS BEHNKE, 39 Earl's Court Sq S.W 5

MEDICAL CORRESPONDENCE COLLEGE,

19 Welbeck Street London W 1

M.D. THESIS

All Universities

Skilled coaching guidance and advice by specialist tutors

Recent successes include Gold Medals at M D Edinburgh and at M D Belfast and many High Commendations and Commendations at these and other Universities

Write for free booklet How to Write a Thesis for the M D Degree

M.D. LONDON

Courses by skilled tutors for each branch of the M D London

Oral clinical and practical work arranged

Special courses postal oral and clinical for all higher medical examinations M R C P London Edinburgh F R F P S Glasgow Many successes

Write for free booklet Guide to the M D London to the Secretary Medical Correspondence College 19 Welbeck Street London W 1

MIDDLESEX HOSPITAL

LONDON, W 1

FERENS INSTITUTE OF OTO-LARYNGOLOGY

Applications are invited for the BERNHARD BARON RESEARCH STUDENTSHIP, vacant on October 1st 1938 and tenable at the Ferens Institute

The appointment is for one year in the first instance, but a suitable candidate will be eligible for re election for at least a year beginning on October 1st, 1939

The honorarium is at the rate of £300 per annum, with holiday leave amounting to one month in each twelve

Candidates must be males of pure British descent and citizens of Great Britain or Northern Ireland and must hold a registrable qualification The selected candidate will be expected to devote his whole time to research in connection with Anatomy Physiology or Pathology of the Nose, Throat or Ear, under the general direction of the two Senior Surgeons to the Department Full opportunities are offered for Clinical and Operative work No strict limits are placed upon the nature of the research undertaken and in it the selected candidate may expect to avail himself to the full of the resources of the Department, both clinical and pathological These include a large and fully equipped laboratory providing special facilities for and with a staff familiar with the technique of, temporal bone preparation

Applications should reach the School Secretary, Middlesex Hospital, W1, not later than September 3rd 1938

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17, RED LION SQ LONDON, W C 1

FOUNDED IN 1882

by E S WEYMOUTH M A (Lond)

POSTAL OR ORAL PREPARATION FOR ALL MEDICAL EXAMINATIONS

SOME SUCCESSES

M D (Lond)	1901 37 (11 Gold Medallists during 1913 37)	**413**
M S (Lond)	1901 37 (including 4 Gold Medallists)	**24**
M B, B S (Lond)	*Final* 1918 37 (Complete d Exam)	**255**
F R C S (Eng) 1919-37	*Primary*	199
	Final	192
M R C P (Lond)	1919 37	**286**
D P H	(Various) 1906 37 (Completed Exam)	**348**
F R C S (Edin)	1918 37	**65**
M R C S, L R C P	*Final* 1919 37 (Completed Exam)	**606**
M D	Various By Thesis Many successes	

Preparation for the above also for Medical Preliminary and all examinations leading up to M R C S L R C P or M B of various Universities also for M R C P(Edin) D P M D O M S D T M & H D L O D C H D A D M R E M M S A L M S S A D C O G and some exams of Dominions Universities

ORAL CLASSES

M R C P M D Primary and Final F R C S F R C S(Edin) also Final M B B S and M R C S L R C P Museum and Microscope Work Also Private Tuition

MEDICAL PROSPECTUS (47 pp)

CONTENTS The method and the cost of entering the Medical Profession *Particulars of all Medical Examinations* Postal Courses and Oral Classes Suggestions for the Higher Medical Examinations Suggestions for the Higher Surgical Examinations Suggestions for the Special Diploma Examinations Refresher Courses Openings for Women Hints for writing theses

Medical Prospectus gratis alone with list of Tutors etc on application to the Principal 17 Red Lion Sq London W C 1 (Telephone Holborn 6313)

THE TAVISTOCK CLINIC

(The Institute of Medical Psychology)

Malet Place W C 1

A WEEK END COURSE ON

MARRIAGE PROBLEMS

will begin on Saturday October 1st 1938 Lectures will be given from 11 a m to 1 p m on Saturday and from 11 a m to 6 p m on Sunday The Course fee is £2 2s

For further particulars apply to the EDUCATIONAL SECRETARY at the Clinic

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE

INCORPORATING THE ROSS INSTITUTE

POSTS OVERSEAS FOR MEDICAL MEN

A register is kept in the School of medical men who are prepared to be considered for posts overseas and the School is frequently asked to advise plantation and mining companies when such posts fall vacant

The salaries offered are attractive, conditions of service are governed by standardised forms of contract, and many of the posts offer to medical men a most interesting field in which to practise their profession

It is desirable that candidates for posts overseas should hold a diploma in tropical medicine and hygiene The course provided by the London School for the Conjoint Board's Diploma lasts six months and the tuition fee is £40 The course may be taken from October to March or from January to June There are generally more vacancies in the course commencing in January

The Director of the Ross Institute is always glad to interview medical men who would like information regarding the possibilities of a career overseas if they will be good enough to make an appointment to call on him Enquiries may be addressed to

The Director,
Ross Institute of Tropical Hygiene
London School of Hygiene & Tropical Medicine
KEPPEL STREET GOWER STREET W C 1

UNIVERSITY OF LONDON

Applications are invited for the WILLIAM JULIUS MICKLE FELLOWSHIP which is of the value of at least £200 and is awarded by the Senate to the man or woman who being resident in London and a graduate of the University has in the opinion of the Senate done most to advance MEDICAL ART or SCIENCE within the preceding five years Applications must be made before October 1st 1938 Further particulars should be obtained from the Academic Registrar University of London The Senate House London W C 1

NUFFIELD DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

THE RADCLIFFE INFIRMARY Oxford

Applications are invited for the post of HOUSE SURGEON for Gynaecological Ward which will become vacant on October 1st 1938 The appointment will be for six months with salary at the rate of £120 per annum Candidates must be male and qualified and should have previous hospital experience

Application with copies of testimonials must be sent to the undersigned not later than September 17 1938 A G E SANCTUARY

Administrator

BRITISH POSTGRADUATE MEDICAL SCHOOL

(University of London)

DEPARTMENT OF SURGERY

A Course of THREE LECTURES will be given by

PROFESSOR CHEVALIER L JACKSON of Philadelphia

on

September 12th and 13th

BRONCHOSCOPIC METHODS in the DIAGNOSIS and TREATMENT of BRONCHO-PULMONARY DISEASE

September 14th

MECHANICAL PROBLEMS of EXTRACTION of FOREIGN BODIES from the AIR and FOOD PASSAGES

at 4 30 p m

These lectures are for regular students of the School but a limited number of tickets are available without fee for medical practitioners

Applications for tickets should be addressed to the Dean British Postgraduate Medical School Du ane Road Shepherd's Bush London W 12

GUY'S HOSPITAL MEDICAL SCHOOL.

DIPLOMA IN ANAESTHETICS

A COURSE OF INSTRUCTION in preparation for the November Examination for the Diploma in Anaesthetics of the Conjoint Examining Board in England will commence on Monday October 10th provided that there is a minimum number of seven entrants The Course will cover a period of three weeks and will include lectures in Physiology Anatomy Pharmacology Clinical Investigation and Anaesthetics

The Course will be open to men and women graduates The fee for the Course will be £11 11s

Further information may be obtained from the Dean Guy's Hospital Medical School London Bridge S E 1

Preliminary Examinations

The COLLEGE OF PRECEPTORS holds Preliminary Examinations for Medical and Dental Students in London and at Provincial Centres in March June September and December Regulations apply to the Secretary College of Preceptors Bloomsbury Square London W C 1

F R C S (Edin)

EDINBURGH POSTAL COURSES

Full details of above and Oral Classes from H C ORRIN F R C S Surgeon's Hall Edinburgh

CHELMSFORD AND ESSEX HOSPITAL

(155 Beds.)

HOUSE PHYSICIAN required for six months at £150 p a with board apartments and laundry Resident staff consists of two Registrars and two House Officers Application stating age and experience together with copies of three testimonials should be sent to the undersigned not later than September 17th

R G MORRIS

INDIAN MEDICAL SERVICE

RECRUITMENT OF EUROPEAN OFFICERS

Applications are invited from Medical Men for Permanent Commissions in His Majesty's Indian Medical Service. The terms offered include a gratuity of £1 000 on retirement after six years service, or of £2,500 after 12 years service, together with free return passages for those who no longer desire to remain in the Service. In other respects the terms will be as detailed below

British subjects of pure European descent who are under 32 years of age who are registered under the Medical Acts in force in Great Britain and Northern Ireland are eligible to apply

CAREERS

The Indian Medical Service offers a permanent career with wide opportunities of medical experience including clinical preventive specialist and research work At the beginning of his career an officer is employed on the military side which has medical charge of the Indian Army Promotion is on a time scale up to the rank of Lieutenant Colonel and by selection to the ranks of Colonel and Major General An officer may apply after one year's Indian Service to have his name registered for transfer to the civil side from which appointments are made to Civil Surgeoncies which are established at the principal civil centres to provide for the medical needs of Civil Officials and for general medical administrative purposes to specialist (for example public health and bacteriological) services to research posts and to professorships at the Medical Schools

RATES OF PAY

Years of Service	Rank	Basic Pay Rs per mensem	Overseas Pay £ per month	Total £ per annum
1	Lieutenant	450	15	685
2	Captain	500	25	750
3	"	550	25	795
4	"	550	25	795
5	"	600	25	840
6	"	600	30	900
7	"	700	30	990
8	"	700	30	990
9	"	700	35	1050
10	"	700	35	1050
11	Major	800	35	1140
12	"	800	40	1200
13	"	800	40	1200
14	"	800	40	1200
15	"	800	40	1200
16	"	950	40	1335
17	"	950	40	1335
18	"	950	40	1335
19	"	1100	40	1470
20		1100	40	1470
21	Lieut. Col	1300	40	1695
22		1350	40	1695
23		1350	40	1695
24		1500	40	1830
25		1500	40	1830

Note—(1) The rupee is at present stabilized at a rate equivalent to 1s 6d

(2) An officer promoted to the rank of Lieut Colonel before completion of 20 years service will receive pay at the rate of Rs. 1200 per mensem (basic) plus £40 per month overseas pay

Extras—In addition to the above rates various allowances are admissible for a large number of special appointments on both the military and the civil side which may be held by members of the Indian Medical Service Special high rates of pay are also attached to the numerous administrative appointments open to officers in both branches of the Service

ANTEDATES IN COMMISSION

Candidates possessing certain higher medical qualifications or holding the Diploma in Public Health may be granted an antedate in their commissions Past service in certain hospital appointments may also render candidates eligible for an antedate Persons holding or about to hold resident posts at recognized hospitals may be seconded in those posts for a period The maximum period of antedate secondment or antedate and secondment combined admissible under this paragraph is limited to 18 months

OUTFIT ALLOWANCE

Officers on appointment will receive an allowance of £75 towards the cost of outfit.

PRIVATE PRACTICE.

With the exception of Administrative Officers military or civil, and officers holding certain special appointments officers are not debarred from taking private practice so long as it does not interfere with their proper duties.

LEAVE

Leave can be taken at reasonable intervals and adequate rates of leave pay are provided Extra leave (known as study leave) which may not exceed twelve months in all during an officer's service may be granted to officers desirous of pursuing special courses of study of a postgraduate nature During such leave study allowance at present fixed at the rate of 12s a day in the United Kingdom £1 a day on the Continent of Europe and £1 10s a day in the United States of America and Canada is granted to an officer in addition to ordinary rates of leave pay

PENSIONS

The rates of pensions are as follows —	Per annum
After 17 years service for pension	£372 0s.
18 "	£400 0s
19 "	£428 0s
20 "	£465 0s
21 " "	£502 0s
22 " "	£539 10s.
23 " "	£576 10s
" 24 "	£614 0s
25 " " "	£651 0s
26 " " "	£697 10s
" 27 "	£744 0s

There are additional pensions ranging from £65 to £350 per annum for officers who have held administrative appointments

PASSAGES

An officer on appointment is provided with free passage to India The families of officers who are married prior to the date of the officers embarkation on first appointment will also be provided with free passage to India subject to the payment of messing charges Officers and their families are also eligible for passage concessions under which they are granted a certain number of return passages home at Government expense during their service

INSTRUCTION PRIOR TO EMBARKATION

Officers are required to undergo courses of instruction at the Royal Army Medical College and at Aldershot lasting approximately three months prior to their embarkation for India on first appointment Information as to the rates of pay admissible during this period and subsequently up to arrival in India is contained in the memorandum referred to below

A memorandum giving full details regarding these appointments and forms of application may be obtained from the UNDER SECRETARY OF STATE FOR INDIA MILITARY DEPARTMENT INDIA OFFICE, LONDON S.W.1 The Selection Committee will meet at the India Office on 11th October 1938 next and the selected candidates unless seconded for hospital appointment, will be required to join a course of instruction commencing on 1st November prior to sailing for India in February 1939 Applications should reach the India Office as soon as possible

INDIA OFFICE, SEPTEMBER 1938.



Appointments for Medical Officers in the ROYAL AIR FORCE

Medical men are invited to apply for Short Service Commissions in the Royal Air Force Candidates must be registered under the Medical Acts and be not more than 31 years of age on entry

The *period of service* is 3 years—extendible to 5 years A gratuity of £400 or £1,000 is payable at the termination of 3 or 5 years respectively Permanent commissions are awarded in a number of cases These offer a pensionable career with the opportunity of extra leave on full pay for specialised study Applicants who hold—or are likely to hold—post graduate appointments in civil hospitals may, on joining the Royal Air Force, be seconded until the termination of their appointments (for a period not exceeding one year) An antedate of commission up to twelve months is allowed for appointments held at approved hospitals

Fuller information can be obtained from The Director of Medical Services, Air Ministry, Kingsway, London

SOUTHERN RHODESIA MEDICAL SERVICE

GOVERNMENT MEDICAL OFFICER

Applications are invited from fully qualified unmarried male Medical Practitioners with surgical experience for appointment as a Government Medical Officer in the Southern Rhodesia Medical Service

Salary will be on the scale £600 £25 £750 per annum There is also a senior grade (£750 £25 £900) to which promotions are made as vacancies occur Salary will commence from the date of assumption of duty in Southern Rhodesia In addition private practice is allowed

The successful applicant will be required to sign an agreement for three years service in the first instance and thereafter may make application to be placed on the pensionable establishment

A free second-class steamship passage to Cape Town and first-class railway ticket thence to Southern Rhodesia will be provided

Canvassing either directly or indirectly will disqualify applicants

The applicants should state the date on which they would be prepared to leave England if appointed

Applications stating age qualifications and experience together with copies of testimonials should reach the Official Secretary Office of the High Commissioner for Southern Rhodesia Rhodesia House 429 Strand London W C 2 (from whom further particulars and application form may be obtained) not later than September 14th 1938

THE OTAGO HOSPITAL BOARD

UNIVERSITY OF OTAGO AND DUNEDIN HOSPITAL NEW ZEALAND

Applications are invited for the position of RESIDENT SURGICAL OFFICER (senior)

Candidates must be holders of a degree in Medicine of a British University must have been qualified for three years and have held resident hospital appointments for at least one year Preference given to unmarried applicants

The duties will be those of superintending house surgeon with in addition certain tutorial work under the direction of the Professor of Surgery

Salary to be at the rate of £500 per annum with board and residence

Further details may be obtained on application to the Secretary British Medical Journal

JOHN JACOBS Secretary

Otago Hospital Board Dunedin New Zealand

August 1938

UNIVERSITY OF THE WITWATERSRAND Johannesburg

PROFESSOR OF OBSTETRICS AND GYNAECOLOGY

The Council of the University of the Witwatersrand Johannesburg invites applications for appointment to the Chair of Obstetrics and Gynaecology

The Professor is ex officio a member of the senior honorary staff of the Johannesburg Hospital

The Professor will be entitled to undertake private practice provided that this does not interfere with his University duties

Assumption of Duties—January 1st 1939 or as soon as possible thereafter

Salary—£1 000-£50-£1 100 subject to 6 per cent deduction for Provident Fund contributions Government and University together contributing an equal amount Half salary will be paid for the period from date of leaving England to date of assumption of duties in Johannesburg

Transport—£100 will be contributed towards the cost of passage and first-class rail fare will be refunded for the journey from Capetown

Further information and forms of application may be obtained from the Secretary Office of the High Commissioner for the Union of South Africa (South Africa House Trafalgar Square London W C 2) with whom applications must be lodged in triplicate not later than September 24th 1938

CITY OF MANCHESTER

PUBLIC HEALTH DEPARTMENT

APPOINTMENT OF ASSISTANT PATHOLOGIST

The Public Health Committee invites applications from qualified medical practitioners for the appointment of Assistant Pathologist (non resident) in the Manchester Municipal Hospitals Pathological Service

Salary £600 per annum rising by annual increments of £ 5 to £750 per annum subject to the Manchester Corporation conditions of service

Applicants must have had good practical experience in all branches of clinical pathology

Full information and form of application may be obtained from the Medical Officer of Health Town Hall Manchester 2 and applications for the post must be received by him not later than September 23rd 1938

Town Hall Manchester 2. F. E. WARBRECK HOWELL Town Clerk.

August 29th 1938

UNIVERSITY OF GLASGOW

BARCLAY LECTURESHIP IN SURGERY AND ORTHOPAEDICS IN RELATION TO INFANCY AND CHILDHOOD

The Selection Committee gives notice of a Vacancy in the Barclay Lectureship in Surgery and Orthopaedics in Relation to Infancy and Childhood tenable at the Royal Hospital for Sick Children Glasgow

The post carries with it the appointment as a VISITING SURGEON to the Royal Hospital for Sick Children Salary (for the combined posts) £

Information regarding the Lectureship may be obtained on application to the Secretary of the University Court The University Glasgow W 2 to whom applications should be sent not later than September 30th 1938

J S MUIRHEAD Secretary of University Court

August 1938

LONDON COUNTY COUNCIL

Applications invited from MEDICAL PRACTITIONERS of at least one years standing for undermentioned position Experience in general hospital for at least appointment in a general hospital for at least months desirable Married quarters available

ASSISTANT MEDICAL OFFICER (Grade II) Salary £250 a year to either with board and washing Appointment for one year in first instance (renewable for a second year under certain conditions) at—

KING GEORGE V SANATORIUM near Godalming Surrey

Application forms obtainable (stamped addressed foolscap envelope necessary) from Medical Staff Division of Health Staff Division 2A County Hall returnable by September 12th

Canvassing disqualifies

BOROUGH OF WILLESDEN

RESIDENT MEDICAL OFFICER

Applications are invited for the appointment of Resident Medical Officer at the Willesden General Hospital The salary will be at the rate of £ per annum with board lodging and washing the appointment is for a period of one year The Hospital accommodates about patients

Applications stating age qualifications and previous experience with copies of testimonials to be sent to the Medical Superintendent Willesden Municipal Hospital Harlesden Road Neasden N W 10 T PHILIP Town Clerk

August 23rd 1938

CITY OF BIRMINGHAM EDUCATION COMMITTEE

APPOINTMENT OF MALE ASSISTANT SCHOOL MEDICAL OFFICER

Required to be duly qualified male Assistant School Medical Officer. Candidates must have had at least three years' experience in the practice of their profession (preferably to attain a standard equivalent to that required by Asquith Scholarship) by all interviews (if any). In the case of candidates with previous service in Class II. Asquith Scale may be taken into consideration when fixing commencing salary.

Forms of application to be returned not later than first post on Monday, October 3rd, 1938, with further particulars and testimonials under cover of envelope marked "Confidential" to be addressed to Chief Executive Officer, Education Office, Margaret Street, Birmingham, 3.

Assistant School Medical Officers are wholly employed.

EDUCATION OFFICE, P. D. INNES,
Margaret Street, Chief Executive Officer.
Birmingham, 3.
September 9th, 1938.

UNIVERSITY OF BIRMINGHAM

FACULTY OF MEDICINE

PROFESSORSHIP OF ANATOMY

The Council of the University invites applications for the Chair of Anatomy, vacant by the retirement of Professor Robert D. Lockhart.

The stipend offered is £1,000 per year. The duties will commence January 1st, 1939.

Applications and testimonials (twenty-four copies) may be exempted by referees of their credentials, and should be received by the undersigned on or before October 31st, 1938.

Further particulars may be obtained from the University.

C. C. BURTON,
Birmingham, 3. Secretary.
September, 1938.

CORPORATION OF GLASGOW

PUBLIC HEALTH DEPARTMENT

GARTLOCH MENTAL HOSPITAL, GARTCOSH

JUNIOR RESIDENT MEDICAL OFFICER

(male). Salary £200 rising to £300 with board, lodging and laundry. Experience in treatment of General Hospital essential. Successful candidate will be required to work in association with Central Laboratory. The successful candidate will be required to take up duties at the hospital in October.

Applications stating age and experience, and accompanied by copies of not more than three recent testimonials to be sent to the Medical Superintendent, Gartloch Mental Hospital, Gartcosh.

BREDBURY AND ROMILEY URBAN DISTRICT COUNCIL
HAZEL GROVE AND BRAMHALL URBAN DISTRICT COUNCIL
MARPLE URBAN DISTRICT COUNCIL
DISLEY RURAL DISTRICT COUNCIL

APPOINTMENT OF WHOLE-TIME MEDICAL OFFICER OF HEALTH

Applications are invited from duly qualified and registered Medical Practitioners not exceeding 45 years of age who are also registered in the Medical Register as holders of a Diploma in Sanitary Science, Public Health or State Medicine for the above combined appointment.

The appointment will be made subject to the approval of the Minister of Health, the provisions of Section 110 of the Local Government Act, 1933, and the Sanitary Officers (Outside London) Regulations, 1935.

The person appointed will be required to commence his duties on January 2nd, 1939, and devote the whole of his time to the performance of the duties of the office.

He will not be permitted to engage in private practice as a Medical Practitioner will be required to enter into an agreement with each Authority and to reside within the area.

Commencing salary £600 per annum, plus a motor car allowance.

Each Council will designate the position as an established post under the provisions of the Local Government and Other Officers' Superannuation Act, 1922, and the successful candidate will be required to pass a medical examination.

Applications on forms to be obtained from the undersigned endorsed "Medical Officer of Health," stating age, particulars of qualifications and local Government experience (if any), supported by copies of not more than three recent testimonials which will not be returned, must be delivered to the undersigned not later than Friday, September 16th, 1938.

Canvassing of members of any Authority directly or indirectly will be deemed a disqualification.

The Council House, F. E. CAPPER,
Hazel Grove, Clerk to the Joint Committee.
Cheshire.
September 1st, 1938.

SURREY COUNTY COUNCIL

PUBLIC HEALTH DEPARTMENT

KINGSTON COUNTY HOSPITAL
(185 beds; mainly acute)

APPOINTMENT OF RESIDENT SURGEON

Applications are invited for the appointment of Resident Surgeon at the Kingston County Hospital, Wheatfield Way, Kingston-upon-Thames.

Candidates must be duly registered medical practitioners and must possess a Higher Surgical Qualification.

The Officer appointed will be required to devote his whole time to the duties of the Council and any fees he may receive from time to time must be paid into the County Fund.

Commencing salary £600 per annum, rising by annual increments of £50 to a maximum of £700 per annum. The scale is full residential emolument and allowances for all purposes at the rate of £100 per annum will be paid in the event of the appointed person being required to act as Deputy Medical Superintendent.

Applications may be obtained from and must be returned direct to their own communication to the Superintendent of the Hospital in the case of persons at present employed in the service of the Council, and in other cases to the Clerk of the County Council, County Hall, Kingston-upon-Thames, not later than Thursday, September 15th, 1938.

County Hall, DUDLEY AUKLAND,
Kingston-upon-Thames. Clerk of the Council.
August 5th, 1938.

SURREY COUNTY COUNCIL

TUBERCULOSIS OFFICER

Applications are invited for the post of Tuberculosis Officer, which is a whole-time post under the Local Government and Other Officers' Superannuation Act, 1922, and the appointment will be subject to a satisfactory medical examination. Salary £700 per annum rising by annual increments of £50 to £1,000 per annum, together with travelling expenses in accordance with the Council's scale.

Candidates must be registered medical practitioners and have had not less than two years' appointment in a general hospital, of at least six months' duration, and have had practical experience in the diagnosis and treatment of tuberculosis in sanatoria or otherwise.

The Officer appointed will be required to devote his whole time to his official duties to work under the administrative control of the County Medical Officer of Health and to reside at such address as may be required. The duties will include the charge of tuberculosis dispensaries, the general arrangements for the treatment of tuberculous patients otherwise than in sanatoria, and such other duties as the Council may direct.

The appointment is terminable by three months' notice on either side.

Applications stating age, qualifications and experience to date, with copies of not more than three recent testimonials, must be sent to the County Medical Officer of Health, County Hall, Kingston-upon-Thames, from whom further particulars may be obtained. Special form of application are not applicable. Envelopes must be endorsed "Tuberculosis Officer."

Canvassing directly or indirectly will be a disqualification.

The last date for receipt of applications is first post on Monday, September 19th, 1938.

DUDLEY AUKLAND,
County Hall, Clerk of the Council.
Kingston-upon-Thames.
September 5th, 1938.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

ASSISTANT TUBERCULOSIS OFFICER

The County Council of the West Riding of Yorkshire invite applications for the appointment of an Assistant Tuberculosis Officer. Candidates must be qualified in accordance with the Regulations of the Minister of Health. The possession of the D.P.H. will be an advantage.

Salary £600 per annum, rising by annual increments of £25 to £700.

The appointment is subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1922.

Further particulars and forms of application may be had from the undersigned to whom all applications together with copies of not more than three recent testimonials should be addressed not later than Monday, September 26th, 1938.

J. CHARLES McGRATH,
County Hall, Clerk of the County Council.
Wakefield.
September, 1938.

SURREY COUNTY COUNCIL

ASSISTANT MEDICAL OFFICER

Applications are invited for the appointment of an Assistant Medical Officer (male). Applicants must possess a qualification in Public Health. The main duties will be in connexion with the School Medical Service and Child Welfare Services, but the Officer appointed will be required to undertake such other Public Health duties as may be allocated to him. He will be on the staff of the County Medical Officer of Health, and will reside in the County, and duties will be undertaken in the Administrative County.

Salary £600 per annum, rising by annual increments of £25 to £700 per annum. Travelling expenses in accordance with the Council's scale will be allowed.

The appointment will be subject to the approval of the Ministry of Health, Board of Education, and to the satisfactory result of a medical examination as to the provisions of the Local Government and Other Officers' Superannuation Act, 1922, and the Statutory Regulations of the Council, which provide, *inter alia*, that appointment may be determined at any time by one month's notice on either side.

Applications, together with copies of testimonials and experience, should be sent to the undersigned not later than Monday, September 19th, 1938, and should be addressed to the County Medical Officer of Health, County Hall, Kingston-upon-Thames, from whom copies of the appointment may be obtained and to whom all queries relating to the appointment should be addressed.

Last date for receipt of applications, Wednesday, September 21st, 1938.

Canvassing directly or indirectly will be a disqualification.

DUDLEY AUKLAND,
County Hall, Clerk of the County Council.
Kingston-upon-Thames.
September 6th, 1938.

LANCASHIRE COUNTY COUNCIL

PARK HOSPITAL, DAVYHULME
(near Manchester)

APPOINTMENT OF JUNIOR RESIDENT MEDICAL OFFICER

Applications are invited from duly registered male Medical Practitioners for the appointment of Junior Resident Medical Officer at the above Hospital. Candidates must be unmarried.

Salary £200 per annum, rising by annual increments to £250, with full emoluments.

The appointment is for a period of six months, but applicants will be eligible for reappointment for further periods if recommended by the Medical Superintendent.

The Hospital comprises 600 beds for acute cases, is fully equipped in every respect, and is recognised as a complete training school for nurses.

The appointment will be terminable by one month's notice on either side.

Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom all applications must be forwarded, together with copies of not more than two recent testimonials, which must be forwarded so as to be received not later than Friday, September 9th, 1938.

GEORGE ETHERTON,
Clerk of the County Council.
County Offices, Preston.
September 1st, 1938.

GLOUCESTERSHIRE

South Gloucestershire United Districts (Medical Officer of Health) Order, 1938

Applications are invited from male Medical Practitioners for a Medical Officer who will act as MEDICAL OFFICER OF HEALTH for the area comprising the Dursley Rural District and the Thornbury Rural District in the County of Gloucester and Assistant Medical Officer under the County Council of Gloucester for the purpose of such inspection only.

The person applying must be qualified in accordance with Article 4 of the Sanitary Officers (outside London) Regulations, 1935.

The salary for the combined appointments will be £700 per annum, rising by four annual increments to £900 per annum, with an allowance for travelling and office, and the expenses thereof of £150 per annum.

The officer appointed will be required to reside in the area between Thornbury and Dursley, to devote his whole time to the duties of the above mentioned appointment, and he will be restricted from engaging in private practice.

The successful candidate will be subject to a medical examination, and the appointments are subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1922.

Applications, stating age, qualifications and experience, must reach me at the undersigned not later than September 26th, 1938, and must be accompanied by copies of three recent testimonials, but not later than September 26th, 1938.

JOHN G. WICKS,
Clerk to the Joint Committee.
Thornbury, Bristol.
August 16th, 1938.

CITY OF BIRMINGHAM MENTAL HOSPITAL

WINSON GREEN DIVISION

DEPUTY MEDICAL SUPERINTENDENT

The Committee of Visitors invite applications from duly qualified medical men for the position of Deputy Medical Superintendent of the Winson Green Division at a commencing salary of £625 per annum plus residential emoluments consisting of unfurnished quarters coal light and laundry valued for superannuation purposes at £120 per annum The above emoluments are for a married man but if a single man is appointed they will consist of board lodging and laundry

Applicants must have had several years experience in Mental Hospital practice and must possess the Diploma in Psychological Medicine A person who has held for at least six months a medical or surgical residential post in a General Hospital will be regarded as having an additional qualification The successful candidate must be a good Anaesthetist

The candidate appointed will be required to pass a medical examination and to contribute under the Asylums Superannuation Act 1909 He must also devote the whole of his time to the duties of the office and will not be permitted to engage in any other work

All fees received in connexion with panel work will be required to be paid into the Borough Funds but for making insurance reports reports on compensation cases and Coroner s inquests the fees can be retained

The appointment is subject to one month s notice on either side and the successful candidate will be required to serve in such Institution belonging to the Mental Hospitals Committee as they may from time to time direct

Applications endorsed Deputy Medical Superintendent Winson Green stating age full particulars and qualifications experience and appointments held accompanied by copies of three recent testimonials must be addressed to the undersigned so as to be received not later than September 28th 1938 Canvassing either directly or indirectly will be a disqualification

Town Clerk s Office F H C WILTSHIRE
Council House Clerk to the Committee
Birmingham 1 of Visitors

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE

APPOINTMENT OF ASSISTANT CHILD WELFARE MEDICAL OFFICER (Male or Female)

Applications are invited from duly registered Medical Practitioners for the post of Assistant Child Welfare Medical Officer The person appointed will take part in the ordinary routine work of the child welfare centres but will not be required to assist in the working of the maternity services

Applicants will be required to have held a post as House Physician in a recognized teaching hospital (General or Children) and some experience of methods of medical or pathological research is desirable The possession of the Diploma in Child Health granted jointly by the Royal College of Physicians and the Royal College of Surgeons will be regarded as an additional qualification Salary £500 rising to £700 per annum by annual increments of £25

The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass the necessary medical examination

Applications on the prescribed form which can be obtained on application to the Medical Officer of Health Health Department Town Hall Newcastle upon Tyne 1 must be submitted not later than Friday September 30th 1938

GLOUCESTERSHIRE COUNTY COUNCIL

ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

Gloucestershire County Council invite applications for the appointment of an Assistant County Medical Officer of Health (male) The salary will be on the scale £600 per annum × £25 to £700 per annum Travelling and subsistence allowances will be paid in accordance with the Council s scale

The post is designated for the purposes of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination by the Council s medical adviser Applicants must be registered Medical Practitioners and should hold a Diploma in Public Health Previous experience in various branches of public health and school medical work is desirable

Forms of application with particulars of the duties and conditions of appointment may be obtained from the County Medical Officer of Health Shire Hall Gloucester to whom completed applications with copies of three recent testimonials should be sent not later than September 19th 1938

Canvassing directly or indirectly will disqualify

RICHARD L MOON
Clerk of the County Council

CITY OF BIRMINGHAM MENTAL HOSPITAL

WINSON GREEN DIVISION

JUNIOR LADY ASSISTANT MEDICAL OFFICER

The Committee of Visitors invite applications from single ladies who are duly qualified and registered Medical Practitioners for the position of Junior Lady Assistant Medical Officer The successful candidate will be required to reside in the Hospital

The commencing salary will be £250 per annum plus the usual residential emoluments of board lodging laundry and attendance An increase of £50 will be granted on completion of twelve months satisfactory service and thereafter in increases of £25 per annum up to a maximum salary of £450 per annum An additional £50 per annum will be paid to a holder of the D P M qualification or to a person obtaining the D P M after appointment All fees received in connexion with panel work will be required to be paid into the Borough Funds but for making insurance reports reports on compensation cases and Coroner s inquests the fees can be retained

A person who has held for at least six months a medical or surgical residential post in a General Hospital will be regarded as having an additional qualification Previous mental hospital experience is not essential but experience in the administration of anaesthetics is desired

The candidate appointed will be required to pass a medical examination and will be placed on the permanent staff after one year s satisfactory service when she will be required to contribute under the Asylums Officers Superannuation Act 1909 She will be required to serve in such institution belonging to the Mental Hospitals Committee as they may from time to time direct The appointment is subject to one month s notice on either side

Applications stating full particulars of qualifications experience and appointments held accompanied by copies of three recent testimonials must be addressed to the undersigned so as to be received not later than September 28th 1938 Canvassing either directly or indirectly will be a disqualification

Town Clerk s Office F H C WILTSHIRE
Council House Clerk to the Committee
Birmingham 1 of Visitors

COUNTY BOROUGH OF DEWSBURY

ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from qualified and registered medical practitioners (men or women) for the post of Assistant Medical Officer of Health and Assistant School Medical Officer

Applicants should have had at least three years experience since qualification and possess the D P H Experience in eye work and refraction is desirable The duties are in connexion with School Medical work Child Welfare and Tuberculosis and there are also opportunities for experience in general Public Health work

The salary is £500 per annum rising by annual increments of £25 to £700 per annum The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination

Particulars of the duties and terms and conditions of the appointment together with application form may be obtained from Dr J F Galloway Medical Officer of Health Public Health Department Municipal Buildings Halifax Road Dewsbury to whom applications accompanied by copies of not more than three recent testimonials should be delivered not later than Thursday September 22nd 1938

Canvassing in any form will be a disqualification

Town Hall HOLLAND BOOTH
Dewsbury Town Clerk
September 3rd 1938

CITY OF MANCHESTER

MONSALL HOSPITAL FOR INFECTIOUS DISEASES (600 Beds)

The Public Health Committee invites applications from registered medical men for the post of JUNIOR RESIDENT ASSISTANT MEDICAL OFFICER (Grade II) at the above named hospital

Preference will be given to applicants who have held resident surgical and medical posts in a general hospital and have had special experience in bacteriology

Salary £250 per annum with board residence and laundry in addition subject to the Manchester Corporation conditions of service

The appointment will be made in the first instance for a period of six months renewible for a further six months but not renewable thereafter

Full information and forms of application may be obtained from the Medical Officer of Health Town Hall Manchester 2 and application for the post must be received by him not later than September 24th 1938

Town Hall F E WARBRECK HOWELL
Manchester 2 Town Clerk
September 6th 1938

COUNTY OF DORSET

MEDICAL OFFICER OF HEALTH

for Wareham Borough the Wareham and Purbeck Rural District and the Swanage Urban District

and

ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from medical practitioners not exceeding 40 years of age for the joint whole time appointment of Assistant County Medical Officer and Medical Officer of Health for the Wareham Borough the Wareham and Purbeck Rural District and the Swanage Urban District (population about 25 000)

The salary for the combined appointment will be £800 per annum together with a travelling allowance of £80 per annum and necessary out-of-pocket expenses according to the scales now in force

Applicants must be qualified in accordance with Article 8 of the Sanitary Officers (outside London) Regulations 1935 and hold the Diploma in Public Health or similar qualification

The candidate appointed will as regards his duties as Assistant County Medical Officer act under the direction of the County Medical Officer of Health and will be required to perform such duties as may be from time to time prescribed As regards his duties as Medical Officer of Health he will be subject to the control and direction of the District Councils concerned

The post will be designated under the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination He will also be required to reside within the area for which he is Medical Officer of Health and to take up his appointment as soon as possible

Candidates must apply on the prescribed form to be obtained from the undersigned by whom applications accompanied by copies of not more than three recent testimonials must be received not later than Friday September 30th 1938

Canvassing in any form will be a disqualification

C P BRUTTON
Clerk of the County Council

County Offices Dorchester
September 5th 1938

COUNTY BOROUGH OF OLDHAM

THE MUNICIPAL HOSPITAL

Applications are invited from fully qualified practitioners for the post of RESIDENT OBSTETRIC OFFICER at the above Hospital (350 Beds)

Candidates must have held previous resident appointments in a Maternity Hospital and have had experience in Ante Natal work

The duties are chiefly in connexion with the Maternity Wards and the Ante-Natal Clinics but the officer will also be required to undertake such duties in the Hospital or in the Institution as may be required

The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the person appointed will be required to pass a medical examination

Salary £350 rising by annual increments of £25 to £450 per annum with board apartments and laundry In accordance with the Grading Scheme of the Corporation the first increment will be payable on April 1st next following the appointment provided a period of six months has elapsed since the commencement of duties otherwise the increment will be paid on the subsequent April 1st

The appointment may be terminated by one month s notice on either side

Canvassing or submitting testimonials from members of the Council or of any Committee appointed by the Council will be a disqualification

Applications stating age experience and salary qualifications together with not more than three recent testimonials and endorsed Resident Obstetric Officer should be forwarded to the Medical Officer of Health Town Hall Oldham so as to be received not later than 9 a m on Monday September 19th 1938

THOMAS ALKEP
Town Clerk

Town Hall Oldham
August 26th 1938

COUNTY COUNCIL OF DURHAM

Seaham Hall Sanatorium for Women and Children Seaham Harbour

(80 Pulmonary and 50 Non-Pulmonary beds)

JUNIOR RESIDENT MEDICAL OFFICER

Applications are invited for the post of Junior Resident Medical Officer at a salary of £ per annum with board residence and laundry in addition

The appointment is for a period of [illegible] and is not renewable

Applications stating age and experience with copies of three recent testimonials to be sent to the County Medical Officer Shire Hall Durham not later than 14th 1938

Shire Hall J K HOY
Durham Clerk of the County Council
September 5th 1938

METROPOLITAN BOROUGH OF STEPNEY

ASSISTANT TUBERCULOSIS OFFICER AND ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are hereby invited for the appointment of an Assistant Tuberculosis Officer and Assistant Medical Officer of Health in the Borough. The person appointed will also be required to carry out such other duties as the Council may from time to time direct.

The person to be appointed must possess the Diploma of Public Health as well as the qualifications prescribed by the Local Government (Qualifications of Medical Officers and Health Visitors) Regulations 1930 with not less than two years experience in a sanatorium or other tuberculosis institution or otherwise in wholetime work in relation to tuberculosis. He should be experienced in artificial pneumothorax treatment.

The salary will be at the rate of £600 per annum rising by annual increments of £25 to a maximum salary at the rate of £650 per annum. The salary will be an inclusive one.

The person appointed will be required to devote the whole of his time to the duties of the office, act under the direction and supervision of the Medical Officer of Health and pass an examination by the Council's Medical Referee to ascertain medical fitness. The appointment will also be subject to the provisions of the Stepney Borough Council (Superannuation) Act 1905 to 1931 and to the Council's by-laws. It will in the first instance be for a probationary period of six months, in the first instance and the person appointed will be required to agree the position in addition to such probationary period as observed.

Forms of application may be obtained from the undersigned to whom they must be returned in envelopes endorsed "Appointment of Assistant Tuberculosis Officer" so as to reach him not later than 10 a.m. on Saturday October 1st 1938.

Canvassing members or officers of the Council is strictly prohibited and will disqualify candidates. The Council do not bind themselves to appoint any of the candidates.

By Order

Municipal Offices, Raine Street, Old Gravel Lane, London E.1
September 1st 1938

WM. McCARTY
Town Clerk

COUNTY BOROUGH OF ROCHDALE

PUBLIC HEALTH DEPARTMENT

The Health Committee invite application from fully qualified registered Medical Practitioners (unmarried) for the appointment of SENIOR (male) ASSISTANT RESIDENT MEDICAL OFFICER at the Birch Hill Hospital (464 beds Medical Surgical and Children and Maternity).

Previous hospital experience including maternity and surgical work is essential.

The appointment will include certain services in connection with the adjoining Public Assistance Institution.

The salary will be at the rate of £350 per annum rising by annual increments of £25 to £400 per annum together with board residence and laundry emoluments valued at £160 per annum.

The candidate appointed will be required to pass the Council's Medical Examination and will be subject to the provisions of the Local Government Superannuation Act 1937.

Applications must be made on the prescribed forms which may be obtained on application to the Medical Officer of Health and returned addressed to him at the Public Health Offices, Baillie Street, Rochdale not later than Thursday, September 22nd 1938.

Town Hall, Rochdale
September 3rd 1938

HARRY BANN
Town Clerk

COUNTY BOROUGH OF DEWSBURY

EDUCATION COMMITTEE

ASSISTANT SCHOOL DENTIST

The Education Committee invite applications from qualified and registered Dental Practitioners (men or women) for the post of Assistant School Dentist who will be responsible under the School Medical Officer for the Dental Inspection and Treatment of School Children and there will be in addition a certain amount of work in connection with Tuberculosis and Maternity and Child Welfare.

The person appointed will be required to devote whole time to the duties of the office. The salary attached to the post will be £4 0 per annum. The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination. Forms of application and list of duties may be obtained from the School Medical Officer, Dr. J. F. Galloway, Municipal Buildings, Halifax Road, Dewsbury, and should be returned to me accompanied by three recent testimonials not later than first post on Thursday, September 22nd 1938.

Municipal Buildings, Halifax Road, Dewsbury

LESLIE EMMERSON
Education Officer

ADMINISTRATIVE COUNTY OF KENT

PUBLIC HEALTH DEPARTMENT

TUBERCULOSIS OFFICER (Male)

Applications are invited from registered Medical Practitioners for the above-named appointment of Tuberculosis Officer.

The candidate appointed will be required to work under the direction of the County Medical Officer of Health, who will allot to the duties of the office to be undertaken such other work as may be considered from time to time desirable to include in such part of the county as may be allotted.

Applicants should not exceed 40 years of age and should have had at least three years' post graduate experience in general medicine and surgery and tuberculosis including Dispensary and Sanatorium duties.

The salary is at the rate of £500 per annum rising with efficient service by three annual increments of £25 to £600 and one of £50 to a maximum of £650 with travelling and subsistence allowance in accordance with the County Council's scale.

The post is designated as an established one under the Local Government and Other Officers Superannuation Act 1922, and is terminable by three months' notice on either side. The successful candidate will be required to pass a medical examination.

Applications stating age, qualifications and clinical experience with special reference to practical experience in the diagnosis and treatment of tuberculosis, accompanied by copies of three recent testimonials, should be received by the County Medical Officer of Health, Sessions House, Maidstone not later than Tuesday, September 20th 1938. Medical staff of the present Sanatorium will be invited to attend for interview.

Sessions House, Maidstone
September 7th 1938

W. L. PLATTS
Clerk of the County Council

HULL CORPORATION HEALTH DEPARTMENT

ASSISTANT MEDICAL OFFICER OF HEALTH (Female)

Applications are invited from duly qualified unmarried or widowed medical women under the age of 30 years and of not less than three years' standing in their profession for the post of Assistant Medical Officer of Health.

Salary £600 per annum rising, subject to satisfactory service, by annual increments of £25 to £700.

The duties consist mainly of work in the Maternity and Child Welfare Department, the School Medical Service and the Tuberculosis Department.

Candidates must have had special experience in Paediatrics and preference will be given to those possessing the Diploma in Public Health or similar qualification and to those with experience in a children's hospital.

The appointment will be subject to the provisions of the Local Government and Other Officers' Superannuation Act 1937.

Application forms to be obtained from the undersigned and returnable not later than 10 a.m. on Thursday, September 22nd 1938.

NICOLAS GEBBIE, M.D.
Medical Officer of Health

Health Department, Guildhall, Hull
September 1938

COUNTY BOROUGH OF SOUTHEND-ON-SEA.

SOUTHEND MUNICIPAL HOSPITAL

The Health Committee of the Town Council invite application for appointment of ASSISTANT MEDICAL OFFICER (male) Grade I at their Municipal Hospital Rochford Essex (475 beds). Candidates must have had two years previous resident experience in hospitals including experience in midwifery. Salary £3 0 per annum rising by annual increments of £25 to £4 0 per annum with full residential emoluments.

Forms of application together with particulars of the appointment can be obtained from the Medical Superintendent, Southend Municipal Hospital, Rochford. Essex by whom applications should be received not later than September 19th 1938.

H. J. WORWOOD
Town Clerk.

Town Clerk's Office, Southend-on-Sea

BATTERSEA GENERAL HOSPITAL
London S.W.11 (95 Beds.)

Applications are invited for the post of CASUALTY OFFICER (part time—four mornings a week) at a salary of £60 per annum. Candidates must be fully qualified and registered and preference will be given to candidates working for a higher medical or surgical degree. The appointment is for a period of six months and the successful candidate will be required to commence duty on November 1st 1938.

Applications with copies of two testimonials to be sent to the Secretary not later than September 24th 1938.

THE CENTRAL COUNCIL FOR HEALTH EDUCATION

APPOINTMENT OF GENERAL SECRETARY

Applications are invited for the post of a General Secretary who will be the chief salaried officer of the above Council.

The function of the Council is the organization and promotion of Health Education on a national scale in conjunction with and on behalf of local authorities and other bodies.

The appointment will be a wholetime one and is subject to three months' notice on either side. The salary scale will be £700 with annual increments of £50 rising to a maximum of £900 subject to satisfactory service.

Arrangements for superannuation will be made in accordance with the Local Government Superannuation Act 1937.

Candidates whose age should not exceed 45 years must have wide experience in administration and organization. Canvassing will disqualify.

Applications should be sent to the Chairman of the Council to arrive not later than October 3rd and should be accompanied by the names of three referees.

Further particulars may be obtained from the Chairman, the Central Council for Health Education, 1 Thornhaugh Street, Russell Square, London, W.C.1.

COUNTY COUNCIL OF FIFE.

DEPUTY MEDICAL OFFICER OF HEALTH

The County Council invite applications for the above post from registered male Medical Practitioners under 50 years of age. Applicants must possess Diploma in Public Health and have previous experience of Duties, General Public Health Work, Housing, Water Supplies, Drainage, Infectious Diseases, Food and Milk Supplies. Salary £600 subject to deduction under Superannuation Act 1937.

Applications stating age, qualifications and experience to be either with copies of three recent testimonials should reach the undersigned not later than 11 a.m. on September 14th.

County Buildings, Cupar, Fife
September 6th 1938

J. M. MITCHELL
County Clerk.

METROPOLITAN HOSPITAL
Kingsland Road, E.8 (110 Beds.)

There are vacancies for the following—

SENIOR HOUSE PHYSICIAN
SENIOR HOUSE SURGEON
JUNIOR HOUSE PHYSICIAN
JUNIOR HOUSE SURGEON
MALES. Salary £100 p.a.

Appointment in the first place will be for a period of six months dating from November 1st. Candidates must possess a registered medical and surgical qualification of the United Kingdom.

Form of application must be obtained from the undersigned and returned duly completed by September 24th 1938. Two members of the Resident Staff are candidates for the two senior appointments.

FRANK JENNINGS
House Governor and Secretary

METROPOLITAN HOSPITAL
Kingsland Road, London, E.8

Application are invited for the post of ASSISTANT MEDICAL OFFICER in the Physio-Therapeutic Department. Experience of Radiology and Electro-Therapy is necessary. Particulars of the appointment to which an Honorarium is attached may be obtained from the undersigned.

Applications and testimonials should be received by September 17th 1938.

FRANK JENNINGS
House Governor and Secretary

HOSPITAL OF ST. JOHN AND ST. ELIZABETH
60 Grove End Road, N.W.8

Applications are invited for the post of RESIDENT HOUSE SURGEON (male). The post is recognized for the degree of M.S. London University. The appointment will be for six months from November 1st 1938. Salary at the rate of £75 per annum with full board.

Applications together with copies of three testimonials should reach the undersigned on or before September 9th.

Applicants will be required to attend a meeting of the Medical Committee at 8.30 p.m. on October 4th at the Hospital.

F. DUDLEY HOBBS, B.A.
Secretary

KING GEORGE HOSPITAL, ILFORD
near London (467 Beds.)

RESIDENT ANAESTHETIST (male) required for six months from October 1st. Salary at the rate of £110 per annum. Forms of application may be obtained from the undersigned to whom they should be returned duly completed by September 23rd.

G. AUSTIN HEPWORTH
Secretary and Superintendent

THE PRINCESS BEATRICE HOSPITAL
Earl's Court London S W 5
(General Hospital—81 Beds)

RESIDENT SURGICAL OFFICER (male) required for a period of six months in the first place from October 1st 1938 eligible for re election Salary at the rate of £200 per annum with board residence and laundry (together with £25 to cover all duties during the six months relating to private patients) Previous resident experience and F R C S essential

Full particulars may be obtained from the Secretary Manager by whom applications with copies of three recent testimonials should be received not later than 9 a m on Monday September 19th 1938

HOUSE PHYSICIAN AND CASUALTY OFFICER (male or female) required for a period of six months as from October 1st 1938 also CASUALTY OFFICER AND OBSTETRIC HOUSE SURGEON (male or female) required for a period of six months as from October 1st 1938

The following details apply to both posts Salary at the rate of £110 per annum with board residence and laundry (together with £10 to cover all duties during the six months relating to private patients) Previous resident experience desirable but not essential Full particulars may be obtained from the Secretary Manager by whom applications with copies of three recent testimonials should be received not later than 9 a m on Monday September 19th 1938

THE HOSPITAL FOR SICK CHILDREN
Great Ormond Street London W C 1

Three OUT PATIENT SURGICAL ASSISTANTS are required Duties to commence on October 10th 1938 Honorarium £50 per annum The appointment is tenable in the first instance for one year but is renewable Duties will include attendance upon members of the Surgical Staff in the Out-patient Department on two mornings a week

Candidates must possess a legal qualification to practise and have held a responsible resident appointment at a General Hospital Preference will be given to those holding the Fellowship of the Royal College of Surgeons of England

Applications must be received by noon on Monday September 26th 1938 and candidates must be prepared to attend for interview by the Joint Committee at 4 45 p m on Wednesday October 5th 1938 Full instructions and forms of application are obtainable from the undersigned

HERBERT I RUTHERFORD
August 1938 Secretary

THE HOSPITAL FOR SICK CHILDREN
Great Ormond Street London W C 1

An OUT PATIENT MEDICAL OFFICER (part time and non resident) is required on October 10th 1938 Salary £150 per annum

This appointment is tenable in the first instance for one year but may be held for a period of two years subject to re election The duties will include those of the former Out Patient Medical Registrar Candidates must possess a legal qualification to practise and have held a responsible resident appointment at a General Hospital

Applications must be received by noon on Monday September 26th 1938 and candidates must be prepared to attend for interview by the Joint Committee at 4 45 p m on Wednesday October 5th 1938 Full instructions and forms of application are obtainable from the undersigned

HERBERT I RUTHERFORD
August 1938 Secretary

THE HOSPITAL FOR SICK CHILDREN
Great Ormond Street London W C 1

Two HOUSE PHYSICIANS and two HOUSE SURGEONS are required Duties to commence on October 18th 1938 The appointments are tenable for six months Salaries at the rate of £50 per annum Candidates must be unmarried possess a legal qualification to practise and have held a responsible resident appointment at a General Hospital

Applications must be received by noon on Monday September 26th 1938 and candidates must be prepared to attend for interview by the Joint Committee at 4 45 p m on Wednesday October 5th 1938 Further particulars and forms of application are obtainable from the undersigned

HERBERT I RUTHERFORD
August 1938 Secretary

ROYAL NORTHERN HOSPITAL
Holloway N 7
(Borough of Islington Tuberculosis Dispensary (North))

Applications are invited for the appointment of TUBERCULOSIS OFFICER (Non-resident) in the above Dispensary vacant on November 7th 1938

Candidates must possess a registered British qualification and have had previous experience in the treatment of Tuberculosis

The appointment is a whole time post with salary at the rate of £750 per annum

Further particulars with regard to duties and the superannuation scheme may be obtained from the undersigned to whom applications should be sent not later than September 21st

CUBERT C PAMER Secretary

WEST LONDON HOSPITAL
Hammersmith W 6 (239 Beds)

Required one HOUSE PHYSICIAN one HOUSE SURGEON and one RESIDENT ANAESTHETIST The duties of House Physician will include some work in the Children's Dept and of the House Surgeon some work in the Genito-Urinary Dept These three appointments (males) are tenable for six months from October 1st next subject to one month's notice on either side Salary at the rate of £100 per annum with board and lodging Candidates must be registered under the Medical Act

Applications (which must be made on printed forms obtained from me) must reach me not later than first post Wednesday September 14th Selected candidates will be required to call upon such members of the Medical Staff as directed to be in attendance at the Medical Council Meeting on Friday September 23rd at 4 30 p m and the House Committee Meeting at 5 p m the same day when the appointments will be made

H A MADGE
Secretary

WESTMINSTER HOSPITAL
Broad Sanctuary S W 1

The Wander Scholarship in Diseases of Children

Applications are invited for the office of WANDER SCHOLAR (Clinical Pathologist and Registrar to the Children's Department) Salary £250 per annum Duties to commence October 1st 1938

Candidates must be registered medical practitioners who have held a resident Hospital post and had some experience in pathology or in diseases of children The office is a whole time one and is tenable for one year

Applications (six copies) together with six copies of three recent testimonials should be submitted to the undersigned (from whom further details regarding the duties of the office can be obtained) not later than Friday September 16th 1938

By Order of the House Committee
CHARLES M POWER Secretary

WESTERN OPHTHALMIC HOSPITAL
Marylebone Road N W 1

Applications are invited for the following resident posts for six months from October 1st 1938

1 SENIOR HOUSE SURGEON salary at the rate of £150 per annum

2 JUNIOR HOUSE SURGEON salary at the rate of £100 per annum

Previous ophthalmic experience desirable Applicants for the senior post should state if they are willing to accept the junior post The Hospital is recognized for the purposes of the D O M S examinations

Applications with copies of three recent testimonials should reach me as soon as possible and not later than September 19th

H W BURLEIGH
Honorary Secretary

THE WILLESDEN GENERAL HOSPITAL
Harlesden Road N W 10

ASSISTANT SURGICAL OFFICER

The Council of Management invite applications for the appointment of Assistant Surgical Officer

Candidates must be Fellows of the Royal College of Surgeons of England and shall not be engaged in general practice An Honorarium at the rate of £50 per annum is attached to the appointment

Six copies of application with names of referees (testimonials should not be sent) to be received not later than 9 a m Monday October 3rd 1938 by the Secretary of the Hospital from whom a copy of the Regulations may be obtained upon written application

---

THE WILLESDEN GENERAL HOSPITAL
Harlesden Road N W 10

Applications are invited from fully qualified and registered candidates (unmarried) for the appointment of a Resident Officer to hold the appointment of CASUALTY OFFICER for a period of three months from October 1st 1938 followed by a six months appointment as HOUSE PHYSICIAN (total nine months)

Salary at the rate of £100 per annum

Applications to be received by the Secretary not later than first post on Thursday September 15th 1938

August 29th 1938

THE RADIUM INSTITUTE AND MOUNT VERNON HOSPITAL
1 Riding House Street London W 1

There will very shortly be a vacancy for a HOUSE SURGEON at the Mount Vernon Hospital Northwood The appointment will be made for six months at a salary at the rate of £120 per annum with board and residence

Applications should be sent immediately to the undersigned at the above address

T A GARNER
Secretary

KING EDWARD MEMORIAL HOSPITAL
EALING (145 Beds)

Applications are invited for the posts of

RESIDENT MEDICAL OFFICER (male) Six months appointment with possibility of re-election for a further period Salary £275 per annum with usual residential emoluments Applicants must have had good experience (at least two years) in House appointments

HOUSE SURGEON (male) to act in the Eye Gynaecological and Ear Nose and Throat Departments Six months appointment with possibility of re election for a further period Salary £150 per annum with usual residential emolument

Applications stating age experience and qualifications and accompanied by copies of two recent testimonials to be sent to the undersigned not later than September 16th

R A MICKELWRIGHT
House Governor

ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road London S W 3

Applications are invited for the two posts of *FULL TIME ASSISTANT RADIOLOGISTS* at this Hospital One for the Diagnostic Department and one for the Therapeutic Department

Applicants must be Registered Medical Practitioners who hold a Diploma in Radiology

The appointments will be for one year commencing on October 1st 1938 at a salary at the rate of £350 per annum each

Applications to be made on a form which will be supplied by the Secretary together with three (copies only) recent testimonials should be sent to the Secretary on or before Monday September 19th 1938

CLEMENT COBBOLD Secretary

THE MIDDLESEX HOSPITAL AND MEDICAL SCHOOL W 1

Applications are invited for the appointment of MEDICAL REGISTRAR The appointment will be for fourteen months from November 1st 1938 and the holder will be eligible to apply for re appointment and may retain office for two further consecutive years Salary £300 per annum

Further particulars may be obtained from the Secretary Superintendent to whom applications with copies of not more than three testimonials must be sent by *noon on* Saturday October 15th 1938

By Order of the Board
S R C PLIMSOLL
Secretary Superintendent

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL

Applications are invited for the posts of HOUSE SURGEON (two male unmarried) one for seven months from October 1st and one for six months from November 1st renewable for a further period of six months on the recommendation of the Medical Board £150 per annum with full board quarters and laundry Applicants should be registered Medical Practitioners

Applications with copies of testimonials should be sent to the House Governor 234 Great Portland Street W 1 not later than September 15th

---

SOUTH EASTERN HOSPITAL FOR CHILDREN
Sydenham S E 26 (100 Beds)

Recognized by the Examining Board for Post Graduate Study for the Diploma of Child Health

Applications are invited for the post of RESIDENT MEDICAL OFFICER The appointment will be for six months commencing Oct 1st Honorarium £100 per annum with board residence and laundry

Applications by letter only stating age qualifications and experience with copies of three testimonials should be received by the Hon Medical Secretary at the Hospital by September 23rd

---

THE LONDON CHEST HOSPITAL
Victoria Park E 2
(Bus Tram and Rail Cambridge Heath L and N E Railway)

A vacancy for a HOUSE PHYSICIAN will occur on November 1st Six months appointment Salary at the rate of £110 per annum Board residence and laundry provided

Applications with copies of three testimonials should be sent to the undersigned not later than Saturday October 1st 1938

THOMAS BROWN Secretary

ST JOHN'S HOSPITAL LEWISHAM SE

Applications are invited for the post of HOUSE PHYSICIAN (male) for six months from October 1st 19 at a salary at the rate of £100 per annum

Applications with copies of three recent testimonials should reach the undersigned by

J C GILBERT
Secretary

HULL ROYAL INFIRMARY

Applications are invited from registered medical practitioners for the following appointments:—

HOUSE SURGEON TO THE OPHTHALMIC AND EAR NOSE AND THROAT DEPARTMENTS to start September 3rd. The post is recognized for the final examination required in the regulations for the DOMS and DLO.

SECOND HOUSE PHYSICIAN to start September 15th. The post is recognized by the University of London for the MD Branch I (Medicine) Examination.

Salary (for each post) at the rate of £100 per annum, plus board, residence, and laundry.

The appointments will be for six months, but will be determinable at any time by one month's notice on either side.

Applications, stating age, experience, and qualifications, together with copies of recent testimonials, should be sent to the undersigned.

R. J. CARLESS,
September 7th 1938. House Governor.

EAST SUFFOLK AND IPSWICH HOSPITAL

Ipswich (300 Beds—8 Residents)

Wanted immediately CASUALTY OFFICER (male—British). Salary at the rate of £140 per annum, with board and apartments and laundry.

Also

on October 1st HOUSE SURGEON to the EAR NOSE AND THROAT SURGEON with some general surgical work. Salary £120 per annum.

Applications, stating age, qualifications, and experience, to be sent to the undersigned together with copies of three recent testimonials.

The Hospital, ARTHUR GRIFFITHS,
Ipswich. Secretary.
September 10th 1938.

CHILDREN'S HOSPITAL, NOTTINGHAM

Applications are invited for the post of RESIDENT HOUSE SURGEON (woman). The salary will be at the rate of £100 per annum, with apartments, board and laundry. The appointment will be for six months, duties to commence on November 1st.

Applications, together with testimonials stating age, qualifications and experience, to be sent to the Honorary Secretary, 1 King John's Chambers, Bridlesmith Gate, Nottingham, on or before Tuesday, September 20th. Selected candidates will be required to attend at the Hospital for a personal interview.

CLAYTON HOSPITAL, WAKEFIELD

Applications are invited immediately for the post of HOUSE SURGEON (with medical duties) for six months (renewable) from October 15th. Candidates should be of British nationality, male and single. Salary £100 p.a., together with board, residence and laundry.

Applications, stating age, qualifications and experience, together with three recent testimonials, should be sent to the undersigned immediately.

T. F. W. MACKEOWN,
Supt. and Sect.

BUTE HOSPITAL, LUTON

HOUSE SURGEON (male) wanted to commence duties as soon as possible. Salary £100 per annum, with board, residence and laundry.

Applications, stating age, nationality and experience, together with copies of not more than three recent testimonials, should be sent immediately to the Secretary of the Medical Advisory Committee at the Hospital.

R. E. LINGARD,
Bute Hospital. Secretary.

HOVE GENERAL HOSPITAL, HOVE

(150 Beds)

Applications are invited for the appointment of JUNIOR RESIDENT MEDICAL OFFICER (male). Salary £100 per annum, with board, quarters and laundry.

Applications, stating age and qualifications, together with three recent testimonials, to be forwarded to the undersigned.

K. C. BOOKER,
Secretary Superintendent.

ESSEX COUNTY HOSPITAL, Colchester

(174 Beds)

Wanted in early October a HOUSE SURGEON (male). Salary £175 per annum, with board, washing and residence in the Hospital.

Applications, with three recent testimonials, to be sent by Wednesday, September 21st, to—

ERNEST R. HANCHET,
Secretary.

BEDFORD COUNTY HOSPITAL

FIRST HOUSE SURGEON required. Male. Salary £155 per annum. To commence duties October 2nd. For particulars apply Secretary.

NORTH STAFFORDSHIRE ROYAL INFIRMARY

Stoke-on-Trent (350 Beds)

HOUSE SURGEON (GENERAL)

The Committee invite applications for the above post.

Salary at the rate of £100 per annum, with board, residence, and laundry.

The appointment will be made for six months, renewable.

Previous hospital and general experience essential.

Applications, with copies of not more than three recent testimonials, to be sent to the undersigned (marked "Confidential").

B. O. W. STEVENSON,
Secretary and House Governor.
September 8th 1938.

THE ROYAL SEA-BATHING HOSPITAL, Margate

(300 Beds—for Surgical Tuberculosis.)

A male HOUSE SURGEON required on October 1st next. Salary at the rate of £80 per annum, with board, residence, attendance and laundry. Candidates for the post must be fully qualified and registered. The appointment is for one year, but may be extended for a further period of six months. There are 300 beds for adults and children who have surgical opportunities for the study of surgical tuberculosis.

Applications, stating age, previous appointments with names of three referees, should be sent to the Secretary, R. S. B. H., Offices, 15 York Buildings, Adelphi, London, W.C., as soon as possible.

THE ROYAL GWENT HOSPITAL, Newport, Mon.

(210 Beds. Six Residents. Two of these posts are recognized by the Royal College of Surgeons for the final Fellowship.)

CASUALTY OFFICER required. previous experience essential from September 6th next to April 14th 1939. Salary at the rate of £150 per annum, with board, residence and laundry.

Applications, stating nationality and experience, to either with copies of three testimonials, should be forwarded to the undersigned as early as possible.

ALAN RUDDLE,
Secretary Superintendent.
(Newport is 2½ hours by train from London.)

LIVERPOOL HEART HOSPITAL

Applications are invited for the position of HONORARY ASSISTANT PHYSICIAN to the above Hospital. The Institute for the Prevention of Disease is the Research Department of the Hospital. There is a vacancy for a RESEARCH FELLOW at the Institute (£200 per annum), although a senior rate application for either position will be considered. These two positions may be held by the same gentleman. There are available at the Institute unique laboratory facilities, including those for animal experimentation. Candidates from outside Liverpool will receive the same consideration as local men. Applications to Miss Lewis, Secretary, not later than Monday, October 3rd.

SOUTHPORT GENERAL INFIRMARY

(150 Beds)

THREE HOUSE SURGEONS

Special Departments for Eye, Ear, Nose and Throat, X-rays, Massage, Skin, Pathology, etc.

Wanted to take up duties on October 1st next a JUNIOR HOUSE PHYSICIAN. Salary £100 per annum, with residence, board and laundry. Applicants to be fully qualified, registered and unmarried.

Application, stating age, experience, with copies of testimonial, to be sent in by September 19th 1938, to the Superintendent and Secretary, Infirmary Office, Pilkington Road, Southport.

PRESTON ROYAL INFIRMARY

Applications are invited for the post of HOUSE SURGEON, vacant on October 1st next.

Salary at the rate of £100 per annum, with board, residence and laundry.

Applications, stating age, qualifications and experience, to be addressed to Mr. JOHN GIBSON, Superintendent, Royal Infirmary, Preston.

N.B.—This appointment is recognized as approved experience for the F.R.C.S. (Eng.).

LOWESTOFT & NORTH SUFFOLK HOSPITAL

JUNIOR HOUSE SURGEON (male) required. Salary at the rate of £100 per annum, with board, residence and laundry. Medical and Surgical qualification required. Eligible for Senior post at £120 per annum after a period of satisfactory service.

Applications, together with copies of three recent testimonials, to be sent to the Honorary Medical Superintendent.

KENT AND SUSSEX HOSPITAL, Tunbridge Wells

(210 Beds.)

Applications are invited for the post of RESIDENT SURGICAL OFFICER. Salary £150 per annum, with board, residence and laundry, in the Hospital.

The Hospital includes the following departments: Medical, Surgical, Ear, Nose and Throat, Ophthalmic, Orthopædic, Gynæcological, Radium, X-Ray, and Electrotherapeutic. Isolation, Pathological, Venereal Diseases, etc.

In addition to the Resident Surgical Officer the Resident Staff includes:

One Senior House Surgeon,
One Casualty Officer and Junior House Surgeon,
One House Physician,
One Ear, Nose and Throat and Ophthalmic House Surgeon.

Applications, stating qualifications, together with certificates of registration and copies of not more than three recent testimonials, should be sent to me under and as soon as possible. Duties to commence on October 1st next, and the appointment will be for twelve months.

TOM B. HARRISON,
September 1st 1938. Superintendent Secretary.

THE PRINCE OF WALES'S HOSPITAL, Devonport

(Formerly Royal Albert Hospital, Devonport.)
(164 Beds.)

Applications are invited for the post of SENIOR HOUSE SURGEON. Salary £130 per annum, with board, residence and laundry.

Duties to commence October 1st. Appointment is tenable for six months, and is subject to renewal. Applicants must be registered under the Medical Acts.

The Hospital is officially recognized for the surgical practice required before admission to the Final Fellowship Examination of the Royal College of Surgeons of England.

Applications, stating age and qualifications, with copies of three recent testimonials, must reach the undersigned by September 23rd.

ARTHUR R. CASH,
General Supt. and Secretary.
Prince of Wales's Hospital,
Greenbank Road, Plymouth.
September 7th 1938.

THE PRINCE OF WALES'S HOSPITAL, Devonport

Formerly Royal Albert Hospital, Devonport.)
(164 Beds.)

Applications are invited for the post of JUNIOR HOUSE SURGEON. Salary £100 per annum, with board, residence and laundry.

Duties to commence forthwith. Appointment is tenable for six months, and is subject to renewal or promotion to the senior position when this post becomes vacant. Applicants must be registered under the Medical Acts.

Applications, stating age and qualifications, with copies of three recent testimonials, to reach the undersigned immediately.

ARTHUR R. CASH,
General Supt. and Secretary.
Prince of Wales's Hospital,
Greenbank Road, Plymouth.

THE GUEST HOSPITAL, DUDLEY

(General Hospital, 139 Beds.)

The Resident Staff consists of a Resident Surgical Officer and two House Surgeons.

HOUSE SURGEON (male) required immediately. Salary at the rate of £100 per annum, with furnished apartments, board and laundry. Candidates must be fully qualified and registered.

Applications, stating age, qualifications, and experience, accompanied by copies of testimonials, to be sent to the undersigned.

H. RAYMOND HURST,
House Governor and Secretary.
September 7th 1938.

TILBURY HOSPITAL, ESSEX

(Seamen's Hospital Society.) (92 Beds.)

HOUSE SURGEON (male) required for six months from October 1st. Salary £140 per annum, with board, residence and laundry.

Applications, with copies of three testimonials, to be sent in on or before September 22nd to the undersigned.

F. A. LYON, Secretary,
Seamen's Hospital Society,
Greenwich, S.E.10.

WHITEHAVEN AND WEST CUMBERLAND HOSPITAL

HOUSE SURGEON required for end of September. Ninety beds. Two House Surgeons in residence. Six months appointment. Salary at the rate of £100 per annum, board residence and laundry.

Applications, with copies of three recent testimonials to be sent to the Secretary.

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(220 Surgical and Medical Beds)

CASUALTY OFFICER AND FRACTURE HOUSE SURGEON

Applications are invited from fully qualified men for the above post to commence as soon as possible

The appointment is for six months salary at the rate of £200 per annum with board apartments and laundry

The duties include the post of House Surgeon to the Director of the Fracture Clinic under whose care the whole of the fractures both in and out patients are treated and deputy to the Resident Surgical Officer

Candidates for this post should have had special fracture experience

Application stating nationality and age together with copies of three recent testimonials should be sent to the undersigned as early as possible

M H BOONE
Superintendent and Secretary

August 26th 1938

CORNELIA AND EAST DORSET HOSPITAL
Poole Dorset (120 Beds)

HOUSE PHYSICIAN

Applications are invited (from single men) for the post of House Physician

Period ending March 31st 1939 Salary at the rate of £150 p a with usual emoluments

Reappointment may be applied for and if granted the salary is at the rate of £175 per annum

Duties to commence immediately

The Hospital is recognized by the Royal College of Surgeons of England in connection with the Final Examination for the Fellowship

Applications stating age nationality experience and qualifications together with copies of three recent testimonials (which will not be returned) should reach the undersigned at the Hospital immediately

Preference will be given to applicants who have already held a resident appointment in a Hospital

E A HART
Secretary

CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE
Withington Manchester 20

RESEARCH FELLOWSHIP IN RADIATION THERAPY

Applications are invited for the above The Fellow will be required to continue a clinical investigation concerned with a study of the *Time Factor in Radiation Therapy* Candidates must be prepared to continue the work for a minimum period of one year Remuneration £450 per annum whole time

Applicants if medical graduates need not necessarily be experienced in radiology but must have a first-class academic record Graduates in science (e g physiology) would be considered if already experienced in some type of biology research

Applications giving full particulars to be forwarded to the undersigned immediately

PERCY N CLASS
Superintendent

KENT AND CANTERBURY HOSPITAL
Canterbury
(183 Beds Four R M O s)

Applications are invited for the post of HOUSE SURGEON (male) to the Special Departments (Ear Nose and Throat Ophthalmic and Genito-urinary) The appointment is for six months commencing October 1st 1938

Salary £125 per annum with board residence and laundry The Hospital is recognized for the D L O and D O M S examinations

Applications together with copies of recent testimonial should be forwarded immediately to the undersigned

J F KENT
Superintendent and Secretary

BRISTOL ROYAL INFIRMARY

Applications are invited for the post of HOUSE PHYSICIAN for the period ending February 28th 1939 Salary at the rate of £50 per annum

Candidates who must be duly qualified to send in their applications on forms to be obtained from the undersigned together with copies of not more than three testimonials

ELLIS C SMITH F C I S
Secretary and House Governor

DARLINGTON MEMORIAL HOSPITAL

Wanted—HOUSE SURGEON for Adult Surgical Wards Early Surgical experience an advantage Salary £150 per annum with board residence and laundry Medical qualification and experience desirable Applications with copies of testimonials to be sent to the undersigned

A RIDDLE
Secretary Superintendent

MANCHESTER ROYAL INFIRMARY
MEDICAL NEUROLOGICAL DEPARTMENT

PSYCHIATRIST

The Board of Management invite applications for the above newly created post Applicants must be registered medical practitioners Higher qualifications desirable The successful candidate will be attached to the Medical Neurological Department and will be required to attend the Hospital for seven half days per week The duties will include the study and treatment of both out and in patients and participation in teaching Ample research facilities will be available

The appointment is part time and carries with it a salary of £300 per annum and permission to engage in practice

The appointment is renewable annually

It is the intention of the Board of Management to reconsider the status of the appointment within three years

Candidates should forward fifteen copies of their application stating age experience etc together with fifteen copies of three recent testimonials not later than 9 a m on Thursday September 15th 1938 to the undersigned.

By Order
F J CABLE
General Supt and Secretary

August 29th 1938

MANCHESTER ROYAL INFIRMARY
CENTRAL BRANCH ROBY STREET

SENIOR HOUSE SURGEON (Male)

The Board of Management invite applications for the above appointment Applicants must be registered must hold a Medical and Surgical qualification and have had at least six months experience as a House Surgeon

The appointment is for twelve months subject to the provisions of the By laws as to notice Salary £150 per annum with board residence and allowance for laundry

Applicants must state age and send fifteen copies of their application and fifteen copies of their testimonials to the undersigned not later than 9 a m Thursday September 15th 1938

By Order
F J CABLE
General Supt and Secretary

September 2nd 1938

MANCHESTER ROYAL INFIRMARY

The Board of Management of the Manchester Royal Infirmary invite applications for the post of RESIDENT MEDICAL OFFICER of the Private Patients Home of 100 beds

Applicants must be registered and hold a Medical and Surgical qualification and must have had previous resident experience in a general hospital

The appointment is for twelve months renewable for a further period

Salary £250 per annum with board residence and laundry allowance

Full information is obtainable from the undersigned to whom applicants must send twelve copies of their application and testimonials on or before 9 a m on Thursday September 15th 1938

By Order
F J CABLE
General Superintendent and Secretary

MANCHESTER ROYAL INFIRMARY
RESIDENT CASUALTY OFFICER (Male)

The Board of Management of the Manchester Royal Infirmary invite applications for the above appointment

Applicants must hold a Medical and Surgical qualification and be registered

The appointment is for twelve months subject to the provisions of the By laws as to notice

Salary is at he rate of £150 per annum with allowance for laundry

Applicants must state age and send fifteen copies of their application and fifteen copies of their testimonials to the undersigned not later than 9 a m Thursday September 15th 1938

By Order
F J CABLE
General Supt and Secretary

September 1st 1938

BARROWMORE TUBERCULOSIS SANATORIUM AND SETTLEMENT
Great Barrow near Chester

Male JUNIOR ASSISTANT MEDICAL OFFICER required Appointment is for twelve months only Salary £400 per annum with board residence and laundry

The Institution deal with all stages of Pulmonary Tuberculosis and comprises Hospital and Sanatorium accommodation extensive workshops for graduated work and a Settlement

Special treatment Sanocrysin and Artificial Pneumothorax given

Applications marked Junior Assistant Medical Officer with copies of three testimonials to be sent to the Medical Director at the above address by Friday the 16th inst

---

VICTORIA HOSPITAL BURNLEY
(150 Beds)

This Hospital is officially recognized for the surgical practice required before admission to the Final Fellowship Examination of the Royal College of Surgeons

HOUSE SURGEON (MALE)

Applications are invited for the above post which will become vacant on September 30th next The appointment is for six months in the first instance at a salary of £150 per annum together with board residence and laundry At the end of this period reappointment may be applied for and if confirmed the salary for the second six months will be at the rate of £200 per annum

Applications with full details of qualifications and experience and stating nationality together with copies of recent testimonials should be addressed to the undersigned forthwith

J E WHEATCROFT
Secretary

VICTORIA HOSPITAL BURNLEY
(150 Beds)

HOUSE PHYSICIAN (Male)

Applications are invited for the above post which will become vacant on September 14th next. The duties include the giving of a certain number of anaesthetics The appointment is for six months in the first instance at a salary of £150 per annum together with board residence and laundry At the end of this period reappointment may be applied for and if granted the salary for the second six months will be at the rate of £100 per annum

Applications giving full details of qualifications and experience stating nationality together with copies of recent testimonials should be addressed to the undersigned forthwith

J E WHEATCROFT Secretary

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke on Trent (390 Beds)

HOUSE SURGEON (CASUALTY)

The Committee invite applications for the above post—half duties in Casualty Over 6 000 casualties per annum Salary at the rate of £150 per annum with board residence and laundry

The appointment will be made for six months renewable

Eligible for the other resident posts as vacancies arise

Applications stating age and experience with copies of two recent testimonials to be sent to the undersigned immediately

By Order
W STEVENSON
Secretary and House Governor

September 5th 1938

ROYAL SALOP INFIRMARY SHREWSBURY
156 Beds (Enlarging to 2 6 Beds)

APPOINTMENT OF RESIDENT SURGICAL OFFICER

Applications are invited from fully qualified [illegible] for the appointment of Resident Surgical Officer vacant immediately

The appointment is for a period of [illegible] months at a salary of £250 per annum with board residence etc The Resident Surgical Officer is Senior Resident Officer of the Hospital

House Staff comprises House Physician and two House Surgeons

Applications stating age qualifications experience nationality and accompanied by copies of three recent testimonials to be sent to the undersigned immediately

Board Room J W NOBLE
September 5th 1938 Secretary Superintendent

THE CHILDREN'S HOSPITAL SHEFFIELD
(157 Beds)

Applications are invited for the post of HOUSE SURGEON vacant October 1st 1938

The appointment is for six months at £100 per annum with board and laundry Candidates (male or female) must possess registered qualifications

Ward applications stating age together with copies of three recent testimonials to the undersigned

T H G GARTLAND
Superintendent and Secretary

ROYAL HOSPITAL RICHMOND SURREY

Applications to be sent in by September 1939 for the following post

JUNIOR HOUSE SURGEON (Male) at the rate of £100 per annum

Board [illegible] and laundry

Candidates must be fully qualified [illegible] since Forms of application may be obtained from the undersigned

G [illegible]
Secretary

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association, B M A House, Tavistock Square, W C 1 (in the case of Scottish appointments, with the Scottish Secretary, 7, Drumsheugh Gardens, Edinburgh)

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—*(contd.)*	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY *(Medical Officer)*	MID RHONDDA MEDICAL AID SOCIETY *(Assistant Medical Officer)*	MIDDLESBROUGH EDUCATION COMMITTEE *(Senior Assistant School Medical Officer)*
BLAENAVON MEDICAL SOCIETY *(Chief Medical Officer)*	NEATH AND DISTRICT *(Medical Aid Association)*	COUNTY OF PEEBLES *(Assistant Medical Officer of Health)*
GILFACH GOCH GLAMORGAN *(Workmen's Medical Scheme)*	OGMORE VALLEY GLAMORGAN *(Bryn-du-ar Colliery Medical Aid Society)* *(Workmen's Medical Scheme)*	**DISPENSARY APPOINTMENTS**
LLWYNYPIA CLYDACH VALE, PENYGRAIG GLAMORGAN *(Workmen's Medical Scheme)*	OAKDALE MON *(Medical Officer for Medical Aid Association)*	LIMERICK CITY *(Whole-time Dispensary Medical Officers)*

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association, B M A House Tavistock Square, W C 1

Town or District	Hon. Sec. of Division or Branch	Town or District	Hon. Sec. of Division or Branch	Town or District	Hon. Sec. of Division or Branch
NEW SOUTH WALES *(All Friendly Societies Appointments)*	The Medical Secretary New South Wales Branch 135 Macquarie Street, Sydney N S W	**VICTORIA** *(All Institute or Medical Dispensaries)*	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria	**WESTERN AUSTRALIA** *(Contract and Lodge Practices)*	The Hon Sec Western Australian Branch British Medical Association Shell House 65 St George's Terrace Perth Western Australia
QUEENSLAND *(Brisbane Associate Friendly Societies Institute)*	The Hon Sec Queensland Branch British Medical Association B M A House 225 Wickham Terrace Brisbane B 17				

September 7, 1938 By Order of the Council G C ANDERSON, *Secretary*

THE BIRMINGHAM UNITED HOSPITAL
(Medical School)

NEW HOSPITALS CENTRE AT EDGBASTON
(500 Beds)

Applications are invited from fully qualified candidates for the following appointments
Two non-resident (full-time) MEDICAL REGISTRARS (M R C P essential) Salary £3 0 per annum
Two resident SURGICAL REGISTRARS (full residential emoluments) Salary £100 rising to £110 annually
Applications stating age experience qualifications and nationality with copies of recent testimonials should be forwarded at once to the undersigned but not later than Monday October 3rd 1938

G HURFORD
(House Governor)
Birmingham at Queen's Hospital
September 1938

DONCASTER ROYAL INFIRMARY
(165 Beds)

HOUSE PHYSICIAN (male) required Six House Surgeons are resident Salary at the rate of £150 per annum with residence board and laundry This large industrial area offers excellent opportunities for gaining experience
Applications accompanied by not more than three testimonials to be sent to the undersigned immediately R LANCASTER
Secretary Superintendent

INVERNESS DISTRICT ASYLUM

JUNIOR ASSISTANT MEDICAL OFFICER (male) required Recent graduate with some general hospital experience preferred Salary £3 0 per annum with board lodging and laundry
Appointment is subject to terms of Asylum Officers Superannuation Act 1909
Applications stating age and qualifications with copies of testimonials to be sent to the Medical Superintendent

---

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY

Applications are invited for the post of HOUSE SURGEON to the Eye Ear Nose and Throat Wards and Clinics Six months appointment
Salary at the rate of £1 0 per annum with board residence and laundry Total resident staff of the General Hospital eight
Applications stating age qualifications and experience together with copies of recent testimonials to be forwarded to the undersigned
JOHN GIBSON
Superintendent and Secretary
August 25th 1938

ROCHDALE INFIRMARY AND DISPENSARY
(110 Beds)

The Board of Management invite applications for the appointment of SENIOR HOUSE SURGEON The salary attached to the appointment is at the rate of £—0 per annum including board residence and laundry
Applications stating age nationality etc together with copies of three recent testimonials to be sent to the Secretary endorsed House Surgeon Conditions of the appointment may be had on application to the Secretary
Infirmary Office W WYNNE Secretary
Rochdale Lancs.

SCARBOROUGH HOSPITAL YORKSHIRE
Telephone No 1—0/1

Wanted November 1st 1938 one female HOUSE SURGEON and one female HOUSE PHYSICIAN
Appointments are for six months
The House Physician is in charge of Ophthalmic Patients in addition to the Medical Wards
Salary at the rate of £1 0 per annum together with board residence laundry etc
Applications stating age and experience together with copies of not more than three recent testimonials to be sent to the Hon Secretaries not later than the first post on September 19th 1938

SOUTHEND ON SEA GENERAL HOSPITAL
(130 Beds) Eight Residents
Hon Specialist Staff of 40 members

Applications are invited for the post of HOUSE PHYSICIAN Duties to commence on October 1st 1938 The appointment is for six months Salary at the rate of £100 p a with board residence and laundry Candidates must be Registered (male) Practitioners
Applications with copies of two recent testimonials should be sent to the undersigned not later than September 14th 1938
P H CONSTABLE,
Secretary

THE LADY CHICHESTER HOSPITAL
Hove Brighton
For Functional Nervous Diseases.
(60 Beds)

SENIOR HOUSE PHYSICIAN (woman) required Six months appointment £100 per annum all found Valuable experience for Diploma in Psychological Medicine
Also JUNIOR (woman) at £75 per annum
Applications with testimonials to be sent to the Secretary Mr P F SPOONER, 33 West Street, Brighton
July 29th 1938

THE NOTTINGHAM HOSPITAL FOR WOMEN

HOUSE SURGEON (male or female) required to commence duties on October 1st 1938 Appointment for period of not less than six months Salary at the rate of £1 0 per annum with board residence and laundry Previous hospital experience essential
Applications stating age experience and qualifications accompanied by copies of three recent testimonials to be sent to the Secretary M A L MORETT, Burton Building Chapel Street, Nottingham not later than September 16th 1938

(Appointments continued on p 57)

TO ADVERTISERS

The BRITISH MEDICAL JOURNAL has a larger circulation than that of all other British weekly medical periodicals combined

CIRCULATION OF THIS ISSUE—41,750

TERMS FOR ADVERTISING

SMALL PREPAID ADVERTISEMENTS

The MINIMUM charge is 9s which covers up to 30 words Extra words are charged 1s 6d for 5 or less *e g* 33 words would be charged as for 35 Name and address should be included when counting words for cost

If BOX NUMBER is used it should be reckoned as 5 words in the total Advertisements, accompanied by remittance should reach this office not later than NOON, TUESDAY, for insertion in ensuing number

DISPLAYED ADVERTISEMENTS

Whole Page £24 and *pro rata* to one eighth page

Special positions dates and rates on application

EVERY EFFORT IS MADE TO ENSURE THE ACCURACY OF ADVERTISEMENTS APPEARING IN THE JOURNAL NO RECOMMENDATION IS IMPLIED BY ACCEPTANCE AND THE BRITISH MEDICAL ASSOCIATION RESERVES THE RIGHT TO REFUSE OR INTERRUPT THE INSERTION OF ANY ADVERTISEMENT

ADVERTISEMENT MANAGER
BRITISH MEDICAL JOURNAL
B M A House, Tavistock Square,
London W C 1
Telephone EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA

TOBACCO GOOD SMOKES at a low price quality guaranteed Box of 50 for 25/ post free — Sole Manufacturer J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"BIZIM" CIGARETTES

THESE luxurious deliciously satisfying smokes 50 s or 100 at 6/3 per 100 58/6 per 1 000 post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"SOLACE CIRCLES" TOBACCO

THE finest combination ever discovered of Choice Natural Tobaccos Every pipeful an indescribable pleasure 12/6 per ½ lb tin post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

DOCTOR RETIRED WANTS COMFORTABLE HOME Would ASSIST Salary not primary consideration —Address No 8687 B M A House Tavistock Square W C 1

NATIONAL ADOPTION SOCIETY 8 BAKER STREET W 1 Telephone Welbeck 7411 OFFERS ASSISTANCE in the legal adoption of babies and orphan babies into suitable homes The Chairman THE LADY GWENETH CAVENDISH

RETIRED OLD ARMY MAJOR WISHES TO [illegible] PAYING GUEST [illegible] W or NW [illegible] Phone [illegible] — [illegible] Sailer Street Mo[illegible] Street W 1

NEW VOCATION FOR LADIES QUALIFIED KENNEL MAIDS are in demand TRAIN at the foremost school for kennel work in beautiful surroundings at the largest kennels in England Experience with dogs of all breeds Whelpings puppy rearing and showing Particulars from Mrs C A Miles Bellmead Kennels Haslemere Surrey

TYPEWRITING —SPECIALISTS IN TYPING Medical and scientific papers lectures theses and books Shorthand typists always available Proof reading indexing — MARGARET WATSON LTD 16 Palace Chambers Bridge Street S W 1 WHitehall 3838

TYPEWRITING DUPLICATING TRANSLATIONS —Experts in Medical work TESTIMONIALS THESES etc accurately copied in style that commands attention —WOBURN BUREAU Drayton House Gordon Street London W C 1 (close B M A House) EUSton 1775

WHEN YOU COME TO LONDON STAY AT THE HAMPDEN RESIDENTIAL CLUB FOR GENTLEMEN Hampden Street N W 1 Close Kings Cross and Euston 300 bedrooms 15/- to 22/6 p w includ baths attend and boot cleaning All meals à la carte in dining room Mod tariff Large club rms reading rm study for students Illus pros See EUSton 2244/5

ASSISTANCIES

WANTED IMMEDIATELY INDOOR AND outdoor ASSISTANTS for town and country practices with and without view to partnership Good salaries offered State full particulars — BRITISH MEDICAL BUREAU 33 Cross Street Manchester 2

WANTED IMMEDIATELY OUTDOOR ASSISTANT to live at branch unmarried Salary to commence £300 all found plus car allowance plus half midwifery fees etc plus bonus Young energetic principal Midlands — Address No 8628 B M A House Tavistock Square W C 1

WANTED OCTOBER MALE ASSISTANT (preferably Scotch) Mixed practice Northern England Some experience G P desirable Young energetic principal Salary £330 p a all found and £52 car allowance and garage Write particulars —Address No 8631 B M A House Tavistock Square W C 1

WANTED OCTOBER 1ST 1938 INDOOR male ASSISTANT with view near Manchester British Protestant Salary £350 p a plus board and lodging and car allowance £52 p a —Address No 8633 B M A House Tavistock Square W C 1

WANTED OCTOBER 1ST OUTDOOR MALE ASSISTANT British Mixed general practice South Coast resort Salary £400 car allowance £52 garage Full personal particulars essential Photo returnable —Address No 8690 B M A House Tavistock Square W C 1

WANTED FOR OCTOBER 1ST 1938 YOUNG unmarried male Indoor ASSISTANT for large panel practice near Newcastle on Tyne Salary £325 per annum with car allowance of £50 per annum Applicant to furnish at least two recent testimonials and state nationality —Address No 8693 B M A House Tavistock Square W C 1

WANTED FOR OCTOBER 1ST OR LITTLE later young INDOOR ASSISTANT for practice in Leicestershire Work light and ample time for reading allowed Salary offered £300 p a Car available —Address No 8688 B M A House Tavistock Square W C 1

WANTED IN OCTOBER EXPERIENCED married ASSISTANT Salary £450 and very good house no rates Own car but petrol and oil provided Would suit doctor home from the East — Apply Ronald R Walker M D Cantab Warden Court Prestetyn Radnor

WANTED ASSISTANT OCTOBER PROTESTANT panel and private practice Scotland Partnership later to suitable man Write stating age experience nationality —Address No 6[illegible] B M A House Tavistock Square W C 1

WANTED IN JANUARY 1939 ASSISTANT for large general practice in pleasant town in Natal S Africa Appointments include hospital Surgery essential Salary to start at £500 less £60 off £60 living out —Address No 8695 B M A House Tavistock Square W C 1

WANTED NOW OUTDOOR ASSISTANT Protestant age about 30 must have had surgical hospital experience and own car Salary £480 inclusive Send full particulars —Address No 8614 B M A House Tavistock Square W C 1

WANTED SOON INDOOR MALE ASSISTANT Scotch preferred Mixed practice near Cardiff Dispensers kept Car or allowance Previous experience not essential Apply stating full particulars to—Address No 8 0s B M A House Tavistock Square W C 1

WANTED ASSISTANT (MALE OR FEMALE) mixed general and surgical practice two partners good hospital facilities State age and religion £400 and £50 car allowance excellent house partially furnished —Address No 8611 B M A House Tavistock Square W C 1

WANTED ASSISTANT ENGLISH OR Scots newly qualified for East London practice Salary £300 p a all found Excellent prospects for steady keen man —Address No 8671 B M A House Tavistock Square W C 1

WANTED ASSISTANT WITH VIEW TO early succession Old established practice East Coast resort Must be highly qualified and had some experience Some capital or definite prospects —Address No 8627 B M A House Tavistock Square W C 1

WANTED INDOOR ASSISTANT SINGLE for good class mixed practice in University Town in Yorkshire No clubs no midwifery Time for postgraduate work Salary £300 per annum Sign usual bond —Address No 8637 B M A House Tavistock Square W C 1

WANTED IN SOUTH YORKSHIRE TOWN a male ASSISTANT English or Scottish preferred salary £300 £350 p a indoor car or an allowance dispenser kept sound practice excellent experience —Address No 8437 B M A House Tavistock Square W C 1

WANTED PERMANENT ASSISTANT Begin £300 plus mod house garden in Surrey outskirts London Married preferred Previous experience and skill unessential Willing to learn energetic Particulars to—Address No 8626 B M A House Tavistock Square W C 1

WANTED YOUNG MALE OUTDOOR ASSISTANT (British) on November 1st for practice in Leicester Salary £400 plus £50 car allowance Good prospects for right man —Address No 8691 B M A House Tavistock Square W C 1

WANTED EXPERIENCED ASSISTANT with early view to PARTNERSHIP in good mixed middle-class suburban practice Applicant should be British Protestant keen of good appearance and not over 29 Salary £[illegible] per annum —Address No 8673 B M A House Tavistock Square W C 1

WANTED INDOOR ASSISTANT FOR LATE Sept aged under 30 Compact panel and police practice Work light Midlands Southern experience and essential particulars Reference required —Address No 8[illegible]9 B M A House Tavistock Square W C 1

WANTED OUTDOOR FEMALE ASSISTANT London area £400 per annum —Address No 8427 B M A House Tavistock Square W C 1

WANTED EXPERIENCED OUTDOOR ASSISTANT London Free modern flat available Car necessary Salary £4[illegible] excellent prospects State essential particulars —Address No 8690 B M A House Tavistock Square W C 1

WANTED YOUNG SINGLE ASSISTANT early October Outdoor Sherwood Forest or Scotch graduate preferably with [illegible] Ample off duty Golf Hospital experience essential —Address No 8637 B M A House Tavistock Square W C 1

WANTED SINGLE MALE [illegible] ASSISTANT for Glamorgan Coast [illegible] Salary £400 with rooms and attendance allowance Cottage Hospital Dispensary assistants kept —Address No 8414 B M A House Tavistock Square W C 1

WANTED PART TIME ASSISTANT [illegible] London mainly evenings [illegible] Dentist for fully equipped [illegible] room on rental —Address No [illegible] House Tavistock Square W C 1

WANTED PART TIME WORK [illegible] engaged dental practice [illegible] Between 10 a m and 1 p m [illegible] 617 B M A House Tavistock

WANTED WOMAN ASSISTANT FOR general practice in nice town South Midland Work light Salary £3 0 all found per annum rising to £3 Car provided—Address No 8611 BMA House Tavistock Square W C 1

WANTED YOUNG MAN AS INDOOR ASSISTANT with view to partnership Residential practice near London Car provided—Address No 8610 BMA House Tavistock Square W C 1

WANTED PART TIME ASSISTANTSHIP preferably indoor by woman doctor in or near London for part time work—Address No 6 BMA House Tavistock Square W C 1

ASSISTANT WANTED OCTOBER FOR pleasant river side district near London indoor salary £3 0 and £1 0 car allowance Interview—Address No 8659 BMA House Tavistock Square W C 1

ASSISTANT REQUIRED MALE SCOTTISH or English unmarried young man experienced general practice preferred Golfers at small Kent hotel £3 0 per annum all found £10 car allowance if required—Address No 8616 BMA House Tavistock Square W C 1

LONDON N—CAPABLE ASSISTANT wanted preferably married Own pleasant Unfurnished house provided Apply stating experience particulars 13—Address No 660 BMA House Tavistock Square W C 1

MALE ASSISTANT (OUTDOOR) REQUIRED October 1st Panel and private practice in Sheffield £360 per annum and all found Car allowance—Address No 8418 BMA House Tavistock Square W C 1

PART TIME ASSISTANT REQUIRED FOR night calls and occasional evening surgery in return for board and lodging Surgery very close to London teaching hospitals—Address No 8616 BMA House Tavistock Square W C 1

PART TIME WORK REQUIRED FROM October to March in London by poster duate. Experienced in G P and hospital work—Address No 8609 BMA House Tavistock Square W C 1

REQUIRED FOR PRIVATE PRACTICE IN Seaside Resort an experienced ASSISTANT outdoor male Must be English married and an Anglican preferably over thirty Personal interview and high references essential A good salary will be paid to suitable man—Address No 8619 BMA House Tavistock Square W C 1

REQUIRED FOR LARGE PRACTICE mostly private in North East City suburb young male ASSISTANT with view to partnership Disperser kept Good salary Car or allowance—Address No 8608 BMA House Tavistock Square W C 1

SEMI RETIRED G P (MOTORIST) BRITISH requires Outdoor ASSISTANTSHIP Home Counties Fees six guineas—Address No 8607 BMA House Tavistock Square W C 1

WOMAN DOCTOR DESIRES ASSISTANT Skilled LONG LOCUM Experienced G P and hospital Own car if necessary London or South England preferred—Address No 8681 BMA House Tavistock Square W C 1

YOUNG UNMARRIED OUTDOOR MALE ASSISTANT wanted partnership later for practice near Manchester Scotsman preferred Salary £400 and £50 car allowance and garage—Address No 8402 BMA House Tavistock Square W C 1

£500 P A—YOUNG OUTDOOR ASSISTANT wanted by two partners Midland Cathedral City Some experience desirable but not essential Car provided—Address No 8636 BMA House Tavistock Square W C 1

LOCUMS

REQUIRED YOUNG MALE LOCUM FOR two weeks about 17th this month Practice near Manchester Car desired but not necessary—Address No 8702 BMA House Tavistock Square W C 1

SENIOR MAN (LOND HOSPITAL) DOES LOCUMS in non-dispensing practices 2 5s per day any period—Address 8701 BMA House Tavistock Square W C 1

MEDICAL POSTS DISPENSERS

WANTED LADY DOCTOR FOR VOLUNTARY WORK AT CLINIC in West End Girls Club Thursday evening 7 45 to 9 45—Apply Clinic 31 Alfred Place Tottenham Court Road W C 1

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request qualified and with practical experience in private practice and dispensary work also trained in Bacteriological Laboratories of the LONDON COLLEGE OF PHARMACY FOR WOMEN Preparations for Examinations—Write wire or phone (Bayswater 0769) Secretary 7 Westbourne Park Road W 2

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY and Secretarial Dispenser can be supplied to Doctors Sessions January April and September—Apply Principal's School of Pharmacy Dayton House Gordon Street W C 1 Phone Euston 3930

PROFESSIONAL AND PERSONAL REQUIREMENTS MAY OFTEN BE SATISFIED THROUGH THE ADVERTISEMENTS IN THE BRITISH MEDICAL JOURNAL

DISPENSER, 35 (HALL) SEEKS POST IN Hospital or with Doctor keep accounts collect debts and make himself generally useful Moderate salary Well recommended—Address No 8601 BMA House Tavistock Square W C 1

DISPENSING CAREER FOR YOUNG LADIES FULL TRAINING for Apothecaries Hall Certificate Enrolments every three months—Apply The Principal Central School of Pharmacy 48 Moreton Street London S W 1 Telephone Victoria 1641

DOCTORS REQUIRING QUALIFIED Dispensers Nurse Dispensers Secretary Dispensers or Chauffeuse Dispensers are invited to write wire or phone Temple Bar 5658 THE DISPENSERS BUREAU 3 Lindsay House 171 Shaftesbury Avenue London W C 2

EXPERIENCED SECRETARY RECEPTIONIST 30 requires post with doctor or dentist or similar London Nursing knowledge drive car if required Excellent references—Address No 8624 BMA House Tavistock Square W C 1

EDITORIAL OR OTHER LITERARY WORK sought by qualified medical woman with 11 years free lance writing experience Two successful books published in England one America—Address No 8611 BMA House Tavistock Square W C 1

FULLY TRAINED NURSE KNOWLEDGE OF shorthand and typewriter desires post as RECEPTIONIST SECRETARY to doctor or dentist London Phone Maida Vale 2654—Address No 8625 BMA House Tavistock Square W C 1

GENTLEWOMAN 6 CONVALESCENT nervous breakdown desires LIGHT POST Congenial home preferably doctor's family Home county diploma shorthand typist chauffeur home duties References Part board paid—Address No 8626 BMA House Tavistock Square W C 1

MEDICAL PUBLISHERS REQUIRE YOUNG efficient SUB-EDITOR Medical qualification and some literary talent essential Opportunity for progressive position—Address No 8707 BMA House Tavistock Square W C 1

RECEPTIONIST EDUCATED YOUNG LADY with knowledge of nursing shorthand typewriting and bookkeeping desires POST with doctor—Address No 601 BMA House Tavistock Square W C 1

ROYAL SOCIETY OF MEDICINE requires whole time ASSISTANT EDITOR of PROCEEDINGS Applicants whether male or female must hold medical qualifications Initial salary according to experience but not less than £3 0 per annum Knowledge of languages and editorial or parallel experience desirable

Applications stating age and experience should be received before Thursday September 29th by the Secretary Royal Society of Medicine 1 Wimpole Street W 1

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION 28 Eccleston Square S W 1 (Telephone Victoria 7722) supplies qualified Dispensers Bookkeepers Laboratory Assistants Sanitary Assistants Male Nurses Mental and Special Treatment Orderlies Dental Clerk Orderlies Porters Caretakers etc without charge to prospective employers

YOUNG LADY 0 REQUIRES POST AS RECEPTIONIST London Also light secretarial duties if necessary Good education 5 years science 2 years office experience—Address No 8700 BMA House Tavistock Square W C 1

PARTNERSHIPS

WANTED BY MB M R C S AGED 6 PARTNERSHIP in better-class practice near London Preliminary assistantship preferred Hospital and G P experience Successful in few years desired—Address No 60 BMA House Tavistock Square W C 1

AN OLD-ESTABLISHED MIXED MIDDLE class suburban practice has a vacancy for a JUNIOR PARTNER Applicants should be British Protestant under 30 year keen and of good address Share worth £1 0 0 increasing to double at two years purchase—Address No 6 BMA House Tavistock Square W C 1

FOR SALE—CONGENIAL PARTNERSHIP with view EARLY SUCCESSION Excellent general practice seaside surgery Share about £900 Country town Educational facilities golf boating bathing Pembrokeshire—Address No 8635 BMA House Tavistock Square W C 1

F R C S (ED) 28 YEARS OF AGE WITH special obstetrical experience desires PARTNERSHIP with 3 or 4 doctor preferred South—Address No 631 BMA House Tavistock Square W C 1

M R C P LONDON 31 ENGLISH married hospital and general practice experience desires PARTNERSHIP country or small country town south of Wash preferred Initial income from £1 000—Address No 8674 BMA House Tavistock Square W C 1

M D (GOLD MEDAL) B S AET 32 EX-H P Medical Registrar etc experienced G P desires MEDICAL PARTNERSHIP Share about £1 00—Address No 8629 BMA House Tavistock Square W C 1

SEVEN SIXTEENTHS SHARE (£700) OFFERED in rapidly growing practice with ample scope for increase Excellent opportunity for keen and energetic man—Address No 8620 BMA House Tavistock Square W C 1

THIRD PARTNER REQUIRED GROWING practice Surrey pleasant district Third share two years purchase £1 000 guaranteed Cottage hospital private panel Aided fee books Short preliminary assistantship preferred—Address No 8 04 BMA House Tavistock Square W C 1

PARTNERSHIP FOR SALE NEAR WAKEfield In old established practice Average receipts for the last three years £3 341 House available rent £60 Panel patients 2 742 Premium for one third share 1 years purchase The incoming partner to increase his share to five twelfths in three years time Can thoroughly recommend —Apply REYNOLDS AND BRANSON LTD 13 Briggate Leeds

PRACTICES

WANTED IMMEDIATELY PRACTICE OR PARTNERSHIP About £1 500 gross Scotland or North England Panel and good class private Scope Suitable house in or near town —Address No 8697 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY UNOPPOSED country PRACTICE from £1 000 £1 500 p a with Panel Good garden and house essential —Address No 8401 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY COUNTRY PRACTICE About £1 500 with panel Good garden and house essential —Address No 8651 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY BY PRIVATE purchaser PRACTICE 2 000 panel patients London or within 15 miles Strictly confidential Prepared to do LOCUM WORK immediately —Address No 8613 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY OR NEAR future PRACTICE approximately £1 200 £1 500 London or environs or south preferably mixed class with fair panel Consider smaller income if scope —Address No 8615 B M A House Tavistock Square W C 1

WANTED URGENTLY PRACTICE IN Western half of London Income about £2 000 with a substantial panel No agents Replies in strict confidence to —Address No 8639 B M A House Tavistock Square W C 1

A NUMBER OF SMALL PRACTICES AT LOW premium Excellent opportunities for practitioners wishing to get a practice with scope —Apply LEWCOCK AND HADLEY LTD 67/68 Chandos Place Strand W C 2

D.O.M.S. REQUIRES OPHTHALMIC PRACTICE or NUCLEUS November or later preferably in South Good climate essential Would consider assistantship with view to partnership or succession —Address No 8699 B M A House Tavistock Square W C 1

FOR SALE SMALL MEDICAL PRACTICE Private and panel 275 North London Accommodation including garage on rental Expense small confidential private advertisement —Address No 8618 B M A House Tavistock Square W C 1

FASHIONABLE RESORT S COAST — Middle class PRACTICE 200 panel established 9 years £650 net Two years purchase Beautifully situated house (6 bedrooms) excellent repair garden garage £2 000 freehold Must purchase Suit semi-retired doctor with some family or younger man willing take private patient while working up —Address No 6610 B M A House Tavistock Square W C 1

LONDON S E —PRACTICE FOR SALE Income £80 Panel 1 75 increasing Lock up if every Car not necessary Expenses low Excellent scope price £7 000 Good house and garden on lease Address No 8694 B M A House Tavistock Square W C 1

LONDON WEST - DOCTOR GOING ABROAD wishes to dispose of his panel PRACTICE to suitable successor such as ex-Service man Price subject to valuation Covenant not to Income about £1 000 Address No 8681 B M A House Tavistock Square W C 1

M.D. M R C P (Edin) AGED 37 ENGLISH 10 years hospital and good class private experience desires PRACTICE or PARTNERSHIP with scope for physician Hospital appointment if possible South Coast or London preferred Address No 8691 B M A House Tavistock Square W C 1

MIDDLESEX - WELL ESTABLISHED PRACTICE Receipts average £450 p a panel 500 Partnership Correct house good scope Present principal and house £1 000 —PEACOCK AND HADLEY LTD 67/68 Chandos Place Strand W C 2

[illegible] WC — WELL ESTABRETIRED OLD ACE Receipts average £1 000 to £1 200 p a Fully established Panel 900 NW [illegible] Freehold £2 000 —Apply B C E Ellis Solicitor 302 67/68 Chandos Place

CHESTER (NEAR) —UNOPPOSED COUNTRY PRACTICE Receipts average £850 per annum Panel 450 — Chemicals 40 Hamilton Street Hoole Chester

NEAR LONDON —VERY SOUND PRACTICE for sale averaging about £2 000 Panel about 1 500 Freehold house for sale or rent No agents —Address No 8708 B M A House Tavistock Square W C 1

NORTHANTS — DELIGHTFUL OLD ESTABlished country PRACTICE Receipts £1 4 0 p a panel 950 Fine old family house Premium for practice and house £3 850 —PEACOCK AND HADLEY LTD 67/68 Chandos Place Strand W C 2

OLD ESTABLISHED PRACTICE RESIDENtial district South east London Average £900 per annum panel £200 transferable appointment £50 Price £2 000 or near offer Excellent freehold house for sale £1 600 —Address No 8270 B M A House Tavistock Square W C 1

OLD - ESTABLISHED WORKING - CLASS panel and private PRACTICE for sale in large industrial city Number of insured persons 1 770 Gross cash receipts for last three years average £1 780 per annum Practice increasing each year House 5 bedrooms etc on lease For further particulars apply—MESSRS DAY JOHNSON AND BOOT Solicitors 8 Park Row Nottingham

OLD ESTABLISHED GLASGOW MEDICAL PRACTICE for sale (Northern district) private and panel Panel over 1 500 —Address No 8705 B M A House Tavistock Square W C 1

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed

Applications should be separately enclosed and clearly addressed,

(Address No
B M A House
Tavistock Square W C 1

All communications are forwarded to advertisers under plain cover

PRACTICE IN LARGE LONDON SUBURB £600 per annum 2 years purchase required —Address No 8710 B M A House Tavistock Square W C 1

SOUTHERN RHODESIA —PRACTICE FOR sale established nine years Gross cash receipts average £2 000 p a approximately over last four years Appointments Hospital rapidly growing town Excellent schools lovely country large modern house offices tennis court gardens garage etc Sport of all kinds Good fees Premium for practice 1½ years purchase Would sell or rent house Living cheap income tax 6d in £1 — Address No 8644 B M A House Tavistock Square W C 1

SOUND GROWING PRACTICE 10 MILES S of Holborn with cope Garden garage Low expenses Established nearly five years Patients just above insurance limit Panel 130 Premium £425 —Address No 8619 B M A House Tavistock Square W C 1

YORKSHIRE —WANTED COUNTRY PRACTICE in Yorkshire preferably Wharfedale — Apply to Dr Pickles Westerham Kent

HOUSES CONSULTING ROOMS

HARLEY STREET AND MEDICAL DISTRICT

For all types of available accommodation

BERTRAM & CO., Surveyors and Estate Agents
59 Connaught Street W 2 Paddington 1647 3

CAMBRIDGE TERRACE NEAR MARBLE Arch Edwardes Road W 2 —CONSULTING ROOM to let together with WAITING ROOM Separate living room and bathroom Rental £—5 per annum exclusive —Telephone PAD [illegible] Bay 7735

For available

CONSULTING ROOMS, PROFESSIONAL HOUSES & FLATS

in Harley Street and the medical area generally including Mayfair

LEY CLARK & PARTNERS

AUCTIONEERS SURVEYORS & VALUERS
3a Wimpole Street Cavendish Square W 1
Telephone Langham 1095-6-7
Represented at Cannes Nice and Monte Carlo

CONSULTING ROOM PART TIME GOOD service well appointed Diathermy 10s per week Marble Arch W 1 —Address No 8693 B M A House Tavistock Square W C 1

DEVONSHIRE STREET TWO DOORS FROM Harley Street an excellent CONSULTING SUITE of three good rooms in one of the finest professional houses Rent only £250 p a or single rooms may be had at £100 p a with plate on the door and all services Vacant Sept 9th 1938 —Address No 7610 B M A House Tavistock Square W C 1

HARLEY STREET AND DISTRICT —A NUMber of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application —ELGOOD AND Co 10 Henrietta Place Cavendish Square W 1 Lang 2601

HARLEY STREET LARGE CONSULTING ROOM SUITE beautifully decorated all amenities and services Also part time use Furnished treatment rooms available —Address No 8604 B M A House Tavistock Square W C 1

PARK LANE —ADVERTISER WISHES TO meet consultant with view to LETTING ROOM Use of waiting and ladies room small x rays References —Address No 8701 B M A House Tavistock Square W C 1

QUEEN ANNE STREET —ONLY £0 PA secures exceptionally fine CONSULTING ROOM for use when required with all use of all services Residential accommodation also at —Address No 6355 B M A House Tavistock Square W C 1

SOUTH BUCKINGHAMSHIRE Between High Wycombe and Marlow Borough overlooking the beautiful Hughenden Valley A MODERN RESIDENTIAL PROPERTY standing in delightful grounds of about 6 acres with hard tennis court 4 reception rooms 10 bedrooms 2 bathrooms Well fitted domestic apartments Main water and electricity Central heating Heated garages for six cars Other useful outbuildings Secluded and commanding views but readily accessible

Suitable for occupation as a Nursing or Convalescent Home School Private Hotel or Residential purposes

For sale by auction at High Wycombe on September 30th at much below cost price

Auctioneers
HAMNETT RAFFETY AND Co 9 HIGH STREET High Wycombe (Phone 1330)

STAMFORD HILL N 16 —TO BE LET OR sold DOCTOR'S CORNER HOUSE in excellent state of repair situated in most commanding position 3 reception rooms 7 bedrooms garage —Address No 8695 B M A House Tavistock Square W C 1

VACANT SEPTEMBER 9th —ONE OF THE finest PROFESSIONAL MAISONETTES in the Harley Street district 3 reception 4 bedrooms and usual offices electric fires Licence for one plate allowed Rent £— on lease For full particulars and cards Address No 8703 B M A House Tavistock Square W C 1

MISCELLANEOUS SALES etc

INCOME TAX

YOUR burden is OUR business
Tax Specialists to the Medical Profession
HARDY & HARDY
13 CHANCERY LANE LONDON W C 2
Telephone Holborn 0[illegible]
Write for free copy of 32 page booklet

PATHOLOGICAL SPECIMENS [illegible] second hand [illegible] Irrelevant correspondence Address No 7313 B M A House Tavistock Square W C 1

IMPORTANT

to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE Specially Cut Fitted and Moulded to each individual figure made from finest Quality Materials and in the Best Possible Style cost no more than mass production ready made clothes

The invaluable Practical Experience and Advice of our 14 Expert West End Cutters and Fitters is always at your disposal

ALL "HALLZONE" polo tion are HAND FINISHED IN EVERY ESSENTIAL DETAIL

SPECIAL OFFER

JACKET & VEST (in black or grey) £4 4
Linen lined quality Art Satin Art Silk or Alpaca
SOLID FANCY WORSTED TROUSERS £2 2
The ideal suit for Professional or Business wear
LOUNGE SUITS to measure from £6 6
OVERCOATS £5 5
DINNER SUITS £8 8
DRESS SUITS from £10 10
PLUS FOUR SUITS from £6 6
THE IDEAL Suit for Country and Sports Wear
GOLD MEDAL RIDING BREECHES from £2 2
RIDING HABITS £8 8
RIDING BOOTS £3 3
COSTUMES & LONG COATS £6 6

UNSOLICITED APPRECIATION

I strongly advise all medical men who wish to have satisfaction to patronise Harry Hall Ltd as all the clothes I have had from them during 35 years have been perfect in Fit Cut and Finish
(Signed) S J A MA MB FRCPS

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self measurement Form or Pattern Garments

Visitors to London can order and fit same day Special attention would then be given and Fit to *Fitting Clothes applied after without trying on*

HARRY HALL, LTD

Governing Director Harry Hall
THE Coat Breeches, Habit and Costume Specialist
181 OXFORD ST., W 1 114 CHEAPSIDE E C 2
Telephones
GERrard 4405 4906 and 4907 NATional 8696/7
Makers of Finest Quality Bespoke Civil Sporting and Hunting Clothes for Ladies and Gentlemen
Highest Awards 12 Gold Medals
Established over 100 years

COVERS FOR BINDING

Vols I and II of the BRITISH MEDICAL JOURNAL for 1937 and previous years can be had price 2s 6d by parcel post 2s 10d each.

Orders with appropriate remittance should be addressed to

THE SECRETARY
BRITISH MEDICAL JOURNAL,
B M A. HOUSE TAVISTOCK SQ
LONDON W C 1

APPOINTMENTS—*Contd*

HAMPSTEAD GENERAL AND NORTH WEST LONDON HOSPITAL
Haverstock Hill N W 3

APPOINTMENT OF CASUALTY MEDICAL OFFICER

Applications are invited from registered medical women for the resident appointment of Casualty Medical Officer for six months vacant October 1st next at the Out Patient Department Bayham Street Camden Town Salary £100 per annum

Application to be made on the prescribed form together with copies of not more than three testimonials should be returned to the Secretary by September 17th

BAILBROOK HOUSE BATH

HOUSE PHYSICIAN required immediately small private mental hospital Salary £120 per annum full board and laundry Good opportunities for study and experience for D P M Previous experience unnecessary
Apply A GUIRDHAM *Medical Superintendent*

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St Quintin Avenue North Kensington W 10
(5 Beds)

HOUSE PHYSICIAN (male) required for six months from October 1st 1938 Salary at the rate of £1 0 p a for the first three months and £150 p a for the second three months with board residence and laundry

Applications with copies of three recent testimonials must be submitted on a form to be obtained from the undersigned and must reach him not later than Tuesday September 0th 1938
H J ELEY
Secretary

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St Quintin Avenue North Kensington W 10
(*75 Beds*)

HOUSE SURGEON (male) required for six months from October 1st 1938 Salary at the rate of £1.0 p a for the first three months and £150 p a for the second three months with board residence and laundry

Applications with copies of three recent testimonial must be submitted on a form to be *obtained from the undersigned and must reach him* not later than Monday September 19th 1938
H J ELEY
Secretary

ST MARY'S HOSPITAL W.

ASSISTANT RADIOLOGIST

Applications are invited for the above appointment Candidates must be registered medical practitioners *and must hold a Diploma of Radiology Honorarium £1.5 per annum*

Applications giving particulars of qualifications and experience should be forwarded to the undersigned on or before Monday September 12th 1938 The appointment is in the first instance for a period of six months

A copy of the regulations may be had on application to the Secretary's office
W PARKES
House Governor

ACTON HOSPITAL W 3

CASUALTY OFFICER (male unmarried) required to commence duties *September 4th* 1938 for a four months appointment with promotion to Resident Medical Officer for a further period of three months if approved Salary £1 0 per annum with board residence and laundry

Candidates must be fully qualified and registered

Applications stating age nationality and qualifications should be sent with copies of three testimonials to the Secretary and should arrive not *later than first post Tuesday September 13th* 1938
DONALD C D SWORD
Secretary
Acton Hospital
Gunnersbury Lane
Acton W 3

THE ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road London S W.3

Applications are invited for the post of RESIDENT MEDICAL OFFICER to commence duties on October 1st 1938 The appointment is for twelve months at a salary at the rate of £ 00 *per annum* with board residence and laundry At the end of this period reappointment for a *further twelve months may be applied for*

Applications to be made on a form which will be *supplied by the Secretary with copies of not* more than three recent testimonials to be sent to *the Secretary not later than the first post on* September 16th 1938
CLEMENT COBBOLD *Secretary*

CHARING CROSS HOSPITAL

MEDICAL REGISTRAR

The Council invites applications for the post of Medical Registrar Candidates must be registered Practitioners (male) Honorarium £1 0 per annum

A copy of the Regulations can be obtained from the undersigned to whom applications together with copies of three recent testimonials must be submitted not later than September 20th 1938
GEORGE J JONES
Charing Cross Hospital *Secretary*
London W C 2

CHARING CROSS HOSPITAL

OBSTETRIC REGISTRAR

The Council invite applications for the post of Obstetric Registrar Honorarium £100 per annum

Applications together with copies of three testimonial must be submitted to the under signed not later than September 20th 1938
Charing Cross Hospital GEORGE J JONES
London W C 2 *Secretary*

WARRINGTON INFIRMARY AND DISPENSARY

The post of THIRD RESIDENT will fall vacant on October 1st 1938 and applications are invited from male candidates who must be duly qualified Medical Practitioners and unmarried Salary at the rate of £150 per annum with board lodging and laundry

At the expiration of six months term of office and subject to the recommendation of the Medical Board the Third Resident is appointed Second Resident (salary £175 per annum) and then Senior Resident (salary £2.0 per annum) for similar periods Candidates should therefore be prepared if successful to remain at the Hospital for eighteen months in all

Applications stating age and qualifications accompanied by copies of three recent testimonials should be sent in not later than first post on Tuesday September 13th Chosen candidates will be interviewed on Friday September 16th 1938
By Order
HENRY L BOOT
Superintendent and Secretary
August 29th 1938

EAST SUFFOLK AND IPSWICH HOSPITAL
Ipswich

TO MEDICAL WOMEN

Applications are invited from fully qualified medical women for the position of WHOLE TIME ASSISTANT PATHOLOGIST Some experience in general pathology and particularly biochemical work desirable Commencing salary £450 per annum

Applications stating age qualifications and experience accompanied by copies of three recent testimonials *to be sent to me by September 17th*
ARTHUR GRIFFITHS
August 27th 1938 Secretary

EVELINA HOSPITAL FOR SICK CHILDREN
Southwark S E 1

Applications are invited for the post of HOUSE PHYSICIAN (male) for six months from October 1st (first two months in the Casualty and Out patient Department) Salary at the rate of £1 0 per annum with board and residence

Applications with copies of three recent testimonials should be sent to the undersigned from whom particulars can be obtained not later than first post on Tuesday September 20th
W H SIDNELL *House Governor*

THE CENTURY INSURANCE COMPANY LTD

7 LEADENHALL STREET
LONDON E C 3

18 CHARLOTTE SQUARE
EDINBURGH

ASSISTS DOCTORS TO PURCHASE A PRACTICE OR PARTNERSHIP

NO GUARANTORS REQUIRED
REPAYMENTS ARRANGED BY EQUAL QUARTERLY INSTALMENTS WHICH DO NOT VARY WITH FLUCTUATIONS IN THE BANK RATE.

PLEASE WRITE FOR PARTICULARS, STATING AGE NEXT BIRTHDAY

MENTION B M J

THE MEDICAL AGENCY, Ltd.

DUDLEY HOUSE, 36 38, SOUTHAMPTON ST, STRAND, W C 2

Telephones—Temple Bar 1034-1054 Established in 1893 by J A REASIDE

LONDON AND HOME COUNTIES—We have several small PRACTICES for disposal situated in residential localities Receipts £400 up with and without Panel Suitable houses available Premiums moderate Full details on request

COUNTY DURHAM—Mixed G P Receipts (approx) £2 000 Panel over 2 000 Clubs and 1 Appointment Pre mium £4 000 or near offer to include Book Debts Drugs e c

LONDON — PARTNER SHIP in growing Suburban G P Suitable house available Receipts nearly £5 000 Panel (approx) 4 000 Premium for share worth £1 000 p a with view to larger share 2 years purchase Excellent scope

WEST COUNTRY —PARTNERSHIP Old estab Town and Country Practice suit to competent Surgeon One third share offered with view to half Receipts £4 000 Large panel Prem 2 years pur

LOCUMS AND ASSISTANTS ALWAYS AVAILABLE

HOME COUNTIES —PARTNERSHIP in better class G P situated in growing locality Suitable for Surgeon Share worth about £1 300 2 years purcha e House to rent or sale Many other available details on request

LONDON (Residen tial suburb) —PARTNER SHIP Good middle class non dispn G P Receipts approx £2 500 Panel (select) over £200 Fees 7/6 up Half share 2 years purchase or near offer

YORKSHIRE —Mixed G P Resi locality near large Town Medium sized house Large garden garage Receipts £1 500 Panel over 2 000 Fees 3/6 up Premium £2 800

LONDON S E —PARTNERSHIP old established mixed middle and working-class Mostly cash and panel House to rent Receipts £2 600 Panel 1 800 Fees 2/6 up Half share £2 750 Practice expanding

MANY OTHERS FOR SALE DETAILS ON REQUEST

ESTABLISHED 1877

LEE & MARTIN, LTD.

The Birmingham Medical Agency, 71, TEMPLE ROW, BIRMINGHAM

Telegrams Locum Birmingham *Telephone* 5963 Midland B ham

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED

MAXIMUM FEE £50 if exclusively entrusted to us

ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED

RELIABLE AND EFFICIENT LOCUMS SUP LIED AT SHORT NOTICE also ASSISTANTS

WANTED TO PURCHASE

1 BIRMINGHAM (or within 50 miles thereof) — Good Mixed PRACTICE with a Panel of 1 200 over and receipts of from £1 500 £3 000 URGENTLY REQUIRED CAPITAL AVAIL ABLE

2 NORTH WEST MIDLANDS — Good Mixed PRACTICE wanted immediately Receipts should be from £1 000 upwards and must have substantial Panel Good house required CAPITAL AVAILABLE

FOR DISPOSAL

1 NORTHANTS — Old established unopposed country PRACTICE Receipts £1 600 p a Panel 900 Excellent house which may be rented

2 MIDLANDS —Rapidly increasing mixed private and panel PRACTICE Receipts av £1 600 p a Panel 1 100 Good house to rent Ample scope

3 STAFFS —Rapidly increasing mixed private and panel PRACTICE Receipts last year £1 050 and panel 1 230 over Excellent house with all services

4 SOUTH WALES —Well established middle and working-class PRACTICE Receipts £2 200 Panel 2 100 ample scope to increase Good house

5 MIDLANDS —Old established industrial and working class PRACTICE Receipts av £1 065 p a Panel 962 Good scope to increase and good house

6 *GLOUCESTERSHIRE* —*Well established middle* and working-class PRACTICE Receipts £1 0 p a Panel 1 00 Excellent house with all services

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partnerships on very reasonable terms Full particulars on application

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE

Telephone Welbeck 27 8
Telegrams ASSISTAMD London

NURSES

MALE OR FEMALE

TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES

[illegible]

THE NURSES ASSOCIATION [illegible] MALE NURSES ASSOCIATION)

York St Baker St London W 1

[illegible] INTELLIGENT NURSES [illegible] W 1 NURSES [illegible]

THE WESTERN MEDICAL AGENCY

LONDON and BRISTOL

Dr K H BENNETT and Dr W J PARAMORE who give personal attention to every client

Financial Assistance for Purchasers and all Classes of Medical Insurance arranged

LOCUMS AND ASSISTANTS SUPPLIED WITHOUT CHARGE TO PRINCIPALS

For exclusive Agency maximum commission is £50 which includes everything sold except house property

1 NORTHANTS —Unopposed country PRACTICE in good part Good schools and all sports Low expenses Panel 900 Receipts £1 600 p a 2 years purchase or near offer House sale or rent

2 MIDLAND CITY —PARTNERSHIP in pleasant part Panel 2 500 £2 212 last year Half share at £5 000 or near offer Choice of house

3 SOMERSET COAST — PARTNERSHIP in country town Preferably man keen on medicine Panel 1 400 Over £5 000 p a Third share at 2 years purchase House rent

4 MIDLAND CITY —Steadily increasing PRAC TICE Average £2 460 p a Panel 2 100 Pre mium £5 250 Excellent house See following details

5 MIDLAND CITY —WOMAN S PRACTICE This Practice has been worked entirely independently to the above but they can easily be amalgamated and worked together if required Average £860 p a Panel 900 Good scope Premium £1 800 House rent

6 BRISTOL —WOMAN S PRACTICE offering excellent scope Vendor is retiring and constantly refusing work Offers considered Apply for full details

7 MIDDLESEX —Genuine increasing PRACTICE 10 miles from London Low expenses Premium £420

8 LONDON W —PRACTICE doing about £1 000 p a Small panel Premium £1 000 or offer House rent

9 LONDON W C —Panel 1 104 Average £1 000 p a Premium £2 000 Lock up surgeries to rent

We have several attractive post for ASSISTANTS whole and part time both Indoor and Outdoor some with view to Partner hip

22, CLARE STREET, BRISTOL, 1
Teleg Medgen Bristol *Tel* Bristol 22689

15, BEDFORD ST, STRAND W C 2
Tel Temple Bar 2532

CAVENDISH NURSES

★ **MALE AND FEMALE**

Head Office
51 BEAUMONT STREET LONDON W 1
Branches MANCHESTER 176 *Oxford Road* GLASGOW 28 *Windsor Terrace* DUBLIN 29 *Upper Bargot St*
Telephones London 1277 Welbeck (2 lines) Manchester 3154 Ardwick Dublin 6 00 Glas 477 Douglas
Telegrams Ta tear London Surgical Glasgow Tactear Manchester Ta tear Dublin

ESTABLISHED 1865

PEACOCK & HADLEY, Ltd,

MEDICAL TRANSFER AGENCY

6 68 Chandos Place Bedford St Strand W C 2
Tele grams H haria Le ware L ndon
Tel phone Temple Bar 5 64

The old established Agency re ceives in Sale of PRACTICES and PARTNERSHIPS on reasonable terms which can be obtained on application LOCUM TENENS and ASSISTANTS supplied [illegible]

PERCIVAL TURNER LTD MEDICAL AGENCY

ESTABLISHED 60 YEARS

25, MAIDEN LANE, STRAND, W C 2
(Corner of Bedford Street)

Telegrams Epsomian London
Phone Temple Bar 9011 (3 lines)
After office hours Walton-on Thames 1 33

Assistants and Locums Provided without fee to Principals Practices investigated Book kept Debt Collecting etc

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE EXCLUSIVE OF HOUSE PROPERTY £50 FULL TERMS ON REQUEST

FOR DISPOSAL

NEAR HYDE PARK—HIGH CLASS income about £1 450 ample accommodation Rent £100 p a Premium for lease £950 Practice £1 500 —1

WEST END AND CITY PRACTICE— PARTNERSHIP 4 SHARE of approx £3 000 p a Premium £3 000 Would consider asst with view —

DEATH VACANCY—GREENOCK— LOCK UP about £400 p a Panel 500 Rent 15/ per week Premium £500 —3

SUSSEX COAST —£1,360 P A IN CREASING Non panel non-dispg Fees 7/6 up Premium 2 years purch Good house (5 bed) tennis etc Sell or let —4

LONDON, S E —ABOUT £2 600 P A Panel 1 800 Half share for disposal at £ 50 —5

OUTER LONDON SUBURB S E— Residential Over £1 000 increasing Panel 600 Good fees Nice corner house to rent or sell —6

HANTS COAST —NON PANEL NON DISPENSING Over £1 000 p a Better class Scope panel Vendor specialising Excellent house 5 bed etc Premium only £1 000 —7

BUCKS — WELL ESTABLISHED £9/1 000 p a House 2 recep 4 bed et Will sell or let —8

WEST OF ENGLAND —COUNTRY PRACTICE £950 p a Panel 450 Ex house 7 bed etc Acre garden Free £2 400 —9

SURREY —NEAR LONDON £800 P A rapidly increasing Panel now 650 Small £78 p a Premium £1 2 0 —10

LONDON, S W —LOCK UP LADY PRACTICE £485 p a Panel 300 (a rare) Premium £600 —11

NEAR PROSPEROUS MIDLAND TOWN —Country PRACTICE about £1 0 p a good class select panel increasing and choice of house Premium 12 years purchase —12

NORTHERN TOWN —ABOUT £1 000 p a Very old-estd Panel Clubs and £1 500 p a Visits 5/ to 6/ Prem £1 0 book debts etc House only £400 —13

KENT COAST — WOMAN S PRACTICE Average £400 p a Panel over 200 fees 5/ to 10/6 Premium £600 H etc Rent £85 p a —14

MIDDLESEX — HALF SHARE OF £1 000 p a with scope Panel 600 A £100 p a Premium £800 Nice hou

LONDON W 3 —ABOUT £3 0 P A Panel 860 Visits 5/6 to 5/ Prem purch House 4 bed etc to rent —16

LONDON N W —ONE FIFTH SHARE of over £5 000 p a Panel 6 000 Appts Fees 2/6 to 10/6 Prem years p mai onette to let —17

SCOTLAND (N) —COUNTRY OVER £1 000 p a incl panel of £500 p a £5 5s Premium 11 years purchase house rent or sell —18

MIDDLESEX —SUBURB £1 0 0 P A Panel 600 increasing £ M S £100 years purch Comfy house (4 bed) garden and garage to let of £3 000 p a Oldest re

LANCASHIRE —OLD ESTABLISHED INCREASING £1 100 p a Select par house ample accommodation incl drug and surgery furniture —19

SOUTH COAST —OLD ESTA £1 000 p a Partner and better class D and area for all or part

BIRMINGHAM NEAR — NEW £1 00 p a Good open pos Panelled House suitable or let at 2 5 p w —21

NO CHARGE TO PURCHASER FINANCIAL ASSISTANCE MADE

ASSISTANTS — VACANCIES Town and Country

BRITISH MEDICAL BUREAU

(The Scholastic, Clerical and Medical Association Ltd)

(*FOUNDED* 1880)

NORTHERN BRANCH

33, CROSS ST., MANCHESTER, 2.

Telephones {Manchester - Blackfriars 3925
{Manchester - Rusholme 2549 (*Night Calls*)

Telegrams "Locum Manchester"

Branch Offices at Leeds and Belfast

Recommended with every confidence to the profession by the BRITISH MEDICAL ASSOCIATION as a thoroughly trustworthy medium for the transaction of all Medical Agency business

TRANSFER OF PRACTICES AND PARTNERSHIPS INTRODUCTION OF RELIABLE ASSISTANTS AND LOCUM TENENS at Short Notice VALUATION and INVESTIGATION OF PRACTICES, Etc

Practices and Partnerships wanted Large list of bona fide purchasers with ample capital available Enquiries invited from prospective vendors All information treated in strict confidence

FOR DISPOSAL

Full details free on request.

CHESHIRE.—Old established mixed Panel and Private PRACTICE in pleasant Country town. Average cash receipts £1,727 p.a. Panel 1 52. Attractive house 3 reception, 5 bedrooms, garage and large garden with tennis court to rent Premium—1½ years purchase —No 1140

NEAR MANCHESTER —Sound old-established mixed Panel and Private PRACTICE in present hands over 30 years. Cash receipts over £1 00 p.a. Panel 2,304 Good corner house 2 reception 4 bedrooms garage and small garden Separate Professional rooms Rent £65 p.a Premium—1½ years purchase (to include valuable book debts) —No 1165

CUMBERLAND —Old-established unopposed Country PRACTICE near to Sea and Lakes Receipts approximately £1 000 p.a Panel 340 plus mileage and dispensing fees Good detached house 8 rooms, 2 Professional rooms garage and large garden Rent £40 p.a Premium—1½ years purchase —No 1167

CHESHIRE TOWN near Manchester —DEATH VACANCY —Old-established mixed Panel and Private PRACTICE. Cash receipts last year £3 6-6. Panel 1 138 Scope Excellent detached house (in own grounds) 2 reception rooms study 4 bedrooms, 3 Professional rooms garage with servants quarters and garden. For sale at valuation Premium—Practice—best offer —No 1136.

NORTH EAST COAST —Old-established mixed Panel and Private PRACTICE. Cash receipts last year £1,160 Panel 2,220 Appointments (transferable) over £400 p.a. Good house 2 reception 3 bedrooms, 3 Professional rooms garage and small garden Price £760 Premium—1½ years purchase —No 1094

NORTH STAFFS —Very old-established better working and middle-class PRACTICE Cash receipts last year £2,431 Panel 1 225 Scope as district developing Excellent house 2 reception 4 bedrooms, maid's room separate surgery premises garage and garden For sale Freehold Premium—Practice—1½ years purchase or near offer —No 11.0

NORTH WEST LANCS —Old established mixed Panel and Private PRACTICE in large town Cash receipts last year £1 102 Panel over 1 000 Good house pleasantly situated 2 reception 5 bedrooms garage and small garden Premium—Practice—1½ years purchase —No 1105

NORTHANTS —Sound unopposed Country PRACTICE. Cash receipts approx £1 600 p.a of which £950 is derived from Panel and transferable appointments. Panel 900 Excellent house 7 bedrooms 3 Professional rooms, garage and pretty garden Electricity Main drainage and water supply Price £1,200 or would let on lease Premium—2 years purchase —No 1160

NEAR MANCHESTER —Very old-established middle and better working class PRACTICE Cash receipts over £2,400 p.a Panel 1 450 Excellent detached house 2 reception 6 bedrooms garage and garden with tennis court. Price £1 000 Premium—1½ years purchase —No 1117

MANCHESTER —Old-established middle and working-class PRACTICE in good scope Good and small garden close to country In present hands 38 years Cash receipts last year £1 487 Panel 1 400 Nice detached house 2 reception 5 bedrooms, garage and large garden Premium —Practice—£2 600 —No 1153

LINCOLNSHIRE —Very old-established PRACTICE in pleasant Country town Cash receipts last year £2,471 Panel about 1 300 Scope Cottage Hospital Good house 5 bedrooms garden and garage. To rent Premium—£3 1 0—No 1132.

MIDLANDS —Increasing middle and working-class PRACTICE in large town Cash receipts last year £1 050 Panel over 1 00 Scope Excellent modern house 2 reception 4 bedrooms, garage and large garden For sale Freehold Premium—Practice—£2,000 —No 1123

LANCS TOWN —Very old-established mixed Panel and Private PRACTICE. Cash receipts last year £1 372. Panel 1 925 Scope Good house 2 reception 4 bedrooms, 3 Professional rooms (separate entrance) Premium—Practice 1½ years purchase —No 1131

YORKSHIRE (W.R.) —Old-established mixed Panel and Private PRACTICE Cash receipts about £1 00 p.a Panel 900 Scope Excellent detached house 2 reception 4 bedrooms, garage and garden Premium—1 years purchase or near offer —No 11.5

LINCOLNSHIRE.—PRACTICE or SHARE in prosperous town Suit man whose wife is also a doctor Gross receipts average £2,00 p.a Panel 2,00 Good house to rent Premium—whole Practice or one third share—2 years purchase —No 1164

NORTH WALES COAST —Good-class PRACTICE in select residential resort Cash receipts last year £905 No Panel or appointments. Detached house with splendid accommodation, garage and garden. Premium—Practice —2 years purchase —No 115.

SHEFFIELD —Sound old-established working-class PRACTICE in present hands 34 years. Average cash receipts £815 p.a Panel 1 196 Good house 5 rooms etc Price £7 0 or may be rented at £55 p.a. Premium—1½ years purchase —No 1161

LADY DOCTOR'S PRACTICE —LIVERPOOL —Well-established and capable of increase Cash receipts about £600 Panel 1 470 Good house 4 bedrooms, to rent. Premium—1½ years purchase.—No 1157

NEAR MANCHESTER.—Very old-established middle and working-class PRACTICE in prosperous town. Very suitable for two friends in partnership or may be run by one man and an Assistant. Cash receipts last year £3 3.0 Panel 3 000 Nice modern house 2 reception 4 bedrooms, separate Professional rooms, garage and large garden For sale at valuation. Premium—best offer —No 1137

SHROPSHIRE.—Old-established unopposed Country PRACTICE. Cash receipts last year £680 Panel 450 Modern house 2 reception 5 bedrooms, 3 Professional rooms garage and large garden. Electric light. Rent £80 p.a. Premium—best offer —No 10 6

NORTH WEST LANCS —DEATH VACANCY —Well-established PRACTICE in beautiful Country district, near lakes and sea. Cash receipts last year £1 359 Panel 195 Good house 2 reception, 5 bedrooms, garage and garden Rent £80 p.a. Premium—£1 000 or near offer —No 1161

MANCHESTER —Old-established mixed class PRACTICE in suburbs. average cash receipts £1 3 0 p.a Panel 838 Good corner house 5 bedrooms 3 Professional rooms garage Premium—1½ years purchase —No 1150

NORTH LANCS —YORKSHIRE BORDER.—Old-established unopposed Country PRACTICE in present hands 30 years Cash receipts £1 000 p.a. Panel and appointments approximately £400 p.a. Well built house with ample accommodation, central heating, electric light, garage and garden of 2 acres. Rent £75 p.a. Premium—£1 500 Vendor retiring —No 1119

DERBYSHIRE.—Old-established PRACTICE capable of great increase. Cash receipts last year £7-0 (increasing) Panel 862 Excellent house 2 reception 4 bedrooms 3 Professional rooms (separate entrance) garage and good garden Premium—Practice and house £1 600 —No 9 9

NORTH WEST LANCS —PARTNERSHIP in old-established middle and better working-class Practice in pleasant town near Coast, owing to retirement of senior partner Cash receipts last year £6 037 Panel 3 600 and appointments £450 p.a Suitable for well-qualified physician or one holding diploma in ophthalmology Possible Hospital appointment. Purchase may be on part-residence Premium—1th or 1th share—2 years purchase (to exclude drugs book debts, etc) —No 1153

MANCHESTER.—Sound old-established PRACTICE in industrial district. Cash receipts last year £2,00 Panel 2,200 House 4 bedrooms 2 Professional rooms Rent £50 p.a. Premium—best offer —No 1164

MONMOUTHSHIRE.—Old-established Contract PRACTICE. Cash receipts last year £2 114 of which over £,000 is from contract work. Excellent house containing 3 reception, 4 bedrooms 2 maid's rooms, garage for 2 cars, and garden Rent £52 p.a on long lease Good prospects of increase in practice. Premium—best offer —No 11--

— WANTED —

ASSISTANTS and LOCUMS

For Immediate Engagements

Apply with full particulars to above address

All communications to be addressed to the Branch Manager BRITISH MEDICAL BUREAU 33 CROSS STREET MANCHESTER, 2.

British Medical Bureau

(The SCHOLASTIC, CLERICAL & MEDICAL ASSOCIATION LTD)

(FOUNDED 1880)

Tele Address
Triform, Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1

Telephone Euston 1644 1645

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical, Scholastic, and Accountancy business and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult The Manager in all transactions requiring the services of a Medical Agent

Members of the British Medical Association may take advantage of a reduced scale of charges applicable to them

REDUCTION IN FEES

In cases where the Bureau are sole Agents the commission in respect of any sale of goodwill, book debts, furniture drugs fittings and other effects (excluding sales of any freehold or leasehold property or of practices, effects, etc, outside Great Britain) is limited to a maximum fee of Fifty Pounds

FULL TERMS ON APPLICATION

Practices and Partnerships for Disposal — **Full Particulars sent free**

1 SOUTH OF ENGLAND—PARTNERSHIP in non dispensing Practice £7 800 p a, in pleasant residential town and watering place Panel 2,000 Good house to be purchased One seventh share at first Premium 2 years purchase Partner should be aged 28 35, and possess the M D or M R C P

2 LONDON, S W—PARTNERSHIP in mixed class Practice, £4 360 p a in residential suburb Panel 2 500 Very nice house with good garden for sale Two fifths share at first at 2 years purchase

3 SOUTH COAST—PARTNERSHIP in steadily increasing Practice of £2 000 a year in growing district Panel 1 000 One third share at first at 2 years purchase Preliminary Assistantship

4 LANCS—Mixed PRACTICE, over £1,000 p a in large town Panel over 1 000 Pleasantly situated house for sale Scope Premium £1 800 to include Drugs, etc

5 EASTERN COUNTIES—Middle and working class town PRACTICE Cash receipts past 12 months £3 600 Panel 2 500 House (5 bedrooms etc) to rent on lease Premium two years purchase or near offer

6 S W of ENGLAND—Non-dispensing general and surgical PRACTICE averaging £1,636 p a in favourite watering place Small panel House for sale or rent Good hospital Premium £2 800

7 KENT—PARTNERSHIP in Practice in industrial town Cash receipts last year £3,646 Panel about 1 400 House with 6 bedrooms and dressing rooms, to rent Share of about £1 200 p a two years purchase

8 HERTS—PRACTICE about £750 p a in growing residential district Panel 540 Nice house, garage and garden price £1 600 Purchaser should be English or Scottish and under 35 years of age Premium £1 400

9 MIDLANDS—PRACTICE in very attractive village about 70 miles from London Receipts past year nearly £750 Panel 535 Detached modern house for sale or rent Premium 14 years purchase to include stock of drugs

10 SUSSEX—NUCLEUS, near coast Receipts past year £270 Panel about 200 Charming house and garden for sale Alternative house to rent if desired Premium £450

11 EASTERN COUNTIES—PARTNERSHIP in old established middle and working class practice £1 600 in country town Panel 2 500 House available to rent Premium one third share two years purchase

12 S COAST—Non dispensing PRACTICE of £1 250 p a in health resort No panel but ample scope Commodious well built residence with garage and garden for sale Premium £1 000

13 S MIDLANDS—PARTNERSHIP in Practice £4 400 p a in progressive town Panel 2 000 House for sale or rent One fourth share two years purchase Graduate of Oxford Cambridge or London preferred

14 EAST ANGLIA—A Medical Woman's PRACTICE in a nice town Cash receipts year ended April 5th 1938 £944 Panel 700 Semi detached house (6 bedrooms) and half an acre of garden Premium £750

15 UNIVERSITY TOWN—THIRD PARTNER required (after preliminary Assistantship) in old established Practice averaging £3 820 p a Panel 2 200 Premium for [illegible] two years purchase

16 MIDDLESEX—Old established PRACTICE of £1,000 p a in developing town Panel 850 Corner house with garage and garden for sale Premium two years purchase

17 W AUSTRALIA—PRACTICE of over £3 000 p a in suburb of important coast town Excellent house for sale or might be rented Premium £4 000

18 LONDON, W—Well established non dispensing panel PRACTICE of £1,000 p a in nice suburb House with garage and small garden, for sale Premium £1 000

19 S MIDLANDS—Well established PRACTICE about £700 p a, in good town Panel 758 Detached corner house with garage and garden to rent Premium £850

20 KENT—Medical Woman's PRACTICE of £600 p a, in outlying suburb Panel 493 Detached house with garage and garden to rent Premium £850

21 S WALES—Old established PRACTICE over £800 p a in small town Panel 600 Detached house (4 bed rooms), for sale Premium 1½ years purchase

22 S OF ENGLAND—Easily worked PRACTICE about £1 000 p a, in Cathedral city (clubs worth about £160 and panel 1,065) House (6 bed and dressing rooms) for sale or rent Premium one and a half years' purchase

23 S E COAST—Easily worked middle class PRACTICE over £650 p a, in summer resort House (6 bed etc) in best part, with small garden and garage for sale Branch surgery rented at 10s weekly Panel 200 Scope Prem £1 200

24 HOME COUNTIES—Old established country PRACTICE of about £700 p a under 50 miles from London Panel 450 Good house in excellent position with garage and garden to rent Premium £800

25 LONDON, W 12—Old established PRACTICE about £800 p a in suburban district Panel 900 Good house (4 bedrooms etc) Freehold for sale Prem two years purchase

26 S E COAST—Medical Woman's PRACTICE of about £400 in a popular seaside resort Panel 203 House with garage for sale or to rent Premium £650

27 SURREY—PARTNERSHIP (after a preliminary Assistantship) in growing residential district about 10 miles from London Cash receipts average about £2 350 p a Panel 1,050 A three eighths share is for disposal at two years purchase

28 SURREY—PARTNERSHIP in Practice of about £3 000 p a in residential district Panel 630 Modern house (4 bedrooms), garage garden To rent Preference would be given to an I R C S One half share £3 000

29 E ANGLIA—Old established country PRACTICE of about £2 200 p a within easy distance of coast Panel 1 300 Well built house to rent Premium two years purchase

30 S WALES COUNTY TOWN—PARTNERSHIP in Practice £2,800 p a Panel over 1 000 One third share on reasonable terms Partner must hold F R C S Hospital and excellent opportunity for surgical scope appointment on staff Preliminary Assistantship

31 S E COAST—PARTNERSHIP in non dispensing Practice about £4 500 p a Panel 1 400 One fifth or fourth share at two years purchase Preliminary Assistantship Scotsman preferred

32 LONDON, N 12—Middle class increasing PRACTICE in growing district Receipts past year £[illegible] Modern labour saving house for sale or rent Premium [illegible]

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1880)

Tele Address TAVISTOCK HOUSE SOUTH
Triform Westcent—London TAVISTOCK SQUARE, W C 1
Telephone Euston 1644 1645

Practices and Partnerships for Disposal (continued)

33 S WALES—Contract and small private panel PRACTICE over £1 900 p a in industrial district Panel over 2 100 Hou e with surgery premises to rent Prospect of appointment Premium £3 500

34 S COAST HEALTH RESORT—OPHTHALMIC PRACTICE Receipts 1938 £1 600 House to rent Unlimited scope Premium one year s purchase

35 LONDON S W—ELECTRO THERAPEUTICAL PRACTICE Receipts 1937 £1 7_7 Large consulting room and treatment room to rent Premium £1 600 plus apparatus valued about £750

36 LONDON N—LOCK UP PRACTICE £390 p a run by medical woman Panel 3_7 Rent at surgery 25/ weekly Good scope Premium 1½ year purchase

37 N WALES—Popular seaside resort—Good class chiefly non dispensing PRACTICE averaging £870 p a No panel Excellently situated detached residence for sale Good scope Premium £1 400

38 LONDON E—Cash and panel PRACTICE averaging £2 800 p a Panel 4 60 Hou e (5 bedrooms) Rent £156 p a Scope Premium two and a half years purchase to include drugs etc

39 W MIDLANDS—PARTNERSHIP in Practice averaging £6 000 p a in market town Panel 3 500 One sixth share at first at two years purchase Incoming partner should be aged 28/30 and able to do general surgery and minor E N and T work Ho pital Preliminary Assistantship

40 N MIDLANDS—PRACTICE in residential district near progressive town Receipts 1937 £770 Panel about 100 House for sale Good scope Premium £900

41 S OF ENGLAND—Well established SANATORIUM for the open air treatment Receipts at present at rate of about £3 000 p a Prem £1 000 include furniture etc

42 LONDON S E—PRACTICE averaging £800 p a in populous suburb Panel 800 Detached double fronted house Price of leasehold £1 2 0 Scope Premium £1 750

43 FRENCH RIVIERA—Old established PRACTICE M D essential Vendor at present in England

44 S W ENGLAND—Country PRACTICE over £1 400 in beautiful part Panel about 1 100 Exceptionally nice modern house standing in own grounds for sale Hunting and shooting Scope Premium two years purchase

45 Consulting Ear Nose and Throat PRACTICE in industrial city Receipts average £1 350 p a (in addition appointments worth about £850 p a) Centrally situated house to rent Purchaser should hold F R C S and have specialist experience Premium two years purchase

46 KENT—PRACTICE in developing district 12 miles from London Receipts past year over £500 Panel about 465 House (3 bedrooms) to rent Ample scope Premium £750 to include drugs etc

47 MIDDLESEX—PARTNERSHIP in steadily increasing town Practice about £2 000 p a Panel 1 800 House to rent Premium one half share two years purchase Applicant should be English or Scottish

48 SURREY—Medical Woman s PRACTICE over £300 p a in outlying suburban district Panel 150 House for sale or rent Scope Premium £500

49 S AFRICA—Medical Woman holding D O M S required in Ophthalmic Practice Experienced in operative work and not over 30 preferred SHARE about £1 000 offered after ASSISTANTSHIP

50 S COAST—PARTNERSHIP in Practice over £3 000 p a in seaside resort Panel about 2 000 Semi-detached house (5 bedrooms) for sale or rent Premium one half share £3 000 Excellent hospital and scope for surgery

51 N E ENGLAND—PARTNERSHIP in non-panel Practice doing about £6 000 in one of the chief towns House available One sixth share at two years purchase Partner should be surgically inclined

52 MIDLAND SPA—PARTNERSHIP in Practice about £1 900 p a Panel 1 200 Excellent house for sale Premium one half share £1 800

53 S COAST—PARTNERSHIP in non dispensing Practice over £5 600 p a in health resort Panel about 600 Share worth about £900 at two years purcha e

54 WEST END OF LONDON—Good-class non-dispensing PRACTICE about £1 150 No panel Large house to rent Premium, lea e and practice £3 000

55 BUCKS—PRACTICE in growing town Receipts last year £894 Panel about 790 House for sale Well equipped hospital Premium £1 500

56 LONDON S W—Medical Woman s PRACTICE about £960 p a in outlying ubu b No panel Suitable accommodation available Premium £950

57 PARTNERSHIP in increasing Ear Nose and Throat Practice in provincial town Partner must hold F R C S

58 MIDDLESEX—FOURTH PARTNER required in Practice over £7 600 p a in residential district on the Thames Panel 1 600 Hou e (5 bedrooms) to rent Scope Premium 6 30ths share £3 100

59 LONDON N W—PARTNERSHIP in Practice averaging about £5 200 p a Panel about 6 000 Maisonette (2 beds etc) to rent One fifth share at first at 2 years pur

60 LONDON N W 4—Middle class PRACTICE about £800 p a in developing part Panel 300 Hou e (3 bedrooms) for sale or rent Scope Premium £1 250

61 HOME COUNTY—FOURTH PARTNER required in Practice in growing town Panel 3 000 Incoming partner must be energetic aged about 30 (married preferred) with a leaning towards medicine Initial share about £1 250 p a Premium £3 000 Preliminary Assistantship

62 CORNISH COAST—PARTNERSHIP in non dispensing Practice nearly £3 000 in favourite resort Panel 1 200 House obtainable One third share at two years purchase Good anaesthetist required Short Assistantship

COLONIES—Number of Colonial PRACTICES Incomes range from about £750 p a upwards

Purchasers can raise additional capital for the purchase of approved practices or shares
Particulars will be forwarded on application

All communications to be addressed to The Manager

Manager W M SCOBIE. Telephone Edinburgh 3969

SCOTTISH BRANCH, 21, Alva Street, Edinburgh, 2

FOR DISPOSAL

A S OF SCOTLAND—Country PRACTICE in lovely district Receipts approximately £1 000 Panel 760 Exceptionally convenient house Price £2 000 Premium for practice one and a half years purchase

B SCOTLAND—Old established City PRACTICE Receipts approximately £2 400 Panel 2 500 House price £900 Premium two years purchase or near offer

C YORKSHIRE—Country PRACTICE Receipts £1 200 Panel 500 Excellent house with garage Price £1 200 freehold Premium one and three quarter years purchase

D E OF SCOTLAND—Country town Receipts last year £685 (appointments £312 panel 565) Excellent house with garage and garden Price £1 450 Premium £1 000

E N OF SCOTLAND—Country PRACTICE Long established Receipts approximately £1 000 Panel 275

F EDINBURGH—PRACTICE doing £450 House must be bought Premium practice and house £1 650

G CENTRAL SCOTLAND—Country town PARTNERSHIP both partners retiring Receipts average £2,357 Panel 1 343 Excellent houses prices £1 500 and £1 250 Premium for practice two years purchase

For further details apply The Manager 21 Alva Street Edinburgh

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager to whom all communications should be addressed

RELIABLE LOCUMS and ASSISTANTS are URGENTLY REQUIRED by ALL OFFICES of the BUREAU

INDEX TO ADVERTISEMENTS

PUBLISHERS
British Medical Association 8
Churchill J & A Ltd 3
Lewis H K & Co Ltd 4
Nursing Illustrated 5
Practitioner The 2

ASSURANCE & INSURANCE
Century Insurance Co Ltd 57
Guardian Assurance Co Ltd 34
Medical Defence Union Ltd Supp i

BANKS & FINANCE
Century Insurance Co 57
British Medical Finance Ltd 36

CHEMISTS
Aluzyme Products 36
Armour & Co Ltd 28
Bemax Laboratories 30
British Colloids Ltd Supp ii
British Drug Houses Ltd 13 16 17
Burroughs Wellcome & Co Cover ii
Christy Thos & Co Ltd 18
Coates & Cooper Ltd 35
Denver Chemical Co 21
Eli Lilly & Co Ltd 25
Evans Sons Lescher & Webb Ltd 23
Glaxo Laboratories Ltd 31
Hillard 36
Iron Jelloid Co Ltd 35
Kaylene Ltd 14
Martindale W 20
May & Baker Ltd Supp iv
Napp H R Ltd 18
Oppenheimer Son & Co Ltd 19
Peat Products Ltd 15
Phil Sano Ltd 12
Prentif Ltd 15
S P Charges Co 14
Whitlen & Son Ltd 14
Wright Layman & Umney Ltd 26

CIGARETTES & TOBACCO
Player's No 3 6
Wills's Capstan 34

FOODS, BEVERAGES
Allen & Hanburys Ltd 26
Cow & Gate Ltd Supp i
Genatosan Ltd 22
Hovis Ltd 62
Husband J K & Co Ltd 13
Karlsbad Sprudel Salt 20
Lactagol Ltd 15
Libby McNeill & Libby Ltd 24
Polley & Co Ltd 36
Rayner & Co Ltd 12
Ryvita Co Ltd 27
Sumner's Typhoo Tea Ltd 30
Valentine's Meat Juice Co 17
Vichy Celestins 16
Winder A Ltd 19

FOOTWEAR, TAILORING & CLOTHING, etc
Church & Co, Ltd 5
Regent Dress Co 36

MOTORS & ACCESSORIES
Henlys 7
Lodge Plugs Ltd 4
Wolseley Motors Ltd 9

NAME PLATES, etc
Cooke's (Finsbury) Ltd 36
Hall F B & Co 37
Herd S J & A 37
Osborne F, & Co 37
White Bronze Co 37

VACCINES, SERA, etc
Parke Davis & Co Cover iv

SURGICAL APPARATUS
Allen & Hanburys Ltd 29
Curtis H E & Son Ltd 35
Everett S & R J & Co Ltd 12
Franklin J G & Sons Ltd 12
Hillard 36
Leslies Ltd 36
Omniped 36
Salt & Son Ltd Supp iii
Spencer Corsets Ltd 11

X-RAYS & ELECTRO-MEDICAL
Ilford Ltd 32
Peto Scott Co Ltd 32
Portable X Rays Ltd 4
Universal Electric Co 36
Victor X Ray Corporation Ltd 33

HOMES & INSTITUTIONS
Pages 38 39 40

HOUSE AGENTS
Page 56

HOSPITALS & CLINICS
London Clinic 41
Ruthin Castle 39

HOTELS
Majestic Harrogate 42

SANATORIA
Cornish Riviera Sanatorium 41
Cotswold Sanatorium 41
Holloway Sanatorium 41
Montana Hall 41
Mundesley Sanatorium 41

SPAS, HEALTH RESORTS, & HYDROS
Harrogate 4
Majestic Hotel
Rheuma Spa 47
Rockside Hydro
Smedley's Hydro 3

MEDICAL SCHOOLS, TUTORS, & LECTURERS
Pages 43 44

NURSING, etc
Page 54

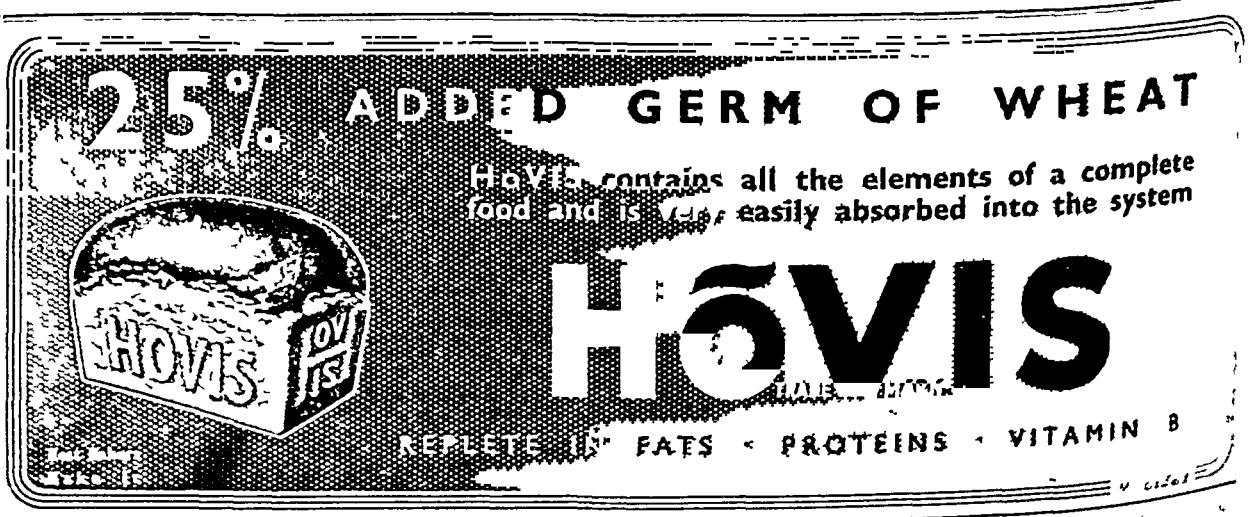
TRANSFER AGENTS
Bovril Medical Agency Ltd Cover ii
British Medical Bureau 59 60 61
Lee & Martin Ltd 58
Medical Agency Ltd 58
Peacock & Hadley Ltd 58
Turner Percival Ltd 58
Western Medical Agency 58

CONTRACT PRACTICE
Page 53

HOSPITAL VACANCIES, etc
Pages 44 45 46 47 48 49 50 51 52 53 54

CLASSIFIED ADVERTISEMENTS—(Wanted & Vacant)
Pages 61 & 55

GENERAL
British Oxygen Co Ltd 10
Chartered Society of Massage 4
Frankland E J & Co Ltd 4
Furniture & Fire Art Depot 4



Published by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Reeds Ltd at Ludgate Hill Printing St Fleet St London E C 4 Printed in Great Britain Entered as Second Class at New York U S A

BOVRIL MEDICAL AGENCY, LTD.

ALDINE HOUSE,

10-13 BEDFORD STREET, STRAND, LONDON, W.C.2

Telegrams BOVMEDICAL, LESQUARE, LONDON Telephone TEMPLE BAR 1616 (3 Lines)

Chairman and Managing Director, Dr J. FIELD HALL.

The maximum commission payable on the sale of any Practice or Partnership in Great Britain placed exclusively in the hands of this Agency is £50 (fifty pounds) which sum covers goodwill drugs surgery fittings fixtures and furniture instruments and book debts, but not house property. Schedule of Terms will be forwarded on application.

Accountancy and legal services furnished by the Agency where desired at moderate inclusive charges. No charge is made to Principals for the introduction of Locum Tenens or Assistants.

1 MANCHESTER.—Very old-established middle and working-class PRACTICE averaging for last 3 years £1,380 p.a. Panel of 8,40. Appointments about £150 p.a. Fees from 3/6. House with 3 bedrooms, etc., garden, garage, electric light. Price freehold £800. Premium for quick sale 1½ years purchase part by instalments.

2. LONDON, EAST.—Old-established mixed-class PRACTICE averaging about £2,700 p.a. including part of about 1,300 and increasing. Separate surgery premises. Premium 2 years purchase.

3 LONDON, N.W.—GROWING RESIDENTIAL DISTRICT.—PARTNERSHIP.—Guaranteed share in rapidly expanding Practice producing to commence about £500 p.a., with increase later. Suitable detached house on rental at £52 p.a. Ingoing partner must be experienced and energetic.

4 KENT.—RAPIDLY EXPANDING DISTRICT.—Well-established middle and working-class PRACTICE producing about £1,700 p.a. including panel of nearly 1,400. Good house with 2 reception, 5 bedrooms, etc., large garden. Inclusive rent £130 p.a. Premium 2 years purchase.

5 MIDDLESEX.—DEVELOPING AREA.—Well established mixed-class PRACTICE averaging over £1,000 p.a. including panel of 800 and appointments worth about £100 p.a. Corner house with 2 reception, 4 bedrooms, garage, garden. Rent £100 p.a. Premium £2,000 or near offer for quick sale.

6 KENT COAST.—PARTNERSHIP.—ONE THIRD or ONE HALF SHARE in middle-class Practice averaging £3,650 p.a. Panel of about 2,000. Excellent modern house available by purchase or rental. Premium 2 years, or share. Ingoing partner must be experienced and well qualified.

7 NORKS.—Country PRACTICE.—Old-established income about £1,030 p.a. with scope for increase. About £350 of present income is derived from panel of some 700 patients. Good freehold house with ample accommodation, garden and garage. Price for practice and house £3,600 of which about £1,900 may be left on mortgage.

8 GLOS.—NEAR WYE VALLEY.—Very sound PRACTICE producing about £1,100 p.a. including panel of 1,150 patients and appointments worth about £20 p.a. Low expenses. Detached house with large garden, 5 bedrooms, etc. Freehold. Premium 1½ years purchase.

9 FAVOURITE SOUTH COAST RESORT.—Private and better class PRACTICE averaging over £1,000 p.a. Minimum fee 5/-. No dispensing. Scope for panel if desired. Modernized house with ample accommodation. Premium £1,000.

10 UNOPPOSED COUNTRY within easy distance North of London.—Income about £1,600 of which about £1,000 is from panel appointments and club. Convenient family residence with 6-7 bedrooms, etc. Freehold for sale or let on lease. Premium 2 years purchase.

11 ESSEX.—PARTNERSHIP after ASSISTANTSHIP of 3 months in chiefly better class practice offering considerable scope. Good house available on rental. Share worth £800/£900 p.a. at 2 years purchase.

12 WEST LONDON RESIDENTIAL DISTRICT.—Old-established chiefly upper and middle class PRACTICE averaging approximately £1,500 p.a. Selected panel of 1,14 patients but scope for increase if wished. Fees 5/- to 21/-. Non-dispensing. Scope for increase as large blocks of modern flats in course of erection. Excellent house with ample accommodation. Premium £3,000.

13 LINCS.—MARKET TOWN.—Old-established PRACTICE in prosperous district producing nearly £2,500 p.a. Panel of nearly 1,387. Substantial house (2 reception, 7 bedrooms etc., good garden). Rent £75 p.a. Premium 1½ years purchase or near offer for quick sale.

14 MIDLANDS.—GOOD RESIDENTIAL COUNTRY DISTRICT.—Compact PRACTICE at present producing about £750 p.a. but capable of considerable expansion. Choice of 2 houses. Moderate premium for either.

15 TOWN WITHIN 40 MILES [illegible] (with increase later) in old-established PRACTICE producing about £3,125 p.a. (last year approximately £3,500). Panel of about 1,200. Suitable house with 3 reception, 4 bedrooms, etc. Garden. Garage. Rent £80 p.a. Premium 2 years purchase. Ingoing partners should be over 30 used to better-class practice and able to do midwifery.

16 OUTLYING NORTHERN SUBURB.—Recently established PRACTICE on new estate producing about £300 p.a. including panel of 130. House with 2 reception, 3 bedrooms, etc. Garden. Price £670. Reasonable premium accepted.

17 SUSSEX.—PARTNERSHIP.—A half share in old-established good-class Practice producing over £3,200 p.a. Panel of about 1,500 and various appointments producing about £600 p.a. Good house with ample accommodation, large garden etc. Freehold for sale. Good schools and social facilities. Premium 2 years purchase. Ingoing partner should be experienced and have

18 [illegible].—Well-established PRACTICE producing [illegible] including panel of over 1,000. Excellent free [illegible] etc. Easily worked. On rental or can be bought. Premium 1½ years purchase or near offer.

19 NORTH WEST LONDON.—PARTNERSHIP.—One fifth share (with increase later) in well-established Practice producing about £5,200 p.a. including panel of about 600. Suitable maisonette with 2 reception, 2 bedrooms, etc. Inclusive rental £90 p.a. Premium 2 years purchase.

20 DURHAM COUNTY.—Old-established industrial PRACTICE producing £2,000 p.a., of which only about £450 is derived from private work. Panel of over 2,100 units. Practice has been held by the vendor for about 20 years. Premium £4,000 to include book debts, drugs, surgery furniture etc. (part by arrangement) or £3,600 cash down.

21 COAST TOWN WITHIN 80 MILES OF LONDON.—Well-established PRACTICE producing about £1,600 p.a. of which about £1,100 p.a. is derived from panel of approximately 1,300 patients. P.N.S. etc. Good freehold house available. Thoroughly modernized and redecorated, central heating. Ample accommodation, garden, garage. Price £1,800. Premium 2 years purchase. Scope for anyone who can do surgery.

22 CITY LOCUM.—Old-established PRACTICE producing about £1,250 p.a. gross, or approximately £700 p.a. net. Fees 10/6 and 21/-. Good deal of electrotherapy done. Premium £1,400 with furniture, equipment, etc., at valuation. Hours: Mondays to Fridays only, 10 to 5.

23 WEST END.—Opportunity for physician desirous of entering West End PRACTICE. M.R.C.P. minimum qualification essential. Full details on personal application.

24 EAST LONDON.—Well-established PRACTICE producing about £1,550 p.a. of which about £7,0 p.a. is derived from panel of about 1,350 patients P.M.S. and Public Assistance work. Large proportion of cash. Premium 2 years purchase.

25 SURREY.—WITHIN 15 MILES OF LONDON.—PARTNERSHIP.—ONE HALF SHARE in a very good mixed-class Practice situated in growing residential district. Gross cash receipts approximately £3,000 p.a. with substantial panel. Very nice house with all modern conveniences and beautiful garden (2 reception, 4 bedrooms etc.) Can be rented or purchased. Premium 2 years purchase. Ingoing partner must be experienced in surgery.

26 LONDON, S.W.—Old-established mixed-class PRACTICE producing for last 12 months £7,0 including panel of 1,80. Flat can be rented at £78 p.a. Premium £1,250.

27 LONDON, EAST.—Middle and working-class PRACTICE producing over £500 p.a. with good scope. Panel of about 750. Fees from 2/-. Ten roomed corner house. Price for lease £550. Premium £400 to include drugs, surgery fittings etc., and some furniture.

28 DEVON COAST.—POPULAR HOLIDAY RESORT.—Old-established non-dispensing PRACTICE averaging for the past 3 years £1,640 p.a. including panel of 1,400. Suitable house with ample accommodation. Freehold £1,700 or would rent. Premium £2,000.

29 [illegible] middle-class non-panel PRACTICE. Scope. Detached house overlooking [illegible]. Sport of all kinds. Good schools. Premium 2 years purchase. Ill health reason for sale.

30 WEST MIDLANDS.—PARTNERSHIP with succession in 2 or 3 years. Mixed-class Practice in attractive country town in very pleasant surroundings. Average receipts for last 3 years £1,828 p.a. Panel of about 850. On succession ideal house available 3 reception, large lounge hall, billiard room, 5 bedrooms, etc., excellent. Practice accommodation, nice garden, garage. Premium for half share £1,650.

31 BEDS.—PARTNERSHIP.—ONE THIRD SHARE in well-established mixed-class Practice producing £1,675 p.a. Panel of 760. Suitable house easily obtainable. Premium £1,000. Definite scope.

32 WELSH COAST.—Well-established good mixed PRACTICE producing over £2,000 p.a. including panel of 1,400. Suitable house with ample accommodation, good garden and garage. Rent £50 p.a. Premium £3,000 for quick sale.

33 SURREY.—RAPIDLY EXPANDING DISTRICT.—PRACTICE at present produces about £700 p.a. but could be much increased. Panel of 350 (discouraged). No midwifery. Excellent house with all modern conveniences. Premium for Practice and house £3,000.

34 S.W. ENGLAND.—FAVOURITE COAST TOWN.—HALF SHARE after preliminary assistantship in chiefly better-class Practice producing nearly £2,000 p.a. Small panel. Choice of residence. Must be experienced and preferably knowledge of E.N.T. Premium 2½ years purchase part by arrangement.

35 LONDON, S.E.—Well-established PRACTICE, chiefly cash. Receipts average about £1,030 p.a. with panel and club producing over £400 p.a. Can be run as a lock up. Suitable premises available. Premium 2 year purchase.

36 LONDON, S.W.—WITHIN EASY REACH OF CITY AND WEST END.—Well-established chiefly middle and better-class PRACTICE with surgical scope producing about £1,450 p.a. Selected panel of 45. Fees 5/- and 7/6. Good-sized first floor flat with all conveniences. Purchaser should be able to do surgery and F.R.C.S. would be advantageous.

37 SOUTH WALES.—Old-established mainly contract PRACTICE producing last year £2,200 of which £2,050 is from contract work and panel. Suitable house available. Future prospects are considered to be excellent as new works have recently been erected in the district. Premium £3,500.

38 KENT COAST.—FAVOURITE SEASIDE RESORT.—Old-established middle-class PRACTICE producing about £670 p.a. Small panel 1,200 patients. Very good house in best end of the town with ample accommodation. Freehold available. Premium £1,200. Eminently suitable for retired army officer wishing to augment pension or there is scope for young man.

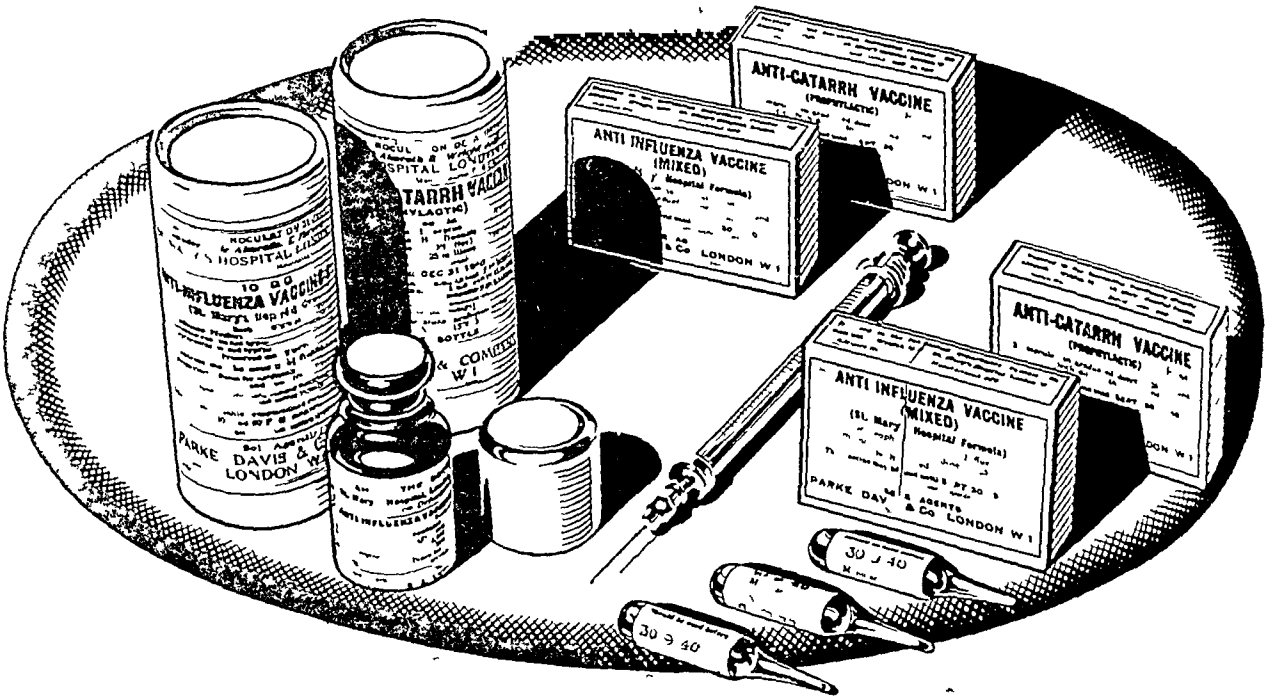
39 SUSSEX.—FAVOURITE COAST TOWN.—Old-established PRACTICE producing about £800 p.a. including panel which brings in about £150 p.a. Good house on two floors, 2 reception, 4 bedrooms, etc. Freehold for sale. Premium 2 years purchase.

40 NORTHANTS.—ASSISTANTSHIP with view to Partnership in an old established country Practice with good future prospects. Initial salary £500 p.a. including car allowance the assistant to live out. Full details on application.

41. MIDLANDS.—FAVOURITE COUNTY TOWN.—SURGICAL OPENING.—A QUARTER SHARE (after preliminary assistantship of 3 months) is offered in old-established increasing Practice producing approximately £3,900 p.a. Panel of about 2,800. One appointment worth about £125 p.a. Fees 5/- to 30/-. No dispensing. Suitable house with garden and garage. Rent £65 p.a. Premium 2 years purchase, part by arrangement. *Ingoing partner should be under 35, experienced, and able to do some surgery.*

ASSISTANTS REQUIRED.—Several good vacancies. Full details on application.

The Agency has made arrangements for special facilities on very favourable terms, to be afforded to approved purchasers for the advance of part of the premium for any suitable practice or partnership. Full details on application.



VACCINES for prophylaxis against Respiratory Affections...

PROPHYLACTIC inoculation against the common "cold," influenza, and catarrhal conditions of the respiratory tract generally, by means of vaccines prepared from the various organisms found in those infections, has given a high degree of immunity in a large number of cases

The micro organisms most commonly found in patients suffering from "colds" are Pneumococcus, Pfeiffer's Bacillus, Micrococcus catarrhalis, and Bacillus septus, and these are included in the ANTI CATARRH VACCINE prepared especially for the prophylaxis of the common cold in adults

The prophylactic effect of this vaccine is most advantageously obtained if inoculations are carried out during the latter part of September or early in October

It is generally agreed that the serious and sometimes fatal complications of influenza—such as bronchitis and pneumonia—as well as many of the less severe symptoms, are caused by infection with Pfeiffer's Bacillus, Pneumococcus and Streptococcus On this account the ANTI INFLUENZA VACCINE (MIXED), St Mary's Hospital Formula, which contains these three organisms, is of great value as a prophylactic of influenza and its sequelae

Further particulars of the above vaccines, which are prepared in the Department for Therapeutic Inoculation (Founder Sir Almroth E Wright, M D), St Mary's Hospital, London, W , will be supplied on request

SOLE AGENTS

PARKE, DAVIS & CO., 50, BEAK STREET LONDON, W.1.

Laboratories Hounslow, Middlesex Inc U S A, Liability Ltd

BRITISH MEDICAL JOURNAL

JOURNAL OF THE

BRITISH MEDICAL



ASSOCIATION

SATURDAY SEPTEMBER 17 1938

PRINCIPAL CONTENTS

Aspects of Vertigo	p 605	Leading Articles	p 625
Co-operation in Cases of Visual Loss	608	Annotations	627
"Jacket" Respirator for the Treatment of Poliomyelitis	611	Correspondence	633
Diagnosis of Whooping-cough	613	Surgery in General Practice. Amputation of Fingers	631
Human Oil in Treatment of Adherent Scars	618	Reviews	621
Accumulation of Faeces in the Rectum	624	Epidemiology Section	642

WITH SUPPLEMENT AND EPITOME

LONDON

BRITISH MEDICAL ASSOCIATION

TAVISTOCK SQUARE

No 4054 WEEKLY PRICE 1 3

Copyright

REGISTERED AS A NEWSPAPER

In the treatment of MACROCYTIC ANAEMIAS

This palatable liquid extract of hog's stomach contains Hæmopoietin in stable solution The stomachs are treated immediately after killing to extract the *Antianæmic Factor in active condition* producing a bland liquid of pleasant flavour, to which the name HOGASTRIN has been given

A dose of two teaspoonfuls in a little water three times a day for a fortnight, then reduced to one teaspoonful, will invariably give good results in the treatment of all *Macrocytic Anæmias*

Packed in 4 oz 8 oz and 16 oz bottles

For inspection sample and literature apply to the manufacturers

GILES SCHACHT AND CO
CLIFTON, BRISTOL, 8
Manufacturing chemists for over a century

HOGASTRIN

YES

YOU CAN SAFELY PRESCRIBE THIS TEA FOR ALL YOUR PATIENTS

Not because it is specially prepared in any way whatever, but simply because it is harmless to the most delicate digestion The Doctor's China Tea is a blend of the choicest teas that China grows—teas which contain comparatively so little tannin that they can be enjoyed by all For over a quarter of a century The Doctor's China Tea has been recommended by the medical profession—even in cases of dyspepsia and gastritis A generous free sample will be sent to any doctor who would like an opportunity of trying the tea

THE DOCTOR'S CHINA TEA

Priced at 3, , 3 6 4 2 and a super quality at 4 8 per lb

HARDEN BROS & LINDSAY LTD (Dept 19), 30/34, MINCING LANE EC3

BRITISH MEDICAL JOURNAL

SEPTEMBER 17 1938

TABLE OF CONTENTS

ADDRESSES AND PAPERS

Vertigo its Neurological, Oto-logical, and Surgical Aspects W RUSSELL BRAIN DM FRCP 605

Co-operation Between Ophthalmologist and Physician in Cases of Visual Loss C B F TIVY M Ch M B 608

New Type of "Jacket" Respirator for the Treatment of Poliomyelitis AUBREY F BURSTALL D SC M I Mech E 611

The Diagnosis of Whooping-cough A B DONALD M D D P H 613

Human Oil in the Treatment of Adherent Scars CECIL P G WAKELEY D.SC F R C.S 618

Incontinence From Accumulation of Faeces in the Rectum HAROLD DODD ch M F R C.S 624

SURGICAL SERIES

Amputation of the Fingers HAROLD C EDWARDS M S, F R C S 631

CLINICAL MEMORANDA

Acute Volvulus of the Stomach PHILIP SCIENCE M D 619

Thrombosis of Pulmonary Artery H BARSOUM F R C P Ed 620

REVIEWS

Leukaemia and its Congeners 621
Characters of the Pneumococcus 621
Refraction of the Eye 622
Poison Gas 622
Dietetics 623
Notes on Books 623

GENERAL ARTICLES AND NEWS

PREPARATIONS AND APPLIANCES 623
UNIVERSITIES AND COLLEGES 639
MEDICAL NEWS 643

LEADING ARTICLES

Vitamin B Complex 625

The Blind Man in Religion 627

SUPPLEMENT

Insurance for Medical Men and Women—II
HENRY ROBINSON M D D L J P

Future Development of the Hospital System
A S M MACGREGOR O B E M D

INSURANCE MEDICAL SERVICE
MEMORANDUM ON SMALL POX
EMERGENCY TREATMENT UNDER THE ROAD TRAFFIC ACT
CORRESPONDENCE
NAVAL MILITARY AND AIR FORCE APPOINTMENTS
Association Notices Vacancies and Appointments Diary

ANNOTATIONS

Allergy and Immunity in Ocular Tuberculosis 627
Radiotherapy of Actinomycosis 628
Swallowed Foreign Bodies 628
Gonococcal Meningitis 629
Percussion of the Heart 629
Jacket Respirator for Polio myelitis 630
Prince Arthur of Connaught 630

EPIDEMIOLOGY SECTION

TABLE OF INFECTIOUS DISEASES AND VITAL STATISTICS 642
EPIDEMIOLOGICAL NOTES 643

CORRESPONDENCE

Convalescent Serum in Infantile Paralysis F M R WALSHE O B E M D 633

Fracture of the Neck of the Femur E W HEY GROVES M S F R C S 633

Tuberculosis Dispensaries or Chest Clinics? M DAVIDSON M D G G KANE M D 634

Fractured Olecranon Personal Experience R JACKSON F B 635

Carbohydrates and Alimentary Disease ANDREW BROWN M B 635

Undescended Testicle DENIS BROWNE F R C S 636

The Harris Prostatectomy COLIN EDWARDS M B R G S HARRIS F R A C S 637

Neglect of Galvanism W GARTON M R C S 637

Treatment of Typhoid Fever by Sulphanilamide K V SUBBARAO M B 638

The Occipito posterior Case DAVID PRICE M B 638

Tetanus from a Cancer Cure H C CONNELL M D 638

A Mere University Sir W LANGDON BROWN M D 639

Rheumatoid Arthritis and Jaundice W M CROFTON M D 639

Wanted Surgical Instruments for China F M OSBORN 639

OBITUARY

Sir Robert Henry Woods M Ch, F R C S I (With Portrait) 640
Willmott Henderson Evans M D 640
James Potter M R C S L R C P 641
C H Bubb O B E M R C S 641
H M ABEL M.R.C.S L R C P 641

LETTERS AND ANSWERS

Income Tax 644
Endometrioma of the Appendix 644
Abortion and the Law 644
Sentence Postponed for Operation 644

A KEY TO CURRENT MEDICAL LITERATURE will be found at the end of the JOURNAL

J. & A. CHURCHILL

Autumn *Announcements*

THREE NEW BOOKS

BIOCHEMISTRY FOR MEDICAL STUDENTS

By W. V. THORPE, M.A., Ph.D.
Reader in Chemical Physiology, University of Birmingham

4 Plates and 33 Text figures. 12s. 6d.

This volume is an endeavour to supply the student of medicine or dentistry with those Biochemical facts that he will require especially.

ELEMENTARY ANATOMY AND PHYSIOLOGY

By JAMES WHILLIS, M.D., M.S., F.R.C.S.
University Reader in Anatomy, Guy's Hospital Medical School

87 Illustrations. 12s. 6d. *(Ready end of this month)*

Correlates structure and function and emphasises the essential interdependence of Anatomy and Physiology.

DIETS FOR DIABETES

arranged in MENU FORM

By G. E. BEAUMONT, D.M., F.R.C.P.
Physician to the Middlesex Hospital.

56 Pages. 2s.

Offers the patient the easiest method of selecting meals which suit both his appetite and his taste, and does away with the necessity of working out equivalent food values from tables.

THREE NEW EDITIONS

DISEASES OF THE EYE

By SIR JOHN HERBERT PARSONS, *C.B.E.*, D.Sc., F.R.C.S., F.R.S.
Consulting Ophthalmic Surgeon, University College Hospital, London.

New (9th) Edition. 21 Plates, 20 in Colour, 360 Text figures. 18s.

This favourite book gives details of new drugs and new methods of treatment.

A TEXTBOOK OF SURGICAL PATHOLOGY

By C. F. W. ILLINGWORTH, M.D., F.R.C.S.Ed. and B. M. DICK, M.B., F.R.C.S.Ed.
Lecturers in Clinical Surgery, University of Edinburgh.

New (3rd) Edition. 299 Illustrations. 36s.

Thoroughly revised and brought up to date. Includes much new material.

SURGICAL NURSING AND AFTER-TREATMENT

By H. C. RUTHERFORD DARLING, M.D., M.S., F.R.C.S.
Surgeon, Prince Henry Hospital and New South Wales Hospital, Sydney, N.S.W.

New (6th) Edition. 206 Illustrations. 9s.

Carefully revised throughout. Incorporating much new matter and several new illustrations.

104 GLOUCESTER PLACE, LONDON, W.1

WRIGHT'S PUBLICATIONS

EMERGENCY SURGERY

By HAMILTON BAILEY, F.R.C.S. (Eng.). Third Edition. Fully Revised. Large 8vo. 812 pp. With 816 Illustrations, a large number of which are in colour. 30s. net; postage 8d.

Forms a reliable guide, and the author merits praise for the high standard which is consistently maintained. —THE LANCET

DEMONSTRATIONS OF PHYSICAL SIGNS IN CLINICAL SURGERY

By HAMILTON BAILEY, F.R.C.S. (Eng.). Sixth Edition. Fully Revised. 296 pp. With 338 Illustrations, some of which are in colour. 21s. net; postage 6d.

"It fully maintains the very high standard of its predecessors. —BRITISH JOURNAL OF SURGERY

A MANUAL OF PRACTICAL OBSTETRICS.

By O'DONEL BROWNE, F.R.C.P.I. Large 8vo. 370 pp. With 12 Plates, some in colour, and 236 Illustrations. 20s. net; postage 6d.

The author displays throughout a sound understanding, and the book may be recommended to all who are studying obstetrics. —THE LANCET

CYSTOSCOPY AND UROGRAPHY.

By JAS. B. MACALPINE, F.R.C.S. Second Edition. Large 8vo. 490 pp. With 14 Coloured Plates and 297 Illustrations. 30s. net; post age 7d.

There can be no doubt that this book can be looked upon as the best work in the English language dealing with Cystoscopy and Urography. —MEDICAL PRESS AND CIRCULAR

Bristol: JOHN WRIGHT & SONS LTD **London: SIMPKIN MARSHALL LTD**

No underwear is comfortable which in any way irritates the skin—nor is it healthful. DR. DEIMEL UNDERWEAR is soft, soothing and agreeable to the most sensitive skin. The garments are made of a two-ply composite thread of vegetable origin woven in a porous manner, providing a calm layer of air around the body. A change into DR. DEIMEL UNDERWEAR may be made at any time. It is a change for the better and cannot be made too soon.

Can be washed in boiling water for sterilization without injury.

Dr. Deimel "DEIMELIN" Underwear
BRITISH MADE

Please write for full particulars of this remarkable Underwear

DEIMEL FABRIC COMPANY, 99, NEW BOND ST., LONDON, W.1

NEW AND RECENT BOOKS

VOLUME I Pp xii — 590 With 398 Illustrations Crown 4to 50s net
VOLUME II Pp xii — 456 With 307 Illustrations Crown 4to 42s net

It is hoped that Vol III will be ready in a few months

A TEXT-BOOK OF X-RAY DIAGNOSIS

BY BRITISH AUTHORS

Edited by

S COCHRANE SHANKS M D M R C P PETER KERLEY M D M R C P D M R E,
E W TWINING M R C S M R C P, D M R E

LIST OF CONTRIBUTORS

S I BAKER I h D M Sc M P C S
H C I CAIRNS M A F R C S
J CAMBELL COLDING M B Ch M D M R E
L DUFF CRAY M A M D D M P E
H h GI AHAM HODGSON C V O F I C P D M P E
DONALD HUNTER M D F R C P
J H JUPE B A M R C S L R C P D M P F
PETLP KERLEY M D M R C P D M R E
C JENNINGS MAPSHALL M D M S F I C S
RUSSELL J REYNOLDS C B E M B B S D M P E
R E ROBERTS M D D M R E
S COCHRANE SHANKS M D M P C P
CECIL C TEALL M B Ch B
T [illegible] S L P C P D M P E
E M P C P D M P E
E D M R C P D M P E
J M C F R C S F C O G
H M WOLFF M R C S L R C P L D S D M R E

This excellent text book will be welcomed th illustrations are well cho en and the reproduction o good that all the points referred to in the t xt are clearl visible there can be no reason to await comple n before prophe ing its earl reco nition as a classic —LANCET

Prospectus of the work, with a Summary of Contents Specimen Pages and Order Form, post free on application

JUST PUBLISHED FOURTH EDITION, THOROUGHLY REVISED AND ENTIRELY RESET

With 55 more illustrations and many new figures

Demy 8vo With 515 Illustrations of which 109 are coloured 28s net postage 1d (Abroad 1s 6d)

A SHORT PRACTICE OF SURGERY

By HAMILTON BAILEY, F R C S Eng, Surgeon, Royal Northern Hospital London etc and R J McNEILL LOVE, M S Lond F R C S Eng, Surgeon Royal Northern Hospital London etc

Extract from the Preface —A new feature of this edition is the inclusion of brief historical notes we feel that they will add to the reader's interest and that names otherwise meaningless will assume some personality

SECOND EDITION Thoroughly Revised With 9 Coloured Plates and 102 Black and White Illustrations including 8 Plates Royal 8vo 28s net postage 6d

THE PRINCIPLES AND PRACTICE OF RECTAL SURGERY

By W B GABRIEL, M S F R C S, Surgeon, St Mark's Hospital for Cancer Fistula and other Diseases of the Rectum and Royal Northern Hospital, etc

one of the best accounts of Rectal Surgery in the English language It has *the merit of being complete yet not too long* it is *practical up to date* and rational in outlook —LANCET

SECOND EDITION, WITH REVISIONS AND ADDITIONS

TREATMENT IN GENERAL PRACTICE

THE MANAGEMENT OF SOME MAJOR MEDICAL DISORDERS

ARTICLES REPUBLISHED FROM THE BRITISH MEDICAL JOURNAL

VOLUME ONE With Illustrations Demy 8vo 8s 6d net postage 6d
Diseases of the Respiratory Tract Acute Specific Fevers Cardio Vascular Diseases

VOLUME TWO With Illustrations Demy 8vo 10s 6d net postage 6d
Diseases of the Nervous System Diseases of the Digestive System Some Diseases of the Blood Rheumatic Diseases Metabolic Diseases Diseases of the Kidney

It is a good idea to keep these useful collections up-to-date and they will continue to serve practitioners who see concise and well balanced sketches of methods of treatment —LANCET

RECENTLY PUBLISHED With 14 Plates including 24 Figures Demy 8vo 7s 6d net postage 6d

ARTHRITIS, FIBROSITIS AND GOUT

By C W BUCKLEY, M D F R C P

Physician Devonshire Royal Hospital for Rheumatic Diseases Buxton and the Buxton Clinic etc

a most complete and concise handbook provides the information which the practitioner requires —PRACTITIONER

Lewis's Publications are obtainable of all Booksellers

London H K LEWIS & Co Ltd, 136 Gower Street, W C 1

OXFORD MEDICAL PUBLICATIONS

Some Recent Comments by Reviewers:—

A TEXT-BOOK OF NUTRITION.
By **J A NIXON** and **D G C NIXON** 7s 6d net
"Supplies the need for a well-balanced general introduction to the modern conception of nutrition and dietetics"—THE LANCET

A SURVEY OF CHRONIC RHEUMATIC DISEASES. 18s net
"A splendid contribution to the literature of the subject"—MEDICAL WORLD

COLLECTED PAPERS ON TUBERCULOSIS. By **Sir ROBERT PHILIP** 21s net
'To read this book is an inspiration"—BULLETIN OF THE NATIONAL TUBERCULOSIS ASSOCIATION

DIXON'S MANUAL OF HUMAN OSTEOLOGY.
Revised by **E B JAMIESON** 21s net
"A most valuable book"—BRITISH MEDICAL JOURNAL

ACTINOMYCOSIS. By **ZACHARY COPE** 15s net
'The medical profession should feel grateful to Mr Cope ... will become a standard reference book for many years to come"—MEDICAL PRESS AND CIRCULAR

BIOLOGICAL STANDARDIZATION. By **J H BURN** 21s net
Establishes the author in the front rank of workers who enjoy an international reputation"—GLASGOW MEDICAL JOURNAL

HEART DISEASE AND PREGNANCY.
By **CRIGHTON BRAMWELL** and **E A LONGSON** 8s 6d net
'It is no wonder that, in a foreword, Sir Ewen Maclean congratulates the authors on a very notable and welcome addition to literature"—CLINICAL JOURNAL

THE SCIENTIFIC BASIS OF PHYSICAL EDUCATION.
By **F W W GRIFFIN** 7s 6d net
'Opportune ... cordially to be recommended"—WEST LONDON MEDICAL JOURNAL

THE PHYSIOLOGY of the KIDNEY. By **HOMER W SMITH** 15s net
The most important work on the subject since Cushny's 'Secretion of Urine'"—BRITISH MEDICAL JOURNAL

HENNING'S TEXT-BOOK OF GASTROSCOPY.
Translated by **H W RODGERS** 7s 6d net
Everything relevant to the subject has been included ... clear, lucid ... beautiful illustrations"
ST BARTHOLOMEW'S HOSPITAL JOURNAL

Oxford University Press
AMEN HOUSE, WARWICK SQUARE, LONDON, E.C.4

NEW EDITIONS OF TWO FAMOUS BOOKS

JUST READY!—Norris & Landis on Chest Diseases and Physical Diagnosis

Remade New (6th) Edition—In this successful book on *Diseases of the Chest and the Principles of Physical Diagnosis* you will find detailed discussions of inspection palpation percussion and auscultation—their *technique and application* in the diagnosis of diseases of the chest More than that complete chapters are included on the use of the electrocardiograph and of the X ray

Then the authors devote *two extensive sections* to Diseases of the Bronchi Lungs Pleura Diaphragm and Diseases of the Heart Causes morbid anatomy the symptomatology physical signs and the methods of eliciting them as well as other important data that contribute to more specific and accurate diagnoses are given full consideration

The *New (6th) Edition* represents the most severe revision ever given this book The discussions of bronchial asthma bronchiectasis lung abscess and cystic disease relations of nasal and accessory sinus disease to infections of the lower air tract the chapter on coronary disease and that on the electrocardiograph have been *completely rewritten* The chapter on X ray diagnosis of the heart and great vessels is *entirely new* and there has been extensive revision of hypertensive heart disease functional tests of the circulation with venous pressure and many other subjects There are 477 illustrations

By Charles W Norris MD formerly Professor of Clinical Medicine in the University of Pennsylvania Revised with the assistance of Seth S Ireland MD Assistant Professor of Medicine and Head of the Department of Physical Diagnosis in the University of Pennsylvania With chapters on the *Fundamentals of Physical Examination of the Chest* by Charles M Mast MD formerly Instructor in the Department of Medicine in the University of Pennsylvania and chapter on the *Electrocardiograph* by Thomas M McMillan MD Chief Cardiologist to the Philadelphia General Hospital Octavo of 1070 pages with 477 illustrations Cloth 42s net

JUST READY!—DeLee's Principles and Practice of Obstetrics

Just Off Press—In revising his book for the *New (7th) Edition* Dr DeLee scrutinized every page to make sure that no new and important fact was omitted He has added *new material and new illustrations* throughout the work In fact, so thoroughly did he revise the work to bring it right up to date that *the entire book had to be reset*

The new procedures and new treatments are of course included such as the use of scalp traction (Willett's) forceps in placenta praevia and the sulphanilamide treatment of puerperal sepsis New material on contracted pelvis has been added including today's methods of treatment The discussion of the mechanism of labour has been given special attention as have those on the physiology of menstruation ovulation of the ovum blood chemistry of the toxaemias of pregnancy the barbiturates and anaesthesia and many other subjects of specific importance

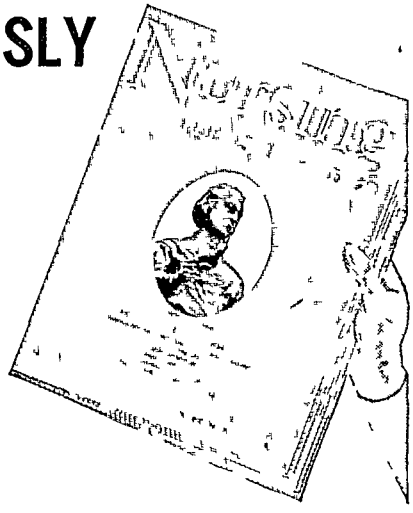
On physiology and pathology on signs symptoms biologic tests on the hygiene of pregnancy on prenatal care conduct of labour on the management of diseases incident to pregnancy and particularly on *operative and non operative measures* Dr DeLee writes fully and in detail Nothing is left to chance nothing to inference—*he tells you what to do when and how to do it*—gives you such guidance that is as authoritative as it is specific because it is based on an experience of many years as teacher and practising specialist The *New (7th) Edition contains* 1,277 *magnificent pictures on* 985 *figures including* 271 *in colours*

By Joseph DeLee AM MD Professor of Obstetrics and Gynecology Emeritus at the University of Chicago Octavo of 1277 pages with 1277 beautiful illustrations on 985 figures including 271 in colour 50s net

SAUNDERS' NEW ILLUSTRATED CATALOGUE—POST-FREE ON REQUEST

W B SAUNDERS COMPANY, LTD, 7, Grape Street, London, W C 2

FOR NURSES WHO TAKE THEIR CAREERS SERIOUSLY



The new nursing weekly

THERE may still be nurses who are content merely to wash patients, make beds, take temperatures, and blindly follow instructions But not many

The modern nurse takes her job seriously—brings all her intelligence to bear upon it She wants to understand the whys and wherefores of the treatments she gives She wants to keep abreast of every development affecting her work

For such women Nursing Illustrated is designed Every week leading nursing, medical and surgical authorities will bring you the latest information on every topic interesting to nurses Not in dull academic lectures, but in simply written language with copious illustrations

Whilst essentially a professional paper, Nursing Illustrated brings the same modern outlook to off-duty activities Regular features include lively articles on pastimes, fashion, needlework, books—all fully illustrated—together with competitions and a short story From all newsagents

CONTENTS No. 2 INCLUDES

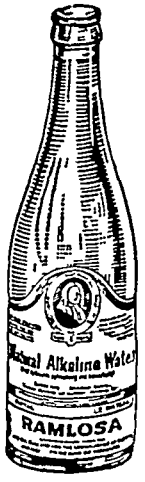
Practical Nursing—Thyroidectomy
Anatomy & Physiology—The Kidneys
Clinical Demonstration—Goitre
The Nurse in the Witness Box
The Interpretation of X-rays—Colle's Fracture.
Notable Names—Spencer Wells Forceps
Examination of the Tongue
The Pathological Museum—Cancer of the Liver
The Brighton Poisoning Case
Midwifery—Ante-Natal Care.
Diet
And Off-Duty Features

OUT EVERY FRIDAY 2D

THE SWEDISH ALKALINE TABLE WATER

RAMLÖSA

Supplied by Special Warrant to H M the King and H R H the Crown Prince of Sweden and also to H M the King of Denmark



50 years' reputation
For Medicinal and Table Use

This famous natural water contains practically no lime or iron, and so does not affect the hydrochloric acid in the gastric juice Ramlosa considerably increases the amount of urine and is therefore indicated in the treatment of diabetes, rheumatism, gout, kidney disorders, etc

ANALYSIS (per litre)
Sod Bicarb 53 gm Pot Bicarb 0003 gm Sod Chlor 041 gm Potass Sulph 0003 gm Mag Carb 0016 gm Silicon Ox 006 gm Protoxide of Iron 000015 gm

Retail Prices (per dozen)
Large, 13/ Small, 9/ Splits, 7/

Supplied by Army & Navy Stores Selfridges Harrods Barkers and the Trade generally

SAMPLE BOTTLE FREE ON REQUEST

Sole Agent in Gt Britain
COL DRAGE, CRICCIETH

Sole Wholesale Distributors
GRAM & ROYLE LIMITED, 45 Belvedere Road S E 1

RA 2

OF MEDICAL INTEREST

This brilliant novel, by the author of "The Doctor's Defence," gives the truth about Quackery, and should be bought by every doctor and read by every patient

QUACKS' PARADISE

by SIDNEY FAIRWAY

Telling the truth in the pleasant garb of fiction the author strips quackery of its trimmings and reveals it naked and unashamed "Quacks' Paradise" should create wide interest amongst the medical profession

Entertaining."—*Sunday Times*
Topical and Entertaining."—*Public Opinion* "A very readable novel."—*Daily News (Camb)*

Obtainable at all libraries and booksellers 7/6 net

STANLEY PAUL

PUBLICATIONS
of the BRITISH MEDICAL ASSOCIATION

A General Medical Service for the Nation
50 pp 8vo FREE ON APPLICATION

Medical Insurance Practice
By R W Harris and Leonard Shorten Sixth Fourth Edition January 1937
Price 2s post free

Medical Practitioners Handbook
23 pp 8vo Price 3d post free

Report of Committee on Nutrition
48 pp 8vo Price 6d post free

Facts about Small Pox and Vaccination
(Revised Edition 1934)
34 pp Price 2d post free

The Doctors Cookery Book
50 pp 8vo Price 4d post free

Report of Committee on Immunization including Vaccination
35 pp 8vo Price 6d post free

Report of Committee on Tests for Drunkenness
20 pp 8vo Price 2d post free

Report of Special Committee on the Relation of Alcohol to Road Accidents
10 pp 8vo Price 2d post free

Relationship of the Private Practitioner to the Treatment of Mental Disability
7 pp 8vo Price 6d post free

Report of Mental Deficiency Committee
2 pp 8vo Price 1s post free

The Essentials of a National Medical Service
16 pp 8vo Price 2d post free

Hospital Policy
40 pp 8vo Price 3d post free

Problem of the Out Patient
10 pp 8vo Price 2d post free

Report of Committee on the Diagnosis and Certification of Miners Nystagmus
16 pp 8vo 3d or 25 6d per doz post free

Report of Committee on Fractures
3 pp 8vo 4d or 3 6d per doz post free

The Osteopaths Bill
Report of the Proceedings before a Select Committee of the House of Lords
176 pp 8vo Price 1s 3d post free

Report of the Psycho Analysis Committee July 1929
24 pp 8vo Price 3d post free

Report of Committee on Physical Education
6 pp 8vo 6d or 55 6d per doz post free

National Maternity Service Scheme for England and Wales
18 pp 8vo Price 3d post free

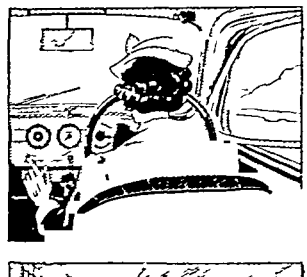
B M A. Model Forms (No 1) for Doctors use when sending a patient to Hospital
Price 1s per 100 post free

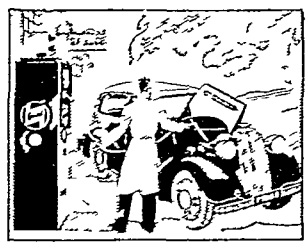
B M.A. Model Forms (No 2) for use of Hospital when Patient attends without a Doctor's Letter
Price 6d per book of 50 forms

British Medical Association, B M A House, Tavistock Sq, London W C 1

"FREER STARTING— AND EASIER RUNNING" writes VAUXHALL







"Vauxhall cars are designed to run on lighter oils all the year round in order to reduce petrol consumption and cylinder wear

"In addition, lighter oils give freer starting and easier running therefore we recommend all Vauxhall owners to use an oil which is light when cold and tough when hot—in summer as well as winter

VAUXHALL OFFICIALLY APPROVE PATENT CASTROLITE
for 1937-8 models and
PATENT CASTROL XL
for earlier model

WAKEFIELD PATENT
Castrol
LIGHTER OILS
LIBERATE POWER

C C WAKEFIELD & CO LTD *All British Firm* CHEAPSIDE LONDON E C 2

'The days are drawing in' — but

YOU CAN SAIL INTO SUMMER NEXT JANUARY!



STRATHMORE • JAN. 14 • 32 days
VICEROY OF INDIA • JAN. 20 • 46 days

TO THE SPANISH MAIN • SOUTH AMERICA • WEST & SOUTH AFRICA
TRISTAN DA CUNHA ST HELENA

STRATHMORE • **FARES FROM 64 GNS.**
VICEROY of INDIA • **FARES FROM 92 GNS**



P&O *Winter* **CRUISES**

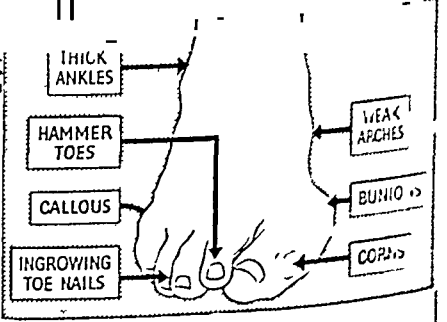
Apply
14 COCKSPUR STREET SW1
130 LEADENHALL STREET EC3
AUSTRALIA HOUSE WC2
OR AGENTS

FOOT COMFORT

By wearing

'APTERNA' HEEL-LESS SHOES

These shoes are designed in the common-sense knowledge that the majority of foot troubles are due in large measure to faulty footwear which aggravates the trouble and does not permit the natural exercise and freedom which is essential to foot health



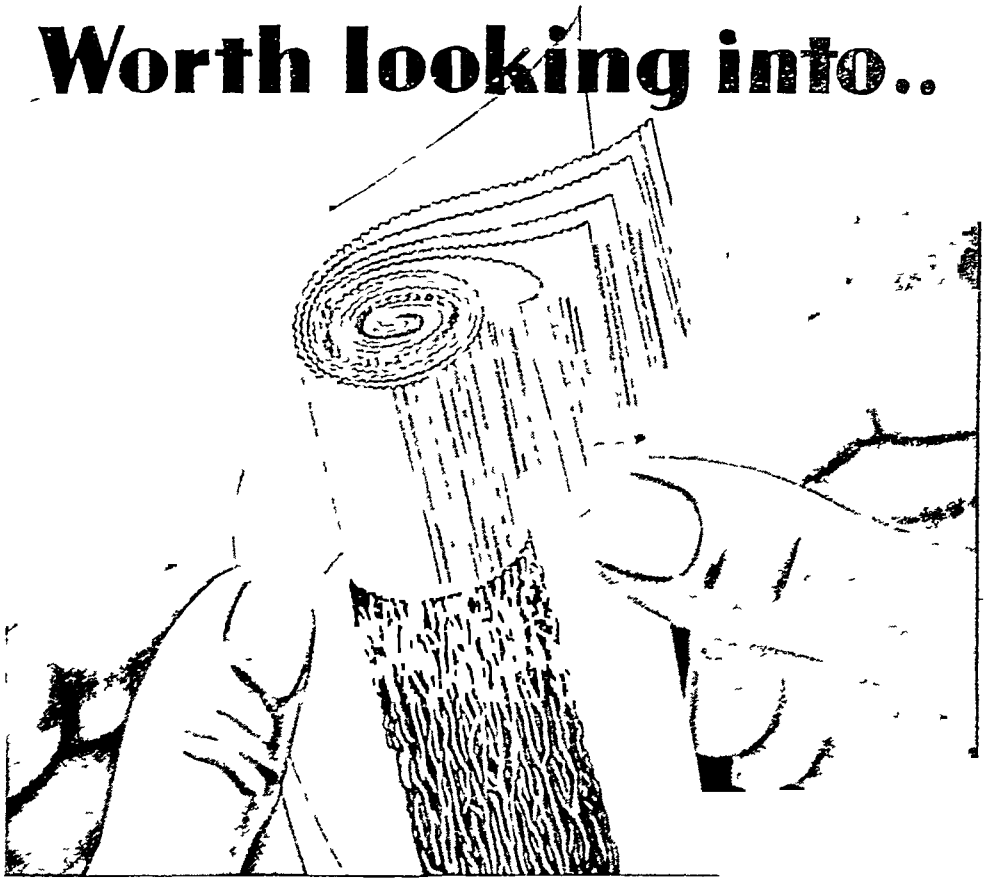
Any of the common foot ailments mentioned in the above diagram can be successfully prevented and relieved by prescribing the correct cries of "Apterna" Heel less Shoes

Apterna" Shoes are available for men, women and children

Charles H. Baber

LANGHAM HOUSE, UPPER REGENT ST, W1

Worth looking into..



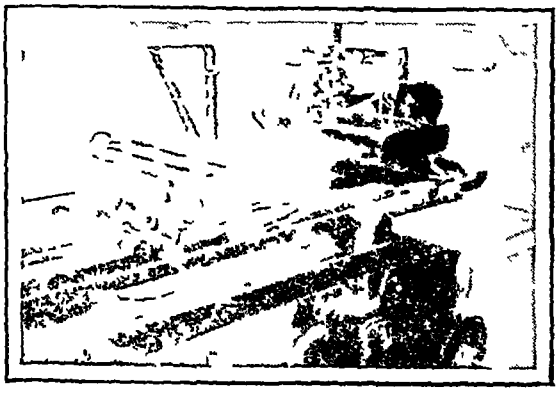
Inside the du Maurier filter tip there are five closely rolled layers. Two of cellulose fibre have been carefully interleaved with three of pure white vegetable tissue This allows the full flavour of Virginia tobacco to pass the lips, but keeps out the bits of tobacco and other irritants That's why sensitive throats are so safe with "du Maurier" (either cork tipped in the red box or plain tipped in the blue box)

du MAURIER

the perfect cigarette with the exclusive filter tip

TEN FOR SIXPENCE—TWENTY FOR ONE SHILLING

THE IMPORTANCE OF PRECISION POLISHING



Precision Automatic Polishing in one operation of twelve catgut strands each 10 feet in length

In order to obtain uniformity of calibre and complete roundness of strand along its entire length, A & H Catgut is polished by automatic machinery

Hand polishing of individual strands fails to obtain this desirable precision and uniformity in the production of surgical catgut strands

One of the modern advantages incorporated in the production of A & H Catgut

The entire product manufactured in England

A descriptive booklet will be sent on application

A & H CATGUT

AZOULE BRAND Ministry of Health Manufacturing Licence 6 B

Allen & Hanburys Ltd., London, E.2 *Manufacturers of Surgical Instruments and Appliances Sterilized Surgical Sutures Hospital Furniture and Electro Medical Apparatus*

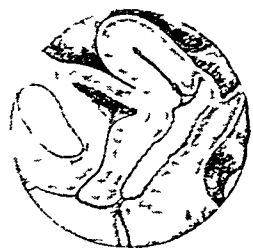
Showrooms 48 WIGMORE STREET, LONDON, W 1

MAWMAWMAWM

A doctor's adaptation of the medical tampon to Menstrual Hygiene

TAMPAX ★ SANITARY PROTECTION WORN INTERNALLY

The efficacy and safety of the vaginal tampon for the purpose of absorbing cervical discharges at the site are recognised by every doctor Realising that the application of the same principle to menstrual hygiene would spare the patient much local discomfort and minimise risk of infection, a physician designed an adaptation of the vaginal tampon for regular monthly use Tampax is its perfected form



Tampax is made of long fibred surgical cotton wool, which has been sterilised and highly compressed Each tampon is individually sealed within its own patented applicator which enables every user to insert it in the proper position without contact with the hands It is removed simply by means of a cord sewn through the cotton wool by an exclusive stitching process which makes disintegration impossible

Each tampon has an absorption capacity of 1-1½ ounces As it absorbs the fluids, the tampon opens gently to a soft mass, comfortably adapting itself to the size and form of the vaginal walls Irritation and chafing are thus eliminated As the tampon is contained in the vagina away from contact with the urethra, contamination from this source is minimised Infections of rectal origin are likewise avoided

Tampax ensures the maximum cleanliness and comfort, and affords complete protection Tampax may confidently be recommended for use by married women during normal menstruation Its use by unmarried girls should not be advocated when the size of the hymeneal aperture would cause difficulty in insertion and withdrawal

We will be glad to send doctors a full size package of Tampax, together with a folder giving more details on request to Tampax Ltd, 10 Bolton Street, London, W 1

TAMPAX

Regd Trade Mark

Similar Names — Dissimilar Properties

In scope and character 'Benzedrine' Tablets and 'Benzedrine' Inhaler are completely different

SAFEGUARDED

'Benzedrine' TABLETS—The tablets contain the SULPHATE of β-aminoisopropylbenzene (5 mg) and are administered orally

On and after January 1, 1939, they can be supplied only on the written authority of a registered medical practitioner or on the signing of the Poisons Register 'Benzedrine' Brand Tablets have a striking effect in stimulating the central nervous system and have proved of value in narcolepsy, post-encephalitic Parkinsonism, depressive and asthenic states, impaired mental efficiency, and gastro-intestinal spasm

UNRESTRICTED

'Benzedrine' INHALER.—This aluminium tube is packed with VOLATILE β-aminoisopropylbenzene, which possesses a decongestive potency greater than that of ephedrine

After careful examination, this Inhaler has been totally and authoritatively exempted from all restrictions of sale by the Poisons (Amendment) Rules, 1938 It is *perfectly safe*, even for young children, and is indicated for shrinking the nasal mucosa in head colds, sinusitis, nasal catarrh, hay fever, and asthma

Distributed by

MENLEY & JAMES, LTD, 64, HATTON GARDEN, LONDON, E.C.1

for Smith Kline and French Laboratories, owners of the Registered Trade Mark, 'Benzedrine'

WHY WAIT FOR INTRAVENOUS SOLUTIONS?



Baxter's Intravenous Solutions of Dextrose, Saline and Acacia are ready for use in the "Vacoliter" container in less than three minutes from stockroom to patient In "Vacoliters" Baxter's Solutions are always ready when you are ready to use them

Baxter's Intravenous Solutions in 'Vacoliters" make it possible for you to have Intravenous Solutions ready in any quantity and to keep them at the highest degree of purity, stability, sterility and of a constant pH value They cannot become contaminated because they are packed in a high vacuum and tightly sealed with a metal closure

Baxter's service of Intravenous Solutions in Vacoliters ' is unmatched, and is not more costly than your own product

JOHN BELL & CROYDEN

Wigmore Street, London, W.1.

DAY AND NIGHT SERVICE.

Sole Distributors in Great Britain for Baxter Laboratories Ltd 24, Conway Road, N.15

LIVOGEN

In conformity with the recent findings concerning the rôle of the Vitamin B complex in metabolism, Livogen has been modified so that it now includes an adequate dosage of —

VITAMIN B_1	(aneurin)
VITAMIN B_2	(lactoflavine)
VITAMIN B_6	(an anti-anæmic factor)
NICOTINIC ACID	(precursor of the P P factor)

as well as all the hæmatopoietically active principles of fresh liver

Livogen supplies, therefore, ample and balanced quantities of the principal essentials for health and vigour which are commonly lacking in the diet of convalescents, and corrects the ill-effects of partial or complete deficiency

Vitamin B_1 B D H, Lactoflavine B D H and Nicotinic Acid B D H are also issued separately for medicinal use

A sample of Livogen will be gladly sent on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

Lgm/S 61

CHLOROFORM

(DUNCAN)

PURE

PREPARED from ETHYL ALCOHOL

METHYLATED

PREPARED from INDUSTRIAL ALCOHOL

BLUE LABEL

(DUNCAN)

These three varieties are guaranteed to be absolutely pure according to the specifications of the British Pharmacopoeia They are the result of many years experience in the manufacture of anaesthetics and are recognized as the most reliable and perfect products offered to the medical profession

LITERATURE AND PRICES ON APPLICATION

DUNCAN, FLOCKHART & CO.

EDINBURGH and LONDON

104/8, Holyrood Road, 8 155/7, Farringdon Road E C 1

A DOCTOR DINES

Dealing with the psychology of dining in a recently published "Belly Book" a Fellow of the Royal College of Surgeons makes this interesting comment:—

"It is imperative that the articles most commonly wanted should be easy of access by everyone at table Bread, perhaps, is the most important"

Verb. sap.

Bread for Energy

CFH 482

Asthma

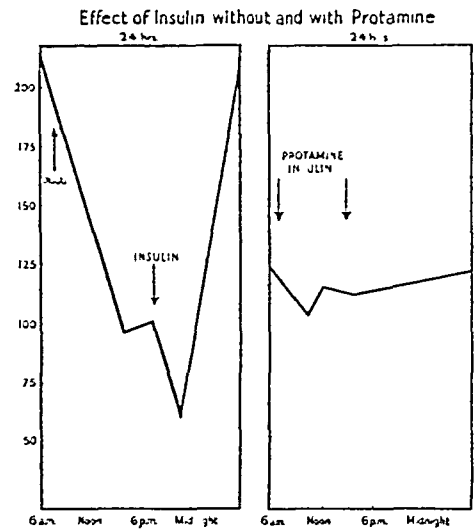
SUCCESSFULLY TREATED WITH SANABRONCHIN INHALANT AND RESPIROSAN TABLETS



Samples and Lite[illegible] request

FRANCIS RIDDEL LTD AXTELL HOUSE WARWICK ST LONDON W1

'A.B.' PROTAMINE INSULIN
BRAND *(with zinc)* SUSPENSION



The absorption of insulin injected in the form of A B Brand Protamine Insulin (with Zinc) Suspension is much prolonged and closely resembles the natural secretion of the pancreatic islets This insulin has a steady action and exerts a better control than that of ordinary insulin over the carbohydrate metabolism The number of injections can be reduced a lower total dosage is usually necessary and the subjective symptoms of diabetes markedly improve

40 units per c cm
5 c cm (200 units) 2/4
10 c cm (400 units) 4 6

80 units per c cm
5 c cm (400 units) 4,6

INSULIN 'A B was the first British insulin offered commercially to the medical profession and has a world wide reputation for its strictly safeguarded sterility, its carefully standardised strength its freedom from toxic reactions and its stability in hot climates

Full particulars will be sent free to members of the Medical Profession

Joint Licensees and Manufacturers
ALLEN & HANBURYS LTD
THE BRITISH DRUG HOUSES LTD

Now obtainable for infant feeding . . .
HOMOGENISED
Fruits and Vegetables
supplied by
NESTLÉ'S



Nestles, experienced in the production of Infant Food, are now able to supply the new HOMOGENISED fruits and vegetables Homogenisation breaks down the cell walls of these foods and not only releases more nourishment, but eliminates all possibility of cellulose fibres irritating the digestive tract Nestle's Homogenised Fruits, Vegetables and Soup can be added to the diet without any digestive disturbances too often experienced when the milk diet is first supplemented A further advantage of these Homogenised foods is that all their "bulk" is retained and has been found a healthy aid to elimination

Free supplies of Nestles Homogenised Fruits, Vegetables and Soup will be sent, together with an interesting booklet about the recent clinical tests, on receipt of the coupon below

Please send me full details of Nestlé's Homogenised Fruits, Vegetables and Soup, together with a gratis supply for clinical trial

Name

Address

To Messrs Nestlé's Milk Products Ltd. (Dept. J23) 6 & 8 Eastcheap London E C.3

Copyright

FOR EFFECTIVE CONTROL OF PAIN

AMONG the many and diverse analgesics which have been evolved by modern chemical research acetyl salicylic acid retains its reputation as one of the safest and most effective Its tendency to liberate salicylic acid—the irritant properties of which are well known to physicians—has however, caused many to hesitate to employ it as widely as it deserves Exhaustive trial in hospital and private practice proves that Alasil definitely solves the problem of administering acetyl salicylic acid in an effective form being free from the risk of irritating the stomach or bowels or of causing general reactions

A supply for clinical trial with full descriptive literature sent free on request

In 'Alasil" the desirable therapeutic effects of acetyl salicylic acid are well exhibited by its calcium acetyl salicylate moiety while the presence of Alocol' (Colloidal Hydroxide of Aluminium) a powerful gastric sedative and antacid obviates any tendency to gastric irritation The superior absorbability of "Alasil over ordinary salicylate compounds and its freedom from the risk of liberating free salicylic acid in the stomach have been well proved by careful experimentation Alasil' can be prescribed with perfect safety to patients of all ages and in larger doses than ordinary salicylate compounds

A WANDER, Ltd, Manufacturing Chemists
181, Queen's Gate, London, S W 7

Laboratories and Works KINGS LANGLEY HERTS

ALASIL

M 68

Nutrition and Public Health

'The importance of the new knowledge of nutrition as a factor in public health" **is emphasised in the Annual Report of the Ministry of Health (1937 8) So also is** *"the importance of discrimination in the selection of those [foods] which are more valuable for their growth promoting and protective qualities '*

MARMITE

is known to be exceptionally valuable for its growth-promoting and protective qualities

Marmite is an autolysed extract of fresh brewers yeast It is rich in vitamin B_1 and the B complex and provides principles of special efficacy in the treatment of certain forms of anaemia Marmite is prescribed extensively in private practice and in hospitals school and welfare centres

Sample and literature on request

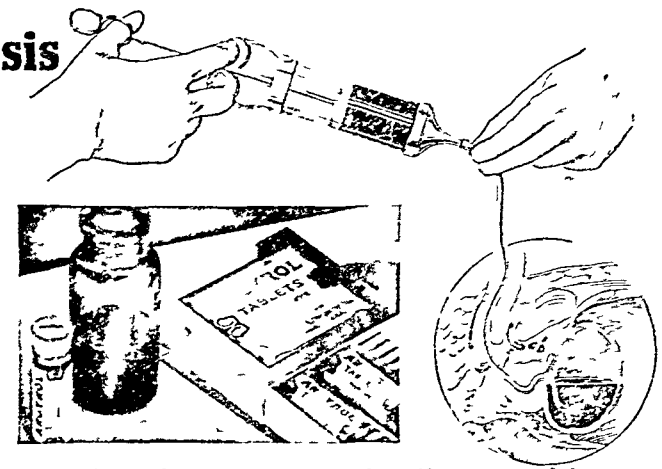
THE MARMITE FOOD EXTRACT CO LTD
Wigmore House Wigmore Lane - London E C 3

★

Vesical Neck Fibrosis

ARGYROL

BRAND SILVER VITELLIN



Urologists are generally agreed that vesical neck fibrosis or median bar is a late sequel of prostatic or perivesical inflammation which frequently responds to conservative non-operative measures. Prostatic massage, dilatation, instillations of 10-20 per cent. Argyrol solution in the bladder and special attention to possible remote foci of infection often suffice to afford relief and thus prevent the otherwise inevitable resection or prostatectomy.

Argyrol is especially useful in the infected bladder which generally accompanies the fibrosis because of its unique sedative and bacteriostatic properties. The irritable bladder with its distressing symptoms usually make a strikingly quick response to the soothing influence of Argyrol and soon functions normally without pain or distress. Chemically different from all other silver products, Argyrol although it is a mild silver protein in fact the prototype of all silver proteins is in a class by itself—*sui generis*. It has never been duplicated and it is the only silver salt which does not tend to become irritating with increased concentrations.

Insistence on having the name ARGYROL on all solutions ordered or prescribed will ensure the clinical results you expect.

Sole Distributors

FASSETT & JOHNSON, LTD.,

86, Clerkenwell Road, London, E.C.1.

THERE IS ONE AND ONLY ONE "ARGYROL," MADE ONLY BY: A. C. BARNES COMPANY SOLE MAKERS OF ARGYROL AND OVOFERRIN

HEPARIN B.D.H.

(500 *units per milligramme*)

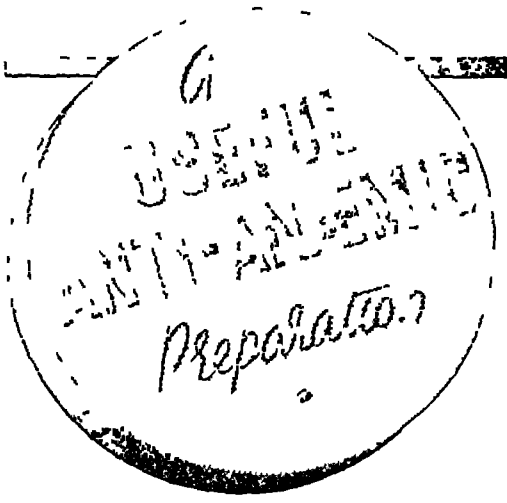
HEPARIN, the anti-coagulant prepared from liver and issued by The British Drug Houses Ltd., is a highly-purified product possessing an activity of 500 units per milligramme. It has been prepared in co-operation with Dr. E. Jorpes of Stockholm, and is available in ½ per cent., 1 per cent. and 5 per cent. solutions for use in blood transfusions and for intravenous injection in cases of thrombosis. It is available also in the form of heparinised tubes, each containing 1 mg., for the collection of blood samples.

Literature on request

THE BRITISH DRUG HOUSES LTD LONDON N.1

Telephone: Clerkenwell 7000. Telegrams: Tetradome Telex London.

Hep/5/1



THE AQUEOUS EXTRACT
MOST SIMILAR TO WHOLE LIVER

● Eight years of clinical use attest to the potency of Solution Liver Extract Valentine. This concentrated aqueous extract contains both the Whipple fraction for secondary anæmia and the Cohn-Minot principle for pernicious anæmia. It is rich in Vitamin B.

One tablespoonful is derived from lb of whole liver

8-oz. Bottles 11'6

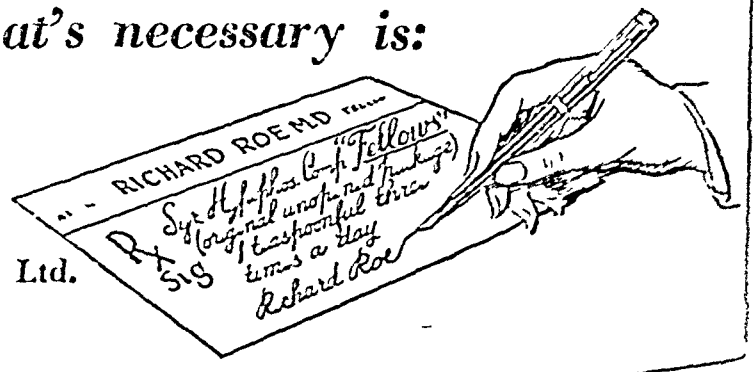
Sample and abstracts of published articles showing clinical response sent on request. Apply British Distributors

BUTLER & CRISPE,
80/84, Clerkenwell Road, London, E C 1

Specify Solution LIVER EXTRACT·VALENTINE

WHEREVER and WHENEVER
MINERAL METABOLISM
is important,
the hydrogen-ion balancing qualities of
Compound Syrup of Hypophosphites
TRADE **"FELLOWS"** MARK
have a distinct and important place.

All that's necessary is:



Samples on request

Fellows Medical Mfg. Co., Ltd.
286 St Paul Street West
Montreal, Canada

OESTROFORM

For Rapid Relief of Menopausal Symptoms

Oestroform, being an ester of the pure oestrogenic hormone, possesses a specific action in the treatment of symptoms associated with the menopause

MILD CASES OF MENOPAUSAL DISTURBANCE

rapidly respond to the oral administration of Oestroform tablets An initial dose of 10,000 international units three times daily is recommended, and this is reduced to one of 1000 international units three times daily immediately the symptoms have been brought under control

SEVERE CASES OF MENOPAUSAL DISTURBANCE

require an injection of Oestroform 20,000 international benzoate units (in advanced cases 50,000 international benzoate units) twice weekly Again the dose is reduced immediately the symptoms abate, and the optimum dosage by oral administration of tablets that is necessary to keep the symptoms in abeyance is determined

Literature on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

SHor/S/43



PHOTOGRAPHED JULY 29 1938



PHOTOGRAPHED NOVEMBER 4 1937

PSORIASIS

- **21 Years' Resistance to Treatment**
- **Terminated in under 4 months with**

BELZEMA

BRAND OINTMENT

The case here illustrated is typical of hundreds in our files, which cover disorders such as ECZEMA PSORIASIS RINGWORM ACNE DANDRUFF, ALOPECIA

BELZEMA Ointment and BELZEMA Soap together constitute a local treatment with a long record of consistent success

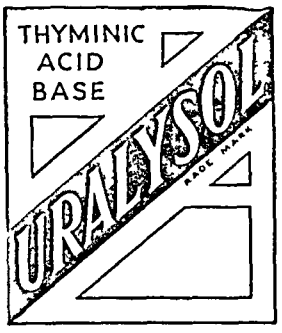
BELZEMA ointment is readily absorbed It is non-staining, non-greasy quickly allays itching, possesses antiseptic and anti parasitic properties, and requires NO BANDAGING

BELZEMA is a purely ethical product—its publicity is confined absolutely to the Medical Profession, and the fullest co-operation of the manufacturers and ourselves may be expected Samples for clinical trial sent to any Practitioner on request.

BROOKS & WARBURTON LTD,
232 VAUXHALL BRIDGE ROAD
LONDON S W 1

BELZEMA SOAP

cleanses and prepares the skin for the absorbtion of BELZEMA ointment - It is absolutely pure—contains no synthetic perfume—no artificial colouring—no free alkali —recommended for personal hygiene



FORMULA

Thyminic Acid	0 10
Hexamethylenetetramine Anhydromethylenecitrate	0 50
Hexamethylene Tetramine	2 50
Piperazine Tartrate	0 25
Lithium Carbonate	1 00
Sodium Benzoate	1 00
Effervescent Base	ad 100

DIRECTIONS

One teaspoonful to be taken morning and night in a tumblerful of water

Uralysol, in addition to being a solvent and eliminator of pathological Uric Acid, is a powerful urinary antiseptic.

Normally there exists in the body a certain quantity of uric acid, which assists general metabolism, and after it has played its part is eliminated together with the normal thyminic acid of the organism When, however, uric acid is present in excess, the body needs additional thyminic acid to supplement the resultant deficit of this normal solvent of uric acid

Uralysol, by its thyminic acid content, supplies the agent necessary to dissolve excessive uric acid

The next step is the elimination of this thyminic uric acid which, being in excess of normal, necessitates treatment by an agent capable of enhancing elimination

Uralysol, by its content of hexamethylenetetramine and lysidin, stimulates the organism to eliminate the pathological uric acid already dissolved by its thyminic acid content.

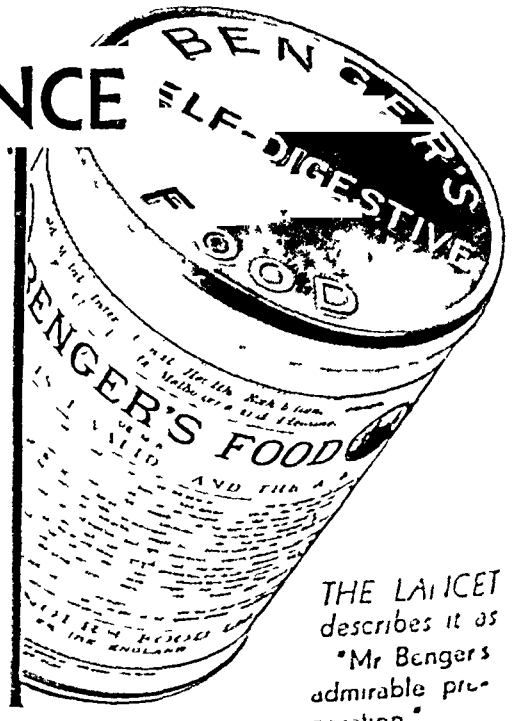
Samples and literature on request

CONTINENTAL LABORATORIES LTD. 30 MARSHAM STREET, LONDON, S W I

MILK INTOLERANCE

Benger's Food is devised to be used in conjunction with fresh cow's milk For many years it has been used by Physicians everywhere as a routine diet in gastric cases and in cases of milk intolerance In its composition Benger's differs from all other foods, e g, in addition to its base of specially treated wheaten flour it contains the two natural digestive principles — Amylase and Trypsin — in a latent state These exert their digestive powers during preparation The Amylopsin acts on the carbohydrates and gradually changes them into soluble sugars, while the Trypsin acts on the gluten of the flour, and on the proteins of the milk The prepared Benger's Food forms a fine soft flocculent curd in the stomach, in marked contrast to the large indigestible curd formed by milk *The extent of the digestion of Benger's Food can be varied to suit the digestive condition, and it is important to note that undigestion can never take place*

Benger's Food contains no preservatives It is palatable and free from rough irritant particles



THE LANCET describes it as "Mr Benger's admirable preparation"

BENGER'S Food

BENGER'S FOOD, LTD., Holmes Chapel, CHESHIRE

INDICATIONS FOR SANATOGEN No 13

APPENDICITIS

Diagnosis and Expectant Treatment.

At the Plymouth meeting of the B M A, it was pointed out that, in spite of surgical advances, 3,000 deaths from appendicitis are still annually registered in Great Britain Yet the mortality from operations for acute appendicitis before diffuse peritonitis has resulted is trivial The moral is obvious Once the diagnosis is reasonably established, immediate operation is desirable But early diagnosis is not always simple

The characteristic sequence of sudden abdominal pain, vomiting and tenderness in the right iliac fossa does not invariably occur, and thus a short period of expectant treatment is often forced on the surgeon

When there is even the slightest suspicion of appendicitis, it is agreed that complete rest in bed should be insisted on, as should the avoidance of aperients and of morphia Food should be reduced to the barest minimum, and it should be such as leaves no residue Even water should be taken in small quantities

Both during the days of expectant treatment, and during the period following symptom-subsidence or operation, 'SANATOGEN' has been found of great value 'SANATOGEN' is a carbohydrate-free product of ninety-five per cent pure milk casein with five per cent sodium glycerophosphate It is readily digested and absorbed, leaving no appreciable residue, and it is non-irritating to the intestinal mucous membrane

I have recently had good results with SANATOGEN in post operative cases One case in particular a hard working housewife supporting a large family right up to the time of her operation No holiday for several years and consequently little or no resistance and due for a severe reaction after a mild pelvic operation I put her on SANATOGEN before and after operation with I am convinced exceptionally good results —M D

I cannot speak too highly of your SANATOGEN I had a very severe abdominal operation about six years ago and for years I found I could not do without it I always slept better when I was taking it and still have it "— L R C P I & L M L R C S I & L M

I have recommended SANATOGEN to several patients who are suffering from nervous troubles and have given it to a patient who is convalescing after a serious abdominal operation The results obtained in this particular case are excellent and the patient expresses great satisfaction with SANATOGEN —M B Ch B

'SANATOGEN'

(Trade Mark)

A brand of Casein and Sodium Glycerophosphate

Sold by all chemists Price 2/6 to 10/9

DOSAGE For children and adult two teaspoonsful three times daily or according to circumstances For infant teaspoonful added to each bottle fed

Clinical samples and literature available on request to

GENATOSAN LTD, LOUGHBOROUGH, LEICESTERSHIRE

'ENTORAL'

TRADE MARK BRAND

ORAL COLD VACCINE

FOR PROPHYLACTIC IMMUNISATION TO RESPIRATORY INFECTIONS AND PARTICULARLY TO THE COMMON COLD

ISSUED IN PACKAGES OF 20 and 60 'PULVULES' brand filled capsules

---

ELI LILLY AND COMPANY LIMITED,

2, 3 and 4, DEAN STREET, LONDON, W 1

Distributing Agent in Britain for

ELI LILLY AND COMPANY, INDIANAPOLIS, U S A

GERMICIDAL EFFICIENCY maintained in the presence of organic matter.

In the conduct of labour 'Dettol' possesses marked superiority over carbolic and cresylic antiseptics. 'Dettol' has a Rideal Walker co-efficient of 3 0, yet 'Dettol' can be used at really effective strengths — without discomfort, danger or staining. 'Dettol' maintains high bactericidal efficiency in the presence of blood and other organic matter 'Dettol' is a clean, clear, non poisonous fluid — with a distinctly pleasant smell.

Sold by Chemists and Medical Suppliers in bottles 1/-, 1/ 3, 2/-, 3/-, 5/- and 7/6 and in larger sizes for Medical and Hospital use. The prices do not apply in Eire or Overseas. Samples and full information on request



'DETTOL' TRADE MARK THE MODERN ANTISEPTIC

[illegible] (PHARMACEUTICAL DEPARTMENT) HULL LONDON 40 BEDFORD SQUARE

Intestinal Disorders *consequent upon Bronchial Infection*

Partly owing to the considerable amount of sputum inevitably swallowed by the patient in bronchial affections (especially in children) disorders of the digestive organs may be produced

A suitable diet and a free daily evacuation tend to prevent these disorders

Andrews Liver Salt by its effervescence freshens the mouth (often so dry in bronchitis) and by its antacid reaction counteracts gastric catarrh By producing an easy evacuation, safe even in the presence of myocardial degeneration, it removes the organisms introduced by the swallowed sputum



ANDREWS
LIVER SALT

SCOTT & TURNER LTD
Works and Laboratories at Newcastle-on-Tyne

★ *N B —A large size tin will be sent free on request to any member of the medical profession*

especially designed for use in the treatment of
Pneumonia, Bronchitis, Pleurisy and similar
affections of the Chest and Lungs

"Gamgee Tissue" REGD TRADE MARK

PNEUMONIA
JACKET

Made from the superfine grade of Gamgee tissue made exclusively by Robinson & Sons Ltd. Chesterfield and reputed as the finest dressing for use in Thermal treatment. Invented by and prepared exactly according to the direction of the late Sir Joseph Gamgee F.R.S.E. Consulting Surgeon to the Queen's Hospital, Birmingham. Made in one size. 9½d to 3/- Obtainable from all Chemists

SOLE PROPRIETORS & MANUFACTURERS ROBINSON & SONS LTD OF CHESTERFIELD & 168 OLD ST, LONDON, E.C.1

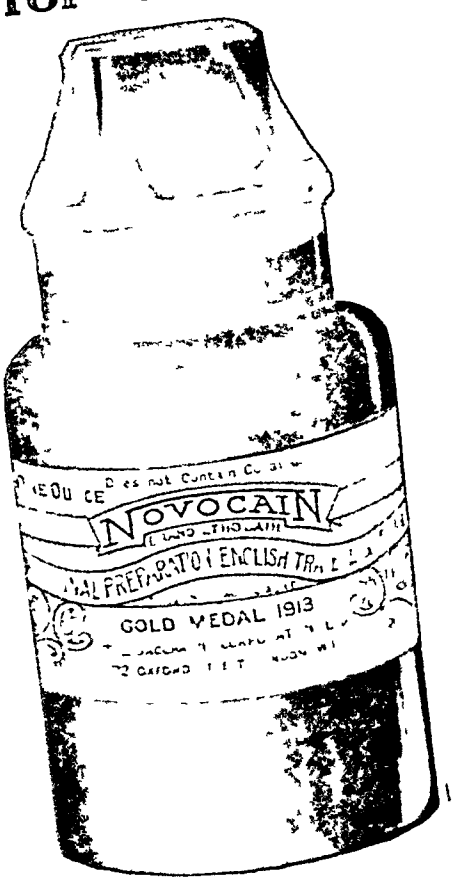
NOVOCAIN

Brand Ethocain
The Original Preparation
English Trade Mark No 276477 (1905)

The Safest and most Reliable Local Anaesthetic for all Surgical Cases

The oldest and still the best

Does not come under the restrictions of the Dangerous Drugs Act



Cocaine Free Local Anaesthetic

Write for Literature

THE SACCHARIN CORPORATION LTD, 72, Oxford Street, London, W 1

'PROMINAL'

METHALONYL

Clinical trials of this drug in thousands of cases of epilepsy have shown that its fit reducing effect is even better than that of Luminal its toxicity is 30 lower

The hypnotic effect of Prominal is minimal and secondary reactions are seldom met with



BAYER PRODUCTS LIMITED, AFRICA HOUSE KINGSWAY LONDON W C 2.
Northern Office (Information only) BLACKFRIARS HOUSE PARSONAGE MANCHESTER

IN ASTHENIC CONDITIONS
CLINICALLY PROVED

"let us still hold that that alone is true which is proved clinically, and that which is clinically proved needs no further evidence"
—Sir James Paget

By this exacting test thousands of physicians throughout the world have satisfied themselves of the worth of Neuro Phosphates (Eskay Brand) in asthenic conditions generally, for the aged, and during convalescence Each dose (two teaspoonfuls) contains in acid state —Sodium Glycerophosphate, 2 grs , Calcium Glycerophosphate, 2 grs , Strychnine Glycerophosphate, $\frac{1}{4}$ gr

NEURO PHOSPHATES
(ESKAY BRAND)
A Palatable and Efficient Tonic

M&J

IN RHEUMATIC PAINS

For those patients who complain of vague rheumatic pains, 'Calsiod' (calcium ortho-iodoxybenzoate) is an effective analgesic and palliative Moreover its prompt use in the acute stages may help to prevent the development of a severe, crippling arthritis

In resistant cases the dose of 'Calsiod' may be increased according to the patient's gastric tolerance

'CALSIOD' TABLETS
BRAND
The Safe Anti-Arthritic

Distributed by **MENLEY & JAMES LTD.**
FOR SMITH KLINE & FRENCH LABORATORIES

IN AGRANULOCYTOSIS

'Pentnucleotide' should be given in adequate doses

The present trend is toward larger daily doses of 'Pentnucleotide' in agranulocytosis In discussing the treatment of such cases, one observer states —

> "*We now recommend that 40 c c of pentnucleotide be given each day intramuscularly* One cannot judge its effectiveness or lack of it from smaller amounts*"—*Ann Int Med*, 9 26, 1935
>
> * *Divided doses are recommended*

Further information will be given on request.

'PENTNUCLEOTIDE'

A mixture of the sodium salts of pentose nucleotides for intramuscular use

M&J

CHILDREN'S HEAD COLDS

In 100 cases of acute rhinitis in children from 2 months to 12 years of age treated with 'Benzedrine' Brand Inhaler two observers report prompt and adequate shrinkage of the nasal mucosa in 97% —*Arch Pediat*, 54 97, 1937 The vapour form—in addition to its greater effectiveness—overcomes the strenuous objections which children show to liquid inhalants as applied by drops, tampons, or sprays



'BENZEDRINE' INHALER

BRAND

The volatile vasoconstrictor for Head Colds, Sinusitis, Nasal Catarrh, Hay Fever and Asthma

64, HATTON GARDEN, LONDON, E.C.1.

OWNERS OF THE TRADE MARKS



NEW IRON THERAPY

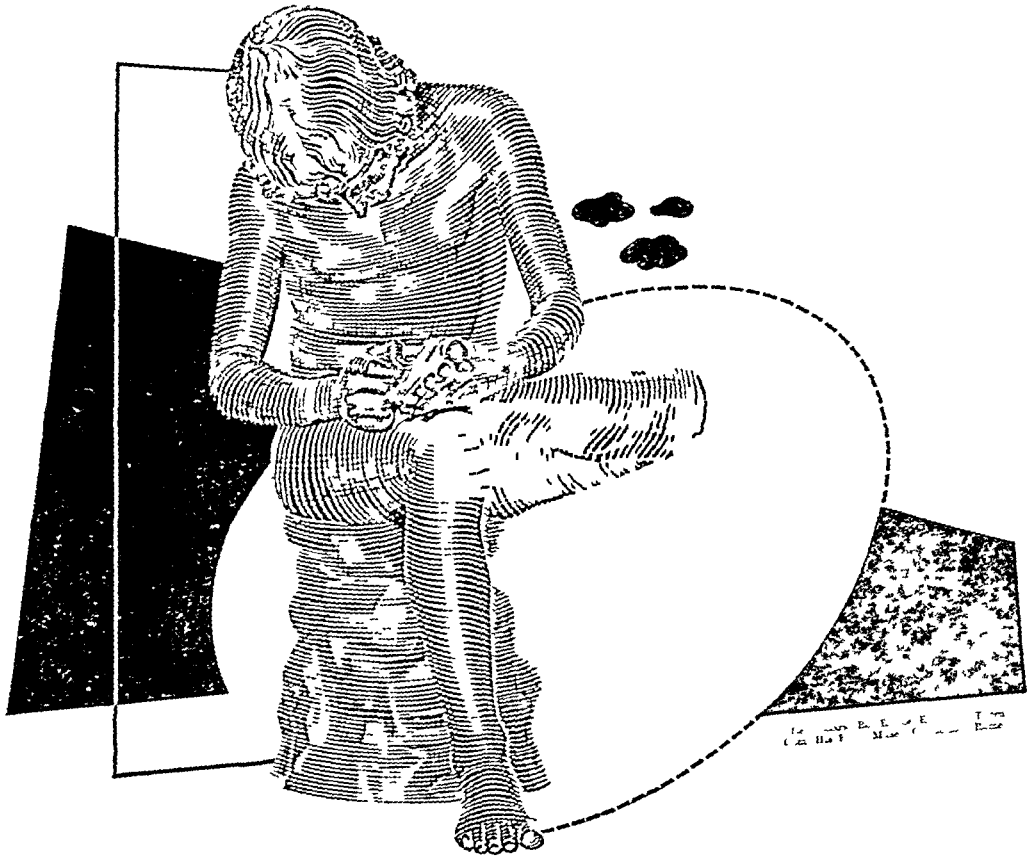
The dosage of 'Plastules' is 3 capsules per day. This small dosage is made possible by the use of Ferrous Iron and Yeast in a semi-fluid and stable form in plastic soluble capsules. It is now recognised that maximum benefit from iron therapy is obtained by using Ferrous Iron—the form in which iron is the most readily assimilated

The addition of Yeast acts as a catalyst and potentiates the value of the Ferrous Iron. 'Plastules' with Liver Extract are fortified with additional anti-anæmic factors. Prescribe 'Plastules' for cases of anæmia and debility and note the immediate general improvement in the patient's condition

Samples on Request

'PLASTULES'
HÆMATINIC COMPOUND
FOR ANÆMIA AND DEBILITY

JOHN WYETH & BROTHER LTD., 23, OLDHILL PLACE, LONDON, N.16



250 TO 1,500 TIMES MORE GERMICIDAL THAN PHENOL

depending upon the organism used in the test

Amongst the numerous advantages of Metaphen (Abbott) the powerful antiseptic properties of the drug are of course, the most important In tests made under properly controlled conditions Metaphen has been shown to have a phenol coefficient of 250 to 1 500 depending upon the organism tested ● Metaphen is relatively non toxic to human tissue is not painful on application does not cause irritation or dermatitis, and does not precipitate in the presence of serum Solutions of the drug are stable when exposed to air ● Metaphen is recommended in infections of the genito-urinary tract eye ear nose throat and skin It is of value as a general antiseptic in surgery and for the disinfection of equipment ● Metaphen is supplied through pharmacies in a variety of useful forms the most widely employed of which are TINCTURE METAPHEN a tinted, alcohol acetone-aqueous solution prepared especially for use as a pre operative skin disinfectant and for all other uses for which a powerful but safe antiseptic tincture is indicated ● METAPHEN SOLUTION 1.500, an aqueous solution which is recommended for general use in surgery urology obstetrics gynæcology and in eye ear nose mouth and throat practice ● Requests for descriptive literature and trial quantities are welcomed

ABBOTT LABORATORIES
(ENGLAND) LIMITED
WADSWORTH ROAD PERIVALE MIDDLESEX
Montreal Sydney Johannesburg Bombay
Shanghai New York Chicago Mexico City
Havana Rio de Janeiro Buenos Aires Manila



METAPHEN

(OF T H RO RO ME U RT J C ESOL)

PLEASE SEND LITERATURE ON METAPHEN TO

NAME

ADDRESS

Prophylaxis and treatment of

WOUND INFECTIONS

TETANUS-GAS GANGRENE ANTITOXIN

GLOBULIN Lederle MODIFIED

containing —

3,000 units Tetanus Antitoxin (Cl tetani)
2 000 units B perfringens Antitoxin (Cl welchii)
2 000 units Vibrion Septique Antitoxin (Cl oedematis maligni)

These two gas gangrene antitoxins have been included in this prophylactic dose because B perfringens is recognized to be the most frequent, and Vibrion Septique next in frequency, in the cause of gas gangrene

Where symptoms of gas gangrene infection have become manifest, early therapeutic dosage of Gas Gangrene Antitoxin is indicated

GAS GANGRENE ANTITOXIN (*Polyvalent*)

GLOBULIN Lederle MODIFIED

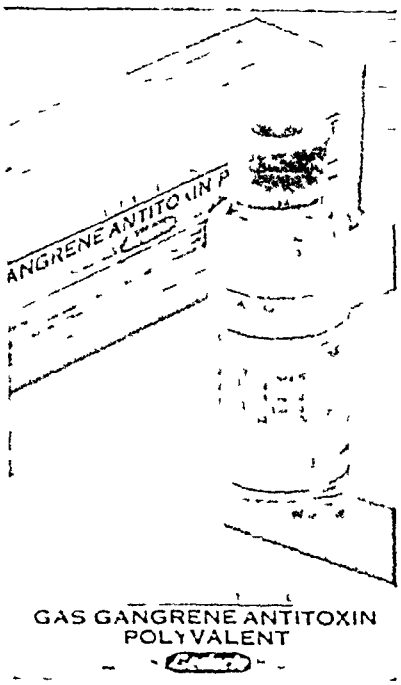
contains effective therapeutic dosages of antitoxin for *all five* toxin-producing anaerobes now credited with causing gas gangrene in man

(B perfringens Vibrion Septique, B oedematiens, B sordellii B histolyticus)

The fact that there is no short-time test to determine which of these toxigenic, anaerobic bacilli is the cause of a given gas-gangrene infection provides the logic for combining these five antitoxins in the treatment dose

While it is recognized that the most frequent offender of these organisms is B perfringens, analyses of soils and dusts have shown that the incidence of the other organisms is by no means insignificant

The bulk of the dose is not excessive, for the Lederle "Globulin-Modified" method of refining has effected a marked reduction in bulk and in the reaction causing serum proteins



Chas F Thackray LTD

1 - Offices and Showrooms LEEDS

252 Regent Street LONDON W1

WILCOX, DE AU & CO

RELIGIO MEDICAL SERIES No 154—CELTIC

A Reliable Hæmostatic

For use with each bottle when an aqueous solution, the necessary sterile solvent

1 c.c. bottle with ampoule of solvent 1 4

5 c.c. bottle with ampoule of solvent, 2 8

TRADE MARK **'STYPVEN'** BRAND

RUSSELL VIPER VENOM

(Vet. for Injection)

A dilute solution applied locally is the most effective hæmostatic for hæmorrhage due to superficial injuries and after tonsillectomy or external bleeding of hæmophilics After teeth extraction and conservative dental surgery at the gum margin

TRADE MARK **'WELLCOME'** BRAND

CALCIUM MANDELATE COMPOUND

As effective in urinary infections as sodium or ammonium mandelate yet free from disagreeable flavour Does not upset the digestion

Bottles of 125 *grammes* 10/10 *(Sufficient for a free 4a course of treatment)*

London Price to Medical Profession

An advance on an established treatment

Literature to Medical Men, on request

BURROUGHS WELLCOME & CO, LONDON

Address for communications SNOW HILL BUILDINGS E C 1

Exhibition Galleries 10 HENRIETTA PLACE CAVENDISH SQUARE W 1

Associated Houses

NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN BOMBAY SHANGHAI BUENOS AIRES

O O O O O



THE WORSHIP OF WATERS WAS PERHAPS THE EARLIEST NATURE CULT THE SPIRIT OF THE WATERS WAS PROBABLY FIRST EMBODIED AS AN ANIMAL OR FISH WHEN THE GODS BECAME ANTHROPOMORPHIC THEY RETAINED SYMBOLS OR ATTRIBUTES FROM THIS EARLY CONCEPTION AS IN THE EXAMPLE OF A HEALTHY DEITY HERE REPRODUCED FROM A THERMAL STATION OF ANCIENT CELTIC FRANCE —The seated god holds a bunch of grapes between his knees his right hand held the head of the snake-like animal the fish like tail of which decorates the back of the seat Most of the gods of Gaul were chiefly givers and guardians of healing springs rivers and other waters Maponos Sirona and Grannos were deities of this nature, while the Matrona, now the Marne was a mother river, a source of fertility and health

DATE The statue, A.D c 100

COPYRIGHT

"COMMON COLD"

AND

ANTI-CATARRH VACCINE (EVANS)

(LOCAL STRAINS)

For Prophylaxis and Treatment

The facilities of the pathological laboratories at **EVANS BIOLOGICAL INSTITUTE** enable us to issue vaccines prepared from organisms collected in the locality in which the vaccine is to be used It will be appreciated that such vaccines are highly specific, producing a greater proportion of successful results than is usual with ordinary Stock Vaccines

The following formulæ have been evolved after many years' experience, as having a comprehensive selection of organisms as found in numbers of typical cases, in the correct proportions

COMMON COLD & ANTI CATARRH VACCINE (EVANS)
(No 3, for Prophylaxis)

M catarrhalis	200	*million*	per cc
Diplococci pneumoniæ	200	,,	
Streptococci	200	,,	
B Friedlander	100	,,	
B septi	100	,,	
Staphylococci (alb et aur)	200	,,	
M tetragon	100	,,	
B influenzæ	100	,,	

'COMMON COLD' & ANTI CATARRH VACCINE (EVANS)
(No 1, for Treatment)

M catarrhalis	50	*million*	per cc
Diplococci pneumoniæ	50	,,	
Streptococci	50	,,	
B Friedlander	25	,,	
B septi	25	,,	
Staphylococci (alb et aur)	50	,,	
M tetragon	25	,,	
B influenzæ	25	,,	

DOSAGE—PROPHYLACTIC (Vaccine No 3)

As different patients vary in their reaction to vaccine treatment it is only possible to suggest the average procedure A brochure which deals fully with the question of dosage will be sent on application In general a series of three injections (given before the season during which the person is usually susceptible) is recommended The initial dose is 0 25 cc followed by 0 5 cc after an interval of seven days and a further 1 cc after another week or so

DOSAGE—CURATIVE (Vaccine No 1)

In acute conditions an initial dose of 0 1 cc or 0 2 cc and in chronic conditions 0 25 cc The initial dose may repeated after three days If no reaction is produced subsequent injections can be larger

COMMON COLD' AND ANTI CATARRH VACCINES (EVANS) (Local Strains) are issued as follow

Boxes of 3 1 cc Ampoules No 3 Vaccine (Prophylaxis) 7/- per box
Boxes of 6 1 cc Ampoules No 1 Vaccine (Treatment) 14/- per box

Also in 5 cc. 10 cc and 25 cc bottles and in single Ampoules

Made in England at THE EVANS BIOLOGICAL INSTITUTE by

Evans Sons Lescher & Webb Ltd.

Liverpool & London

BRITISH MEDICAL JOURNAL

LONDON SATURDAY SEPTEMBER 17 1938

VERTIGO

ITS NEUROLOGICAL, OTOLOGICAL, CIRCULATORY, AND SURGICAL ASPECTS*

BY

W RUSSELL BRAIN, D M, F R C P

Physician with Charge of Out patients to the London Hospital Physician to the Maida Vale Hospital for Nervous Diseases

The Nature of Vertigo

The word vertigo by its derivation implies a sensation of turning either of the body or of its surroundings and it is so defined in the dictionaries We need however a word to describe any subjective accompaniment of disordered equilibrium whether this be a sense of rotation or not and I propose therefore to use vertigo in this extended sense and to define it as the consciousness of disordered orientation of the body in space

There are three main ways in which the spatial orientation of the body may be felt to be disordered (1) The external world especially the world as seen may appear to move Such hallucination of movement is by no means always one of rotation (2) The body itself may be felt to be moving again not always in a rotatory fashion or the sensation of movement may be referred to within the body—for example within the head (3) Finally the postures and movements of the limbs especially the lower limbs in standing and walking are felt to be ill adjusted and unsteady

To understand how vertigo arises it is necessary to begin with the physiological basis of the orientation of the body in space Fundamentally this is reflex and therefore unconscious As is well known an animal which has undergone a transection of the brain stem above the level of the red nuclei is capable of adopting a normal posture and of readjusting itself to this posture by means of righting reflexes if it is displaced from it Such an animal deprived of its cerebral hemispheres, is dependent upon the labyrinths and the proprioceptors of the muscles and joints of the limbs and spine for the stimuli which evoke from the centres of the brain stem and cerebellum a co ordinated and within limits appropriate reflex response

The role of the cerebral hemispheres in spatial orientation is to bring these reflex mechanisms into the service of the conscious perception of the external world To achieve this the cerebral cortex must link together (1) afferent paths excited by stimuli from the exteroceptors especially the retinae which in the perception of visual space are closely associated with proprioceptor impulses from the ciliary and extra ocular muscles (2) proprioceptor impulses from all parts of the body which yield information as to the position of the body in space and of its parts relatively to one another and (3) efferent paths through which voluntary movements modify the position of the body in space

These are the two great corticifugal paths—the pyramidal tract which links the precentral cortex directly with the anterior horn cells and the fronto pontine and temporo pontine fibres which bring the cortex into connexion with the cerebellum and so in directly with the red nuclei the postural reflex centres of the mid brain

THE PSYCHO PHYSIOLOGICAL ASPECT

Vertigo however is a state of consciousness and we must now consider it from a psycho physiological point of view In this task the methods of Gestalt psychology are helpful There is a large field of conscious phenomena which are perceived as localized in space Within this field we distinguish that portion of space occupied by our own body from the rest The body is represented by a constantly changing model—a plastic schema to use Head's (1920) phrase The external world is represented by another schema also constantly being modified These two schemata however are far from independent of each other since the bodily schema receives contributions from proprioceptors such as the labyrinths which are in part stimulated by an external force gravity and on the other hand the perception of external space includes in its raw material proprioceptor impulses The two schemata therefore to some extent interpenetrate one another and must be conceived as functional and not as structural units For consciousness the orientation of the body in space is normally an orderly dynamic relation between the bodily schema and the schema of the external world Vertigo is the state of consciousness which arises when this relation becomes disordered

Two illustrations may help to make this clear As Hughlings Jackson (1932) pointed out the simplest form of vertigo is that which is produced by paralysis of an ocular muscle This is due to faulty projection of the

* Read in opening a discussion in the Section of Neurology and Psychological Medicine at the Annual Meeting of the British Medical Association Plymouth 1938

visual field of the affected eye, as a result of which the patient is presented with two mutually conflicting visual spaces. The second illustration, which I owe to Hartmann (1935), is especially interesting in view of the important part which hallucinations of movement play in the symptomatology of vertigo. The perception of relative movement between the body and the external world must depend upon a certain functional relation between the bodily schema and the schema of the external world. It is not difficult to devise an experiment whereby a rotation of the visual field causes an hallucination that the body is moving in the opposite direction although the subject remains seated throughout the experiment in a chair. A familiar example of the same hallucination is the experience of a person seated in a train who, when a train beside his own begins to move, feels that his own train is moving in the opposite direction. It is clear from this and other observations that whether a perception of relative movement between the body and the external world is referred to the body or to the external world depends not only upon the content of visual perception but also upon the state of the bodily proprioceptors at the time, especially those of the ocular muscles and the labyrinths. If, owing to labyrinthine disease, a patient feels as if his body is in violent motion in a certain direction and if nevertheless the objects at which he is looking remain in front of his eyes, he will experience an hallucination that the external world is moving in the direction in which he feels himself to move, for although he feels himself to be moving there is no cortical process corresponding to relative movement between his body and the external world. The latter, therefore, is perceived as moving in the same direction as the body.

It is worth noting in passing that the fact that a person can experience an hallucination of rotation of both his body and the external world in the same direction implies a space in reference to which they are perceived as rotating, and which itself remains stationary. It appears therefore that our schemata of both the body and the external world are built up within an absolute space which is conditioned by our sensory organs and nervous system and which forms a frame of reference within which the whole visible world including the body may be perceived as moving. This purely personal absolute space is one of the obstacles which the non-mathematical student encounters in trying to grasp Einstein's conception that all movement is relative.

Since vertigo is a state of consciousness in which [illegible] elements play an important part it is mediated by [illegible] cortex even when it is the outcome of an [illegible] lower level. It follows that [illegible] cortex may cause vertigo. Foerster [illegible] in the course of electrical stimulation of the [illegible] patients has observed that [illegible] the stimulation of the interparietal sulcus [illegible]. The patient sees the objects [illegible] towards the contralateral side [illegible] stimulation of the [illegible] eyes. It is [illegible] that [illegible] may [illegible] body [illegible] and [illegible].

moving and which is felt to be stationary probably depends upon the pre-existing background provided by the state of the proprioceptors of the body.

Vertigo as a Symptom of Disorder at Different Levels

It follows from the anatomical and physiological considerations already outlined that vertigo may arise as a result of a disturbance of function at many different levels. We therefore recognize (1) psychogenic vertigo, (2) vertigo due to cortical disturbances, (3) vertigo of ocular origin, (4) vertigo of cerebellar origin, (5) vertigo due to brain stem lesions, (6) vertigo due to lesions of the eighth nerve, and (7) aural vertigo. In diffuse conditions such as head injury and circulatory disease, it may be impossible to say whether the vertigo is cortical, brain stem, or aural in origin.

(1) *Psychogenic Vertigo*.—"Giddiness" is a common complaint among sufferers from anxiety neurosis. There is no sensation of rotation, but the patient describes "a feeling as if I am going to fall," which usually occurs only when he is in the street, especially alone, and may be so severe that he is unable to go on or has to return home. A closely related neurotic symptom is "a feeling as if I am walking on air." Psychogenic vertigo is usually associated with severe feelings of anxiety and the symptoms of over-activity of the sympathetic nervous system. At the psycho-physiological level neurotic vertigo can perhaps best be explained as the effect of bringing into consciousness elements in spatial orientation (the relation of the body schema to the external world schema) which are normally unconscious, the cause of this being that this physical relationship has become for the patient symbolical of a psychological relationship between himself and his environment which is a source of difficulty to him. Such a process of symbolization is well illustrated by the double (physical and moral) meaning of the words 'lapse,' 'fall,' 'fallen' and 'downfall.' Vertigo may also occur as a conversion symptom in hysteria.

(2) *Vertigo due to Cortical Disturbances*.—Foerster's observations, previously described, explain how an epileptic cortical discharge may cause a feeling of vertigo as is not uncommon in petit mal, and how vertigo may arise as a symptom of migraine or of localized cortical lesions. In cases of intracranial tumour, however, vertigo is of no localizing value, since it may occur with tumours in any situation (Symonds, 1933).

(3) *Vertigo of Ocular Origin*.—An explanation of vertigo associated with diplopia has already been given. Vertigo may also arise as a result of a difficulty in adapting the posture of the body to an unusual visual environment such as a rapidly moving train seen from the railway platform. Vertigo on looking down from a height is a similar experience.

(4) *Vertigo of Cerebellar Origin*.—The role of the cerebellum in the causation of vertigo is difficult to assess since many cerebellar lesions may involve vestibular fibres in the eighth nerve or the pons, and [illegible] vertigo may be slight or absent in spite of a lesion of the cerebellum especially if it is confined to the [illegible] lobe. Nevertheless, the [illegible] probably does not [illegible] vertigo of cerebellar [illegible] especially when [illegible] involves [illegible] which is closely linked mechanically with [illegible] system. This [illegible] may [illegible] the [illegible] objects [illegible] and [illegible].

aural vertigo by the absence of deafness and tinnitus and the presence of the characteristic analgesia and thermo anaesthesia of the face on the side of the lesion and of the body on the opposite side due to the medullary infarction

(5) *Vertigo due to Brain stem Lesions*.—Vertigo may be caused by vascular or neoplastic lesions of the brain stem but is most strikingly seen when disseminated sclerosis involves the pons A young adult is suddenly attacked by severe vertigo accompanied by conspicuous nystagmus and sometimes vomiting and prostration severe enough to cause confusion with aural vertigo The absence of tinnitus and deafness however the presence of other signs of a pontine lesion especially paresis of one external rectus or of conjugate lateral gaze and facial paresis together with other signs of dis seminated sclerosis and in some cases a history of previous nervous symptoms enable the correct diagnosis to be made In most cases moreover the vertigo as a rule lasts for several days considerably longer than an attack of aural vertigo usually does

(6) *Vertigo due to Lesions of the Eighth Nerve*.—Vertigo due to a lesion of the eighth nerve especially acoustic neuroma since it is associated with deafness and tinnitus closely simulates aural vertigo Vertigo due to pressure upon the eighth nerve by abnormal vessels has been described by Holmes (1924) and Dandy (1937)

(7) Aural Vertigo

Vertigo is a symptom of a large number of pathological states of the ear concerning which there are still many unsolved problems I shall leave on one side the varieties of acute labyrinthitis including infection of the internal ear secondary to suppurative otitis media and I can only mention the interesting question of the role of the otoliths in vertigo I shall confine myself to certain problems associated with Meniere s syndrome

MENIERE S SYNDROME

Recurrent aural vertigo arising in a previously healthy person is a clinical entity though we cannot yet say whether it is also a pathological entity The term Meniere s syndrome is used to day less often than formerly partly perhaps because a false idea of what Meniere described has been perpetuated by those who have not troubled to read his original communications (1860–1 1861) It is said that Meniere reported an example of spontaneous haemorrhage into the labyrinth a rare condition which clearly is not responsible for re current aural vertigo It is true that Meniere did briefly report such a case to demonstrate that vertigo might be produced by a lesion of the labyrinth but he also gave a clear and masterly account of all the essential clinical features of recurrent aural vertigo

I would therefore urge the retention of the term 'Meniere s syndrome to describe the disorder char acterized by the features to which Meniere originally drew attention—namely (1) the sudden onset in (2) a previously healthy auditory apparatus of (3) functional disorders consisting of (4) continuous or intermittent tinnitus with (5) diminution of hearing and (6) vertigo uncertain gait rotations and falling which are accom panied by (7) nausea, vomiting and a syncopal state Finally he noted (8) the progressive character of the deaf ness and observed that the hearing might be suddenly and completely abolished

There is little that the modern clinician can add to this classical description except perhaps to mention (9) the transitory loss of vision which may occur without loss of consciousness during an attack (Gowers 1907) and (10) transitory diplopia It is important to remember that double vision may occur as a result of vestibular dis order lest this symptom should be attributed to ophthal moplegia and ascribed to a lesion of the nervous system The two images are seen one above the other and the diplopia is doubtless due to skew deviation of the eyes a disorder of ocular posture emanating from the labyrinth and sometimes occurring transitorily as Cairns and I have shown (1933), after section of the auditory nerve It is also important to note that as Meniere observed, loss of consciousness may occur in the course of a severe attack of aural vertigo and such attacks require to be distinguished from epilepsy

AETIOLOGY OF MENIERE S SYNDROME

Men suffer from Meniere s syndrome more often than women in a proportion of about three to two Age is an important factor Meniere s syndrome is a disorder of middle age especially late middle age The age of onset of vertigo in a series of forty one of my own patients is set out in the following table the average being 49

Age	Number	Percentage
10–19	1	2 4
20–29	2	4 8
30–39	6	14 6
40–49	9	22 0
50–59	8	19 5
60–69	13	31 7
70–79	2	5 0

This age incidence suggests the operation either of a degenerative factor or of some process requiring many years to cause symptoms

There are two unusual types of patient however who do not accord well with the conception of a progressive disorder Whereas the usual mode of onset is for tinnitus and deafness to precede vertigo by only a few months or at most a year or two it occasionally happens that a patient who has been deaf in one ear for thirty or forty years suddenly develops vertigo Here perhaps we are dealing with two different processes one of which is superimposed upon the other Even more puzzling are those unusual patients whose vertigo occurs at extremely long intervals Thus a trained nurse aged 50 had a severe attack of giddiness and vomiting in 1918 another in 1932 another in 1937, and another during which I saw her in 1938 Occasional very mild attacks occurred in the intervals but tinnitus and deafness were absent

Focal aetiological factors include infection of the teeth tonsils and nasal sinuses, and I agree with Wright (1938a 1938b) that focal sepsis is the most important single aetiological factor I invite discussion as to whether the recurrent vertigo which is sometimes asso ciated with blockage of the Eustachian canal is a pathologically distinct variety of aural vertigo

Abnormalities of water metabolism have been empha sized by Mygind and Dederding (1928–9) Dederding (1929 1931) and Nielsen (1931) Nielsen has found that sufferers from Meniere s syndrome tend to retain water in the body while Furstenberg and his collaborators (1934) have precipitated attacks by giving chloride and so causing water retention and both Dederding and Furstenberg have relieved them by dehydration The affinity between recurrent aural vertigo and migraine was first pointed out by Meniere himself and has lately been

stressed by Dederding There are certainly clinical resemblances, and the association of the two disorders in the same patient is not uncommon Allergy may in some cases be a common basis (Balyeat, 1933)

The recent valuable observations of Cairns and Hallpike (1938) who have demonstrated a gross dilatation of the endolymph system in two cases, have made it easy to understand how changes in the osmotic tension of the blood reflected in the distended endolymph channels might cause variation in the symptoms and so explain the periodicity of the vertigo and also the fluctuations in the hearing noted by Dederding (1929) It seems unlikely, however that disturbed water metabolism is the primary cause of the disorder, though it may well be a contributory factor Here there are suggestive analogies with glaucoma In the present state of our knowledge it seems best to regard Ménière's syndrome as the end-result of a toxic or toxi-infective process in the labyrinth —Wright's "focal labyrinthitis"

Treatment

If this view is right it follows that the eradication of any source of infection is the most radical form of treatment Tobacco must be included among the exogenous poisons to which the labyrinth may be unusually susceptible in some individuals When the intake of fluid can be shown to be excessive its restriction may be helpful, though few patients will tolerate the heroic measures sometimes recommended Restriction to one and a half pints of fluid daily should not involve hardship Striking improvement sometimes follows lumbar puncture, possibly as a result of its indirect effect upon water metabolism Phenobarbital in ½ grain doses two or three times a day is most valuable Cooper (1938) and Starr (1936) claim good results from certain choline compounds in a small series of patients Most patients respond well to medical treatment if it is sufficiently thorough and comprehensive Resistant and incapacitating vertigo, however, will rightly force the physician's hand, and surgical measures must then be contemplated As in trigeminal neuralgia the choice lies between alcoholic injection and nerve division Alcoholic injection of the labyrinth has its advocates (Mollison 1936, Peacock, 1938, Wright, 1938b), but I have no personal experience of it Surgical division of the eighth nerve limited to its vestibular fibres is practically free from risk and gives excellent results (Crowe 1938)

CO-OPERATION BETWEEN OPHTHALMOLOGIST AND PHYSICIAN IN CERTAIN CASES OF VISUAL LOSS*

BY

C. B. F. TIVY, M.Ch., M.B.

Senior Surgeon Plymouth Royal Eye Infirmary

Under our present system of medical practice the patients who come to an ophthalmologist are by no means ill sent by their family doctor—a good many of them have not even seen him for years, and the first intimation he gets that all is not well with them is a letter from the specialist Others who have seen their own doctor do not always take him fully into their confidence and do not realize that the condition of their eyes has any connexion with their health, and the family doctor himself does not always realize the connexion between the eye condition and the general condition of the patient

It was with these ideas in my head that I suggested that a few remarks on collaboration between the ophthalmologist and the general practitioner, the physician and the neurologist, etc, might be of some value As an example of what often happens I should like to read to you the letters which passed between me and one of my colleagues quite recently

MY DEAR L,—Mrs A came to see me yesterday complaining that her vision seemed to be slightly defective She has worn glasses for some years and has a fair degree of hypermetropia and astigmatism, and the glasses did need some alteration I could not get the vision of either eye up to full normal, the right one being slightly worse than the left There is some slight pallor of both optic discs, especially the right, and moreover, there is some rather vague limitation of the field of vision in the right eye She says that her general health has not been very good, but I could not get any history which would connect up with early optic atrophy

Have you had a Wassermann done? If it is positive that would be a reason The only other suggestion I can make is the possibility of a pituitary tumour, and I must confess that the fields of vision are not at all typical of that

I am sorry to be so vague but I feel that there is something wrong with the woman but that is all I am certain of

Yours sincerely

Types of Cases likely to Benefit

I have to a large extent chosen types of cases that are likely to benefit by treatment which is within the scope of the general practitioner I claim no originality in this paper my object being to suggest and describe briefly some of the types of cases that pass through the hands of the ophthalmic surgeon and of which ultimate treatment lies with the general practitioner the physician or the neurologist I am therefore making no reference to diseases that are wholly or mainly eye diseases although I might really find it hard to say that any such disease is not an affair which has a direct connexion with the general health of the patient

I need not refer at all to injuries of the eyes and only to refractive errors to point out that many cases of apparent sudden failure of vision in one eye can be explained by the existence of amblyopia or a high error of refraction which has remained undiscovered by the patient until some quite irrelevant accident has put the other eye out of action long enough for him to be made dependent on the defective eye Real sudden loss of vision in one eye is sometimes difficult to date accurately for exactly the same reason an example of which I can give by mentioning the case of a young man who came to me with an injury to his right eye from a football Before this he was only vaguely aware that his left eye was not very good but he now discovered that he could not see with it at all I found that he had a large detachment of the retina in his left eye, and on searching his memory he said that he had been struck in that eye by a tennis ball six months before

Apart from injury sudden complete loss of vision in one eye in young people is most commonly due to one of two causes—disseminated sclerosis or vitreous haemorrhage—but some cases of retrobulbar neuritis from other causes may bring about such a rapid deterioration of vision that the loss may be described as sudden and of course large retinal haemorrhages do occur in young people and even embolism of the retinal artery It will be interesting to hear from the physician and the neurologist where we stand with regard to disseminated sclerosis and why it should so often attack the optic nerve or the third fourth and sixth nerves and one would like to know why large vitreous haemorrhages do occur in young people who are apparently otherwise healthy also what is the best line of treatment

In middle aged people sudden failure of vision is most often due to some failure of the vascular system either in the eye itself or in the optic tracts or visual centres If the eye itself is affected this will take the form of retinal haemorrhage of some kind or of embolism of the retinal arteries or thrombosis of the veins

Retinal Haemorrhage

In working class patients failure of vision due to a large retinal haemorrhage or to a thrombosis of one of the retinal veins is very often the first symptom of advanced arteriosclerosis or even of chronic Bright's disease and sometimes of diabetes In case any physician may hereby conclude that I am talking at random I must explain that by 'first symptom' I mean the first thing that the patient complains of to a doctor and the eye doctor is commonly the first to become aware of the patient's grave condition And lest my general practitioner friends should think that I am casting aspersions on them I must go further and say that in my experience the average working class patient (woman especially) will carry on bravely and steadily with all the signs of advanced arteriosclerosis without even thinking of consulting her doctor until some outstanding feature such as loss of vision makes it essential for her to wake up and take notice of herself

When such a patient comes before the attention of the ophthalmologist he can make *his* diagnosis fairly easily because he can see the haemorrhage or haemorrhages and he can observe the tortuous and irregular vessels He can sometimes form a shrewd idea as to whether it is a case of primary arteriosclerosis or one of Bright's disease or diabetes but of course he must pass the patient on to the family doctor or physician for the real investigation and for treatment As to the treatment there is one small point that I should like to lay stress on it is this

Cases of thrombosis of one of the tributaries of the retinal vein should be taken in hand urgently as there is quite a fair chance that a good deal of vision can be restored by measures aimed at lowering the arterial blood pressure and quieting the action of the heart The thrombosis itself is generally situated distal to a spot where the vein is crossed and pressed upon by an artery and the loss of vision is largely due to oedema of the retina as well as to haemorrhages Even if the block in the vein is not relieved or canalized the haemorrhages and oedema do sometimes disappear with rest in bed and treatment—and if this is done early a larger area of retina is saved from destruction

If failure of vision is due to retinal haemorrhages its significance of course varies according to the underlying general condition and it is in diabetes that I think the haemorrhages are of most importance as fresh ones are a certain indication that all is not well The physician who gets a note to say that the fundus condition is getting worse should take this as an indication for reassessment of his patient and especially he should not be reassured by finding that the urine is sugar-free

So far as cases of simple hyperpiesis are concerned I do not think the occurrence of occasional fresh haemorrhages is any valuable indication of the general state of the patient but of course I am open to correction by my physician colleagues and I should be very glad to hear from them why in some cases the retina is seriously affected and in others very little or not at all I have notes of a number of cases where the retinal haemorrhages were numerous and large and the arteries looked very bad but where the patient has kept alive and even enjoyed a fairly active life for many years These cases of loss of vision from simple hyperpieses are not very satisfactory to either the ophthalmologist or the physician because the vision does not often improve much under treatment and the patients are generally of the active type who resent the restrictions put on them when they do not feel really ill It is almost impossible to get them to realize that they are being saved from some major disaster I sometimes wonder if it is worth while to take a woman who is keen on gardening or some man who is busily and fairly happily engaged in some active occupation and force him or her to lead a very quiet life in the hope of prolonging that sort of existence when if left alone he or she might carry on until everything was suddenly ended by a cerebral haemorrhage

By no means all cases of arteriosclerosis show these extreme symptoms and one which might be included under my heading of 'loss of vision' is diplopia caused by a paralysis of the third fourth or sixth nerve Paralysis of the external rectus is by far the most common and I am not at all clear what the exact pathology of this condition is Recovery generally takes place, but

the association of double vision with a report of wiry or tortuous retinal arteries should be regarded by the medical attendant as a well-marked danger sign

In addition to the three great classes of haemorrhagic retinal conditions which I have mentioned, there are, of course various blood diseases in which retinal haemorrhages occur, such as pernicious anaemia, leukaemia, and purpura, but in these cases the loss of vision is very seldom an early feature, and the physician is usually well aware of the disease before the ophthalmologist sees it

Defects in the Fields of Vision

These form a very important item in the matter of liaison between the ophthalmologist and the physician, the neurologist and the surgeon The elderly patient who has had a blockage of his posterior cerebral artery, causing a loss of either the right or left field of vision, will commonly assert that he has lost the vision of one eye, and can only be convinced that that eye still sees when he is made to cover the other and observe objects held at the unaffected side of his field A purely vascular lesion in the occipital region leaves the macula of each eye unaffected owing to the anastomosis or overlapping of the blood supply from the posterior and middle cerebral regions, and the patient can still see to read slowly It is seldom that any improvement takes place in the fields, but the patient does learn to carry his head to one side so as to make better use of his unaffected eye Beyond demonstrating the defect in the field of vision and suggesting that the cerebral arteries are degenerating, the ophthalmologist is of little help

It is in other cases of defects in the field of vision that the eye examination can really be of some help for instance, in a case of middle ear disease with symptoms of abscess in the brain the localization can sometimes be clinched between an abscess in the temporo-sphenoidal region and one in the cerebellum The optic radiations spread out in the temporal lobe on their way from the geniculate body to the occipital cortex and can be interrupted by pressure The hemianopia in cases involving the temporal lobe is not so completely congruous as if the occipital lobe or optic tract is affected because the crossed and uncrossed fibres are not in such close apposition and this incongruity is a valuable localizing sign

Again in suspected tumours of the pituitary the charting of the fields of vision is invaluable The loss of the field of vision may be the first symptom of disease, or it may only be found when the patient is referred by a physician but the alterations in the fields are of first-class importance in estimating the progress or recession of the disease In other tumours of the brain the localization is sometimes greatly helped if not finally determined by examination of the fields of vision

Injury to the Head

I might go on indefinitely mentioning cases where the paths of the ophthalmologist and the physician cross one another or converge

Conclusion

My main idea is to emphasize the fact that loss of vision in the types of case that I have mentioned, and in many others, can be sorted out and diagnosed to some extent by the ophthalmologist and that he can also help in keeping a watch on the progress of the case, but the treatment is almost entirely in the hands of the family doctor, and I hope I have made it clear that loss of vision is generally only one symptom of something with wide reaching consequences to the patient

One does sometimes see the other side of the picture when a patient who is suffering from neurasthenia or even mild mental disorder is found to be developing cataract A successful operation with restoration of easy reading vision will sometimes change the whole outlook on life I have two examples of this in mind

The first case was that of a printer who had got so irritable and nervy that his wife had serious fears that he would do away with himself I found that he had nuclear cataract in both eyes, and after a lot of coaxing he allowed me to operate on one eye This was seven years ago I had a most grateful letter from him last Christmas in which he enclosed a specimen of the minute printing that he was working at, and he has many more happy years of life before him

The other case was that of a country gentleman who had given up his shooting and fishing, had lost all interest in his property, and had become a nervous wreck who spent most of his time drinking at his club He was dragged to see me by a worn out daughter, and both he and she assured me that he could never face an operation I coaxed and bullied him and his doctor doped him with sedatives, and then I operated on him, he nearly broke the hearts of the matron of the nursing home and her nurses He knocked his eye and had a haemorrhage and he did everything possible to ruin his eye but eventually we got him home In due course he sent me a brace of pheasants which he had shot, and he lived for several years a more or less reformed character

I am therefore pleading for a better understanding and collaboration between the general practitioner and the ophthalmologist, so that when the former gets the latter's report he should read it not as something which is to be pigeon holed and only referred to again if the patient complains about some eye symptom, but as a description of the patient's morbid anatomy which has been made by the ophthalmologist in a way that is seldom possible in any other part of the body or by any other method of examination

It may well be, on the other hand that the [illegible] physician feels that he does not always get the information he expects or needs from the ophthalmologist and I hope that some of the other speakers will point out [illegible]

NEW TYPE OF "JACKET" RESPIRATOR FOR THE TREATMENT OF POLIOMYELITIS

BY

AUBRLY F. BURSTALL, D.Sc., M.I.Mech.E.

Professor of Engineering, University of Melbourne

When an epidemic of poliomyelitis in which the nerves of the respiratory muscles were severely attacked occurred in Victoria in 1937 I was called upon to assist in the local manufacture of respirators which were required quickly and in large numbers. At the beginning of the outbreak, in May, there were two cabinet type respirators in Victoria—one at the Queen's Memorial Hospital for Infectious Diseases at Fairfield, manufactured by the Drinker Company, and the other at the Children's Hospital, Melbourne, built by the Acme Vacuum Cleaner Company with the collaboration of a hospital at Toronto. The latter respirator was purchased in Canada for the Children's Hospital by Dame Jean Macnamara in 1935 with a view to its being reproduced if an epidemic made it necessary.



FIG. 1.—Jacket respirator being fitted.

A modified pulsator valve was devised, the centrifugal fan and valve being used in preference to the Drinker arrangement. By this means it is possible to couple up a large number of respirators to one mechanically operated unit. The usual number was six respirators of the cabinet type connected to one fan and pulsator unit. Thirty-five of these pulsator units to operate nearly 200 cabinets, were constructed in Victoria in 1937 for use all over Australia.

The epidemic was almost over before it occurred to me that a simplified type of respirator, in which only the chest was included, might be equally effective and would certainly have many advantages over the cabinet type, particularly in nursing and for splinting the arms. This simpler type, termed the jacket respirator, was built at Christmas 1937 in the Engineering Laboratory of the University of Melbourne and was demonstrated to a number of medical practitioners on January 27, 1938. A week later one of these jacket respirators was put into use at the Children's Hospital, Melbourne, and at the time of writing (August, 1938) it has been in use continuously ever since. Some weeks later a similar apparatus was built for and used in the Queen's Hospital for Infectious Diseases at Fairfield, and others have been supplied to hospitals in Victoria and South Australia. One has also been supplied to Dr. Andrew Topping of the London County Council, at whose suggestion the present paper has been prepared. It was thought that a description would be of interest to members of the medical profession (see Figs. 1, 2, 3).

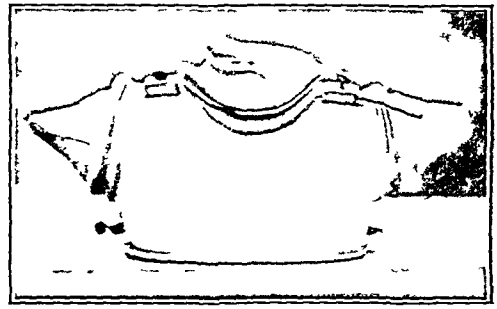


FIG. 2.—Jacket respirator, back view, showing metal lugs.



FIG. 3.—Jacket respirator on patient and attached to pulsating mechanism.

Description of the Apparatus

The apparatus consists of an aluminium cuirass made in one piece which is hammered out to the shape of the thorax. It encloses the trunk of the patient from the

neck down to the waist-line, and is connected to the pulsating mechanism by means of a one-inch flexible hose. It can be connected to a cabinet type respirator. The capacity of a cuirass is so small that a large number of them may be operated from one cabinet type respirator by drilling a hole in the cabinet and connecting a hose to it. Inside the cuirass is a sponge rubber vest, one inch thick, with holes for the arms, neck, and waist. The openings in the cuirass have a beaded edge and are closed to the body by soft sheet rubber jointing pieces, which are held to the cuirass by being lifted over the beaded edge. This resembles somewhat the method by which a glass jam-jar is covered with a parchment lid. Rubber rings may also be added to prevent the sheet from working off the beaded edge. The cuirass is provided with four metal lugs for the attachment of the arm splints as shown in the illustration. The whole of the metalwork can be sterilized. It weighs only 6 lb. for a patient aged 10. It is thought that three sizes of cuirass will provide for patients ranging from the age of 3 years up to medium-sized adults.

For the legs and trunk the modified double Thomas splint frame (Macnamara, 1932), minus the arm supports, is fitted to the patient, the upper portion going up inside the aluminium cuirass and the waist-joint being made over the two longitudinal members of the frame.

The time taken for two persons to dress a sick patient completely in the new respirator is seven minutes without splints and ten to twelve minutes with splints. This respirator is therefore not as suitable for the treatment of emergency cases as the Drinker type, because more joints have to be made, and there is more delay in getting the patient into the respirator.

Merits and Demerits

I wish to emphasize that from the outset it was never contemplated that this apparatus would entirely replace the cabinet type of respirator in a large hospital. The jacket respirator was primarily designed to provide cheaper and better facilities for the treatment of patients who had recovered from the acute stages of the disease.

The special features which characterize this respirator as it was first made are as follows:

1. The main portion is constructed of aluminium.
2. The metal is welded up to form a single piece.
3. The aluminium is hammered out to the shape of the
8. The air capacity is much less.
9. It is easier to maintain the temperature of the extremities.
10. It is particularly valuable when the deltoid muscles are paralysed.

Experience with the jacket respirators which have been used up to the present reveals the following disadvantages:

1. The time taken to install the patient in the respirator is longer than in the cabinet type.
2. At least three sizes of respirator are required.
3. To raise the arms over the head may cause the patient some distress, and in certain cases may make it impossible for this respirator to be used.
4. There are more points where leakages may occur, and more rubber joints to maintain.

Since this type of respirator was constructed discussion has arisen regarding the advisability of including the diaphragm within the respirator, and the jacket at Fairfield Hospital has been extended to include the diaphragm. This modification has not affected the ease with which the patient can be placed in the respirator, but it has increased the difficulty of attending to the patient's back.

The jacket respirator has other applications—for example, it seems to be suitable for the resuscitation of the apparently drowned. The small air capacity makes it possible for a light hand operated bellows to be used in conjunction with the respirator. Further experiments towards its development and application for this and other purposes are contemplated.

I wish to record my indebtedness to numerous members of the medical profession in Melbourne for their advice and assistance during the experimental stages of this work, and particularly to Dame Jean Macnamara for her advice and encouragement to make the first jacket respirator; to Dr. V. L. Collins, medical superintendent of the Children's Hospital, Melbourne, who so willingly undertook to give it a trial; to Dr. F. V. Scholes, medical superintendent of the Queen's Hospital for Infectious Diseases, Fairfield, Victoria, and his staff, and to Dr. F. Kingsley Norris for his advice and enthusiasm.

The jacket respirators were constructed in the workshops of the engineering department at the University of Melbourne by Mr. D. Campbell, under my supervision.

REFERENCE

Macnamara, Jean (1932) *British Medical Journal* 2, 1071

THE DIAGNOSIS OF WHOOPING-COUGH

BY

A. B. DONALD, M.D., D.P.H.

Senior Assistant Medical Officer City Hospital Edinburgh formerly Assistant Medical Officer L.C.C. Special Hospitals London

(From the North Western Hospital Lawn Road and Group Laboratory Pond Street London N.W.3)

The clinical diagnosis of whooping cough in its earliest stage—when recognition would be most valuable in preventing spread of infection—is very difficult and in the majority of cases quite impossible. Even in its later stages diagnosis is far from simple—for example in a series of 171 cases sent to hospital as whooping cough thirty five or 26 per cent were wrongly diagnosed while thirty-eight out of 136 cases or 28 per cent bacteriologically confirmed as whooping cough had not been heard to whoop before admission and never whooped while in hospital. In view of this difficulty in clinical diagnosis an effort has been made to assess the value of various laboratory methods of diagnosis. These may be divided into (1) specific tests—namely (*a*) the isolation of *H. pertussis* by the cough plate method (*b*) the demonstration of specific antibodies by complement fixation or agglutination (*c*) the intradermal sensitivity test and (2) non specific tests—namely (*d*) total and differential leucocyte counts and (*e*) the erythrocyte sedimentation rate. The specific tests mentioned depend on the assumption that *H. pertussis* is the aetiological agent the arguments in favour of which have recently been reviewed by Gardner (1936).

Cough plate Method of Diagnosis

This is the only certain method of early diagnosis and as there are several pitfalls in the technique of preparation of media and exposure of plates the methods are fully described.

THE CULTURE MEDIUM

Potatoes are cleaned and cut into thin slices 250 grammes of which are added to 500 ml. of tap water and 9 grammes of sodium chloride. The mixture is boiled until the potatoes are soft whereupon the loss of water in boiling is made up the whole filtered through linen and the reaction of the filtrate adjusted to *p*H 7·6. 60 grammes of agar powder (B.D.H.) are added to 1,600 ml. of tap water and dissolved. This gives a final concentration of 3 per cent. agar in the medium. To the dissolved agar solution are added 200 ml. of the potato extract 20 ml. of glycerin and 1 per cent. proteose peptone (difco) after mixing distribute in flasks in 100 ml. amounts which are autoclaved. The medium is stored in the cold room till required.

Finally a flask of the glycerin potato agar medium is placed in the steamer for one hour after which it is gently inverted several times and put in a water bath at 55° C. for five minutes until the agar has a temperature of approximately 70° C. An equal volume of defibrinated horse blood is put in the water bath at 55° C. for two to three minutes to take the chill off. The blood is added to the glycerin potato agar mixed very gently to prevent the formation of bubbles and the mixture is poured into Petri dishes. The plates which should not be dried in the incubator are stored in the cold room and may be used for a period of two weeks. It is most important that the surface of the medium be perfectly smooth and free from pitting which by reflecting the light gives a passable resemblance to colonies of *H. pertussis*.

This medium is similar to that used by Westwater and Straker (1937) but differs from that of Gardner and Leslie (1932) as it contains 50 per cent. instead of 33 per cent. blood. Plates of this medium when compared with those containing only 20 per cent. blood gave greater numbers of more easily identifiable colonies.

TECHNIQUE OF EXPOSURE OF PLATES

At the start of the series all cough plates were taken by the ward sisters but later any of the nursing staff including probationer nurses exposed the plates and very few were spoiled. Two plates were exposed in every case so that a heavy and a light inoculum could be obtained from each and quite frequently it was found that one plate was positive and the other negative. Either a natural or an induced spasm of coughing may be used the latter by tickling the front of the neck over the larynx giving the patient a drink of cold water or as was done in most cases inserting a spatula into the pharynx. Once the paroxysm was started the plate was held about four inches from the mouth and exposed for a number of expiratory barks which varied from fifteen to twenty in a very young infant to four to eight in children aged 2 to 5 years. It is impossible to state any definite number of barks required as the force of the bark varies greatly and some experience by the person exposing the plate is very helpful. Young children should preferably be lying down and older children sitting up. If the spasms are short the plate may be exposed on several occasions. Before exposure the surface of the medium should be quite dry as any condensation moisture may help to spread contaminant growths.

After exposure the plates were incubated at 37° C. In a number of instances they were left lying in the ward for twenty four hours after exposure and others were kept in the ice chest for the same period but subsequent incubation showed that these procedures did not in any way delay or inhibit the growth of *H. pertussis*.

EXAMINATION OF PLATES

The plates were examined as a general rule after seventy two hours incubation but in many instances the pertussis colony could be identified in forty eight hours. The ease with which this was done depended almost entirely on a very smooth surface to the medium. Practically all plates were discarded after three days incubation since a plate negative on the third day was never found to be positive on the fourth. In no instance did spreading colonies need to be cut out of the medium as recommended by Gardner and Leslie (1932).

The colonial and morphological appearances of the organism conformed to the descriptions given by many workers. Daylight was preferred to artificial light and the use of a lens was found very helpful in looking for colonies. Haemolysis did not appear in the medium at seventy two hours but when plates were stored for a day or two longer in the ice chest a zone of clearing was often observed. Of the other colonial appearances which may be confused with pertussis that of *H. influenzae* is most important. The latter was flatter duller in oblique light slightly transparent and occasionally of a yellowish colour.

Subculture.—At least two colonies suspected as being *H. pertussis* were subcultured on the Bordet medium, and after twenty four hours incubation the typical growth with a grey sheen like that of aluminium paint was seen. *H. pertussis* in a Gram stained smear of the culture appears as a small Gram negative cocco bacillus uniform in size occurring in clumps and giving the impression of a thumb print. Occasionally the bacilli appear in paired forms but very seldom in chains.

Agglutination—Final identification was carried out by performing "slide agglutination" with a thick suspension of the subculture, and this was further verified by agglutination by Dreyer's method

RESULTS

All cases in the series were diagnosed as whooping-cough on bacteriological, clinical, or serological grounds The results in 136 cases, many of which were examined by the cough-plate method on several occasions, are shown in Table I

TABLE I—*Isolation of H pertussis from 136 Cases of Whooping Cough*

	No of Tests	Positive	Per cent Positive
1st week	5	5	100
2nd	31	29	93 5
3rd ,	58	55	94 8
4th	75	33	44
5th ,	113	8	7 1
6th ,	120	1	0 8
7th	128	1	0 7
Total	530	132	

The duration of disease was definitely ascertained in almost all cases by personal interview with relatives, and the date of the first cough was taken as the beginning of the illness The small number of cases examined in the first week is due to the fact that parents do not consult the doctor until the paroxysmal stage has been reached One case which gave positive plates in both the tenth and eleventh weeks is not included in the table These findings are comparable with those recently published by Westwater and Straker (1937), who obtained positive plates in 86 5 per cent of cases in the first week, 84 4 per cent in the second 70 6 per cent in the third, and 50 per cent in the fourth

EFFECT OF BRONCHOPNEUMONIA ON EXPECTORATION OF THE BACILLUS

In the series there were sixteen cases of bronchopneumonia From eleven of these positive cough-plates were obtained, and all were in the third week of illness except two, which were admitted during the fourth and fifth weeks As the remaining five cases were all admitted after the third week of the illness it would appear that bronchopneumonia does not affect the expectoration of the bacillus Of these sixteen patients four died, all having given positive cough-plates, and at necropsy in three of them large numbers of *H pertussis* were cultured from the lungs, trachea, and bronchi, no examination was performed in the remaining case

DEGREE OF POSITIVITY OF COUGH PLATES

It was found that of 134 positive plates obtained at various stages of the illness ninety-six, or 71 6 per cent, had an estimated *H pertussis* colony count of ten or less This shows the need for careful scrutiny of each plate, especially if it has been over-exposed

ATYPICAL COLONY APPEARANCE

In the majority of cases positive plates gave typical colony appearances, but five children were found to be exceptions Four of these were infected by an unsuspected case of whooping-cough which had been admitted to a scarlet fever ward All gave much larger colonies, whiter than normal, and not so glistening as typical *H pertussis* colonies Subcultures from these colonies gave a luxuriant growth, less glistening than usual, and failed to show the typical aluminium-paint appearance No explanation has been found for this atypical colony

RELEASE PLATES

Although more attention has been paid to the cough plate as a diagnostic method, it follows that it may have value as indicating the cessation of infectivity As the certainty with which the bacillus can be recognized increases the duration of stay in acute fever hospitals could be greatly cut down in cases where further convalescence could be carried out at home or in a convalescent institution if the patient were shown to be non-infective

CARRIERS

The question of carriers of *H pertussis* has for long attracted the attention of public health workers In the present series 110 cases were examined on the day of discharge or shortly before, and in no instance was a carrier found, two plates being taken from each case One case in particular may be mentioned A boy of 8 years was admitted with mild faucial diphtheria at least ten weeks after the start of a mild but definite clinical attack of whooping-cough, and this history was supported by serological findings, his complement-fixation test being strongly positive (— + —) While in hospital he had a very occasional slightly spasmodic cough, and, as a matter of interest, cough-plates were taken, and two colonies of *H pertussis* were isolated and subcultures agglutinated to the maximum titre of the known serum A week later a plate with one colony was obtained, but in the twelfth and subsequent weeks there were no further positive plates No cross-infection was present in the ward, in which there had been one week's exposure, and the suggestion was put forward that *H pertussis* isolated from late cases might possibly be avirulent To test this, virulence tests were made by Dr J C Cruickshank at the London School of Hygiene on several strains of *H pertussis* isolated in the fifth, sixth, and seventh weeks of infection as well as in the early stages These were carried out by injecting mice intraperitoneally and noting the day of death No relation was noted between the degree of virulence of the organism and the severity or duration of the illness in the patient

Complement-fixation Tests

This diagnostic procedure is of very little value as a means of early diagnosis, as the test does not become positive until the third or fourth week or later It may, however, be employed to establish the diagnosis in late or atypical cases, when the period of expectoration of the bacillus is past In hospital practice it has a practical value, too in ascertaining whether a child with a cough of long standing, suspected of being whooping cough, should be admitted to a whooping cough ward or not In this series the test was carried out bi-weekly in 123 cases of whooping-cough

Technique of Test—This was performed in a manner similar to the gonococcal complement-fixation test using a virulent strain of *H pertussis* as antigen (2,000 million organisms per ml), and 2, 3, and 5 M H D of complement Sera fixing less than 2 M H D were recorded as negative

In the series of cases under review all except four patients diagnosed as having whooping cough on bacteriological and clinical grounds (including haematological examination) showed a change from a negative to a positive complement fixation reaction or if already positive on admission became more strongly so while in hospital Three of the exceptions were aged 3 weeks 4 months and 3 years and although all had typical attacks of whooping cough and gave positive cough plates none showed antibody in their sera although they were examined repeatedly until the tenth week The fourth patient aged 7 months died of bronchopneumonia during the sixth week of illness and fixation tests were repeatedly negative but as several other cases of bronchopneumonia showed delay in the appearance of antibodies until the sixth week or even later this result is inconclusive At necropsy a heavy growth of *H pertussis* was obtained from the lungs and trachea All four cases had typical leucocytosis with lymphocytosis

RESULTS OF COMPLEMENT FIXATION TESTS IN 123 CASES OF WHOOPING COUGH

In 123 cases of whooping cough 383 complement-fixation tests were carried out at various periods the result being shown here in graph form (Chart 1)

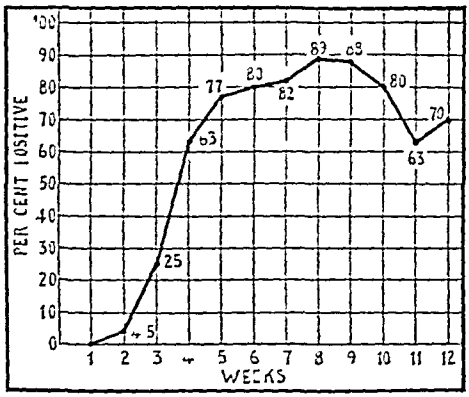


CHART 1

It is seen from the chart that the reaction becomes positive at approximately the third week, and increases steadily till at the seventh and eighth weeks the great majority of cases give positive results after which it falls off slowly In general as in other infections the antibodies tend to disappear after the acute phase of the disease but they may persist in low titre for a considerable time or be stimulated to reappear by another infection as will be shown later

These results may be compared with those of Chievitz and Meyer (1916) who found that 25 per cent of 259 cases tested gave positive results in the second week and that during the fifth sixth and seventh weeks all cases examined gave positive reactions (100 per cent) with a gradual fall to 89 per cent at the twelfth week This relatively high incidence of positive reactions early in the disease may be due to the fact that in many cases they did not inactivate the serum which they found gave a definite positive when inactivated serum gave only a feebly positive reaction

DEGREE OF POSITIVITY

The above graph (Chart 1) however gives no indication of the degree of positivity and an effort is made below (Table III) to do this In Table II the method of reading results of the tests is shown

TABLE II

	M H D			Serum Control 2	Result
	2	3	5		
Degree of haemolysis	C	C	C	C	Negative
	Tr	C	C	C	Doubtful =
	0	Tr	C	C	Positive +
	0	0	Tr	C	+ +
	0	0	0	C	+ + +

M H D Minimum haemolytic dose 0=No haemolysis Tr=Trace of haemolysis C Complete haemolysis

TABLE III (*Total Tests 383*)

Degree of Positivity	Weeks															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	24
+	2	18	10	14	6	3	5	1	1	2	3	2	1	1	0	0
=	0	3	11	9	7	5	3	5	3	2	3	0	1	1	1	0
–	0	1	11	31	34	15	11	13	2	7	7	4	3	2	0	2
– –	0	0	1	3	10	11	13	15	14	7	3	4	0	0	1	0
– – –	0	0	0	0	0	1	2	2	4	2	3	0	0	2	1	0

It will be noted that out of seventeen cases fixing 3 M H D of complement (– – –) fourteen were between the sixth and eleventh weeks the remaining three occurring in the fourteenth and fifteenth weeks (two of these from the same case) while of eighty eight cases fixing 3 M H D of complement seventy nine did so between the fifth and eleventh weeks so that it would appear that the peak of antibody formation occurs at approximately the seventh to eighth week which is a result closely allied to the curve of appearance of the antibodies It may therefore be claimed that if one wishes to verify the diagnosis in a doubtful or atypical case of whooping cough serum should be tested at this period to obtain the most certain proof of recent infection

Does a Positive Complement fixation Test indicate a Recent Attack of Whooping-cough ?

While carrying out this investigation it was observed that eighteen cases which had given a positive complement fixation reaction eventually became negative and it was thought that the fixation test might be found to be absolutely specific for the acute stage of whooping cough To verify this a series of tests were carried out on patients who had a previous history of whooping cough These patients were for the most part cases of scarlet fever and diphtheria some acute others convalescent and at all ages from 2 to 30 years The results obtained were as follows of eighty eight cases examined sixty six gave positive complement fixation tests but of these only four fixed 3 M H D (– – –) the remainder (sixty two) only fixing 2 M H D of complement It may be that the febrile period through which these patients passed stimulated the reappearance of antibodies but pyrexia could not be held responsible as several with positive results had very little elevation of temperature while others with a marked degree of pyrexia gave negative results In this series also the parents were not interviewed except in a few cases and it is possible that the histories of whooping cough (given to nurses) were in some instances inaccurate In five cases with a history of whooping cough a year or less previously three gave negative and two positive complement fixation reactions On the other hand all the four cases giving – – comple-

ment-fixation reactions (3 M H D) had had whooping-cough at least three years previously

Gardner (1936) in a recent publication states that, "like all specific antibodies, however, their presence only proves that the subject has recently been under the stimulus of the specific antigen, not that he is suffering from the present infection,' and in 1934 Bennholdt-Thomsen claimed that adults in contact with whooping-cough acquired a strongly positive complement-fixation reaction without showing any clinical symptoms He found that eight persons with a negative or feebly positive complement-fixation reaction were strongly positive after being in contact with cases of whooping-cough for periods varying from fourteen to seventy-four days An attempt was made to verify this during the present study, but without success Of fourteen persons tested before commencing work in the whooping-cough wards only two gave positive fixation reactions When tested again after periods of contact varying from thirty-one to 120 days only two showed any change One, previously negative, became weakly positive after forty-two days contact, and the other changed from weak positive to positive after eighty-five days' contact In addition to these results it was found that my own blood was negative after nine months contact, and when examined after twelve months gave a doubtful positive (±) reaction, while a sister in charge of a whooping-cough ward for sixteen months failed to show any antibody after this period This short series helps to establish the specificity of the test

EFFECTS OF BRONCHOPNEUMONIA AND AGE ON COMPLEMENT-FIXATION TESTS

It has been pointed out by Paton (1937) that negative complement-fixation reactions were found in cases with severe attacks of whooping-cough or where there were complications such as bronchopneumonia, but in most of his cases the blood was tested only once In this series twelve cases of bronchopneumonia were tested at intervals, and on an average the reaction was found to become positive at the sixth week, which indicates delay in the appearance of the antibodies but as one of the cases in question did not give a positive result until the twelfth week, the average time of appearance of antibodies in the remaining eleven would be the fifth week Of three cases

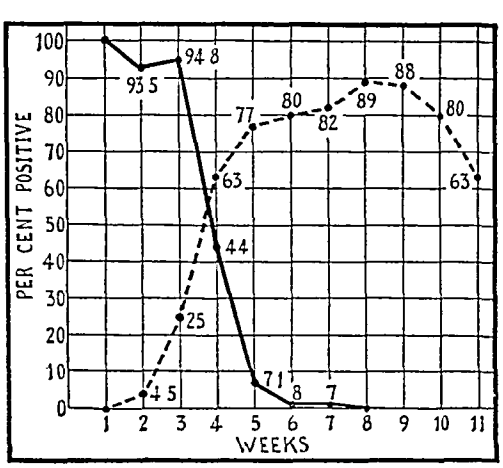


CHART 2.—The continuous line represents cough plates and the broken line complement fixation tests

of bronchopneumonia that ended fatally all gave negative reactions at the seventh week (aged 3 months), third week, and second week respectively

Age in the present series appeared to have little effect, except in one child aged 1 month and in another aged 4 months, both of whom failed to give positive complement-fixation reactions at any stage, but in contrast to this seven other children, all aged 3 to 4 months, gave positive complement-fixation reactions, although the appearance of antibodies was slightly delayed Only two of these gave ++ complement-fixation reactions (3 M H D), the remaining five sera fixing only 2 M H D Sauer (1934) mentions the difficulty in immunizing very young children, and other workers have experienced difficulty in demonstrating antibodies in infants

The accompanying graph (Chart 2) shows how the antibodies appear as the expectoration of bacilli ceases

Agglutinins in the Blood

Fifty different sera, most of which gave well marked complement-fixation reactions, were tested for agglutinins, and the conclusion come to was that the agglutination test was unreliable and useless as a method of diagnosis

Skin Tests

A series of fifty-eight cases were tested by the intradermal injection of 0 1 ml of a killed suspension of *H pertussis* (2,000 millions per ml), but results were equivocal, and this method was abandoned

Non-specific Tests

BLOOD COUNTS

There is considerable controversy in the literature regarding the value of white cell and differential blood counts as an aid to the early diagnosis of whooping cough

In the present study 118 patients were examined White cell and differential blood counts of all cases were done on admission, and in several instances were repeated before discharge The normal standard for children employed was that of Still (1927) (Table IV), most of the counts being done at a relatively late stage of the illness, usually after the second week

TABLE IV

	Birth	6 months	2 years	5 years	10 years
Total leucocytes	24 000 to 62 000 per c mm	15 000 per c mm	13 000 per c mm	11 000 per c mm	9 000 per c.mm
Polymorphonuclears	78 to 80 %	35 %	40%	55 %	60 %
Lymphocytes	20 to 22 %	57 %	52 %	37%	32 %

One case only was examined during the first week of illness, a girl of 5½ years whose count showed 10,600 leucocytes per c mm, with a differential count of 55 per cent polymorphs and 37 per cent lymphocytes, which may be regarded as normal During the second week sixteen cases were examined, and all, except two with leucopenia, showed a definite leucocytosis, with a relative and absolute lymphocytosis

The highest counts with lymphocytosis predominant were obtained in the third and fourth weeks The average white cell and differential counts at three age groups are shown (Table V) for this period of illness (third and fourth weeks)

A control series of thirty-two cases of bronchitis, mainly of a mild nature, were examined, the majority of the cases being in the age group 2–5 years (Table V)

TABLE V

	Age	Leucocytes	Polymorphs	Lymphocytes	No. of cases
Whooping cough	0–5 yrs.	30 000 per c.mm.	35	65	28
	5–	31 000 „	29	66	53
	5+	30 000 „	34	63	12
Bronchitis	5– „	15 000 „	59	3	32

From these figures it will be seen that at all age groups in children the average leucocyte count during the third and fourth weeks of whooping cough is 30 000 per c.mm. while the differential count shows a well marked lymphocytosis in each age group. It will be noted that the series of controls also shows a very mild degree of lymphocytosis but the total white cell count is approximately only half that found in the cases of whooping cough. Only four cases under 6 months of age were examined and in contrast to the findings of Begg and Coveney (1935) all showed marked lymphocytosis but only a mild degree of leucocytosis.

From this peak at the third and fourth weeks the fall to normal was found to be very gradual. The total leucocyte count was the first to change and in the majority of cases of uncomplicated whooping cough had returned to normal at approximately the sixth or seventh week, but the relative lymphocytosis persisted for a longer period and in 50 per cent. of cases examined was still present during the ninth and tenth weeks.

Erythrocyte Sedimentation Rate

This test was carried out in ninety-five cases of uncomplicated whooping cough employing the Westergren method. The results showed a retardation of the sedimentation rate in the second and third weeks with a slight acceleration in the later stages. Since however 29 per cent. of twenty-four cases of acute bronchitis also showed a retardation of the erythrocyte sedimentation rate the test would appear to be of little value by itself but as suggested by Gold and Bell (1936) when used in conjunction with total and differential leucocyte counts in cases with a suspicious cough the test is of definite value.

Practical Application of the Various Diagnostic Methods

The cough plate has been demonstrated to be the only sure method of establishing the diagnosis at the onset and the figures show that whooping cough may be *diagnosed with certainty in over 94 per cent. of cases during the first three weeks of the disease*. By this method the abortive case can be recognized and isolated thus removing an important factor in the dissemination of infection. The negative cough plate also plays an important part in deciding when a child is free of infection and it may render great service to the administrator of a hospital institution or boarding school. In the cough plate the practitioner has at hand a means by which to diagnose and thus control the spread of disease in the home and a method of determining when isolation should cease. The difficulties of this method of diagnosis should not present a serious obstacle to its more general use. Any modern bacteriological laboratory could prepare a suitable medium in a suitable container. The use of the aluminium plate is to be recommended for institutions etc. where carriage or postage is necessary. The time required for diagnosis (three days) will probably be shortened as improvements in media are devised and in any case it is no longer than is usually necessary for the isolation of the typhoid bacillus from faeces. If the time and attention given to devising methods and media for the isolation of the latter organism during the past twenty years were now transferred to the problem of the isolation of *H. pertussis* it is probable that the bacteriological diagnosis of whooping cough would soon become a simple routine procedure.

The complement fixation test has definite limitations and is of no value in diagnosis at the time when it would be most useful—that is in the early stages of infection. Its main value lies in corroborating the diagnosis of abortive or atypical cases where the test may be found to have changed from negative to positive or if already positive to become increasingly so reaching a maximum degree of positivity at the seventh to eighth week. A strongly positive complement fixation reaction at this period is almost conclusive evidence of recent infection with *H. pertussis*.

When bacteriological facilities are not available the total and differential leucocyte count is valuable in cases where there is a *suspicious cough* as it has been shown that a leucocytosis and lymphocytosis is an almost constant finding from the second week of the disease until almost the end of the stage of decline. This method has definite value, and could be employed in dispensaries and out-patient departments of general hospitals and would be extremely helpful in diagnosis.

Summary

An attempt has been made to assess the value of the various methods available for the early diagnosis of whooping-cough. The methods are: (1) *Specific tests*—(*a*) cough plate method, (*b*) complement fixation tests, (*c*) intradermal tests. (2) *Non specific tests*—(*d*) total and differential leucocyte counts, (*e*) erythrocyte sedimentation rate.

SPECIFIC TESTS

(*a*) *The cough plate method* is the only means of certain diagnosis in the earliest stages of the disease. In a series of 136 cases at all stages 100 per cent. were found to give positive plates in the first week, 93·5 per cent. in the second week, 94·8 per cent. in the third week, and 44 per cent. in the fourth week, after which there is a rapid fall to 7·1 per cent. in the fifth week and less than 1 per cent. in subsequent weeks. The value of the cough plate in the diagnosis of atypical and abortive cases is stressed and its value to public health administrators mentioned. Emphasis is also laid on the negative cough plate as a criterion of the termination of infectivity.

(*b*) *The complement fixation test* is shown to be of little value except as a means of corroboration of the diagnosis and occasionally as an indication of immunity. In a series of 123 cases the reaction was found to become positive in 25 per cent. during the third week of illness and reached a maximum during the eighth week when 89 per cent. of the cases gave positive fixation reactions.

(*c*) *The intradermal test* using a suspension of *H. pertussis* is found to be valueless in diagnosis or as a method of determining susceptibility or immunity.

NON SPECIFIC TESTS

(*d*) *The total and differential leucocyte count* is found to be valuable from the second week onwards almost all cases examined showing marked leucocytosis and both absolute and relative lymphocytosis. During the third and fourth weeks the leucocyte count averaged 30 000 per

c mm, with a differential count showing 65 per cent lymphocytes and 28 per cent polymorphonuclears

(e) *The erythrocyte sedimentation rate* is shown to be slightly retarded or normal in almost all uncomplicated cases of whooping-cough in the early stages, with a slight increase in the later stages of the illness

I wish to thank Dr A Joe medical superintendent of the Edinburgh City Hospital formerly of the North Western Hospital for his advice and helpful criticism Dr R Cruickshank pathologist Group Laboratory, North-Western Hospital for his constant supervision and advice on the bacteriological and immunological work carried out in the group laboratory and also the members of the laboratory staff for their assistance

BIBLIOGRAPHY

Begg N D and Coveney M F (1935) *Lancet* 2 1113
Bennholdt Thomsen C (1934) *Mschr Kinderheilk* 62 64
Bordet J and Gengou, O (1907) *Ann Inst Pasteur* 21 720
Chevitz I and Meyer, A H (1916) Ibid 30 503
Gardner, A D (1936) *Proc roy Soc Med* 29, 1273
—— and Leslie P H (1932) *Lancet* 1, 9
Gold A E and Bell, H O (1936) *Amer J Dis Child* 52 25
Paterson D, Bailey R H and Waller R G (1935) *Lancet* 2, 363
Paton J P J (1937) Ibid 1 132
Stuer, L (1934) *South med J* 27 1002
Stebler S K and Okrent S (1934) *J Pediat* 4, 188
Still G F (1927) *Common Disorders and Diseases of Children* p 699 London
Thompson A R (1937) *Lancet* 2 733
Westwater, J S and Straker E A (1937) Ibid 2 565

HUMAN OIL IN THE TREATMENT OF ADHERENT SCARS

BY

CECIL P G WAKELEY, D Sc, F R C S, F A C S, F R A C S (Hon)

Senior Surgeon Kings College Hospital and West End Hospital for Nervous Diseases

Adherent scars are always a problem, and especially so when adherent to bone or cartilage Some five years ago, when confronted with two cases of extensive adherent scars in the neck due to *x*-ray treatment given for exophthalmic goitre, I first tried the experiment of using human oil In these cases the attenuated and parchment-like skin of the neck was adherent to the cartilages of the larynx and the trachea All the subcutaneous tissue of the neck and the infrahyoid muscles had disappeared, and there was absolutely no independent movement of the skin over the trachea and laryngeal cartilages These patients were in a miserable condition and had travelled over the Continent and visited numerous clinics in search of relief for their sufferings As may be imagined, swallowing was difficult and painful, as the skin and the trachea were densely adherent The only form of treatment appeared to be the introduction of some substance between the adherent skin and the trachea, cricoid, and thyroid cartilages Excision was out of the question, and *x*-ray treatment could not cure a condition it had produced I experimented with various types of oil, including different grades of paraffin but none of these gave satisfactory results and all were very painful

Knowing that human fat was fluid at body temperature —for if an incision is made into the abdominal wall one can see the fat globules when some of the fine trabeculae which hold them imprisoned are cut through—some fat from the omentum was removed at laparotomy and investigated, and it gave good results

Preparation of the Oil

My colleague, Dr Creed, assisted me greatly in the isolation and sterilization of the human oil The procedure we adopt is as follows A portion of omentum is removed from a person who is undergoing an operation such as the removal of the appendix or gall bladder The excised portion of omentum is placed in a sterile vessel and taken to Dr Creed's pathological laboratory It is thoroughly washed with distilled water to free it as completely as possible from serum and blood, and then placed in a specimen jar half filled with distilled water and plugged with cotton-wool This is heated to 120 C in the autoclave for half an hour After this treatment most of the fat will be found floating free on the surface of the water as a clear yellow oil While still warm it is pipetted off with a sterile capillary pipette and distributed into sterile 1 c cm ampoules A little is also inoculated into broth culture medium to check its sterility Each ampoule, after sealing, is placed in a short wide test tube, which is plugged with wool and sterilized in the autoclave The ampoules are kept in these plugged tubes so that their exterior remains sterile and can be safely handled by the surgeon

Technique of Treatment

The human oil is liquid at body temperature but is quite solid at temperatures below that, as can be seen in Fig 1 The tube on the right contains solid human oil, but that on the left has been heated to body temperature and is fluid of a clear amber colour The oil is put up in 1 c cm ampoules, as it is never safe to inject a larger quantity at one time The ampoule is warmed in water until the oil is slightly above body temperature, the neck of the ampoule is then broken off and the oil drawn up into a warmed 5 c cm Record syringe The reason for using a 5 c cm syringe instead of a 2 c cm one is that more pressure can be exerted when the injection is given, and this is a most important point When the oil is in the syringe the scar tissue is carefully cleaned with spirit, and a site is selected just at the outer border of the scar tissue and the syringe insinuated between the adherent bone and the contracted and adherent skin (Fig 2) The oil is forced in between these two structures, not more than 1 c cm being injected at any one place The scar tissue is actually raised off the adherent bone or cartilage Several different areas can be injected at one sitting, and the patient does not experience any more pain than is produced when an intramuscular injection is given About twenty-four hours after the injection the site becomes somewhat red and hot, this condition persists for about twelve to twenty-four hours and then gradually disappears Injections can be given at fortnightly intervals and by degrees the adherent scar is made to float upon the underlying structure In the case of badly adherent scars due to *x* ray burns, as many as twenty to twenty-five injections may sometimes be required It is very important that the injections should not be too frequent and that not more than 15 c cm



FIG 1—Solid human oil in the right hand ampoule liquid human oil in the left hand ampoule

be injected in any one area or the scar tissue will give way and an ulcer will form which may take a long time to heal

Besides cases where the scar is adherent to bone or cartilage which are ideal for this form of treatment there are others in which extensive adhesions have formed between tendons and their tendon sheaths or to skin itself as on the posterior surface of the hand In such cases the injection of the oil often results in the free movement of the tendon Here again it is important that not more than 1 c.cm. of the oil be injected at a sitting

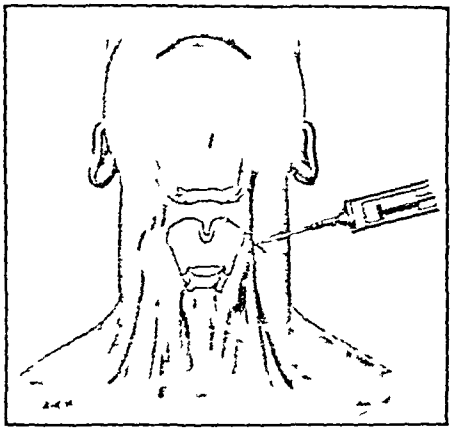


FIG 2.—Method of injecting human oil under an adherent scar



FIG 3.—Showing an adherent scar on the face

or the thinned skin will give way also at least two weeks should elapse before a second injection is given Twelve cases of adherent scars at the back of the hand have been treated by this method and have given uniformly good results It is also valuable in many cases of burns of the face in which the scar is adherent to bone Fig 3 shows a child that was terribly burned on the right side of the face resulting in a long adherent scar the whole length of the mandible on the right side Twelve small injections of human oil resulted in a mobile scar which is gradually becoming more supple and less distinct

In some cases of healed varicose ulcer of the leg where the skin is densely adherent to the tibia a mobile scar can be obtained by this method

The advantages of this form of treatment are that the subject can be treated as an out patient and there is no incapacitation and it often renders extensive plastic operations unnecessary

Clinical Memoranda

Acute Volvulus of the Stomach

Since Laewen in 1927 summarized forty known cases of volvulus of the stomach very few additional cases have been recorded In a review of the literature the aetiological factors in the causation of volvulus of the stomach appear to be (1) ptosis of the stomach with laxity of its ligaments causing increase in the normal space beneath the diaphragm, associated with excessive peristalsis (2) congenital weakness of the left side of the diaphragm The following case is interesting because it reveals the possibility of perigastritis as a cause of gastric volvulus

CASE RECORD

A man aged 25 was admitted into the Anlaby Road Hospital Hull complaining of severe pain across the upper abdomen and across the back at the lower dorsal and upper lumbar level The pain had begun suddenly at 1 p.m. on the day of admission and had persisted with such intensity that by 8 p.m. on the same day he was begging to be put out of his misery He was a spare man of sallow complexion with peculiar slit like eyes and a non paralytic left external divergent strabismus He had been born with bad eyes and double inguinal hernia for which he had had two operations He had not walked until 6 years of age nor cut a tooth until two years later and because of his backwardness was not accepted as a regular scholar at the council school until 8 years old On leaving school at 14 he had difficulty in finding employment because of his mental condition His mother and father are both alive and healthy and he has three brothers and four sisters all alive and well

Clinical Signs.—On examination there was a patch of herpes on his lower lip and a mucous polypus presenting at the right nostril The upper third of his abdomen was somewhat distended but the lower two thirds were quite normal and flaccid His heart chest and central nervous system were also normal Rectal examination revealed nothing abnormal His pulse rate was 80 temperature 97 and respirations 36 He was given morphine ¼ grain The following morning after a restless night he still complained of the agonizing pain His upper abdomen was very much ballooned and now appeared to have definite contour It bulged from beneath the eighth rib in the left anterior axillary line to the eighth rib in the right nipple line and descended from these two sites in a parabola to two fingerbreadths below the umbilicus The patient had not vomited but had regurgitated whatever fluid he had attempted to take There were no abnormal physical signs in the chest The swelling was assumed to be due to a distended stomach An attempt was made under chloroform anaesthesia to pass a stomach tube but it was found impossible to get it into the stomach A differential diagnosis of acute volvulus of the stomach or diaphragmatic herniation of the stomach was discussed but the latter was ruled out as there were no suggestive signs in the chest. The absence of a provoking cause and of persistent vomiting negatived the suggestion of acute gastric dilatation It was decided to take the patient into the theatre

Operation.—The abdomen was opened by a left upper paramedian incision under ether anaesthesia and an enormously distended and cyanosed stomach exposed Gastrostomy was performed and a catheter inserted into the presenting part

which was later shown to be the posterior wall of the stomach near the pylorus There was an escape of gas, but only a few ounces of clear fluid of strong acid reaction were evacuated The stomach was so twisted that its pyloric end was under the left cupola of the diaphragm, whilst the cardiac end and the adjoining oesophagus had wound round the pylorus and were lying under the right costal margin There were about four inches of stretched and twisted oesophagus within the abdomen The spleen had been dragged to a position only slightly to the left of the mid line of the upper abdomen The duodenum, together with the head of the pancreas, was drawn upwards and medially towards the left costal margin The stomach was twisted and kinked at both pyloric and cardiac ends and had become an enormously distended closed loop The diagnosis of volvulus of the stomach was thus confirmed and rotation of the stomach in an anticlockwise direction brought it into its correct lie The stomach was still very distended and a tube was passed and two pints of thin blackish fluid evacuated The catheter incision was sutured with two catgut purse strings and the abdomen closed in the usual layers without drainage The patient died twenty-four hours later, and a post mortem examination was made

POST MORTEM FINDINGS

The stomach was enormously distended The whole of the mucosa from the cardiac orifice to the pylorus had the appearance of a phlegmonous gastritis Lying saddle shaped across the lesser curvature in the juxtapyloric region of the stomach were two ulcers, the one nearer the pylorus being half an inch and the other a quarter of an inch in diameter There was much scarring and puckering of the adjacent lesser omentum, which had become considerably shortened The first and second parts of the duodenum were greatly distended, but the mucosa was quite normal The four inches of stretched intra abdominal oesophagus above the cardiac sphincter had the same blackish discoloration of its mucosa as the stomach The liver, spleen kidneys, brain, and heart were normal, as were the lungs and trachea The stomach contents revealed an excess of free HCl and acid haematin, giving a positive guaiacum-ozonic ether reaction

It was presumed in this case that the perigastritis associated with pre-pyloric ulceration, by causing shortening of the lesser omentum attached to the pyloric end of the stomach, had so disturbed the lie of that organ as eventually to lead to volvulus

I am grateful to Mr C H Corbett, honorary consulting surgeon and to Dr Macrae Tod medical superintendent, for their kind permission to publish this case

PHILIP SCIENCE, M D,
Hull Late A M O, Anlaby Road Hospital

Thrombosis of Pulmonary Artery

I record these two cases of thrombosis of the pulmonary artery which I have lately come across because the condition is rare

CASE I

Clinical History—A housewife aged 26 years was admitted to hospital on January 6, 1937, complaining of severe dyspnoea of three days duration which came suddenly on slight exertion twenty days after apparently normal labour On admission the patient was very cyanosed and dyspnoeic The radial pulse was 170 per minute and the blood pressure 110/70 mm Hg There were few crepitations at both bases of lungs The liver was slightly enlarged and tender There was slight oedema of legs and also albuminuria The case was diagnosed clinically as paroxysmal tachycardia She died four days after admission on January 10 The pulse all the time did not fall below 120

Necropsy January 10, 1937 four hours after death There is marked cyanosis of face and slight oedema of legs The heart shows dilatation of its right side with practically no hypertrophy There is no valvular lesion The pulmonary artery and its branches contain a pinkish grey thrombus, which practically occludes the lumen completely The lungs show congestion There is practically no atheroma of the pulmonary arteries or of the systemic vessels The viscera do not show any change beyond passive congestion The uterus is in process of involution, no phlebitis in the pelvic veins is detectable, and there is no evidence of sepsis consequent on labour Microscopically there is no lesion in the lungs beyond some degree of congestion Although the Wassermann reaction was not tested, there was no evidence of syphilis on post mortem examination, either microscopically or naked eye, and also no bilharziasis Histological examination of the other viscera did not reveal any lesions except the passive congestion

CASE II

Clinical History—A housewife aged 50 was admitted to hospital on February 28, 1938, complaining of cough of several years duration, dyspnoea, and oedema of legs On admission the patient, a stout woman, was much cyanosed, the lips and tip of nose being almost black The radial pulse was 90 and regular, and the blood pressure 130/80 The breath sounds were diminished, with few crepitations at bases The liver was four fingers below the costal margin Oedema of cardiac distribution was present, and also albuminuria The case was diagnosed clinically as double mitral and heart failure She died one week after admission, on March 7

Necropsy March 8, 1938 The body is that of an obese woman The lower limbs are oedematous and the face is extremely cyanosed The heart shows marked hypertrophy and dilatation of right auricle and right ventricle, whose wall measures about 1 cm in thickness The left ventricle is slightly hypertrophied The valves and coronary vessels are practically normal The pulmonary artery and its branches contain a pinkish grey thrombus, which is fairly adherent to the vessel walls and largely occludes the lumen The lungs show the appearance of brown induration The bronchi are prominent and filled with mucoid secretion The pulmonary artery and its branches show widespread patches of atheroma There are some old pleural adhesions There is ascites The liver is the seat of chronic venous congestion, and the kidneys and spleen are indurated from the same cause The systemic blood vessels are practically free from atheroma Microscopically the lungs show bronchitis and fibrosis The pulmonary vessels show atheroma, and the thrombus is in process of organization Although the Wassermann reaction was not tested before death there was no evidence of syphilis on post mortem examination, either naked eye or microscopically, and also no bilharziasis The other viscera showed chronic venous congestion on histological examination

COMMENT

The apparent explanation in the first case is that twenty days after labour a clot in one of the pelvic veins was detached on exertion and attached itself to the pulmonary artery It was not of such size as to cause immediate death, but its presence there caused thrombosis in the pulmonary artery and its branches until there was practically complete occlusion of the vessel, and death took place seven days after this accident The second case is apparently a form of Ayerza's disease in which chronic bronchitis, fibrosis of the lungs, and pleural adhesions with atheroma of the pulmonary arteries predisposed to thrombosis in the vessels which was of some standing and in process of organization The cyanosis (cardiacos negros) in these cases was a striking phenomenon, and could not be explained clinically as the condition was not suspected before death Some cases of pulmonary artery thrombosis have been reported, and the condition is fully reviewed by Montgomery in the *Journal of Pathology and Bacteriology* 1935, **41**, 221

My thanks are due to Dr H A Zaki physician to the hospital for giving me the clinical history of the cases

H BARSOUM F R C P Ed,
Pathologist, Government Hospital, Alexandria
Alexandria, Egypt

Reviews

LEUKAEMIA AND ITS CONGENERS

Leukemia and Allied Disorders By Claude E Forkner A M M D (Pp 333 73 figures 6 plates 21s net) New York and London The Macmillan Company 1938

After the recent spate of ineffectual and repetitive text books of haematology it is a pleasure to read a monograph which makes a contribution to the knowledge and study of blood diseases Claude E Forkner who has himself done important work on leukaemia has performed the Herculean task of reviewing the literature of leukaemia and allied disorders The preparation of the manuscript called for the survey of about 3 000 references and the more important of these (about 1 600) are cited in the text and given in full at the end of the book There are five useful colour plates Leukaemia is defined as an invariably fatal systemic disease of unknown etiology primarily involving the blood forming organs and characterized by widespread rapid and disorderly proliferation of the leukocytes and their precursors and by the presence almost without exception at some time during the course of the disease of immature leukocytes in the blood often in very large numbers

It is now almost a hundred years since the classical description of leukaemia yet to day we know almost nothing about its cause or its specific treatment Nevertheless a great deal has been learnt about its comparative pathology its incidence and its clinical features Leukaemia is widespread throughout the animal kingdom and in fowls it is so common in certain areas as to be a menace to the chicken raising industry Leukaemia can be transmitted by cell free filtrates in birds and by cellular implantation in mammals but attempts to transmit leukaemia from man to man or from man to animals have met with no success In one remarkable instance a donor who a few days later developed acute leukaemia gave blood for the transfusion of a patient who had severe secondary anaemia the donor died but the recipient did not develop leukaemia There can be little doubt however that leukaemia as it appears in the lower mammals is the same disease as in man and the experimental pathologist cannot complain of shortage of material The more work that is done the closer becomes the parallel between leukaemia and the new growths and similar aetiological factors such as hereditary susceptibility tissue irritation and a virus are suggested The most bizarre symptoms may arise from infiltrations of leucoblastic cells and the reaction of the tissues to their presence and Dr Forkner has clearly described and figured the less familiar manifestations in the skin the mucosae and the bones and joints Spontaneous remissions occasionally occur in the acute and subacute forms of leukaemia though they are apparently rare, spontaneous or induced cure of an authenticated leukaemia is very much rarer, but there are three or four cases which might pass muster

It may be a hard thing for the physician to accept but there is no evidence that any treatment extends life in acute leukaemia and on the contrary it sometimes appears to hasten death In chronic leukaemia much may be done to add to the comfort and promote the general health of the patient The most striking advance was the introduction of *x* ray therapy but the hope of the last thirty years that more powerful *x* ray equipment more accurately controlled dosage and more scientific knowledge concerning the biological effects of *x* rays would result in marked improvement in treatment of leukaemia has not been fulfilled It must seem apparent to all that if leukaemia is to be really satisfactorily treated other means than irradiation with *x* rays and radium must be sought Dr Forkner has confined himself fairly strictly to leukaemia and has hardly touched on multiple myeloma or on the group of reticuloses which occupy the unfamiliar tract of country between the leukaemias and Hodgkin's disease Within the territory to which he has limited himself Dr Forkner has organized and classified knowledge without regimenting it or perverting it to a theory and has thus performed a major service to haematology

CHARACTERS OF THE PNEUMOCOCCUS

The Biology of Pneumococcus The Bacteriological Biochemical and Immunological Characters and Activities of Diplococcus Pneumoniae By Benjamin White Ph D With the collaboration of Elliot Stirling Robinson M D Ph D and Laverne Almon Barnes Ph D (Pp 799 illustrated 4 50 dollars 20s net) New York The Commonwealth Fund London Humphrey Milford Oxford University Press 1938

The authors of this volume have attempted the formidable task of reviewing the extensive literature which has accumulated during the last fifty years on the bacteriological biochemical and immunological characters of the pneumococcus The first chapter opens with an interesting historical account of the early work on the pneumococcus and in succeeding chapters morphological cultural and biochemical characters classification transformation of types pathogenicity for animals and for man chemical nature of the antigens of pneumococcus antibodies and active and passive immunization are considered in detail For the sake of completeness a chapter on serum treatment has been included but this aspect of the subject has been treated at greater length in a companion volume since issued by Drs R Heffron and F T Lord On page 471 the authors state in relation to the discussion of dermal allergy that their primary purpose has been to recite the many observations as they have been reported in the literature in order that no contributions whatever might be their value should be neglected This principle has been largely followed throughout the book and while this treatment makes the volume useful as a source of reference it does not always make for easy reading

The description of the methods which have been evolved for the determination of pneumococcal type is not always clear and the phrase protection test appears to be used when simple mouse inoculation with infective material is meant (pp 121 and 133) In Chapter V an interesting account is given of the experimental work on the transformation of pneumococcal types which began with the pioneer researches of F Griffith In this chapter a few errors are to be found On page 148 for instance Dawson is reported to have obtained Type I R pneumococcus by growing a freshly isolated Type I S strain in 25 per cent Type I anti-R serum and the experiments attributed to Dawson's paper published in 1928 (p 137) were recorded in a paper published two years later In certain other instances inaccuracies occur and in the quotation from Abernethy's paper (p 369) the substitution of the word inactive for reactive gives a false interpretation of the facts

The fundamental researches of Avery and his colleagues on the antigens of the pneumococcus indicating clearly for the first time the importance of complex polysaccharides in the antigenic make up of bacteria have pointed the way to many of the recent advances in our

knowledge of bacterial antigens in relation to immunity The chapter on the chemical constituents of pneumococcus gives a very clear account of the development of knowledge in this field, and the many contributions of various workers have been admirably analysed In the effort to make the review of various aspects of the subject as complete as possible a certain amount of repetition has been inevitable, and this is perhaps most obvious in the chapters dealing with antigenicity of pneumococcus, antibodies to pneumococcus, and host response to antigenicity of pneumococcus In the summary to Chapter XI (p 423), and again in the following chapter (p 445), the various manifestations of antibody activity are discussed as if these were due to separate substances in the serum of immune animals, although there is ample evidence, quoted elsewhere by the authors, that many of these effects are due to a single antibody directed against the type-specific polysaccharide

The recent work on the newer sulphonamide compounds in pneumococcal infections suggests that there will soon be available a more effective drug than the cinchona compounds discussed in the chapter on chemotherapy Nevertheless it seems probable that the production of anti-pneumococcal serum, which is very fully treated in this book, will remain a matter of the greatest importance in the treatment of pneumococcal infections Special methods used in the study of pneumococcus and in the preparation and standardization of antisera are given in a useful appendix which covers forty-two pages The more recent work of Heidelberger and his colleagues, however, has shown that more accurate results can be achieved by modifications in technique recently introduced than by the method of nitrogen determination on specific precipitates as outlined on pages 643 and 644

The extensive bibliography occupies 105 pages, and the index twenty-nine pages In spite of minor inaccuracies in this volume, some of which have been noted above, this book may be recommended as a valuable review which indicates the sum of our knowledge of the pneumococcus acquired during recent years, and should prove of the greatest value as a work of reference for those interested in the bacteriology and immunology of pneumococcal infection

THE REFRACTION OF THE EYE

Refraction of the Eye including Elementary Physiological Optics By Charles Goulden, M D, M C F R C S Introduction by Sir John Herbert Parsons, F R C S F R S Second edition (Pp 271 181 figures 12s 6d net) London J and A Churchill 1938

For the most part medical practitioners attached to hospitals who confine their practice to eye work are called ophthalmic surgeons The name is not altogether without ambiguity to the lay mind, which associates the word "surgeon," especially in connexion with hospitals, with operations—cutting operations So there is a tendency for such practitioners to call themselves ophthalmologists, with the idea of correcting this ambiguity The improvement in the general health of the community has without doubt lessened the volume of operative ophthalmic surgery as compared, say, with some Eastern countries But with that improvement there is associated an increase in the demands upon the eyesight of the people of all grades, for fine technical work is the mark of high industrial development That change has increased the demand upon the skill of the ophthalmologist in detecting reasons for tired eyes, and in finding means for the prevention of that tiredness This is now the chief part of the work of the ophthalmologist, certainly in volume, and probably in importance

Mr Charles Goulden has produced a second edition of his book *Refraction of the Eye* Since it is the outcome of a series of lectures on physiological optics delivered at the Royal London Ophthalmic Hospital to students preparing for the diploma in ophthalmic medicine and surgery of the Conjoint Board of the Royal Colleges of Physicians and Surgeons, it is a combination of theoretical and practical instruction that is well balanced It is an excellent book, clearly written with commendable brevity, and admirably illustrated It should prove a useful help to the student and a good remembrancer to the practitioner Like all Churchill's books it is well printed

POISON GAS

On Guard against Gas By H A Sisson O B E, M A, F C A (Pp 91, 2s net) London Hutchinson and Co 1938

Breathe Freely The Truth about Poison Gas By James Kendall, M A, D Sc F R S (Pp 179, 3s 6d net) London G Bell and Sons 1938

On Guard against Gas, by Major H A Sisson, is a book that can be recommended to all who desire a well balanced account of the probable dangers of gas attacks and the best means by which they may be minimized The author was D A D Gas Services at G H Q in France and hence has an accurate knowledge of the potentialities of poison gas His view is that gas will play a subsidiary part in air raids, that it will be combined with high explosive and incendiary bombs, and will be used mainly to create panic and to hamper the work of rescue and reorganization He is also of the opinion that mustard gas is the substance most likely to be used Naturally he is under no illusions about the highly unpleasant properties of this substance, and indeed he remarks "It is probable that mustard gas will play as large a part in the history of the human race as gunpowder has" On the other hand, he points out that panic is the best friend of gas, and that if the population does not give way to panic but keeps under the shelter of houses in rooms made as gasproof as possible, then gas by itself will cause relatively few casualties and is probably much less to be feared than is the high explosive bomb The book opens with an interesting account of the history of gas warfare, gives a short account of the properties of the chief gases, and finally gives a brief and clear account of the methods of defence Gas attacks are very much in the public mind at present No one can foretell what will be the result of an intensive gas attack on a big city, but a few persons who, like Major Sisson, have a really extensive first-hand knowledge of gas warfare are in a position to make an intelligent forecast For this reason his book is of quite exceptional interest

Breathe Freely by Professor J Kendall, is a book that arouses varied emotions The author performs a useful public service by ridiculing in a very entertaining manner an assortment of the many silly exaggerations that have been written about the perils of poison gas The book also contains a large amount of important specialist information For example, the author states and explains the physico-chemical laws that limit the employment and action of gas, and shows the impossibility of poisoning a city by a few gas bombs or of raining down a "dew of death" on an area provided with adequate anti-aircraft defence One feels, however, that in his laudable endeavour to allay panic he at times becomes unduly sanguine The casual reader might, for instance, be left

with the impression that mustard gas was a harmless bogy whereas experience teaches that an area that has been plastered with this substance is a highly unpleasant and dangerous place of residence and also is extremely difficult to clean up So much nonsense has been talked about the dangers of poison gas that a counterblast is welcome but it is desirable not to err on the other side by unduly minimizing the dangers since in the unhappy event of air raids on Britain becoming realities instead of fears of the future carelessness and lack of preparation might be worse dangers than panic Furthermore panic may be aroused not only by exaggerated fears but also by approaching a real danger with unwarranted optimism

DIETETICS

Treatment by Diet By Clifford J Barborka R S M S M D D.Sc F A C P Third edition revised (Pp 642 illustrated 21s net) Philadelphia London New York Montreal J B Lippincott Company 1937

Dr Barborka's book on treatment by diet which appeared first in 1934 has now been issued in a third edition The general scope of the volume an earlier edition of which was reviewed in this *Journal* in July 1935 is essentially unchanged After an introductory section on the dietary requirements in health dietetic treatment of disease is discussed in detail In some diseases dieting is of paramount importance in all it must be considered by the attending physician Each disease heading has a short statement of the dietetic indications and these are then worked out in a series of set diets which may be immediately adapted to the particular case The book is to be recommended as a useful addition to the reference books beside the consulting room desk even allowing for the differences of foods which are found on American and English tables Most of the sections are well prepared and orthodox in dealing with gout though many gouty patients are benefited by reduction of total intake we cannot agree with the high carbohydrate diet recommended by the author A general reduction in diet giving adequate protein provided it is of low purine content, is we believe suitable in practice

Notes on Books

L'Annee Therapeutique for 1937 (Masson 25 fr) is the twelfth of a series which aims at giving an annual summary of recent advances in medical treatment The author has drawn his information from recent publications in France and abroad and presents the work of the year under the headings of certain diseases and their symptoms and means of alleviation modern methods of treatment in anaesthesia radiotherapy autohaemotherapy and artificial fever and new medication Among the latter mandelic acid the new forms of insulin and compounds of barbiturates para aminophenylsulphamide (prontosil etc) and recent progress in knowledge of vitamins are dealt with The result is a considered review of modern therapeutics and is not merely a compilation There is a good index, and the cross reference arrangement gives a useful conspectus of recent advances

To Drink or not to Drink by CHARLES H DURFEE Ph D is published by Longmans Green (6s) The problem of alcoholism must always be an interesting and important one and recent legislation in America and its repeal have raised this question in an acute form in that country The present volume is an exposition by an educational psychologist of his method of treating patients by making them work out their emotional reactions in manual tasks on the farm colony which he has organized, together with a certain amount of simple psychological discussion Most of those who have studied the problem will agree with the author that alcohol is but a symptom of an underlying personality problem and that it is not enough for the patient simply to know why he is alcoholic he must alter his emotional attitude towards life and learn to live without alcohol The methods advocated by Dr Durfee will undoubtedly be successful in some cases but it would be a mistake to think that in this volume the subject has been covered completely or the last word said on the treatment of alcoholism

Preparations and Appliances

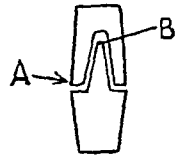
SET OF NON SLIPPING HYSTERECTOMY CLAMPS

Mr KENNETH MCMILLAN F R C S honorary surgeon Birmingham and Midland Hospital for Women and Birmingham Maternity Hospital writes

The two main features of these clamps are that the blades are deeply grooved longitudinally instead of transversely and that the groovings articulate accurately This longitudinal grooving has been used before but the vertical depth of the blades was insufficient to prevent distortion when gripping tough tissues so that the tissue slipped out frequently particularly when clamping the vagina

The complete set consists of two angled ovarian pedicle clamps two slightly curved uterine artery clamps of modified La Foure pattern two straight cervical artery clamps and two very powerful curved vaginal clamps The ovarian clamps are angled so that the handles hang down over the edge of the wound out of the surgeon's way

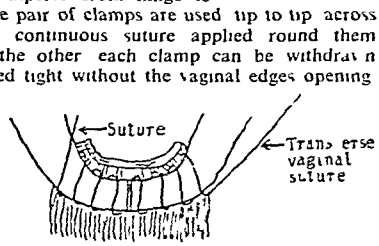
In section the blades represent an isosceles triangle the two long sides giving a much stronger grip on the tissues than the short base of the ordinary clamp The shoulder at A prevents the tissues from being cut through and the edge at B is finished quite bluntly for the same reason Thus tissue paper can be held firmly without cutting or slipping as well as the toughest pedicles The jaws of the straight cervical artery clamps are of the same design and produce a most satisfactory pedicle to tie in a rather inaccessible and deep position The uterine artery clamps are of the same general design as La Foure's pattern but with the grooves in the jaws deepened and running longitudinally



The powerful vaginal clamps are deliberately made heavy enough to avoid any distortion under load The curved jaws are deeply grooved longitudinally and the grooves articulate accurately as shown in the enlarged section illustrated here The jaws are also tapered from hinge to tip so that when the pair of clamps are used tip to tip across the vagina and a continuous suture applied round them from one side to the other each clamp can be withdrawn and the suture pulled tight without the vaginal edges opening



In addition to their special use in gynaecology it is possible the clamps may prove useful in general surgery as well Messrs Philip Harris and Co (1913) Ltd of Birmingham have kindly made them for me Rough unpolished models were first made and tried at operations until the right spring and grip were obtained for each pair



INCONTINENCE FROM ACCUMULATION OF FAECES IN THE RECTUM

BY

HAROLD DODD, Ch M, F R C S

Surgeon to King George V Hospital Ilford and to the Royal Hospital Richmond

Incontinence of faeces during an illness is a very tiresome feature both to the patient and to the nurses This incontinence may be due to an accumulation of faeces impacted in the rectum, so large and hard that it is impossible for the patient to pass it That this is an occasional cause is not, in my experience, generally recognized, fortunately it is one which is readily amenable to treatment Comparatively recently I have seen four such cases of faecal incontinence which, while presenting the same urgent symptom, have stimulated totally different diagnoses They appear to be interesting enough to merit a short description

Case I Perforated Duodenal Ulcer, Query "Organic Nerve Disease"

A man aged 48 was suffering from general peritonitis and severe abdominal distension three days after the suture of a perforated duodenal ulcer I was asked to see him because he was *in extremis* I advised sedatives and heat to the abdomen, continuous gastric lavage and intravenous saline, and no aperients, enemata, or injections He steadily improved I saw him again sixteen days later because he was incontinent of faeces, a bad prognosis had been formulated, querying an organic nervous disease as well as a peptic ulcer A glance at his tranquil countenance, his moist clean tongue, and his equal reacting pupils, with a normal pulse and temperature tended to negative this suggestion The abdomen was doughy and soft but not distended, and a finger in the rectum found a hard mass the size of a foetal head, it was too large and firm to pass through the anus During the course of the next few days this was removed by digital morcellement, with complete recovery

Case II An Unusual Case of Acute Intestinal Obstruction

I was called to hospital to see a woman of 37 with an acute intestinal obstruction She was already in the ward under the care of my physician colleague for indigestion and anaemia She was now suffering from acute abdominal pain, vomiting, and a distended but not tense abdomen and had been constipated for the previous four days Two enemas had been given with but coloured faecal results, and little or no flatus was passed The diagnosis appeared to be a clear one of mild acute intestinal obstruction Further, she had developed incontinence of urine in the previous twelve hours The routine examination of her rectum revealed a mass even larger than a foetal head The house physician said he had done a rectal examination and that he didn't know what to make of it—he had never felt anything like it before Removal of the accumulation with the gloved finger and olive oil enemas gave complete relief

Case III Enlarged Prostate, Retention of Urine, Query Uraemia

A man aged 67 was admitted to hospital with retention of urine from enlargement of the prostate His bladder was decompressed, suprapubic cystostomy was performed, and he progressed well for three weeks when my house surgeon ventured the opinion that uraemia was beginning, for the patient didn't seem so well, had a threatening bedsore, and had become incontinent of faeces The ward sister stated that the bowels had been opened on alternate days by an enema An examination of the rectum revealed a mass quite the size, and almost the consistency of a cricket ball, this was with difficulty removed with the gloved finger, after which continence returned

Case IV "Inoperable Carcinoma of the Rectum" with Intractable Pain

I was asked to see an old lady aged 82 who was suffering from chronic intestinal obstruction which had become acute owing to a huge inoperable carcinoma of the rectum" For two weeks she had been incontinent of faeces and urine, groaning day and night with pain, which was only partially relieved by frequent morphine injections The relatives were strained to the utmost with the nursing, and the doctor was seriously embarrassed by calls every three to four hours for sedatives, day and night The question raised was whether an intrathecal injection of absolute alcohol would be of service The patient was *in extremis*, with a wooden dry tongue and a pulse of 120, and the respirations were shallow and slow She was vomiting freely, and the problem of her nourishment and nursing was an acute one A finger in the rectum met with a surprise in the shape of a huge faecal mass which had been mistaken for an inoperable carcinoma of the rectum It was an enormous aggregation that could be ballotted bimanually, this also explained the urinary incontinence

It was gradually extracted, together with daily warm olive oil enemas A very anxious time followed detoxicating the patient from the large amounts of morphine and hyoscine she had had

Commentary

These patients illustrate four possible manifestations after a major gastric operation, raising the question of central nervous disease, acute intestinal obstruction in an obscure case of indigestion, uraemia after retention of urine from an enlarged prostate, and intractable pain from an inoperable carcinoma of the rectum In two instances, Cases I and III, the rectal examination had been omitted, recalling the aphorism that "if you don't put your finger into the rectum you will put your foot in it" In Cases II and IV a finger had investigated the rectum without the condition being recognized—a *raison d'etre* for this note, and suggesting the necessity for educating the finger in rectal pathology by assiduous practice In these days of slogans the following might prove an apt reminder "Put your finger into the rectum, you may find a brick in it"

The incontinence takes the form of a continuous discharge of faecal coloured fluid, a mixture of mucus which dissolves faeces from the mass The mucus is poured out in response to the mechanical irritation of the bowel It is this discharge which suggests that the bowel lumen is patent and tends to conceal from the observer that extreme constipation is the actual cause

Treatment

The treatment of the condition is simple, being that of digital removal of the hard faeces, assisted by olive oil enemas, the rectum is usually clear in two days, but it may take a week before the colon is empty and continence returns The procedure must be carried out with gentleness, lest the anal canal be lacerated and bleeding or a perianal abscess be thereby excited, for these subjects are usually debilitated, and sepsis starts readily in this area, which is already catarrhally inflamed For this reason spoons and forceps are never used, only a gentle intelligently directed finger.

The *Annales de la Societe Belge de Chirurgie et Journal de Chirurgie* has recently issued a volume containing articles by Dr Oct Coquelet on Surgical Affections of the Lung and the Bronchi, by Dr Jean Govaerts on Tumours of the Lung' and by Professor Christophe and Dr Laduron on Reparative Surgery of the Peripheral Nerves'

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY SEPTEMBER 17 1938

THE VITAMIN B COMPLEX

Until about thirteen years ago vitamin B was regarded as one substance with two functions it cured or prevented beriberi in man and polyneuritis in pigeons and it was necessary for the growth of rats In many food substances tested the amount that had to be added to the vitamin-B-deficient diet of the rats in order to make them grow bore a fairly constant ratio to the amount that was needed to cure a pigeon of polyneuritis allowance being made even in those days for the variation in response of different animals to equal doses of the same substance However as details of experimental technique with animals came under more careful control it became evident that the ratio of the anti beriberi potency to the growth promoting potency in different substances varied widely A substance which could cure polyneuritis in pigeons by a very small dose was not nearly so potent in promoting growth in rats otherwise deprived of vitamin B This was particularly evident in the vitamin B concentrates prepared by the method of Peters and his co workers The more potent his concentrates became in their antineuritic property the less effective were they in supplementing the vitamin-B-deficient diets of rats It was known at this time that by autoclaving yeast its anti neuritic potency was destroyed and that it could not make good the deficiency of the rats' diets Workers in several laboratories, however, soon showed that when anti neuritic concentrates and autoclaved yeast were given to rats fed on the vitamin-B-deficient diet the animals could grow This then proved the existence of two factors at least in vitamin B and they were tentatively named vitamin B_1—the anti neuritic and more heat labile constituent—and vitamin B_2—the more heat stable constituent In the USA some workers preferred to call these two factors B and G others F and G

Further work revealed the existence of other factors which were water soluble and therefore classified temporarily as B vitamins One factor present in wheat germ was found to be necessary for the maintenance of weight in pigeons and named vitamin B_3 Another very heat labile factor in yeast necessary for the rat and chick received the name vitamin B_4 another necessary for the pigeon, was named B_5 and another necessary for the rat (anti dermatitis) was named B Still another factor present in liver extract is regarded as preventing dermatitis in chickens it is generally known as the 'filtrate factor It could not be determined which of these was the anti pellagra factor for none of them was obtainable in a pure form except vitamin B_1 which was completely ineffective in the treatment of pellagra Further work on what had been called vitamin B_2 demonstrated that the effects were due to two substances at least—lactoflavin known as riboflavin since its composition was determined and the anti-dermatitis factor previously called vitamin B which Lepkovsky[1] has recently claimed to obtain in crystalline form—but neither of these proved to be the pellagra preventive factor Less than twelve months ago however Elvehjem showed that nicotinic acid cured black tongue in dogs a condition which is thought comparable with pellagra in man and clinical trials have since proved that nicotinic acid can indeed cure the most typical symptoms in the pellagra syndrome Carter and O Brien[2] have now confirmed the earlier findings of the pigeon s need for vitamins B_1 B_3 B and riboflavin Macrae[4] declares that the rat requires vitamin B_1 lactoflavin an unidentified factor present in an autoclaved aqueous yeast extract after extraction with fuller's earth (yeast filtrate factor) and an unidentified factor present in the barium hydroxide eluate of a fuller s earth adsorbate from an autoclaved aqueous yeast extract (yeast-eluate factor) Nicotinic acid was not either of these yeast factors Amyl alcohol extracts prepared from liver extracts contained a growth factor for rats distinct from all the preceding ones Thus the number of factors tentatively included in the term vitamin B complex is by no means clearly determined Those whose existence is generally accepted at present are B_1 (aneurin or thiamine), lactoflavin (riboflavin) vitamin B_6 (the rat anti-dermatitis factor), and nicotinic acid (the anti-pellagra factor) Others accepted by many workers are vitamins B_3 B_4 B the liver filtrate factor (chick anti-dermatitis factor) and Macrae s yeast-filtrate and yeast-eluate factors

[1] *Science* 1938 87 169
[2] *Biochem J* 1937 31 2264
Ib d 2270
[4] Ibid 2275

Returning to vitamin B_1, it may be recalled that Westenbrink[3] showed that by feeding rats on a diet free from this all the tissues of the rats except the brain became depleted of their reserves of vitamin B_1 within five or six weeks The amount stored in the tissues is limited but dependent on the intake Excess is excreted in the urine Harris and Leong[6] have stated that "a daily excretion of less than 12 International Units raises the presumption that the diet contains less than a normal allowance of vitamin B_1" Babkin[7] has demonstrated that the gastric glands of dogs on the vitamin–B–deficient diet do not respond to the usual stimuli—sham feeding, subcutaneous injection of histamine, the presence of food or 5 per cent solution of alcohol in the intestine When yeast was administered the responses became normal, but the effective substance in the yeast was not determined These results may afford an explanation of the anorexia so characteristic of vitamin-B_1 deficiency Molitor and Sampson[8] have found that vitamin B_1 is without influence on the contractions of the intestine The role of vitamin B_1 in the metabolism of carbohydrate, fat, and protein is still a subject for experiment Peters and his co-workers[9] have postulated the theory that it acts as a co-enzyme in the metabolism of carbohydrate, more especially in the oxidative breakdown of pyruvic acid This is supported by a large amount of experimental work on the ratio between oxygen uptake and disappearance of pyruvic acid in normal brain tissue and in brain tissue of pigeons suffering from vitamin-B_1 deficiency It is suggested by Lipmann[10] that vitamin B_1 is converted into vitamin pyrophosphate by the brain tissue, and that in this form it acts as a co-ferment helping either the carboxylase to break down the pyruvic acid to acetaldehyde and carbon dioxide or the oxidase to oxidize the pyruvic acid to acetic acid and carbon dioxide

Vitamin B_1 exerts a demonstrable action only with B_1-deficient animals Excess dosage has no effect No toxic symptoms have been observed when amounts 25,000 times the estimated daily requirement were administered Hawes[11] has obtained dramatic cures by giving large injections of vitamin B_1 to patients suffering from acute fulminating cardiac beriberi Stern[12] has injected synthetic vitamin B_1 in doses of 500 to 50,000 International Units intrathecally for the relief of intractable pain and for inflammatory and degenerative diseases of the central nervous system The action of the vitamin is much quicker when injected than when given by mouth[7] Fischer,[13] determining the amounts of vitamin B_1 in the crystalline lens in cases of cataract, found less of it and more pyruvic acid than in the normal lens, and concluded that the vitamin plays an important part in the oxidation-reduction system of the lens The question of the presence of vitamin B_1 in white and wholemeal flours and breads has lately been reinvestigated by Copping and Roscoe[14] They found that straight-run white flour, whether new or old, bleached or unbleached, contained 0 37 International Unit per gramme Patent flour contained none and wholemeal 1 18 units per gramme Bread made with yeast had no more vitamin B_1 than the flour from which it was made Thus a man would have to eat each day more than half a pound of white bread made from straight-run flour —not from patent flour—in order to obtain about a quarter of the vitamin B_1 needed The importance of brown bread or of wholemeal bread in the diet was stressed in these columns recently[15]

Day, Darby, and Cosgrave[16] claim to have shown that riboflavin is the anti-cataract factor, but Morgan, Cook, and Davison[17] are of the opinion that the filtrate factor is the anti cataract factor They believe that both flavin and vitamin B_1 are produced, probably by micro organisms, in the intestines of rats fed on large proportions of lactose, but this did not prevent the development of cataract in a large proportion of their rats They found that the filtrate factor was in corn starch or was produced in the intestines when corn starch was given in the diet Carlsson and Sherman[18] have demonstrated that the amount of riboflavin stored in the body depends on the diet of the animal In well-nourished animals the concentration of riboflavin in the liver was ten times that in the skeletal muscles, the concentration in the kidney, brain, and spleen was intermediate between these extremes Sebrell and Onstott[19] have determined that the condition in dogs which they had previously described as "yellow liver" is due to a lack of riboflavin and can be cured rapidly by early parenteral administration of that substance

This survey of a number of the recent studies on the B vitamins gives some idea of the complexity of the work that is being carried out and also of the intensity of the attack of the biochemist on the multifarious problems presented to him The debt of the clinical worker to biochemistry increases every year

[3] *Arch neerl physiol* 1932 **17**, 560
[6] *Lancet* 1936 **1** 886
[7] *Canad med Ass J* 1933 **29** 5
[8] Quoted in *J Amer med Ass* 1938 **110** 805
[9] *Lancet* 1936 **1** 1161
[10] *Nature* 1937 **140** 25
[11] *Trans roy Soc trop Med Hyg* 1938 **31**, 474
[12] *Amer J Surg* 1938 **39**, 495
[13] *Arch d'Opht* 1938 **2** 108
[14] *Biochem J* 1937, **31** 1879
[15] *British Medical Journal* 1937 **2** 752
[16] *J Nutrit* 1938 **15** 83
[17] Ibid 27
[18] Ibid 57
[19] *Publ Hlth Rep* Wash 1938 **53** 83

THE BLIND MAN IN RELIGION

In animal communities and primitive human societies blindness is probably always regarded as anti social and the blind member of the herd is put to death or ostracized Compassion as a religious sentiment is a comparatively late development and a mark of a certain advance in civilization Treatment of the blind may be a fairly reliable index of this sentiment because their misfortune is obvious and severe and yet makes comparatively slight demand upon the charity of their fellows M Étienne Ginestons has collected some interesting and out of the way information in a recent paper[1] - on the status of the blind in various religious systems The old Brahmin law as set out in the Manava Dharma Gastra, laid down that the blind with other sufferers from special sense defects could not inherit property but imposed on the inheriting kinsman of a disqualified person a rule of equity that he should so far as his means allowed, maintain the sufferer during life The idea of blindness as a divine punishment or the work of evil spirits seems to have conflicted with the view that it was a misfortune for which God compensated the victim by the gift of magical powers The legal treatment of the blind man therefore safeguarded the community from divine wrath in either direction—by making him a pariah, but at the same time allowing him the necessities of life as the possessor of a socially valuable second sight

The Old Testament is full of allusions to the blind Sightless men must have been for thousands of years as frequent and familiar in the East as they are to day Sometimes blindness is looked on as an arbitrary act of God sometimes it is a natural accompaniment of old age sometimes it is a punishment either direct or vicarious for sin occasionally as in the case of Tobit it is a trial of faith Leviticus forbids a Jew to put a stumbling-block before the blind and Deuteronomy contains a curse, in the mouth of the Levites on him who maketh the blind to wander out of the way On the other hand a blind man may not offer the holy bread, nor may a blind beast be sacrificed The attitude of Christ towards the blind that they deserve all possible consideration and encouragement was new to the East—at any rate as a canon of ordinary behaviour—and is the basis of their treatment to day in civilized countries Miraculous restoration of sight is one of the commonest of the miracles attributed to Christian saints The Prophet of Islam also taught a charity towards the blind which was a great advance on the manners of Arabia in his time M Ginestons quotes one or two verses of the Koran which say that sight and blindness are sent by Allah at his discretion and the general tendency of that scripture is to treat blindness as an objective phenomenon without attaching to it any sentiment of awe or recrimination The author might perhaps if he had chosen have quoted many injunctions to give alms to the blind, and the most striking of these is perhaps the opening verse of the chapter known as *Abasa* 'He scowled' In that verse God reproaches the Prophet himself through whose mouth he was speaking for scowling and turning away when a blind man asked him for alms The Wine Song of Omar ibn El Fārid a famous mystical poem of the Sufis says of the wine—one of the symbols, as Jung might say of the unconscious libido—that if it shines on the eyes of a blind man at night he will see in the morning Discussing the attitude of the Christian Church M Ginestons records that in the Roman Catholic priesthood blindness disqualifies from celebrating the mass, but a special dispensation may remove the disqualification In the Protestant communions it is not in itself a bar to ordination or the fulfilment of any pastoral duty

[1] *J Méd Bordeaux* 1937 114 625
[2] Ibid 1937 115 55

ALLERGY AND IMMUNITY IN OCULAR TUBERCULOSIS

Rich and his associates at the Baltimore School have been insistent in their teaching that allergy and immunity are two distinct processes In this they have been supported by painstaking work from the highly organized Wilmer Ophthalmological Institute Woods Frieden wald and their collaborators have shown in a series of publications that the extension and progression of an established tuberculous lesion in the eye are due to hypersensitivity of the ocular tissues in the presence of low resistance while limitation and healing are associated with low tissue sensitivity and high resistance In other words the inflammatory caseating and necrotizing phases of ocular tuberculosis are allergic whereas encapsulation and healing of the lesion are due to immunity A profound difference in the approach to treatment is bound up in this theoretical problem On the assumption that allergy and immunity are related tuberculin has been used to produce minimal allergic reactions around a focus of infection in the belief that these reactions bring with them a degree of immunity If immunity is unrelated to allergy ther the rational use of tuberculin is confined not to producing lesions which will produce immune bodies but to desensitizing the tissues Woods and Randolph[1] have studied these two different methods of using tuberculin in human ocular tuberculosis and they have shown that better results were obtained by giving tuberculin on the basis of the concept of desensitization than on that of the perifocal

[1] *Arch Ophthal* Chicago 1937 18 510

concept This approach raises the all-important question of the relation between cutaneous and ocular sensitivity, and to these problems Woods, Burky, and Friedenwald[2] devote a series of important studies They show that under experimental conditions the healthy eyes of rabbits infected systemically with tubercle bacilli participate in the general sensitivity to tuberculo-protein, the sensitization of the skin being determined by the usual intradermal test and that of the eyes by injecting purified protein derivative into the anterior chamber Both ocular and cutaneous sensitivity develop synchronously about the third week and reach their peak about the sixth to the eighth week Woods and his co-workers hold that cutaneous sensitivity gives a fairly reliable index of the degree of ocular sensitivity They further found that when tubercle bacilli are injected into the anterior chamber of one eye sensitivity is produced in both eyes and to a lesser extent in the skin, becoming apparent at the end of the second week and reaching its height by the fifth week The eyes showed progressive tuberculous inflammation during the first few weeks, becoming acute with the production of caseation and necrosis as the ocular sensitivity advanced to a maximum Active tuberculous inflammation and ocular sensitivity persisted steadily up to the sixteenth week, after which both ocular sensitivity and active inflammation subsided synchronously, the eyes thereafter showing evidence of scarring and repair In the final stage of comparative inactivity there were occasional minor exacerbations, and these suggested a return of ocular hypersensitivity These important findings open once more the question of the scope and limitations of tuberculin therapy in ophthalmology Clinicians have of course recognized for many years that high doses of tuberculin are to be scrupulously avoided, and there is evidence that the early results that were claimed for tuberculin might very likely have been the transient improvement from hyperpyrexia induced by the protein shock of massive doses of tuberculin The use of small doses has come with clinical experience, and if desensitization can be achieved without pushing tuberculin to the limit of producing minimal inflammatory reactions the outlook for tuberculous allergic eye conditions is distinctly more promising

RADIOTHERAPY OF ACTINOMYCOSIS

For a relatively uncommon disease actinomycosis has been the subject of a rather extensive literature Much of this, however, is devoted to the bacteriological aspects of the disease, and statistics as to the results of treatment are very few A recent monograph by Axel Renander[3] on the treatment of fifty-two cases of actinomycosis at the Radiumhemmet is therefore to be welcomed It is well known that the commonest site of the disease is in the neck and face (56 per cent of all cases), and that here the prognosis is good Cope[4] estimates that 97 per cent of the cervico-facial group are ultimately cured Twenty-six of Renander's thirty-one cases were cured a proportion very like that found by Duvan before the advent of radiotherapy It is therefore doubtful whether treatment by radium or by x rays improves the prospect of cure in this group, but the duration of the disease is probably shortened and the ultimate scarring less Abdominal actinomycosis, constituting 22 per cent of all cases, shows a recovery rate of about 32 per cent under iodides and surgical measures, of Renander's thirteen cases treated by radiotherapy five were cured, and he quotes also Grunthal's statistics of 45 per cent cures in thirty-three cases The numbers treated are too small for any valid conclusion to be drawn, but it is probable that radiotherapy has improved the prognosis, and the same is perhaps true of the thoracic form of the disease, although Renander's three patients in this group all died The mechanism of action of radiations in actinomycosis is unknown, but, as in other infections, it is certainly not by a lethal effect on the organism itself It is more probable that the effect is mainly on the leucocytes, their destruction may be regarded as equivalent to a "decompression" operation, and allows of an alteration for the better of the condition of stalemate present in a chronic inflammatory focus Iodides are presumed to have a similar effect, promoting the softening and absorption of the cellular infiltration The massive single dose of radiation seems to have been founded on the misapprehension of a lethal effect on the organism, and Renander recommends small doses of the order of 150 *r*, and the repetition of such series after intervals of two months A study of his case reports emphasizes the point that great persistence is required on the part of the radiotherapist, many cases having five or six series of treatments It is perhaps better still to follow Finzi's technique of even smaller doses (75 to 100 *r*) twice weekly without interruption until cure is obtained If the temptation to increase the dose and the discouragement at the slow rate of progress are avoided the number of deaths from the disease in this country (about sixty per annum) might be further reduced

[2] *Arch Ophthal* Chicago 1938 19 229 236 245
[3] *Acta radiol Stockh* 1937 Supplement 35
[4] Cope, Z *Actinomycosis* London Oxford University Press, 1938

SWALLOWED FOREIGN BODIES

Leaving aside those queer people who for a wager swallow nails, and the mentally deranged who are dirt eaters or have a predilection for some other noxious substance, there are others, chiefly children, who quite inadvertently swallow foreign bodies It may be a pin held in the teeth while dressing, a coin from the plum pudding, a piece of glass from a broken bottle or a denture In the *Journal* of March 5 (p 514) three practitioners in Shanghai, Drs J E Bowen, G Chambers, and W R Johnston, reported the case of a Chinaman, aged 24, from whose ileum fifteen foreign bodies resembling pebbles were removed These were regarded as encrusted fruit stones which he had swallowed in childhood, and had been giving rise to symptoms for ten years before their removal F F Henderson and E A Gaston[1] find that a swallowed foreign body which passes through the intestinal tract naturally does so within seven days as a rule, regardless of the age of the patient or the type of foreign body A double edged safety-razor blade has made a successful

[1] *Arch Surg* Chicago, 1938, 36, 66

journey through the alimentary tract and of 800 cases of swallowed foreign bodies seen at the Boston City Hospital only nine (just over 1 per cent) caused perforation The actual percentage of perforations is probably lower even than this since not all the uncomplicated cases are brought to hospital When perforation occurs the stomach is most often the site and the usual type of perforation here is of a chronic character Acute perforations more often arise in the small bowel or caecum Objects pointed at both ends are considerably more dangerous than those pointed at one end only The course of an object which is liable to perforate or become impacted should be followed by x ray examination Laparotomy is called for if localized abdominal tenderness occurs It is worth noting that in none of the reported cases of perforation by a foreign body with abscess formation has the actual site of perforation been found and in none of the cases has a faecal fistula developed after drainage of the resulting abscess An analysis of fifty seven cases of perforation by foreign bodies in which the result of treatment was known revealed a mortality of 14 per cent Preventive measures are perhaps obvious but it may be mentioned that mothers should avoid putting pins in their mouths particularly in front of their children who may swallow a pin while attempting to imitate this bad habit The ordinary pin is the foreign body most often swallowed, and it usually passes along the intestinal canal without mishap an open safety pin does so with the spring foremost if however it makes its way point first it tends to be arrested by the point penetrating the mucous membrane of the stomach or duodenum At laparotomy the surgeon can sometimes close the pin through the unopened stomach and push it into the end of a stomach tube by which it may be withdrawn without performing gastrotomy An open safety pin in the duodenum has likewise been closed by palpation and has then passed successfully If a foreign body remains in one place in the intestinal canal for more than seven days surgical intervention should be considered

GONOCOCCAL MENINGITIS

Several instances of gonococcal meningitis have been recorded in the literature but in many of them the identification of the gonococcus has been so incomplete that pathologists may be pardoned for having been somewhat sceptical In a recent paper however from the United States by Dr Sara Branham and her colleagues[1] data are advanced which are likely to bring conviction to all but the profound unbeliever Dr Branham has for a long time been studying the meningococcus at the National Institute of Health in Washington and has acquired exceptional knowledge of this organism During the past two years no fewer than ten of the 500 strains sent to her for typing appeared to be not meningococci but gonococci It is true that they were agglutinated by polyvalent anti meningococcal serum and some of them especially well by Type II serum but their other characteristics left no doubt of their identity Special weight was attributed to the delicate nature of the growth and the smallness of the colonies on blood agar which differed from the relatively luxuriant growth and large colonies of the meningococcus Every one of the ten strains fermented glucose only whereas the meningococcus almost invariably attacks maltose as well The alkali solubility test of Thomson was found to be of definite though limited value Four of the ten strains were dissolved rapidly but the other six behaved like meningococci in being only partially soluble Serological tests proved very unsatisfactory for differentiation owing to the high degree of group affinity between the two organisms Five of the strains were isolated from the blood stream and five from the spinal fluid The full history of the ten patients could not be ascertained but it was established that in five of them at least the invasion of the blood or meninges followed gonococcal infection of the genital tract In two of the cases both of them in young women there was no history or evidence of genital infection and the meningeal or bloodstream infection appeared to be primary More recently three additional cases of gonococcal meningitis have been studied by the authors and in each instance previous genital infection could be proved There is of course no reason why the gonococcus which resembles the meningococcus in so many respects should not invade the meninges and the present paper leaves little doubt that it may do so It is of particular interest to note that in this series 2 per cent of strains supposed to be meningococci proved on further investigation to be gonococci The ordinary pathologist is content to make his report when he isolates from the spinal fluid a Gram negative coccus of typical morphology agglutinating with anti meningococcal serum In future he will have to realize that these criteria are insufficient to establish the identity of an organism and that a more thorough examination of the strain must be made if he is to avoid missing the occasional gonococcal infection

[1] *J Amer med Ass* 1938 110 1804

PERCUSSION OF THE HEART

Some careful observations by D Mainland and C B Stewart[1] show that percussion of the cardiac borders gives an appreciable error when compared with the radiographic picture The cardiac and superior mediastinal dullness was percussed out by an experienced physician in healthy young male students and in the fourth and fifth left interspaces the dullness was sometimes found lateral to the radiographic border by as much as 2 5 cm though the mean error was less than this a considerable error though in the opposite direction was also the rule in the fourth right interspace The inaccuracy in the most favourable circumstances thus demonstrated is of course increased under less favourable ones—for example in women and in those with thick chest walls and in the presence of emphysema The authors admit the defects of the method but think it should be cultivated for they describe a method by which an observer may determine the error of his own technique Percussion has been used particularly to indicate the position of the left lower contour of the heart if this extends much too far to the left the apex beat will usually be palpable and is then a more accurate guide If the exten-

[1] *Amer Heart J* 1938 15, 515

sion is moderate or slight and the apex beat impalpable percussion is surely too coarse a method to assess it The heart is a curved organ within a curved cavity, and between it and the surface there are tissues which vary in thickness from one individual to another, it is moved and altered in shape with each respiration and with each systole it moves as a whole in relation to its vascular pedicle and changes in size from the contraction of its chambers, it may also be displaced by gastric pressure and by change in the position of the body In view of these static and dynamic obstacles it would indeed be surprising if percussion had been shown to be accurate enough for that purpose for which it would be most useful—for example, the estimation of slight or moderate enlargement In the last few years cardiac percussion has been less and less relied upon, though there are some, including experts in the radiological method, who still think it valuable In general, however, it is being superseded by the x-ray method, which not only gives the most precise measurement of the heart size but detects local changes in areas inaccessible to percussion, the fact that, even after x-ray examination, it may still be doubtful in certain cases whether or not there is enlargement is no criticism of the accuracy of the method To the objection that x rays are not always available (for one reason or another) one may reply that it is better to be without them than rely on a method which is as likely as not to mislead If after inspection, palpation, and auscultation, and a search for signs of failure it is considered necessary to have more information on the size of the heart, then the time has come for radiography There are, however two conditions which may be discovered by percussion of the precordium—namely, pericardial effusion and pulmonary emphysema

"JACKET" RESPIRATOR FOR POLIOMYELITIS

The appearance in this country of acute poliomyelitis in the form of localized outbreaks occurring in centres considerable distances apart has focused attention on the available resources for providing artificial respiration by mechanical means There are at present about twenty Drinker respirators in London and the home counties of which one-half are the property of the London County Council, and two Bragg-Paul pulsators These machines have been made available whenever possible to the various public health authorities and hospitals which required them usually at very short notice Apart from the practical difficulties of transporting large pieces of apparatus which are liable to be damaged in transit problems in connexion with differences in voltage and character of electrical current will continue to arise until electricity supplies are standardized throughout the country As regards the respective merits of the respirator and pulsator, more experience of their employment in different conditions is required before a final decision is possible Theoretically the respirator is preferable as the mechanism of normal respiration—rhythmic production of intermittent negative pressure—is more closely imitated by this apparatus than by the pulsator but the experience of Dr C J McSweeney recently described in these columns [1] would appear to indicate that the objections to the latter have little validity in practice From the point of view of portability and cost, as well as of ease of operation and access to the patient for the application of splints and essential nursing procedures, the advantage lies with the pulsator, and mechanical defects of the earliest models have now been eliminated Both forms of apparatus have suffered from the disadvantage that only one patient could be treated at a time, although in the improved Drinker machines made in this country two or more cabinets could, if desired, be operated by one power unit This disadvantage became apparent early in the Victoria (Australia) epidemic of poliomyelitis in 1937, and Professor A F Burstall at page 611 of this issue tells how he was approached with a view to the construction of machines capable of providing mechanical means of respiration to several patients at once (six was selected as a convenient number from the standpoints of both engineering and nursing) So successful was the first model evolved in the short space of a week that in a few months thirty-five power units were produced, capable of operating two hundred cabinets in all The new "jacket respirator," as it is called, immediately interested workers in this country as it appeared to be convenient, economical, and practicable for the purpose It combines all the advantages of the respirator and pulsator and affords the additional advantage that multiple treatments can be carried out by means of a single power unit The disadvantages are that several sizes have to be made—at least three—for different sizes of patients and that the rubber used in the apparatus is liable to perish, whether in actual use or not Either positive pressure (pulsator) or negative pressure (respirator) can be used with the jacket respirator The Australian models have all been operated to produce negative pressure, and it is expected that this principle will be adopted here in view of the generally more satisfactory results of the Drinker respirator compared with other types of apparatus

[1] *British Medical Journal* 1938 1 1206

PRINCE ARTHUR OF CONNAUGHT

Prince Arthur of Connaught whose death at the age of 55 took place on September 12, was for fourteen years chairman of the Middlesex Hospital In this post he followed the tradition of the Royal Family in maintaining a live and intimate connexion with the art and science of medicine and when he came back from South Africa in 1924 to take over the chairmanship of the Middlesex from Lord Athlone it was clear that he did not intend the position to be a nominal one Prince Arthur attended every board meeting of the Hospital nine or ten months of the year and served most energetically on the building committee He was the main spring of the effort that culminated in the complete reconstruction of the Middlesex Hospital His personal interest in the medical and nursing staffs made him in a real sense a "friend" of the Hospital The day after his death his coffin was placed in the hospital chapel there to remain in state until the funeral It was announced in the *Times* that Princess Arthur of Connaught wishes it to be known that a donation to the cancer wing of the Middlesex would be appreciated instead of flowers

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

AMPUTATION OF THE FINGERS

BY

HAROLD C EDWARDS, M S, F R C S

A conservative policy should be followed in dealing with the question of amputation of the fingers and thumb for the smallest portion of a digit that may be of value to the patient should be saved Such a policy is to be strongly recommended in connexion with injuries and particularly with injuries to the thumb It is surprising how pronounced is the power of recovery in the hand and immediate amputation is best avoided unless the finger is literally hanging by a thread Operation should be postponed until there is unmistakable evidence that the finger or a part of it will not survive Unless complicated by sepsis no set amputation should be done for such injuries but the doomed portion should be separated at the point at which the injury has ordained it and the flaps fashioned accordingly Further operative procedures should be postponed until the wounds are healed

In sepsis early amputation need be considered only when the infection has involved bone or joint and not when it is limited to the soft parts in which case it is wise to defer the question of amputation until the wounds have healed and the damaged finger has been afforded an opportunity to recover function Stiff and useless fingers may result from both injury and sepsis and form one of the most common indications for amputation Whether amputation should be done and if so at what level depends entirely upon the degree of usefulness of the finger affected

Fixed Finger

A fixed finger—whether fixed in extension like a poker or flexed up into the palm—is a worse than useless member Not only does it fail to contribute anything towards the work of the hand in general but it often exerts a malign influence upon the activity of its neighbours A poker finger may prevent the adjacent fingers from flexing fully and a permanently flexed finger may limit their powers of extending Of the two a permanently straight finger is the greater evil for it cannot fail to get in the way for whatever purpose the hand is used However with fixed flexion except possibly in the case of the little finger the hand will be the better for the loss of the affected digit and both fixed flexion and fixed extension therefore may be regarded as definite indications for amputation

In cases in which the flexor tendons are bound down by adhesions so that their action is greatly limited or totally abolished but in which the joints themselves remain supple so that passive flexion is possible amputation is not necessarily indicated In such cases the affected finger may be flexed into the palm by its neighbours and hence need not by its mere presence as a passenger impair the hand's efficiency to any appreciable extent The personal inclination of the patient himself should be studied before any decision to amputate is made The operation of Sterling Bunnell—that of substituting the disorganized tendons by free tendon transplants—may be worthy of trial in fingers so impaired although the results of such operations are not on the whole encouraging

Partially disabled fingers—for example those in which there is ankylosis only of one or both distal joints—are not usually so severe a handicap as to warrant operation but again it is a question of weighing up with the patient the relative advantages and disadvantages of retaining the finger and of partial amputation

Apart from injury sepsis and stiffness indications for amputation are rare and include a miscellany of unusual conditions—growth of bone tuberculous dactylitis in adults epithelioma and melanoma In cases of streptococcus infected puncture wounds of the finger pulp associated with septicaemia immediate amputation is sometimes advocated My personal view is that local excision of the wound is preferable It is to be hoped however that the use of prontosil and its allies will in the future obviate the need even for the less radical operation for these distressing cases

Some Anatomical Points

In connexion with amputations there are three anatomical points of surgical importance which need special mention

Position of Joints—The joints do not correspond with the prominences of the knuckles which are formed by the heads of the phalanges and metacarpals but are situated one twelfth one sixth and one third of an inch respectively distal to these prominences (starting at the distal joint) (See Fig 2)

Flexor Tendons—These are attached to the anterior surfaces of the phalanges by fibrous bands (vincula) and these tend to prevent the cut tendons from retracting (Fig 1) If the tendon be cut proximal to the middle

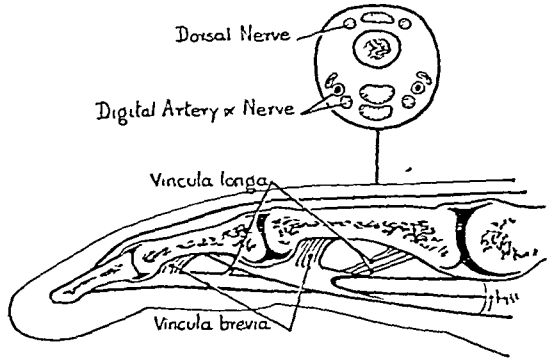


FIG 1—Diagram showing the arrangement of the vincula The smaller drawing is a cross section through the middle of the first phalanx to show the relation of the digital arteries and nerves

of the second phalanx the tendon is free to contract and in order to preserve movement at the first interphalangeal joint in amputation through the middle phalanx the flexor tendons should be held before division and stitched to the periosteum of the bone or over the end of the divided bone to the extensor tendons This precaution is not necessary in amputation through the first inter-

phalangeal joint because flexion at the metacarpal joint, and therefore of the resulting stump, is brought about by the interossei

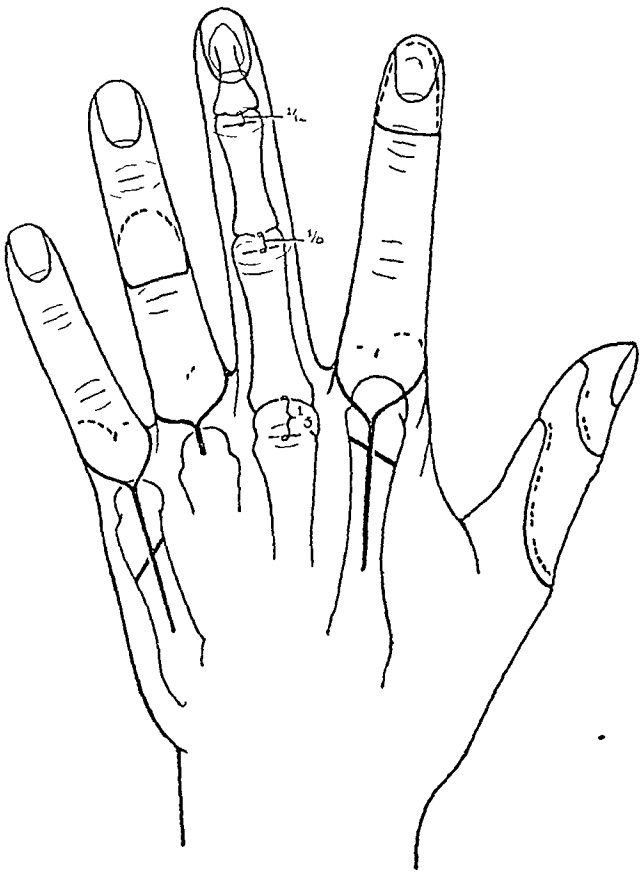


FIG 2.—Diagram showing incisions for various amputations described in the text and the relative positions of the joints

Position of Digital Nerves.—These lie on either side of the finger immediately in front of the digital artery, and both artery and nerve lie slightly anterior to the mid-plane (Fig 1). In amputations proximal to the second interphalangeal joint these nerves should be identified and divided as high up as possible.

Anaesthesia

Local anaesthesia is ideal for amputations distal to the root of the finger. A 1 per cent novocain solution is injected through a puncture wound on the dorsal aspect so that a collar of the anaesthetic is formed, encircling the base of the finger completely. About 3 c.cm. of anaesthetic should be sufficient, and to this should be added 3 minims of 1 in 10,000 adrenaline hydrochloride. Local anaesthesia may also be used for amputation at the metacarpo-phalangeal joint, but it will usually be found more convenient to do this operation under gas and oxygen anaesthesia.

Technique

In cases where the local condition does not permit of one of the set amputations—to be described subsequently—it should be borne in mind that if possible the long flap to be used to cover the end of the stump should consist of skin of the palmar surface. This flap will have greater tactile sensibility than one taken from the dorsum, and the resulting stump will therefore be of greater usefulness. The length of the flaps should be no more than sufficient to cover the end of the stump without tension, and the skin edges should be approximated accurately with interrupted stitches of fine silkworm gut. The flaps should be so fashioned that no corners are left on them which would result in an ugly or redundant scar. A tourniquet may be used, but it is unnecessary if a local anaesthetic is employed with adrenaline. If a tourniquet is desired in the more distal amputations a soft rubber tube tied tightly around the base of the finger will be found satisfactory. For amputations at the metacarpo-phalangeal joint a rubber tube tied tightly around the forearm will suffice, or, if it is preferred, a blood pressure apparatus around the upper arm. A firm bandage on an adequate covering of wool is used in order to diminish the tendency to the formation of haematoma. After amputation through one of the fingers a small wooden finger-splint should be used until the stitches are out, in order to obtain that rest which is so helpful to healing, but it should be discarded with the stitches, for its continued use will not only tend towards lack of mobility of the stump itself but will also affect the mobility of the neighbouring fingers, which readily become stiff in sympathy with their fellow.

Instruments.—A finger amputation set should comprise a narrow-bladed scalpel, two pairs of fine Spencer Wells forceps, one toothed forceps, a small bone holding forceps and a pair of fine bone cutting forceps, a small curved cutting edged needle, some fine silkworm gut, and a tube of 00 catgut, and for the anaesthetic a 5 c.cm. Record syringe and fine hypodermic needle.

Disarticulation at Distal Interphalangeal Joint of Fingers and Thumb

The end of the digit is grasped in the fingers and the joint flexed. A transverse incision is made on the dorsum at the level of the joint—that is, one twelfth of an inch below the prominence of the head of the second phalanx—and the knife passed right through the articulation. The knife is now turned at a right angle and an incision made towards the end of the finger so that a palmar flap of sufficient length is formed. The knife is turned again through a right angle to the palmar surface and the tip of the finger is cut through so that the distal phalanx with the nail-bed is removed (Fig 2).

Amputation through Middle of Finger

An anterior flap equal in length to the diameter of the finger at the point of section is marked out (Fig 2). The edges are rounded off and the flap, consisting of skin and subcutaneous fascia, is raised up. The tendons are divided, care being taken to fix the flexor tendons before the division is made. If the point of section is to be across the lower end of the second phalanx the flexor tendon is stitched to the periosteum or is cut of sufficient length to be passed over the end of the bone and stitched to the divided extensor tendon. The digital nerves on either side of the fingers are defined and grasped in Spencer Wells forceps and pulled upon, to be cut as high up as possible.

Disarticulation through the first interphalangeal joint is performed with a similar type of flap. In amputation here, however, the flexor tendons may be allowed to retract after section.

Amputation through Metacarpo-phalangeal Joint

The most useful incision in amputations at this level is a racket incision, with the handle on the dorsal aspect. The palmar aspect of the racket should be cut with a

notch so as to prevent a corner on the scar (Fig 2) In the case of the two central fingers the flaps should be of equal lengths but care should be taken to see that they are long enough to cover the head of the metacarpal bone if it is intended that this should be left There appears to be little truth in the contention that inclusion of the head of the corresponding metacarpal in the amputation occasions any added weakness of the hand, although on theoretical grounds this might seem to be the case The fact that the cosmetic result to be obtained if the head is removed is so much better than if it is left would outweigh any risk of weakness which experience has proved to be questionable—except perhaps in heavy manual workers in whom muscular strength is of far greater importance than the appearance of their hands If two adjacent fingers are to be amputated excision of the metacarpal heads is probably best avoided When either the first or the fourth finger is the candidate for amputation there should be no hesitation in removing the metacarpal head for the cosmetic result is vastly improved thereby In the case of the first finger moreover the removal will result in a more efficient hand In amputations of the first and the little fingers the racket incision should be so fashioned that there is a long flap on the exposed aspect—that is in the case of the index finger the outer (or radial) flap should be the longer and in the case of the little finger the inner (or ulnar) (Fig 2)

Amputations of Thumb

For amputation of the distal phalanx the method is similar to that of the fingers Amputation through the metacarpo phalangeal joint may be done either by a long flap from the palmar surface (Fig 2) or by a racket incision Amputation proximal to this point—that is, at the metacarpo carpal articulation—so severely disables the hand that it should be avoided if possible If the thumb metacarpal is so damaged that operation is essential, every effort to save the joint must be made for without it future reconstructive operations have very much less chance of a successful outcome In respect of this reiteration of the opening sentence of the article makes a fitting conclusion

---

H Servières (*These Paris* 1938 No 182) records seven illustrative cases of gonococcal septicaemia in patients aged from 19 to 28 three of whom were males and four females Two stages can be distinguished The first is a more or less latent period in which gonococci are present in the blood while the second is characterized by metastatic complications Of the numerous possible localizations of the gonococcus the following are the most important (*a*) joint manifestations of which the pseudo phlegmonous form and polyarticular rheumatism are the most serious (*b*) cardiovascular localizations (myocarditis and pericarditis are rare but ulcero vegetative endocarditis is frequent and the prognosis grave gonococcal arteritis and phlebitis sometimes occur) (*c*) nervous complications in which the spinal cord peripheral nerves, and meninges are affected (*d*) skin complications of which purpura is the most important (*e*) miscellaneous complications in which the liver, kidneys eyes, ears pharynx and thyroid are affected As regards diagnosis a search must be made for the gonococcus both in the genital organs and in the blood, joint fluids and cerebrospinal fluid As the presence of the organism in the blood is not constant repeated examinations must be made especially during the febrile period In addition to treatment by vaccines and serum the use of drugs such as the salts of acridine and mercurochrome is recommended

Correspondence

Convalescent Serum in Infantile Paralysis

SIR,—The statement of Drs Paterson and Critchley cited and traversed by Mr Girdlestone that we have no means of controlling the infection in acute poliomyelitis is surely at this date a truism that no one with any large-scale experience in dealing with the disease and no one who has kept in touch with the relevant clinical and experimental literature would care to dispute

And if it be accurate as I submit it is then it cannot be too widely known It is not right that the public should be led to suppose that we possess the means of scotching this dread infection or of mitigating or averting the development and severity of paralysis and that lack of medical enterprise in this country has failed to make these means generally and easily accessible when in fact no such means exist

A reading of certain past epidemics shows that unwise claims for the efficacy of serum treatment have prevented the making of the vitally necessary control observations since public opinion could not be expected to tolerate the experimental withholding of the vaunted remedy from any case for control purposes For this and other reasons serum treatment had been in use for over twenty years before the elementary scientific requirements of any just assessment of its value could be satisfied Of the quality of much of the evidence upon which the former belief in the efficacy of this treatment was based, Mr Girdlestone's own letter provides a fresh and illuminating example He writes My own experience with convalescent serum has been very happy though relatively small and without controls To speak of this as experience is surely to use the language of hyperbole It expresses simply an act of faith in which despite the disillusionments of the past quarter of a century, Mr Girdlestone hopefully asks us to join him

A remedy that is specific for a given infection reveals its specific potency rapidly as we have seen in the cases of salvarsan and sulphanilamide and does not need twenty five years extensive use to establish its value That after so long a period convalescent serum treatment should still find us wholly unable to claim that it has any value surely indicates that it has none and that the time for that hopeful suspension of cerebration euphemistically known as the open mind is past

In the circumstances neither the cause of medicine nor public policy is served by an attempt unsupported by any new evidence to revive that belief in serum treatment that still apparently lingers as a consolatory but obscuring superstition in the minds of those who cannot bring themselves to face the realities of a grim situation We all like to think that we bring healing in our hands but to attain this happy belief at the expense of the facts is to pay too high a price for it—I am etc,

London W 1 Sept 9 F M R WALSHE

Fracture of the Neck of the Femur

SIR,—I think the profession ought to be very grateful to Mr Nicholson for his most interesting account of his own experiences when suffering from a fracture of the neck of the femur

I only wish to comment upon two points One is the statement that the operation cannot be properly carried out

in fifteen minutes or less It is quite true that if all the preliminary adjustments and x ray investigations are made on the fracture table the whole procedure will probably occupy an hour or more This is no great drawback in a young and healthy patient but it is almost prohibitive for a feeble and frightened old lady I venture to suggest that for these patients the matter is much simplified by the whole procedure being performed in bed This means that the preliminary steps—namely, complete reduction of the fracture, x-ray films in two planes and the marking of the skin of the patient so that the exact points of application of the drill guide may be known—are all done at leisure in the days preceding the operation The sound side of the pelvis being tied to the head of the bed and the fractured limb with the knee bent over a pillow, fixed to the lower end of the bed by weight traction the patient is securely fixed as in a splint From the moment that the operation begins with the insertion of the drill guide until that in which the nail is driven home and the skin incision closed need not occupy more than five minutes We have become quite accustomed to the idea of inserting transfixion pins while the patient is in bed, and the same may be done with putting a nail into the neck of the femur if only the preliminaries are done at leisure beforehand

The other matter of which I was fully aware is Mr Nicholson's statement that the surgeons in voluntary hospitals in London have little experience in modern methods of fracture treatment, and that it is to the L C C hospitals that one has to turn in difficulties of this kind How much longer will it be that this state of affairs is to continue? Either the voluntary hospitals should have adequate fracture clinics of their own or for teaching purposes should be affiliated to one of the L C C hospitals —I am, etc

Bristol Sept 10 ERNEST W HEY GROVES

Tuberculosis Dispensaries or Chest Clinics?

SIR —I have read with interest the letter of Dr Philip Ellman (*Journal* September 10, p 593) The points he raises not for the first time, are of practical importance, but their significance has not been appreciated by the majority of the profession Of the hesitation on the part of numerous patients to attend these dispensaries, owing to the unfortunate stigma which they bear, most practitioners are aware Such hesitation is often reinforced by the attitude adopted by many employers of labour, who are still influenced by an erroneous conception of the pathogenesis of phthisis, which still lingers, even in the minds of the medical profession, as a relic of the teaching of half a century ago

We are an ultra-conservative nation and are loath to change the habits and even the phraseology adopted by our grandsires this, doubtless, accounts for our unwillingness to adopt the very sensible and practical suggestions urged by Dr Todd and Dr Ellman, whose reasons should be sufficiently obvious to influence even the most inert among the public health authorities In view of the advances made within the last few years in the organization of municipal general hospitals ante natal clinics and other forms of public activity designed to further the betterment of our race by means of adequate preventive measures it is surely not too much to hope that establishment of chest clinics on modern lines should remove the noxious stigma of the old tuberculosis dispensary and the prejudice which such a designation is calculated to create in the minds of all except the most highly educated patients

There is yet another good reason for this change, which has reference more to the doctor than to the patient The study of tuberculosis, like other specialties, suffers not a little from the evils of departmentalism In many institutions in which the treatment of this disease forms the main part of the work the minds of the medical staff become so centred upon the idea of tuberculosis that much sense of proportion is lacking and the relation of tuberculosis to general medicine is lost sight of It is largely for this reason that so many patients who have never in their lives suffered from tuberculosis continue nevertheless to spend a nomadic existence in and out of sanatoria at considerable expense to the public Such an abuse is, in these enlightened times, inexcusable Not only does it perpetuate the waste of public money, but it adds to the confusion which exists in too many minds between pulmonary tuberculosis and other forms of lung disease

It is time that we abolished the old-fashioned term "tuberculosis dispensary" and established the "clinic for diseases of the chest" Such a step would be in the best interests, not only of the patients themselves, but of the advancement of the science of medicine—I am, etc,

London, W 1, Sept 10 MAURICE DAVIDSON

SIR —Many people will agree with Dr Philip Ellman concerning the disadvantages of the term "tuberculosis dispensary' (p 593) His condemnation might with justification have included also the term "tuberculosis officer' which to some people conjures up a person vaguely linked with school or Poor Law "boards," whose sole function is with a stroke or two of the pen to whisk away their tuberculous patients to institutions in the wilds, to some of which (and at the same time to 'graduated rest and exercise") the pass is still a single "normal" temperature record at the dispensary At least, the patient would be whisked away if there didn't exist appallingly long waiting lists for most sanatoria But the term "chest clinic" also has definite disadvantages, and it is important that these should be recognized

(1) While admitting the argument of Dr Ellman in favour of "chest clinic," I suggest that the remedy is based on an unsound psychological principle I doubt whether it is of ultimate benefit to the patient to begin his "tuberculous career" with what is patently a subterfuge to his environment, and I doubt the soundness of a structure for a wide public health measure that is based on the ostrich policy (2) One cannot have a chest clinic merely in name, it must also be a chest clinic in deed Many tuberculosis officers neither have had the training nor have they the equipment at their disposal for investigating, diagnosing, and managing diseases of the chest other than pulmonary tuberculosis (3) A notible percentage of the patients seen by the tuberculosis officer suffer from tuberculosis of other organs than the lungs (4) It is still too seldom appreciated that tuberculosis of any part of the body is a systemic disease It is indeed this ignorance that is perhaps responsible for the difficulty experienced in finding an institution that is willing to admit or is equipped for treating a patient, for instance, who is suffering from active tuberculosis of a bone and pulmonary tuberculosis, or from tuberculosis of the spine and genito-urinary tuberculosis The need for treating all types and combinations of tuberculosis in the same institution should be urgently brought to the notice of authorities who are planning new hospitals or sanatoria for the treatment of the disease

What then is the solution? Failing education of the public to recognize that disease is not a stigma the difficulty can be got over by concentrating several clinics in

one building (as is already being done) containing tuberculosis, maternity and child welfare school food dental clinics etc, and calling the building health centre municipal polyclinic or some similar name Where one building must continue to serve for the tuberculosis work alone chest clinic (and physician to the chest clinic) would appear the only way out at present but it should be recognized as a *pis aller* and as a stimulant to the further development indicated above—I am etc

Staines Sept 11 G GREGORY KAYNE

Fractured Olecranon Personal Experience

SIR—In the *Journal* of September 10 (p 590) Sir William Wheeler writes I hope we will have further opportunities to study the comments of patients who belong to the ranks of the medical profession

In the *Journal* of July 30 Mr S L Higgs in his article on fractures of the olecranon says on page 232 Bony union will not be secured but nevertheless a remarkably useful arm may result from a fibrous union with separation of the fragments

In April 1897, I was knocked off my bicycle and fell on the stone sets and my left olecranon received the full force of the blow I treated it with a long anterior splint and a pad above the break with traction to the end of the splint in spite of advice from many of my surgical friends to have passive movement to prevent adhesions my elbow was not bent for six weeks as my firm belief was and still is that with a fracture into a joint the best way to get adhesions is to move the joint After the splint was removed I began to bend and use the arm with firm bony union I was insured at the time and received six weeks total and one week partial compensation I got and still have 100 per cent result If this result could be obtained forty one years ago why not now?

I enclose x ray photographs One I took within a few minutes of the accident and before a splint had been applied, and the other just recently—I am etc

St Helens Sept 10 R JACKSON

Carbohydrates and Alimentary Disease

SIR—The comparative rarity of appendicitis colitis and haemorrhoids in the Rhodesian aborigine living in a natural state and the marked frequency with which these conditions occur in the Europeans in Rhodesia coupled with the fact that the sites affected are associated with the collection and expulsion of the waste products of ingested food, suggested that an examination of the dietaries of the two races might explain the difference in the incidence of these diseases in these peoples A comparison of the respective dietaries indicated that the natives subsist mainly on cereals meat green and root vegetables, and sour milk whereas the Europeans in addition to cereals meat and vegetables consume large amounts of refined sugar fruit, and fresh milk Having concluded that the latter foods probably bore some relation to the diseases peculiar to the Europeans I proceeded to inquire into the manner in which these foods might produce pathological changes

An examination of fifty eight stools from cases of haemorrhoids was made on the assumption that fermentation of the sucrose in the food the laevulose and dextrose in fruit or the lactose in fresh milk might be responsible Of these fifty eight stools fifty five proved to be acid in reaction A similar number of native stools taken at random were all strongly alkaline in reaction In order to determine which of these sugars was responsible for the acidity of the faeces it was decided to eliminate each in turn from the dietaries of these cases Within twenty four hours of excluding sucrose the reaction of the stools in all cases had become alkaline Since sucrose appeared mainly responsible for the acidity of the faeces in these cases an estimate of the amount necessary to produce such acidity was now made Ten cases of piles of several years duration whose stools had been rendered alkaline for over one week were given increasing amounts of sucrose daily 3 to 5 oz of sugar were found to cause acidity of the faeces in different subjects The reversal of the faecal reaction was associated with a marked aggravation of the patients symptoms

In order to confirm these findings experiments were conducted on a patient with an appendicostomy This operation had been performed in order to effect lavage of the colon in a case of severe ulcerative colitis of ten years duration The patient was at first given the diet to which she was normally accustomed The reaction at the appendicostomy opening was consistently acid Within twelve hours of eliminating sucrose from the diet the reaction became alkaline and remained so during the period of abstinence from sucrose Sucrose was now given in increasing amounts and when the daily consumption reached 4 oz the intestinal reaction became acid Withdrawal of sucrose caused a further reversal to alkalinity within twelve hours Laevulose was now added to the diet of this patient After the ingestion of only 14 drachms over a period of twelve hours the intestinal content gave an acid reaction which persisted during the exhibition of this amount daily The administration of dextrose lactose and maltose in amounts up to 6 oz daily did not cause acidity of the faeces but resulted in diarrhoea During the period when all sugars were excluded from the diet the patient was remarkably free from symptoms The exhibition of sucrose and laevulose however caused a pronounced deterioration in the condition of the patient even before the intestinal contents had become acid

To determine whether acidity of the intestinal contents and appendicitis bore any relation to each other the proximal end of a series of appendices removed at operation were examined and the following results recorded

Group 1—8 cases operated on within twelve hours of onset all acid

Group 2—15 cases operated on after twelve hours 5 acid 10 alkaline

Group 3—12 appendices removed during the course of other operations and all apparently normal in appearance all alkaline

The alkaline reactions in Groups 2 and 3 were attributed to the small intake of sugar during the period before operation The effect of sucrose on infants was determined by giving 1 drachm four times daily to twenty native piccaninnies (aged 1 to 3 years) who had never consumed this sugar and who had never had colitis or diarrhoea Within one week four children had developed colitis with sour acid stools and as three of the cases proved very severe the experiment was discontinued An examination of the stools of twenty five European infants suffering from colitis indicated that only four had stools alkaline in reaction Two of these cases were proved to be of amoebic origin and the remaining two were attributed to excessive amounts of lactose in the diet In all cases where the stools were acid the infants were being given sucrose in their artificial foods

Twelve cases of ulcerative colitis in European adults in whom severe third degree haemorrhoids co existed were found to have stools which were acid in reaction whereas in twenty-five less severe cases the reaction of the stools varied from day to day The amount of sucrose normally consumed by these patients varied from 2 to 6 oz daily The effect of laevulose was determined on ten cases of haemorrhoids In all cases the exhibition of 3 oz daily caused the stools to remain consistently acid During the course of the observations the following points were noted

1 Native stools were invariably alkaline in reaction well formed of considerable diameter and bulk and containing no grossly undigested food

2 Stools from cases of colitis and haemorrhoids were invariably acid in reaction badly formed small in bulk and imperfectly dehydrated and the more severe the case the

smaller was the diameter of the stools which usually contained much grossly undigested food

3 Radiological examination in cases of colitis shows a diminution in the diameter of the descending colon and loss of haustration The colon as a whole is prolapsed and elongated

4 Haemorrhoids of all types are associated with some degree of colitis and, generally the more severe the colitis the more pronounced the piles

5 Prolapse of haemorrhoids occurs when flatus or a plug of mucus or faeces is present in the rectum When the bowel content is consistently acid the piles tend to protrude more readily and though the rectum is emptied the masses still tend to protrude even after replacement

6 The level of the anus in natives is much higher than in Europeans suffering from haemorrhoids even when the latter are not protruding

7 Laxatives have a pronounced effect in aggravating the symptoms in cases of haemorrhoids and frequently precipitate an attack of appendicitis

8 The faeces may be acid in reaction in subjects on a sugar free diet when ingested polysaccharides are permitted to remain in the bowel for thirty-six hours or longer

It should be noted that all sugars have a laxative effect dextrose being no exception Lactose would appear to have the most pronounced action in this respect and it is interesting to note that natives when questioned regarding their preference for sour milk indicated that fresh milk taken in amounts necessary to meet their requirements when other foods were scarce caused diarrhoea Fruit and honey were consumed in only small amounts for the same reason

The relation between appendicitis and cane sugar consumption will be seen to be particularly significant when one compares the increase in the incidence of this disease in the United Kingdom with the increased use of cane sugar The first cases of appendicitis were reported in England about 1880, after which time the incidence of the disease rapidly increased In 1844 the sugar consumption in the United Kingdom averaged 18 lb a person per annum In 1860 the figure was 35 lb In 1880 the amount was 60 lb and at the present time is well over 100 lb a person per annum It will be seen that when the sugar consumption in Britain averaged between 2½ and 3 oz daily—slightly less than the amount usually required to render the intestinal contents acid—appendicitis became a surgical entity An examination of the statistical returns in Southern Rhodesia shows that the consumption of sucrose by the natives of this territory averages about 13 lb per annum

When it was concluded that foods containing sucrose, laevulose and lactose were responsible for the conditions peculiar to Europeans it was decided to treat all available cases of colitis and of haemorrhoids, and cases diagnosed as of chronic or subacute appendicitis, by providing a diet based on that of the natives The following foods were permitted Porridge (any cereal but oatmeal to be preferred) Meat, fish, fowl, eggs Cabbage cauliflower spinach, and lettuce Peas, beans, carrots, turnips and potatoes Sour milk butter, cheese and cream Fresh milk (not more than half a pint daily) Bread (preferably wholemeal) Cakes (sugar and syrup free) Alcohol (spirits or beer) Tea and coffee

It was specially emphasized that sugar syrup, honey, and fruit should not be taken and the use of laxatives was discouraged In the early stages of dieting when bowel function caused trouble warm normal saline enemata or small doses of milk of magnesia were recommended The effect of this diet on the cases will not be considered in detail, but it may be mentioned that in mild cases of second and third degree internal haemorrhoids of many years duration where there had been no history of thrombosis the results were almost spectacular Ten cases of severe ulcerative colitis, thirty two of haemorrhoids, and twenty diagnosed as cases of chronic appendicitis were completely relieved of their symptoms in three to six months and showed no sign of recurrence over periods varying from three months to two and a half years In many cases it was found that conditions other than those for which the treatment had been initiated had been relieved or cured. Mention might be made of acne, dermatitis, vomiting of pregnancy, persistent headaches nasal sinusitis and one case of monilia infection of both hands which had resisted all forms of treatment for two and a half years—I am, etc,

Umtali, Southern Rhodesia August 26 ANDREW BROWN

Undescended Testicle

SIR—I thought I had finished with this correspondence, but I should be most sorry to leave Dr P M F Bishop (*Journal* September 10, p 594) with the impression that we disagree My main contention was that there have been gross errors of observation in deciding what an 'undescended testicle' actually is I gather he agrees with this Another was that hormone treatment will never bring down a testicle that would not in time have descended without it in other words, that the 70 per cent of cases in which it will be successful is the same as the 70 per cent of cases in which descent will spontaneously occur before growth is complete, and also the same as the 70 per cent which fall into my two retractile classes He has not commented on this, and as the point is not without statistical importance I think silence must mean consent

Again, we both hint that gonadotropic hormones should be used with some care I presume that the dangers we have in mind are much the same To take only one direction in which they lie, E T Engle (1932) states that "the only uniformity of agreement of investigators on the response of the male genital system to anterior lobe extracts or to those of prolan is that the animals which have been treated do not mate" This is preceded by a long list of German workers who have found hypertrophy of the interstitial tissues and degeneration of the germinal epithelium in the testes after injections of such female urinary extracts into male experimental animals For instance 'Kraus (1930) has suggested that the primary change in the testis after prolan treatment is the hypertrophy in the interstitial spaces, and that the degeneration of the tubules is due to a pressure atrophy' (I am sorry that all German authorities seem to repeat my mistake of talking of the gonadotropic hormone by a trade name, prolan instead of pregnyl) Dr Bishop would probably be interested in a boy I have just seen who after such injections has a hypertrophic penis and tiny, soft, insensitive testes There is a disturbing resemblance to the result of orchitic mumps, in which also a high cellular pressure must be set up inside the gland

Our final point of agreement is on my complete lack of any authority in discussing hormones Of course a carefully prepared position entails a certain amount of reading, but this reading is apt to lead one into errors For instance, my use of the plural in talking of growth hormones was due to my trust in certain printed statements that pituitary secretion actually would produce the skeletal hypertrophy to which I referred, but only in combination with thyroid—I am, etc

DENIS BROWNE

London W 1 Sept 10

REFERENCES

Engle E T (1932) *Sex and the Internal Secretions* Ed 1 by Edgar Allen Williams and Wilkins, Baltimore

The Harris Prostatectomy

SIR,—Mr Kenneth Walker has made a most admirable survey of the present position of treatment of the enlarged prostatic gland (*Journal* July 9 p 53) In one section of his article his remarks are misleading in that he has confused the results achieved by the Harris operation as practised by the late Harry Harris with those of surgeons who have made original alterations to the technique Those of us who have conscientiously tried to follow the precise details of technique which Harris described have usually approached his mortality rate Possibly his achievement was partly due to the ideal surroundings in which he worked—which cannot always be imitated My observations lead me to believe that the more his technique is varied the greater will be the deviation from the high standard set by his results With regard to the incidence of pelvic cellulitis I have seen this only once in well over two hundred cases On this occasion a prostatectomy was undertaken on a patient with a carcinomatous prostatic gland because of an error in diagnosis There is no doubt that the periprostatic tissues were opened during the enucleation in this case

Post operative investigation has proved that several theoretical fallacies in the Harris procedure do not exist in actual practice and the rarity of this complication—pelvic cellulitis—suggests that it is not due to any inherent weakness in the technique It would be more helpful if in discussions on prostatectomy, the true Harris operation was more clearly differentiated from the near Harris operation—I am etc

Sydney Australia August 25 COLIN EDWARDS

SIR,—I should like to congratulate Mr Kenneth Walker on his otherwise masterly survey of prostatic enlargement and its treatment (*Journal* July 9 p 53) but I cannot let pass without comment his references to the operation described by my brother the late S Harry Harris of Sydney Australia Mr Walker's description of the operative technique while necessarily brief is substantially accurate except in his allusion to the lateral sutures to draw together the walls of the cavity and to help to obliterate it The two sutures employed for this purpose should be described as transverse sutures, inserted into the anterior segment of the residual prostatic cavity—the first and uppermost in a plane tangential to the upper rim of the cavity, the second bisecting and passing deeply into the lateral margins and skirting but not including the floor of the cavity

Since the Harris technique was instituted in 1927 I can recollect no case of pelvic cellulitis occurring either in my own practice or in that of my late brother which could in any way be attributed either to the haemostatic, or lateral, sutures, or to the plastic sutures—the postero median retrigonization suture and the anterior transverse sutures nor have I heard of any such reports from those urologists and general surgeons who have been employing the method in Australia While it would be idle to deny the theoretical possibility of infection the only cases that have come to my notice have undoubtedly been due to the opening of tissue planes which should not have been entered This has been brought about by perforation of the fascia of Denonvillier during enucleation or by removal of the verumontanum and proximal urethra in the course of a Freyer or some similar type of prostatectomy Further in personal communications Mr Walter Galbraith of Glasgow and Professor Hryntschak of Vienna, among others, have expressed themselves as highly satisfied with their results

I would emphasize the fact that both these gentlemen were rather extensively coached by the late S Harry Harris in his methods of aseptic and antiseptic preparation (the importance of which is apparently still not fully appreciated) and in his technique and post operative care they have not seen fit to depart except in most minor detail from the originally described technique I can only attribute any unsatisfactory results in view of my own extensive experience of the operation to the modifications which have been introduced Surely it is unjust and unsound roundly to criticize and condemn a technique which has been so modified and emasculated that the methods practised bear little relation to those originally described If surgeons abroad would only familiarize themselves with the technique described by S Harry Harris I am certain that his remarkably low mortality rate would be reproduced It has been stressed repeatedly that the Harris procedure is not an operation for the occasional prostatectomist—I am etc

Sydney Australia August 22 RICHARD G S HARRIS

The Neglect of Galvanism

SIR,—In the August issue of the *American Journal of Roentgenology* (p 236) there is reproduced a radiograph of the lumbar vertebrae of a patient suffering from syringomyelia of Morvan's type Looking at this illustration one cannot help being impressed by the close resemblance between this film and films of the lumbar vertebrae of patients with chronic arthritis of the hypertrophic type The unavoidable inference is that in these cases the similar x ray appearances are the results of a similar cause—a trophic nerve inhibition This is not the only evidence that chronic arthritis is often dependent upon a nerve lesion in cases of chronic arthritis of the knee joint every physician must be familiar with the patients whose lower limbs are letting them down the motor as well as the trophic fibres in these cases being obviously affected

Fifteen to twenty years ago it was a common practice to treat these cases of chronic arthritis by ionization with large electrodes using a considerable current for about an hour In my experience the effect of this treatment was permanently to relieve the symptoms in almost every case A reasonable explanation of the permanency of these results is that they were due to a restoration of the normal influence of the nerve supply to the affected joint the long electrodes used bringing a still greater length of nerve under the influence of the galvanic current A trophic nerve inhibition would involve the trophic fibres of the nervi nervorum thus creating a vicious circle If a galvanic current temporarily replaced the lost trophic nerve influence it would be reasonable to expect that the vicious circle might be broken and complete recovery follow Whether the introduction of ions of suitable drugs accelerates recovery is doubtful but one may as well use sodium salicylate or other drugs in solution as common salt the additional expense being negligible

As regards the efficacy of the galvanic current using salicylic acid ions in the treatment of neuritis Wullyamez of Lausanne in 1911 reported eighteen complete successes out of twenty patients the remaining two showing considerable improvement During my first two years in the Army 1915 and 1916 I treated seven cases of sciatica by this method five with complete success the two unsuccessful cases were suspected by the medical officer in charge of their ward of being malingerers Six cases of brachial neuritis were treated during the same period with complete success Treatments were given three times a week and the average number given for sciatica was six,

and for brachial neuritis ten so good results were quickly obtained With cases of chronic arthritis relief is obtained almost as rapidly Nowadays I am often asked to make x ray examinations of the joints of patients suffering from neuritis or chronic arthritis but so far as I can ascertain treatment of these conditions by this rational and successful method is now hardly ever given a trial—I am, etc,

Chingford September 5 WILFRID GARTON

Treatment of Typhoid Fever by Sulphanilamide

SIR—In a leading article in the *Journal* of May 21 (p 1109) it is suggested that 'another remedy which seems to merit more attention is sulphanilamide This drug has a curative action in typhoid infection in mice comparable to that in streptococcal infections The following case of typhoid fever treated by sulphanilamide seems worthy of record

I was called on to attend a youth of 16 who had had fever and backache after playing tennis in hot sunshine On examination the skin was dry and hot the face was flushed and the conjunctivae were slightly congested His temperature was 102 F his pulse and respiration rates were 108 and 28 a minute respectively There was nothing abnormal in the circulatory and respiratory systems The spleen was enlarged tender and just palpable Examination of the blood revealed no malarial parasites but there was definite leucopenia (3,200 white cells per c mm) with a fall in the proportion of polymorphonuclear cells Blood culture on the fifth day yielded a pure culture of *B typhosus* One tablet of proseptasine was administered every four hours followed after one hour by 10 grains of potassium citrate in water Haliverol, bemax and plenty of orange juice were also given Only a liquid diet was allowed throughout the course of the disease Two days after the first administration of sulphanilamide the patient's temperature began to fall It became normal on the eighth day (twelfth day of the disease) and thereafter remained so

—I am etc,

Vizagapatam, S India, August 25 K V SUBBARAO

The Occipito-posterior Case

SIR—As I have used chloroform anaesthesia and instrumental delivery in the large majority of my confinement cases for thirty-five years unaided, perhaps I may be allowed to assume that I am one of those 'self-taught in the rough school of actual practice with full responsibility I have never once regretted using forceps and chloroform in any case where pains are regular—I do not say good—and no advance is perceptible in half an hour even though full dilatation has not obtained Of course rhythmic gentle tractions have to be made until this full dilatation does obtain to deputize for the function abolished by the anaesthesia When the cervix has retracted beyond the head traction then falls into two categories (1) the advancing, as if against elastic resistance and (2) the 'no good, as if up against a stone wall This last is in nearly every case due to non rotation of the occiput forward, and having embarked upon an artificially assisted delivery we must help it round

Until four years ago I rotated with Barnes's forceps with a wide sweep in whichever direction was the easier until the handles lay right back over the perineum removed the blades and reapplied them in the opposite direction In spite of the nurse's pressure of the infant into the pelvis this was by no means always successful I therefore devised the hinged instrument that enables us to swing the handles forward—thus reversing the pelvic curve—and proceed to extraction sometimes of course prolonged in the case of a primipara but often with the next traction without removing the instrument I have now details of forty cases in which rotation was performed in this way Application is easy when the new sensation of having a movable blade against the fingers in the vagina wears off The blades find the path of least resistance to the robust maxillary region whether transversely or obliquely placed because they are hinged Those who prefer the mother on her left side as I do, can introduce the second blade as a straight one (with no pelvic curve), which obviates hauling the maternal buttocks over the edge of the bed so that the handle can be sufficiently depressed

With the blades locked I believe that I can now diagnose an occipito posterior position by its stone wall' refusal to advance upon traction 'If this occurs I press the head upwards and rotate it in the direction of least resistance The handles are swung forward and a gratifying feeling that now it will come means a successful manœuvre If the no advance feeling still obtains my whole hand goes in and the occiput is located I could press it forward, but I prefer to reinsert the straight forceps blades to do this to rotate more firmly with knowledge gained, and by swinging the handles forward to produce the pelvic curve and extract with confidence In none of my cases has the child's head shown any forceps mark or pressure sign

One more point concerns the aftercoming head I have always found the rigid Barnes's blades difficult and dangerous to pass, but the hinged blades recently slipped easily into position and a rather important 9 lb first baby was extracted with a firm pull, alive and hearty, I admit that the perineum suffered—I am, etc

Castle Cary, Sept 11 DAVID PRICE

"Tetanus from a Cancer Cure"

SIR—In the *Journal* of May 7 (p 1013) there is an annotation, 'Tetanus from a Cancer Cure," containing statements and implications which need to be corrected in fairness to yourself and your readers In the first place the solutions under investigation have never been styled a 'cancer cure' either by myself or anyone associated with my work This research has been conducted upon a conservative ethical basis Solutions have been supplied, without charge, to about six hundred reputable physicians who applied for them for use on their patients at home, with the single request that short case histories and progress notes be returned for our records The Foundation clinic is free Expenses have been met by private money The research has been upon advanced cancer patients who had received all possible benefit from surgery and radiation and then been abandoned as hopeless and about to die

The second error is in your statement that eleven deaths have rapidly followed injections of some of this material The material in question was not from our laboratory or of the same nature as that made here Official investigations and inspections by authorities from Washington and Ottawa proved that to be the case and it was so declared publicly Unfortunately a denial or correction of such a statement never travels as fast or is far as the original false and damaging accusation If you wish to do so you can readily secure the official report from Washington as to the source of the lethal material the nature of the mistake, and the cause of the deaths You add 'This was a danger obviously to be feared from such a product That is equally true of many biological and other products in common use but does not justify a repudiation of their value In our case however it must be acknowledged that due care has been taken since upwards of fifty thousand injections of these filtrates produced in our laboratory have been given to patients and no harmful reaction has been seen or reported from any one of them

You further say that the account given of the conditions under which the product has been manufactured is far from reassuring I have not seen the account to which you refer but Government inspectors from Ottawa and Washington made very few suggestions for changes in the laboratory or process The last inspection made by an official of the Department of Health at Ottawa found that all Government standards and requirements were in force and it was so reported Last February I had made a formal application to the Department of Health at Washington for an inspection of the laboratory but no action was taken upon it until after the publicity from the accident mentioned Everything possible is done to ensure the safety of these biological products made under a personnel approved by Canadian Government officials

You continue your comment by adding that while the disaster had no bearing whatever on the possible usefulness of the treatment properly applied and safeguarded it will doubtless and rightly serve as a setback to the indiscriminate application of treatments which have been insufficiently tested and are not under adequate control The implication is unfair and unwarranted so far as my work is concerned Treatment of patients in this research has been properly carried out under supervision of expert and experienced consultants There has been no indiscriminate application of treatments they have been sufficiently tested and are under adequate control It appears that anyone who undertakes cancer research and combines laboratory and clinical experimentation is immediately under suspicion by the organized medical profession and the mandarins of the medical press and certain to be condemned and derided However if there is merit or truth or value underlying such research it will survive all attacks—I am etc

Kingston Ontario Canada August 10 H C CONNELL

Wanted Surgical Instruments for China

SIR—I am very interested in the relief work that is being done in connexion with the Lord Mayor of London's fund for the relief of distress in China and for the hospitals working in China I am anxious to collect surgical instruments and apparatus from various hospitals and surgeons for which they have no further use All that are worth reconditioning will be put in order in Sheffield and sent out to China If any of your readers have any surplus or unwanted instruments will they please dispatch them to me at Clyde Steel Works Sheffield marked China Relief

The need is very great and through the good will of various people transport will be arranged without any charge being made—I am etc

Sheffield September 2 FRED M OSBORN Vice Chairman of the Sheffield Committee

Rheumatoid Arthritis and Jaundice

SIR—Some of your correspondents seem to think that the jaundice had some curative effect on the arthritic condition It ought to be made clear that such is definitely not the case Virtually every case of arthritis deformans has a complicating gastro enteritis as part of the vicious circle Reaction to an antigen of the causative microbes produces temporary blocking of the bile duct in some few cases with consequent jaundice In Dr G Laurence's case (*Journal* September 10 p 592) the gastro intestinal infection was a *Staphylococcus aureus* streptococcus and *B coli* combination The direct microbial causes of the arthritic condition are excreted into the urine from the blood by the kidneys from which they can be isolated Invariably when there is effusion such microbes can be precisely isolated from the clear generally reported sterile fluid of the joint In this case there was a *Staphylococcus albus* and diphtheroid bacillus combination Complete restoration to health in any case of any kind can only be secured by specifically treating all the infections present in the body The disappearance of osteophytes and the replacement of the destroyed articular cartilage by some substitute tissue the nature of which has not yet been ascertained has to be experienced to be believed—I am etc

London N W 1 Sept 9 W M CROFTON

"A Mere University"

SIR—I can assure Sir Ernest Graham Little and Dr Major Greenwood that I had neither intention nor desire to be sneering or contemptuous about the University of London for I agree that its foundation brought higher education to large sections of the community then debarred from admission to the older Universities by sex creed or race My own father graduated at London in 1851 when as a Nonconformist he would have been unable to obtain a degree elsewhere in England Nor had I any intention of making unfavourable comparisons with Cambridge No Cambridge man can view with pride the state of medical education there when London University was founded and it is obvious that the standard then set had a most beneficial effect in raising standards elsewhere

The head and front of my offending appears to have been the use of the words mere and incredible The Oxford English Dictionary gives as the first definition of mere—pure unmixed undiluted and its subsequent definitions are as free from a note of contempt as I intended my use of the word to be But it is quite clear that though the attitude [of London University] towards examinations has in no way changed the reconstituted University realized that examinations in themselves are not enough In the retrospect an attitude may appear incredible which at the time was the only possible one To say that the advance made by London University in its first century of existence is almost incredible would be to state a fact that has no sinister connotation

May I remind Sir Ernest that the would be destructive criticism of examinations was not mine but came from the pens of a past and a present official of London University I merely attempted some constructive suggestions to diminish the serious chance of fallacies in the system to which they called attention—I am etc

W LANGDON BROWN

London W 1 Sept 13

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

J T Irving M D of Gonville and Caius College has been appointed university lecturer in physiology for three years from October 1 1938

A R H Trim B A of Trinity College has been appointed to the Benn W Levy research studentship in biochemistry 1938-9

UNIVERSITY OF MANCHESTER

Dr Benjamin Portnoy has been awarded the Dickinson Travelling Scholarship in Medicine

Obituary

SIR ROBERT HENRY WOODS, M B, M CH
FRCSI FACS (Hon)
Honorary Professor of Laryngology and Otology, Trinity College Dublin

We regret to announce that Sir Robert Henry Woods died suddenly on September 8 at his residence Marino, Killiney Co Dublin Although he was in his seventy-fourth year he appeared to be in vigorous health and was still in active practice His passing has robbed Ireland of one of her most distinguished sons, the medical profession of a laryngologist of outstanding skill and ability, and his colleagues and patients of a most loyal and trusty friend

Robert Henry Woods was born at Tullamore on April 27 1865 He was the youngest son of the late Christopher Woods, and was educated at Wesley College, Dublin the nursery of many a famous Irishman Later he entered Trinity College, Dublin, where he had a most distinguished record In 1889 he graduated B A with the first Senior Moderatorship in Experimental Science, being awarded the Large gold medal His medical record was equally successful In 1889 he qualified M B B Ch, B A O, and the year after qualification he won the surgical travelling prize, which enabled him to proceed to Vienna for a postgraduate course of study in laryngology and otology the branch of the profession to which he devoted nearly fifty years of his busy life Soon after his return from Vienna he was appointed laryngologist to the Richmond Whitworth and Hardwicke Hospitals where he was a colleague of the late Sir Thomas Myles with whom he made a lifelong friendship Subsequently he resigned his appointment at the Richmond Hospital on being elected the first laryngologist to Sir Patrick Dun's Hospital Here he organized a new department to which he devoted much time and care Sir Robert was the first specialist in Dublin to confine his attention to diseases of the ear, nose, and throat, his predecessors being general physicians, surgeons, or ophthalmologists who practised laryngology or otology in addition to their ordinary work On retiring from the active staff of Sir Patrick Dun's Hospital in 1935 he was appointed consulting laryngologist and was succeeded by his son Dr R R Woods



Sir Robert Woods was an able and adventurous surgeon who was possessed of wonderful dexterity and resourcefulness He inspired great confidence in his patients and as a consultant his advice was widely sought His reputation passed far beyond his own country as was exemplified in 1923 by the conferment upon him of the Honorary Fellowship of the American College of Surgeons At home he was the recipient of many honours In 1911 he was elected President of the Royal College of Surgeons in Ireland In 1913 he was created a Knight and in the same year Dublin University conferred on him the honorary degree of M Ch During the four years 1918 to 1922 he represented Dublin University as M P at Westminster, succeeding the late Lord Carson Trinity College appointed him Honorary Professor of Laryngology and Otology in 1915, the duties of which office he performed until his death Sir Robert was President of the Dublin University Biological Association in his younger days, and at one time was President of the British Laryngological Society He was selected as President of the Irish Medical Association by the medical profession of Ireland When the Royal Academy of Medicine of Ireland instituted the new Section of Laryngology and Otology Sir Robert Woods was the obvious man to become its first president, and was duly elected At the Annual Meeting of the British Medical Association in Dublin in 1933 he acted as president of the Section of Laryngology and Otology, having served as vice president at previous Annual Meetings in 1901 and 1902

This multiplicity of duties, coupled as they were with a busy practice, did not, however, prevent Sir Robert from energetically pursuing interests in other fields He had many hobbies, and exemplified the truth of the saying that a busy man can always find time to do something else He took a keen interest in the Royal Zoological Society of Ireland, of which he became president When he paid a visit to his barrister son in the Far East he returned with a collection of animals which he presented to the Dublin Zoo Sir Robert was an amateur carpenter of no mean order, and could revel in working a lathe and in making his own instruments He could equally well weave a luxurious carpet on a loom As a connoisseur of pictures and antique furniture he was an acknowledged master, having made a rare collection His knowledge and appreciation of good music was recognized at the Royal Dublin Society and at the Catch Club and 'Strollers Club' His writings were not numerous, but when he wrote the substance of his theme was always characterized by original thought and matter, as, for example, his article on malignant granuloma Although he had no great powers of oratory Sir Robert was a most excellent chairman, and always brought to bear a fund of sound common sense and well considered judgment on any subject under discussion Although not able to brook fools gladly he was essentially fair-minded and most tolerant of other people's opinions, even when they did not coincide with his own Personal enmity was foreign to his nature, and he was a staunch friend to those in difficulty He was generous and even lavish in his giving in any cause which interested him, as was the case when he became chairman of the Endowment Fund of Trinity College

In 1894 he married Margaret, only daughter of the late Judge J J Shaw, K C, Recorder of Belfast He lost one son in the war, and is survived by two sons and two daughters and by his widow

[The photograph reproduced is by Elliott and Fry, Ltd]

WILLMOTT HENDERSON EVANS, M D F R C S
Consulting Surgeon to the Royal Free Hospital

We regret to announce the death on September 7 at the age of 79 of Mr W H Evans, who was consulting surgeon to the Royal Free Hospital and to the Hospital for Skin Diseases at Blackfriars The third son of the late Dr Evan Evans, R N, Mr W H Evans was educated at University College London, and received his medical training at University College Hospital After taking his B Sc Lond in 1880 he took the diplomas of L S A and of M R C S in 1883 In 1885 he took his M B, B S and proceeded to the M D in 1887 being

elected F R C S in 1890 Mr Evans was a demonstrator in anatomy at University College was surgeon of the King George Military Hospital and joint lecturer in surgery at the London School of Medicine for Women He was also Erasmus Wilson Lecturer of the Royal College of Surgeons Among his publications were *The Diseases of the Breast A Handbook of the Diseases of the Skin* and *Medical Science of To day* He also contributed to medical journals papers on dermatology and surgery and translated the Handbuch der Prophylaxe Mr Evans married Ann Frances daughter of the Rev George Piercy, formerly of Canton China He is survived by his widow and three sons and two daughters

The large number of medical men both at home and abroad who in recent years have worked in St Mary Islington Hospital will learn with regret of the death of Dr JAMES POTTER deputy medical superintendent He died after a long illness on August 16 James Potter was born in London in 1889 He qualified M R C S L R C P at the London Hospital in 1911 During the war years he served as a captain in the R A M C in India Mesopotamia, and France and was awarded the M C After the war he acted as house surgeon and later as casualty officer at Queen Mary's Hospital Stratford before joining the staff of St Mary Islington Hospital As a surgeon he was an excellent clinician and most capable operator He will be best remembered however for many fine qualities of character—patience kindness and loyalty Few men can have had so many friends His genial forthright manner and charitable judgment of men made him an excellent companion even to the end Potter maintained a lifelong interest in athletics He had played Rugby for the London Hospital and for the Rhine Army and was a former captain and past president of Ilford Wanderers Perhaps more than any other attribute he possessed the quality of unfaltering courage—courage which did not desert him in the sad days of realized doom At the end Potter counted himself fortunate to be back in the hospital where he had spent so many years of his life and which he loved so much

We announce with regret the death on September 1 of Dr CHARLES HENRY BUBB We are indebted to Mr Percival P Cole for the following notes I first met Bubb in 1897 when we were both entered at Guy's as dental and medical students and my association with him as friend colleague, and patient has lasted ever since The dental and medical courses were undertaken concurrently at that time in Guy's The L D S Bubb obtained in the minimum two years although during this same period he had taken successfully the first and second Conjoint Board examinations Bubb thereafter attended the lectures and filled the clerkships and dresserships necessary for signing up but circumstances ordained that the acquirement of a medical qualification would have to be postponed or abandoned It was not for many years—until 1919 in fact while immersed in the cares and responsibilities of a growing practice—that he found opportunity to complete the final stages of the M R C S L R C P That he did finally take the diploma was characteristic of the tenacity of the man, he might be baulked but he was not beaten Even in these early days there was developed in him a reluctance to take anything for granted a habit of mind that rejected the broad outline or the roughed in sketch and demanded the complete picture as the essential basis for judgment and decision He was a man to whom conviction came only after a thorough and thoughtful assessment of all known facts Achieved thus with difficulty his own views were strongly held and he was perhaps somewhat intolerant, without noise or heat of the views of the other fellow though never of the other fellow himself He spoke no ill of anyone, and only once have I heard him express his dislike for a person His professional knowledge and ability were of a high order As an operator he exhibited great manipulative skill with a gentle consideration that was never a cloak for shirking and that evoked from his patients a surprising vein of fortitude—it Bubb hurt you then you felt sure that it was unavoidable During the war his outstanding qualities of perseverance patience and ingenuity found a wider and more varied scope than was possible in the somewhat cramped and restricted field of routine dental practice He was instrumental in the evolution at the King George Hospital of a maxillo facial department which starting as a pioneer enterprise with one patient expanded till it became a unit of a hundred beds To this end Bubb provided his own equipment and to a great extent employed and paid his own technicians The larger issues involved did not deteriorate one jot or tittle an unrelaxed insistence on accuracy and perfection in every detail which might at times and by captious critics be regarded as fastidious and almost pedantic It was to some a disappointment that he decided to devote his time exclusively to his dental practice after the King George Hospital was disbanded For services thus rendered to the King George Hospital and to the advancement of knowledge and procedure in the treatment of injuries to the face and jaws the O B E was conferred upon him a grade of honour that certainly did not overrate the value of his work Trouble and time meant nothing to Bubb His life was devoted to an unostentatious ideal of service, and his memory to all who knew him will be of a life well lived and a work well done

We regret to announce the death on September 4 of Dr HORACE MARSHALL ABEL Dr Abel received his medical education at Oxford University and St Thomas's Hospital, and qualified M R C S L R C P in 1893 Dr Alfred C Jordan writes The death at the age of 75 of Horace M Abel brings to an end a medical career in the City of London of nearly fifty years duration and for me a cordial and intimate friendship of more than forty years standing It began with our mutual devotion to chamber music He was one of the founders of the Oxford and Cambridge Musical Club and he held the post of honorary secretary throughout this period of forty years My own decision to practise in the City (later exchanged for a radiological career) was due to the fact that Abel was there His start in the City was unfortunate an Oxford friend held the post of secretary to an insurance company He told Abel that the company was about to open a life branch and that Abel should have the post of chief medical officer On the strength of this Abel rented a consulting room in the City But the life department did not come into being and he was stranded with little capital and no patients He bravely stuck to his guns however and slowly work began to come His practice grew in a steady crescendo to the end His downright yet unassuming character gained him the confidence of the heads of the City banks insurance houses mining companies etc with whom his work brought him into constant intimate contact I was associated with him in the City Medical Book Club and the Hunterian Society When the Hunterian Society was threatened with extinction Abel was one of the most active of the council in rescuing it and starting it on a new and vigorous lease of useful life yet his modest nature prompted him to decline the presidency offered him many times He was an active member of the Assurance Medical Society Apart from medicine and music Abel and I had other common interests including lawn tennis and figure skating we frequently forgathered on the ice at Ruislip Elstree and Wimbledon Park and on the ice rinks at Prince's or Hengler's and more recently Golders Green and Millbank He was a loyal friend and a man whose word was his bond—one who throughout life played the game Our deep sympathy goes out to his widow his devoted companion through twenty five years The members of the musical club which owes its existence largely to his initiative learned of his death with dismay and assembled in large numbers to do him reverence

No 35

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended September 3, 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 13 principal towns in Eire (e) The 10 principal towns in Northern Ireland

A dash — denotes no cases, a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929-37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	17	3	5		1	7	1	9	1	—		
Deaths		1	1				—	—				
Diphtheria	1,130	127	163	40	22	1,084	128	191	33	29	869	141
Deaths	19	7	1	—	—	21	3	6	2	—		
Dysentery	46	12	18		—	158	4	25		—		
Deaths				—	—				—	—		
Encephalitis lethargica, acute	4	—	1		1	1	—	—		—		
Deaths		1					—					
Enteric (typhoid and paratyphoid) fever	32	3	2	1	2	51	9	8	7	2	70	
Deaths	2	—	—	—	—	—	—	—	—	—		
Erysipelas			59	6	2			53	8	—		
Deaths		—					—					
Infective enteritis or diarrhoea under 2 years												
Deaths	50	12	8	8	4	54	14	24	17	4		
Measles			21		—			19		1		
Deaths	4	1	—	—	—	7	1	—	—	—		
Ophthalmia neonatorum	90	11	28		—	94	6	35		1		
Deaths												
Pneumonia, influenzal‡	279	18	5		7	351	28	1		—	385	34
Deaths (from influenza)	10	2	1	—	—	14	2	1	—	—		
Pneumonia primary			104	5				121	5			
Deaths		6		7	5		9		1	4		-
Polio encephalitis, acute	9	2				—	—					
Deaths		—					—					
Poliomyelitis, acute	73	5	14		1	35	5	1		1		
Deaths		—					—					
Puerperal fever	3*	3	7	2	—	30	8	14	4	—		
Deaths		1†					1†					
Puerperal pyrexia	149	11	23		—	149	21	21		—		
Deaths												
Relapsing fever	—	—			—	—	—	—		—		
Deaths												
Scarlet fever	1,391	97	282	53	56	1,531	143	278	42	58	1,541	227
Deaths	1	—	—	1	2	1	—	1	—	—		
Small pox	—	—	—		—	—	—	—		—		
Deaths		—		—	—	—	—		—	—		
Typhus fever	—	—	—	—	—	—	—	—	—	—		
Deaths				—	—				—	—		
Whooping cough			171		10			76		3		
Deaths	5	—	4	1	—	15	2	2	2	1		
Deaths (0-1 year)	243	44	56	18	17	263	42	61	32	17		
Infant mortality rate (per 1 000 live births)	41	36				44	35					
Deaths (excluding stillbirths)	3,713	681	531	144	128	3 603	691	520	141	108		
Annual death rate (per 1,000 persons living)	9 1	8 7	10 8	9 7	11 3	8 9	8 7	10 6	9 6	9 6		
Live births	6 413	1,153	847	304	229	6 463	1,182	821	397	239		
Annual rate per 1 000 persons living	15 8	14 7	17 3	20 6	20 3	16 0	14 9	16 8	27 1	21 2		
Stillbirths	283	47				267	37					
Rate per 1 000 total births (including stillborn)	42	39				40	30					

* After October 1 1937 puerperal fever was made notifiable only in the administrative county of London

† Death from puerperal sepsis

‡ Includes primary form in figures for England and Wales (less (administrative county) and Northern Ireland

EPIDEMIOLOGICAL NOTES*

Acute Poliomyelitis

In England and Wales 73 cases of acute poliomyelitis were notified during the week under review compared with 71 in the previous week while in London the number fell from 9 to 5 Notifications of two or more cases were received from Braintree and Bocking 2 Braintree (rural) 2 Finchley 2 Gloucester 2 Lichfield 2 Llanelly 2 Oxford 3 Swansea 7 Wokingham 2 Braintree and district and Swansea remain the two areas in which the disease continues since July 1 when it first appeared in Swansea there have been 32 cases with 5 deaths In none of the London boroughs was more than one case notified the boroughs affected were Battersea Greenwich Hampstead Poplar Stoke Newington The head masters of the schools under the control of the London County Council were notified in the *LCC Gazette* of September 6 that contacts of cases of acute poliomyelitis must be excluded from school for a period of twenty one days from the date of their last known exposure to the disease This instruction amends until further notice the rule hitherto in force that such contacts might continue to attend school unless instructions to the contrary were received from the school medical officer or the borough medical officer of health

The position as regards acute poliomyelitis in Europe is shown in the Weekly Epidemiological Record of the Health Section of the Secretariat of the League of Nations During the four week period ended August 13 and the two week period ended August 27 the number of cases of acute poliomyelitis and acute polio encephalitis in England and Wales exceeded the median value for the corresponding periods of 1927-37 A similar excess was noted in Holland in which notifications during the week ended August 27 rose to 54 (26) 30 of which occurred in the province of South Holland among these 30 cases 7 were at The Hague and 4 each at Boskoop Rotterdam and Waddinxveen In Germany 438 cases of acute poliomyelitis were notified during the week ended August 20 compared with 367 cases in the corresponding week in 1937 the principal areas affected were district of Cologne 36 Wiesbaden 13 district of Potsdam 10 Wurtemberg 26 Bavaria 19 Saxony 13

Typhoid Fever

Typhoid fever was less prevalent in England and Wales during the week under review than in the previous week and much less than in the corresponding week last year Thirty two cases were notified in England and Wales and in only 3 centres was more than 1 case reported—namely Barking 3 Doncaster 3 London 3 (1 each in Shoreditch Stepney and Wandsworth) In the following week 2 further cases were notified at Farnworth—one in the father of two girls who fell ill a month previously and one in a two year old child with no known contact—bringing the total number up to 46 of which 7 patients have died

Diphtheria and Scarlet Fever

Notifications of diphtheria in England and Wales rose considerably during the week under review—1 130 compared with 963—and in London—127 compared with 112 in the previous week The chief centres in which increases were noted are Reading 5 (1) Chester 10 (1) Chesterfield 6 (2) Sedgefield (Durham) 4 (0) Liverpool 52 (45) Manchester 25 (14) Southport 5 (1) Crosby 7 (1) Golborne (Lancs) 7 (1) Camberwell 8 (5) Hackney 8 (3) Hampstead 3 (0) Islington 14 (7) Southwark 11 (5) Wandsworth 9 (5) Brentford and Chiswick 12 (3) Hendon 7 (1), Willesden 8 (0) Newcastle upon Tyne 9 (2) Birmingham 30 (20) Barnsley 14 (3) Sheffield 14 (10) Deaths in the 126 Great Towns of England and Wales fell from 21 to 19 in the week under review but in London they rose from 6 to 7

There was also a rise in the notifications of scarlet fever in England and Wales during the week the figures being 1 391 compared with 1,224 and in London 97 compared with 90 The chief increases were noted in Carlisle 10 (5) Derby 13 (9) Sunderland 13 (5) Bristol 21 (17) Manchester 40 (32) Leicester 9 (5) Camberwell 7 (5) Greenwich 6 (1) Kensington 5 (2) Southwark 10 (6) Wandsworth 10 (5) Woolwich 8 (2) Hendon 7 (2) Birmingham 32 (28) Sheffield 25 (16) One death (in Blackpool) was reported during the week

Measles and Whooping-cough

There were 4 deaths from measles in the 126 Great Towns of England and Wales during the week—1 each in London Kingston upon Hull Sunderland and Warrington The average daily admissions to the LCC fever hospitals were 3 (3) In the metropolitan boroughs in which measles is notifiable the numbers rose in two—Shoreditch 2 (0) Southwark 1 (0)—and were *nil* in Battersea Birmingham Fulham Greenwich, and Hampstead In Scotland notifications fell appreciably during the week—21 compared with 38 in the previous week In the 126 Great Towns of England and Wales 6 (9) deaths from whooping cough were reported 2 (2) in Liverpool and 1 each in London (1) Kingston upon Hull (0) South Shields (0) and Stretford (0) In Scotland 171 (72) cases of whooping cough were notified of which 141 (58) occurred in Glasgow and 15 (3) in Paisley with 4 (3) deaths—2 (3) in Glasgow 1 (0) in Motherwell and Wishaw and 1 (0) in Coatbridge

Cholera

During the week ended September 3 the number of cases of cholera in Shanghai fell from 586 to 421 (10 deaths) and in Hong Kong from 21 to 19 (6 deaths) In British India 8 884 cases and 3 366 deaths were notified in the Central Provinces where the epidemic does not yet seem to have reached its peak On the other hand the incidence of cholera declined in most of the other provinces in India for the week the numbers were Bombay (Presidency) 394 cases with 174 deaths Madras (Presidency) 216 cases with 99 deaths United Provinces 324 cases with 136 deaths North West Frontier Province 27 cases with 25 deaths

* Except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

Medical News

The annual dinner of the Middlesex Hospital Medical School will take place at the Savoy Hotel on Friday September 30 at 7 30 p m

The annual dinner of St Mary's Hospital Medical School will be held at Claridge's on Saturday October 1 at 7 30 p m when Dr Walter Broadbent will be in the chair The special postgraduate course open to all medical practitioners without fee will take place on Thursday Friday Saturday and Sunday September 29 and 30 and October 1 and 2

The annual dinner of the Westminster Hospital Medical School will be held at the Royal Palace Hotel Kensington W on Saturday October 1 with the dean Dr Adolphe Abrahams in the chair The inaugural address of the Medical School will be given by Dr Robert Hutchison President of the Royal College of Physicians of London in the large lecture theatre of the school on Monday October 3 at 3 p m

The annual dinner of past and present students of Charing Cross Hospital Medical School will be held at the Trocadero on Saturday October 1 at 7 30 for 8 p m

The annual dinner of the St George's Hospital Medical School will be held at the Mayfair Hotel on Saturday October 1 at 7 45 for 8 p m

The annual dinner of St Thomas's Hospital Old Students will be held at Grosvenor House Park Lane W on Friday October 7 at 7 15 p m with Professor H R Dean in the chair

The annual dinner for past and present students of King's College Hospital Medical School will be held at the Mayfair Hotel on Saturday October 15 at 8 p m with Major General Sir Cuthbert Sprawson in the chair

The opening sessional address of the Welsh National School of Medicine University of Wales Cardiff will be given by Lieutenant General W P MacArthur D S O M D Director-General of the Army Medical Services, on Friday October 7, at 4 45 p m

The eleventh Hollando Belgian Congress of Neurology and Psychiatry will be held at Ghent on September 24 and at Brussels on the 25th Further information can be obtained from Dr Rod, 10, Avenue de la Ramée, Uccle

The Home Office has just issued an Order adding benzedrine and sulphanilamide to Part I of the Poisons List, the Order to come into operation on the first day of January, 1939

According to information in the Press, the Legislative Council of the New Zealand Government on September 13 passed without amendment the Social Security Bill, which is to provide in New Zealand universal health insurance, unemployment benefit and superannuation The Bill passed the House of Representatives on September 9 This Bill was the subject of a leading article in the *Journal* of August 27 at page 456

The general meeting of the International Spa Federation will take place in Berlin on September 22–23 and the congress at Bad Nauheim (in the Rhineland) from September 24 to 27 Excursions have been arranged giving opportunities to study the latest developments in leading German spas Particulars may be had from the Mitteleuropaisches Reiseburo, Ltd (German Travel Bureau), 159, Regent Street London, W 1

At the building exhibition which is being held from September 16 to October 1 a rural slum cottage, occupied up to within a few weeks of the exhibition, is to be demolished and re erected at Olympia in order to show the conditions in which many agricultural labourers and their families are living A smoke abatement exhibit will also be on view and there will be a demonstration by a Lancashire glass firm of how noise can be reduced by double glazing A further exhibit will be an apparatus which records the amount of light required by a person operating a typewriter

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone, unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary, B M A House Tavistock Square W C 1, on receipt of proofs Authors overseas should indicate on MSS if reprints are required as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary, B M A House, Tavistock Square, W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are
EDITOR OF THE *BRITISH MEDICAL JOURNAL* *Attiology Westcent London*
SECRETARY, *Medisecra Westcent London*

The address of the B M A Scottish Office is 7 Drumsheugh Gardens Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Cumann Doctuiri na h Eireann (I M A and B M A) 18 Kildare Street Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Income Tax

Deductible Expenses

"T S inquires as to the admissibility of certain expenses

** (*a*) The expense of entertaining clients for the purpose of introducing them to a new partner seems to us to arise out of the change in proprietorship and the inspector's objection would probably be sustained

(*b*) The expenses borne by the firm in connexion with specialists' visits is admissible as being properly incurred in carrying on the practice

(*c*) The uniform allowance for a ship's surgeon is, we believe, correctly stated by the inspector at £20 per annum, but where the period of service in the capacity is so short the basis of taking, say, one twelfth of £20 for a month's work seems clearly unfair We suggest that the inspector might reasonably be pressed to allow a deduction of, say, £5 instead of the £2 offered

Motor Car Expenses

"A C" is a school medical officer and is allowed 3d per mile for the use of his car He proposes to buy a new car and inquires whether he can make any claim to deduct the whole or part of the cost

** A C" is entitled to claim expenses incurred wholly, exclusively, and necessarily in the performance of his duties In our experience Commissioners would not have regard so much to isolated items of expenditure as to the general average over a fairly long period If, taking one year with another, 3d a mile covers the *necessary* expenditure including depreciation—and presumably the school authorities so regard it—then 'A C' would be unsuccessful in his claim and we think he would find it difficult to discharge the onus of proof

LETTERS, NOTES, ETC

Endometrioma of the Appendix

Mr Derrick J Martin (Hastings) writes 'There appeared in the *Journal* of November 20, 1937 (p 1040), an account by Dr J W Bride of an endometrioma of the pelvic colon In this connexion the following case may be of interest A woman, aged 26, for three years had pain in her right iliac fossa often associated with her periods, but occurring at other times as well The attacks were sometimes accompanied by nausea, but there was no vomiting and no pyrexia The pain was relieved by going to bed and applying a hot water bottle to the abdomen but some soreness was always present On examination, a point of strictly localized tenderness was apparent at McBurney's point A radiograph showed defective filling of a mobile appendix, which was tender on palpation A diagnosis of chronic appendicitis was made At operation it was found that the appendix was *not inflamed* but that there was a hard nodule at the base of the appendix and extending into the caecum The appendix and part of the caecum were removed The pathological report (from Dr P Lazarus Barlow) was The wall of the appendix and caecum is thickened and contains small nodules which histologically show endometrium, the glands are regular and lined by a single layer of columnar epithelium Apart from the nodules are scattered glands either singly or in small numbers these occur throughout the muscular wall The condition is that of an endometrioma of the appendix

Abortion and the Law

Dr B DUNLOP (London S W 15) writes Knowing from previous letters of his that Dr A J Brock is deeply concerned about the existence of huge towns and the menacing unrest in Europe, I am surprised that he depricates any extension of the facilities for family limitation His view (*Journal* August 27, p 480) that the abolition of unwanted births will mean the disintegration of society is a most pessimistic one I beg that he will consider the dictum of Professor Carr Saunders that voluntary parenthood must be the basis of any satisfactory population policy

Sentence Postponed for Operation

A reader in Durban sends the following item published by the *Natal Daily News* from its correspondent in Capetown

Accused of criminal injuria, Percival James McHardy a 26-years old European labourer, volunteered to the Magistrate at Caledon Square to undergo an operation for emasculation The charge arose out of an incident in a train between Somerset West and Capetown Medical evidence was that McHardy had perverted instincts His attorney told the Court that arrangements had been made for McHardy to go to Groote Schuur Hospital for an operation McHardy admitted a number of previous convictions and sentence was postponed until completion of the operation

Messrs W. B Saunders Company, Ltd 7 Grape Street W C 2 have published their mid year catalogue of books for medical, nursing, dental and allied professions

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Deutsche Medizinische Wochenschrift

Berlin vol 64 July 1 1938

Intravaginal Rotation Treatment of Cancer of Cervix—H Martius
Importance of Selective Heating of Certain Layers of Tissues in Ultra-short Wave Concentrator Field—H Schaefer
Retrogression and Disappearance of Malignant Tumours of Rat by Means of Hydrocyanic Strained Muscle—V H Rotlo
Early Diagnosis of Cancer of Stomach Results of Chemical Examinations of Gastric Juice with Various Test Meals and Drinks—A Nosin
Treatment of Tumours of Bladder—W Heckenbach
Technique of Gastroscopy—M Gutzow and T Mandels
Cancer Skin Sensitization Test in Diagnosis of Malignant Tumours—B. Seferyn and N Gr
Development of Cancer Mortality in Ten Large German Towns—H Haubold

Regression of Tumours—This study comes from the University Institute for Cancer Research at Buenos Aires which is under the direction of Professor Roffo He disclaims any pretensions to the discovery of a method for curing malignant growths but suggests that his observations may prove well worth further investigation

Journal of the American Medical Association

Chicago vol 111 July 9 1938

Care and Treatment of Cerebral Lesions—W Phelps
Poliomyelitis Virus in Human Stool—J Frank A Vignec and J Paul
Cutaneous Absorption of Sex Hormones—C Moore J Lamar and N B K.
Follow-up Studies of the 1933 St Louis Epidemic of Encephalitis—J Bredeck G Brown T Hempelmann J M Faulden and H Spector
Meningoencephalitis in Mumps—H Finkelstein
Intravenous Bismuth Compounds used in Therapy of Syphilis—R Nemland E Skolnik and L M Lellan
Mesenteric Vascular Occlusion—L Whittaker and J Pemberton

Klinische Wochenschrift

Berlin vol 17 July 1938

Photography of Bacteria and Viruses by Supermicroscope (*Uebermikroskop*)—B von Borries E Ruska and H Ruska
Antagonism between Iron and Copper in Blood Plasma during Infective Diseases—L Heilmeyer and G Stuwe
Effect of Caffeine on Heart—M Kiese and H Gurmel
Vitamin C in Blood with Special Reference to Reticulocytes and White Blood Cells—H Barber
Value of Oral Cholecystography—W Lutz and H Seyfried
Treatment of Toxic Diphtheria with Vitamin C and Suprarenal Hormone—J Dieckhoff and K Schuster
Carbohydrate Metabolism in Nervous Affections amenable to Vitamin B Therapy—St Molnar and S Noszko
Pathogenic Pasteurella Bacteria in Man—M Kristensen
Absorption of Vitamin B through Skin—M Kasahara J Hayashi I Yokomoka and R Furumi
Absence of Indirect Reactive Luteinization of Ovaries in Female Rats following Administration of Follicular Hormone after Section of Hypophyseal Stalk—L Herold and G Effkemann
Child and Paediatrician in Fight against Tuberculosis—C Noeggerath

Supermicroscopy—The principles of the supermicroscope (*Uebermikroskop*) are explained and the instrument itself made by Siemens and Halske is described It is capable of a magnification of about 20 000 The illustrations of *B coli* of typhoid and paratyphoid bacilli and dysentery and Bang bacilli show a remarkable amount of detail The viruses of small pox of ectromelia and of myxoma are also illustrated

Lancet

London vol 2 July 2 1938

Diabetes Mellitus Survey of Changes in Treatment during Last Fifteen Years I—G Graham
Serum and Sulphanilamide in Acute Meningococcal Meningitis—H S Banks
Sulphanilamide Content of Cerebrospinal Fluid during Treatment of Meningococcal Meningitis—E N Alcott
Treatment of Pneumonia with *p*-(*p*-aminobenzenesulphonamido)pyridine—G M Evans and W F Gaisford
Rupture of Caesarean Scar treated by Simple Drainage and followed by Pregnancy—H Arthure

Meningococcal Meningitis—A series of 113 cases is described the results being compared after treatment by serum intravenously and intrathecally by serum and sulphanilamide and by sulphanilamide alone The last two methods seemed more effective than the first The dosage of sulphanilamide to be given is discussed high initial doses being advocated

Medical Journal of Australia

Sydney vol 1 May 28 1938

Diagnosis and Treatment of Diverticulitis of Colon—B Smeaton
Certain Considerations of Artificial Pneumothorax in Treatment of Pulmonary Tuberculosis—B A Serjeant
Use of Metaphen in Treatment of Psychoses and Pneumothorax—J B Ferguson and V H Pennington
Perurethral Resection in Bladder-neck Obstructions—R J Silverton and C M Edwards
Certain Aspects of Ketosis and Acidosis—A. B Corkill J P Marks and K Johnston
Methods of Induction of Labour—J S Green
Hospital Administration and Organization—J H Blackburn

Sydney vol 1 June 4 1938

History of Leprosy—C G Lambie
Bunodes of Hiss—W Evans
Dermatitis Exfoliativa with Description of Causative Fungus—H L Kesteven
Inflammation and Fibrosis of Heart Wall—J B Cleland

Medizinische Klinik

Berlin vol 34 July 1 1938

Treatment of Febrile Abortion—H Rupp
Embryological and Static Factors of Sacralgia—F Siebke
Periarteritis Nodosa—W Berker
Observations on Scarlet Fever during Last Five Years—Hugenschaffer
New Data on Immunochemistry—F Haurowitz
Value of Electrocardiogram in Social Insurance—F Pfeffer
Present day Treatment of Gonorrhoea—W Schmidt

Scarlet Fever—Observation of 228 cases of carlet fever during the years 1933 to 1937 definitely shows a gradual increase in the incidence of the disease The diagnosis was sometimes difficult particularly in the mild abortive forms Complications were numerous and various but the course of the disease was generally favourable and the mortality was only 2 2 per cent Septicaemia was always fatal There were several unmistakable cases of recurrence The treatment is outlined and the importance of early isolation is stressed

Medizinische Welt

Berlin vol 12 July 2 1938

Damage to Gonads by Radium and X Rays—H Martius
Dosage of Light and X Rays—P W Schmidt
Acute Bowel Disturbances in Infancy—K Dietl
Infection by Fraenkel's Bacillus—E Sedlaczek
Modern Views on Vitamin Research—E Odemeyer
Cholagutt A Fresh Plant Cholagogue—G Vogt
Xylidrin in Treatment of Hay fever—H Reuys

Munchener Medizinische Wochenschrift

Berlin vol 85 June 10 1938

Treatment of Trigeminal Neuralgia—F K Kessel
Wrong Diagnosis and Interpretation of Hegar's Pregnancy Test—W Wolf
Drowning—J A Lober
The Scarlatinas—P Hartess
Sialolithiasis—G Dinkler
Hypotonic Circulatory Diseases Their Relation to Collapse—R Kleinz
Treatment of Post-operative Complications of Lungs—E Schwab
Treatment with Active Hyperaemia according to Gartier—W Thiele
Taking of Cultures in Diagnosis of Gonorrhoea—W Christiansen
Germany's Protection against Small pox—A Groth
Evaluation of Adoption by Doctor Economist and Eugenist—M Nieden

Nature

London vol 141 July 2 1938

Seventeenth Century Science—E N da C Andrade
Optical and X Ray Examination and Direct Measurement of Built up Protein Films—W T Astbury F O Bell E Gorter and J Van Ormondt
Oestrogenic Activity of Alkylated Stilboestrols—E C Dodds L Goldberg W Lawson and R Robinson
Polarographic Estimation of Vitamin C—E Kodicek and K Wenig
Biological Assay of Vitamin E—A L Bacharach
Vitamin E Synthesis of α tocopherol—F Bergel A Jacob A R Todd and T S Work
Formation of Haemolymph Glands in Tumour bearing Rats—A Lasnitzki and M Lasnitzki
Kallikrein as a Reynals Factor—J F Christensen
Intense Radio activity of Superficial Ocean Floor—J Larmor
Combined Ascorbic Acid in Plant Tissues—H Scarborough and C P Stewart

New England Journal of Medicine

Boston vol 218 June 30 1938

Relation of Physician to Industry—Emma S Tousant
Three Types of Meckel's Diverticulum—Thomas F Corriden
*Sulphanilamide in Treatment of Gonorrhoea in Females—Burton C Crodberg and Edmund L Carey

Sulphanilamide—The authors treated thirty-two cases of gonorrhoea in women with sulphanilamide by mouth in doses of from 20 to 30 grains daily for a period of about six weeks They report 85 per cent of cures The criteria of cure were (1) at least three negative smears from both cervix and urethra at weekly intervals and (2) absence of symptoms and physical signs

Nordisk Medicinsk Tidskrift

Stockholm vol 16 July 2 1938

Certain Aspects of Aspiration Treatment for Diseases of Accessory Sinuses—I Skoog
Aspiration in Maxillary Sinusitis—H C Andersen
Recently Discovered Secale Alkaloid and their Employment in Obstetrics—H L Kottmeier

Norsk Magasin for Laegevidenskapen

Oslo vol 99 July 1938

*Tuberculous Primary Infection in Puberty and Adult Life—O Scheel
Azotaemia in Haematemesis and Melaena—M S Kobro
Follow up investigations of 466 Patients operated on for Inguinal and Femoral Hernia—W Mathisen

Tuberculous Primary Infection—This clinical radiological and statistical study of tuberculous primary infections in puberty and early adult life emphasizes the importance of tuberculosis contracted for the first time at these ages, and stultifies the von Behring teaching that the primary tuberculosis of adult life is invariably a sequel to an infection in early childhood

Presse Medicale

Paris vol 46 June 29 1938

Numerical Difference between Tuberculosis as an Infection and as a Disease—E Bernard and M Moine
*Diagnosis of Psychical Disturbances in Exophthalmic Goitre—H Welti H Bitruk and Y Mathey
*Pharmacological Study of Medicinal Properties of *Orthosiphon stamineus* Benth—Schuneck de Goldfiem

Psychical Disturbances and Goitre—The authors point out the importance of correctly differentiating mental symptoms due to Graves's disease and those due to other causes before resorting to operation

Orthosiphon stamineus—De Goldfiem describes the remarkable virtues of this herb as a diuretic It has been used for many centuries in Java to provoke diuresis

Paris vol 46 July 2 1938

Diphtheria Anatoxin Vaccination and Diphtheria Prophylaxis—G Ramon
*Note Theory of Cause of Death from Burns—L Christophe

Diphtheria Prophylaxis—Ramon reviews the progress of diphtheria immunization throughout the world and stresses the advantages of giving a mixed diphtheria and tetanus anatoxin

Cause of Death in Burns—Christophe describes a number of experiments on dogs which, he claims, afford definite proof that death from burns is due to a toxin generated in the burnt area and circulating in the blood, which damages certain centres in the brain

Schweizerische Medizinische Wochenschrift

Basle vol 68 July 2 1938

Last Year's Epidemic of Poliomyelitis in Basle—E. Wieland.
Rheumatism and the Sympathetic II—H Iselin
Hitherto Unknown Hereditary Eye Disease (Degeneratio Hyaloideo-retinalis Hereditaria) Noted in Canton of Zurich—H Wagner
Influence of Hypnosis on Pulse—B Stokvis
* Dumb Early Period in Syphilis—K Wolpert

"*Dumb Early Period in Syphilis*—After a discussion of "syphilis without chancre" and lues ignorata," 2400 cases at all stages are analysed It is concluded that in cases in which the symptoms of the early stages are slight there is a predisposition not only to neuroluetic late manifestations but also to tertiary affections of the skin and viscera

Science

New York vol 88 July 1 1938

Uniovular Twins in Mice—S C Reed
Phosphorylation of Glycogen *in vitro*—W Z Hassid and I L Chaikoff
Preliminary Report on Specificity of Keratins—L Pillemer and E E Ecker

South African Medical Journal

Capetown vol 12 June 25 1938

Vascular Affections of Extremities—M M Posel
*Further Experiences with Pentothal Sodium—C W H van der Post
Treatment of Hare lip and Cleft palate—J Penn
Non gonorrhoeal Urethritis—S Behr
Significance of Haematuria—V Vermooten
Non operative Treatment of Closed Fractures of Shaft of Femur—S V Humphries

Pentothal Sodium—Van der Post believes that pentothal sodium is "as near the ideal anaesthetic as nothing else has yet been It is however not the ideal for each and every operation and its indiscriminate use cannot be condemned too strongly

Ugeskrift for Laeger

Copenhagen vol 100 June 30 1938

Testicular Hormone Excretion in Urine during Treatment of Dystrophia Adiposogenitalis with Gonadotropic Hormone—K Sand and P Plum
Sulphonamide Preparations in Treatment of Gonorrhoea—A Kissmeyer
Treatment of Gonorrhoea with Sulphanilamide (Streptamid Leo)—V Kristjansen and O Kaalund Jorgensen
Case of Tuberculous Meningitis during Pregnancy—H Harpoth
Follow up Examinations of Cases of Lupus in Jutland—S Lomholt

Wiener Klinische Wochenschrift

Vienna vol 51 July 1 1938—

Opening of Sixty first International Postgraduate Course of Vienna Faculty of Medicine—E Pernkopf
Raw Food Therapy—H Eppinger
Comparisons between Diagnostic Value of Julien's and Laurent's Flocculation Reactions in Animal Brucellosis—K Kollar
Cataleptic Manifestations in Childhood—D v Mórtz and J Koniz
Importance of Diastolic Pressure in Evaluation of Thyrotoxicosis—F Hitzenberger
Role of Calories and Carbohydrate Administration in Diabetic Therapy—J Wegierko
Relief of Incontinence of Urine in Women—H Kamniker

Wiener Medizinische Wochenschrift

Vienna vol 88 July 2 1938

Therapy of Inflammatory Conditions of Interstitial Tissue of Kidney—E W
Liver Cirrhosis—F Lauda
X Ray Examination of Stomach and Intestine—H Schuster

SPECIAL JOURNALS

Acta Psychiatrica et Neurologica

Copenhagen vol 13 [illegible]

Neurosecretory Cells in Epithelium Palpebrae Lacrimalis Primates (Eng †) —K Buchmann
Thalamic Appearance of Extensive Injury to Dura of Tremor (Eng †) —B Ingebrigtsen
Prophylaxis of Crime (Fr †)—O Kinberg
Neurological Symptoms in Schizophrenia Electrical Symptoms (Ger †) —B Rees
Peripheral Nerve Lesions in Cases of Pernicious Anaemia (Ger †)—W Mayer Boeker and H C Kreis
Ophthalmoneuromyelitis and Multiple Sclerosis in Dutch East Indies (Ger †)—W J C Verbrugt

American Heart Journal

St Louis vol 15 June 1938

Clinical Studies of Gitalin and of Digitalis in Treatment of Auricular Fibrillation—H Levy and E J Blas
Angina Pectoris and Myocardial Infarction in Coronary Sclerosis Myocarditis—C J Smyth
Incidence and Type of Heart Disease in San Francisco School Children—J J Swenson and J C Geiger
Screening of Variously Vectored by Examination of Sedimentation Rate (Schiefin)—S H Sedgwick and M H Seiberling
Myocardiograph—H Muller
Preferential Extrocardiac Area in Myocardial Infarction—C E Koons and C E Welch Chapple
Accuracy in Diagnosis and Localization of Myocardial Infarction—H Feil E H Cushing and J J Halverson

Myocardial Infarction—A comparison of the post mortem findings with the clinical and electrocardiographic diagnosis in thirty four cases of cardiac infarction showed that the latter was accurate as to the presence of infarction in twenty eight cases The greatest accuracy in diagnosis and localization was in acute single infarction without old infarction (100 per cent.) but in cases of old and recent infarction the recent infarct was diagnosed and located in 73 per cent Chest leads were taken from the apex and from the fifth left costal cartilage, the latter was found superior to the apical lead in the diagnosis of posterior infarction

American Journal of Hygiene

Baltimore vol 28 July 1938

Some Biochemical Properties of *C diphtheriae*—M Frobisher jun
Types of *Corynebacterium diphtheriae* in Baltimore Maryland—M Frobisher jun
Association of *Trichomonas vaginalis* Vaginitis and Leucorrhoea—J Anderson
Trichomonas foetus in Bulls—J Andrews and F W Miller
Further Experiments on Passive Immunity of Rats to Nippostrongylus Infections—A C Chandler
Immunology of Epidemic Influenza—T Francis jun
Glycogen Content of Flagellate of Cattle *Trichomonas foetus*—H M Stewart
Experimental Studies on Course of Trichina Infection in Guinea pigs I Minimum Dose of Trichina Larvae required to produce Infestation of Muscles with Account of Potential Productiveness of Female Trichina—H Roth
Studies on Sodium Deficiency Effects of Sodium Deprivation on Young Puppies—O Turpeinen
Some Uses of Chick Embryo for Study of Infection and Immunity—E W Goodpasture
Infection of Chorio-allantois of Chick Embryo as Diagnostic Test for Variola—G J Buddingh
Quantitative Studies on Glucose Consumption by *Trichomonas foetus*—J Andrews and J von Brand

Properties and Types of C diphtheriae—The hydrolytic and other properties of this organism were extensively studied in the hope of finding some means of readily distinguishing the different strains No well differentiated biochemical groups were revealed A large number of cultures were typed and their characters classified Of 133 indeterminate types 102 possessed only one or two characters of the gravis type Of the whole 85 per cent had no more than two of these characters The author concludes that there is a trend away from the gravis type

Use of Chick Embryos for Inoculation—The author reviews the employment of chick embryos for inoculation experiments and claims outstanding advantages for this technique Chief of these are it is not too delicate or too uncertain a medium it is bacterially sterile with no latent infection is very resistant to accidental infection, is devoid of complement and specific antibodies (unless the hen has been immunized) and the immunity of the hatched chick to certain infections does not apply to the embryo A possible disadvantage is the occasional difference in susceptibility to certain infections at different stages of growth

Diagnostic Test for Variola—Chorio allantoic inoculation of chick embryo with suspected variolous material offers a better means of distinguishing variola and varicella than corneal inoculation of the rabbit

American Journal of the Medical Sciences

Philadelphia vol 195 June 1938

Pathological Changes produced by Gastrectomy in Young Swine—S Perla F Nygaard and J Berg
Observations on Accessory of Toxaemias of Pregnancy IV Primary Reduction of Plasma Protein in conditioning Water Retention and Oedema Formation in Normal and Toxaemic Pregnancy—M B Sussman
The Sedimentometer Protective Reaction of Suspension Stability of Erythrocyte—T Lee
Influence of Anaemia on Blood Sedimentation—J W Cutler F R Park and B S Herr
Normal Venous Pressure as determined by Direct Method—A A Holbrook
Blood as Volume Conductor and its Influence on Electrical Field of Heart—J E Benamin H Laret and L R Culver
Progression in Potential Rheumatic Heart Disease and Rheumatic Mitral Incompetency—J A Bevelander and S A Levine
Transient Nodal Rhythm following Use of Sulphanilamide—D L Dozzi
Manipulation of Glucose Tolerance by Diet—E P McCullagh and C R Johnston
Dietary versus Insulin Treatment of Obese Diabetic Patients—F Fetter J K Durkin and G G Duncan
Effect on Blood Cells of Foetal Rat produced by Infusion of Cadmium Tetrachloride by Mother during Gestation—E Briese
Effect of Iontophoresis with Acetyl beta-methylcholine Chloride on Rate of Peripheral Blood Flow—H Montgomery H E Hollinger and C K Freeland
Changes in Blood Lipoid during Treatment of Schizophrenia—L O Randall D C Carleton and J M Looney
Hyoscine Atropine Therapy in Chronic Encephalitic Parkinsonism—S P Jewett H M Rosow and E Pumpian-Mindlin
Studies of Blood Proteins in Dementia Praecox—J M Thomas E V Semrad and R M Schwab

Gastrectomy in Young Swine—In six young swine 6 weeks old at operation the entire stomach was removed and oesophago jejunostomy was performed Control animals were kept under the same conditions (diet etc) The operation gave rise to clinical and pathological changes similar to those of human pellagra Conspicuous features were arrest of growth hypochromic microcytic anaemia and extensive alterations in the skin and in the central nervous system Other changes were inconsistent The findings suggest a specific factor in the stomach of swine as in dog and man which is required to maintain the skin and the central nervous system in a normal healthy state

Transient Nodal Rhythm after Sulphanilamide—A doctor who had taken 8 grains of prontylin (*p* aminobenzenesulphonamide) in one dose developed arrhythmia four days later The electrocardiogram revealed signs of myocardial degeneration and nodal rhythm Caution in the administration of sulphanilamide in cases of cardiac disease is indicated

Dietary v Insulin Treatment—The great majority of obese diabetic patients particularly those 50 per cent or more over weight do not need insulin When such a patient is put on a low calorie diet and his weight is reduced the blood sugar falls to normal without the drug

† Eng means that the article referred to is printed in English, Fr in French Ger in German

American Journal of Obstetrics and Gynecology

St Louis vol 35 June 1938

Dysgerminoma of Ovary—E Novak and Lyman A Gray
Clinical Evaluation of Stereoroentgenography of Female Pelvis—K B Steele L A Wing and C M McLane
Blood Chemistry Observations in Protein deficient and Toxic Pregnancies—H H Barker
Masculinizing Elements in Ovary—R A Reis and O Saphir
Familial Intersexuality—D A Mishell
Determination of Oestrogenic Substance in Blood Serum by Means of Estimation of Anti proteolytic Power of Serum—E Shute
Vaginal Hysterectomy—L Averett
Origin of Substance in Urine which produces Elongation of Bitterling Ovipositor—A E Kanter A H Klawans and B O Barnes
Evaluation of Common Cervical Lesions—N F Miller and R L Malcolm
Significance of *Clostridium welchii* in Genital Tract of Pregnant and Puerperal Women—S M Bysshe
Relative Efficiency of Two Types of Ergot Preparations in Control of Post partum Bleeding—R C ter Kuile
Trichomonas vaginalis Vaginitis—P Peterson
Serologic Study of Haemolytic Streptococci from Throat Nose and Vagina of Ante partum Obstetric Patients—F Rolfs R E Trussell and E D Plass
Results of Treatment in the Ante partum Syphilis Clinic at Bellevue Hospital—M D Speiser
Clinical Study of Acid Allurate as Rectal Analgesic during Labour—W A Graham and M De Witt Pettit
X Ray Diagnosis of Placenta Praevia—A C Beck and F P Light
Vesico-vaginal Fistula—H Koster
Aetiology of Cervicitis—M A Roblee
Duplicity of Uterus and Vagina—H B Granberry and F L Faust
Chorion Epithelioma of Uterine Tube—R L Pearse and C K Fraser
Formation of Artificial Vagina without Operation—R T Frank
Pregnancy complicated by Gonococcic Salpingitis—W M Brunet and J B Salberg
Twin Ectopic Pregnancy—H C Falk and G Blinick
Incubator for Infants—C C Chapple
Papillary Cystadenocarcinoma in Canal of Nuck—J K Miller
Cyclic Treatment of Case of Secondary Amenorrhoea of Ten Years Duration—M Vesell
Pregnancy complicated by Bilateral Dermoid Ovarian Cysts—B Notes
Theca Cell Tumour of Ovary—H S Fischer
Uterine Bag Introducer—P Graffagnino

Chorion Epithelioma of Uterine Tube—The authors lay stress on the fact that this growth is very seldom encountered and is difficult to diagnose on account of the symptoms and findings being similar to those of ectopic pregnancy For treatment they advocate panhysterectomy and salpingo-oophorectomy to be followed as soon as possible by large doses of x rays

American Journal of Ophthalmology

St Louis Missouri vol 21 June 1938

*Epithelium in Anterior Chamber—C A Perera
Exudative Retinitis—H D Lamb
Staphylococcal Conjunctivitis—C S O Brien and J H Allen
Metastatic Carcinoma of Iris—T E Sanders
Effect of Tartar Emetic on Trachoma—L A Julianelle R Sorsby J E Smith and A C Lange
Idiopathic Retinal Detachment—A E MacDonald
Induced Hyperpyrexia in Ophthalmology—W W Weeks and S A Morris
Kindergarten Visual Acuity Chart—C Berens
Recurrence of Melanoma after Enucleation—F H Newton

Epithelium in Anterior Chamber—This condition follows operation or trauma and may result in pearl tumours of the iris epithelial cysts of the iris or epithelialization of the anterior chamber These are produced by implantation of epithelial cells in the anterior chamber or invasion through the wound Radiotherapy gives encouraging results Experiments on normal rabbits show that epithelialization cannot be produced in them by operation

American Journal of Public Health

New York vol 28 June 1938

Problems of Housing Enforcement Programme—L M Graves and V H Fletcher
Epidemiology of Trichinosis—C D Barrett and R Sears
Nutrition Programme in State Health Department—W E Morris
Tabular Outline for Use in reporting Hospital Morbidity—J Berkson
Acute Diarrhoeal Disorders—V V Hardy and J Watt
Water borne Outbreak of Gastro-enteritis in a Tennessee Town—C Pharris F W Kittrell and W C William
Gastro intestinal Disorder not proved to be Water borne—D G Gill and J G McAlpine
Pathological and Immunological Studies in Poliomyelitis and their Significance in Therapy and Treatment—M Brodie
Rural Syphilis Localized Outbreak—R C Kimbrough D M Cowgill and E P Bowerman
Lactobacillus acidophilus and Dental Caries—Philip Jay
*Survival of *E typhi* in Sewage Treatment Plant Processes—C E Green and P J Beard

Housing Problems—Poverty is put forward as the underlying cause of slums Relief and housing must proceed together Building houses for the better paid workers does not relieve the situation the poorest families must necessarily live in the poorest houses Housing programmes should concentrate on the lowest 10 per cent Slum dwellers cannot be 'educated' to live healthily in slums

E typhi in Sewage—There is a rapid decrease in the numerical content of this organism during the first three or four days, after which survivors may persist for weeks Survival is longer at lower temperatures Reduction up to 90 and even 99 per cent was noted after activated sludge and also trickling filter treatment These two commonly used sewage treatments are a good but not complete protection A modified Wilson Blair bismuth sulphite medium was used for the quantitative studies

American Journal of Roentgenology and Radium Therapy

Springfield Ill vol 40 July 1938

Peritendinitis Calcarea Common Disease of Middle Life Its Diagnosis Pathology and Treatment—C Sandstrom
Non putrid Pulmonary Suppuration—M L Sussman
Radiological Diagnosis of Placenta Praevia Indirect Placentography—W H Ude J A Urner and O F Robbins
Klippel Feil Syndrome with Unusual Clinical Manifestations—E L Turner H S Shoulders and L D Scott
Carcinoma of Uterine Cervix—H H Bowing and R E Fricke
*Clinical Observations on Use of Supervoltage Roentgen Rays Six Years Experience—A Soiland
Multiple Giant Calculi of Prostate—A A Creecy and H Silberman
Large Intrathoracic Thyroid—R B Miller
Measurement of Gamma Rays—W Friedrich
Ionization Measurement of Gamma Radiation—G W C Kaye and W Binks
Some Problems of Gamma ray Measurement in Radiology—G C Laurence
Measurements of Radiation Energy and True Tissue Dosage (Energy Absorption) in High voltage Therapy—L Rovner
Factors influencing Quantitative Measurement of Roentgen ray Absorption of Tooth Slabs IX Tube machine Combination Factors—H C Hodge G v Huysen and S L Warren
Case Report from Weekly Seminar of Roentgenological Department Massachusetts General Hospital—J R Lingley

Supervoltage X Rays—The clinical results with supervoltage x rays (550 kV constant potential) proved definitely superior to the results obtained with a 200 kV radiation This superiority applied particularly in the case of patients with deep lesions or with distant recurrences A combination of supervoltage irradiation with diathermy cautery gave astonishing results in apparently hopeless cases

American Review of Tuberculosis

Baltimore vol 38 July 1938

Skin as Organ of Experimental Tuberculosis—H Sewall and G Duffner
*Allergic and Desensitized Guinea pigs—H S Willis C E Woodruff R G Kelly and M Voldrich
Accessory Stomach in Right Thorax—T Lowry and L J Moorman
Isolated Hyperplastic Ulcerative Tuberculosis of Small Intestine—S E Wolpaw
Influence of Sulphocyanates on Tuberculosis—L J Steidl W Steenken Jr and F H Heise
Comparison of Direct Smear Flotation Concentration and Culture in Sputum Examination—C R Smith
Plombage in Pulmonary Tuberculosis—J W Cutler
Intracutaneous Tuberculin Test—M Paretzky
Incidence of Tuberculosis among Blind School Children—Camille Kerstein
Tuberculosis Survey in Chicago High Schools—J B Novak and J S Krulee
Tuberculosis Control in Germany

Allergic and Desensitized Guinea pigs—The authors observations indicate that it is unsafe on the basis of present knowledge, to conclude that the phenomena of allergy [by which they mean tuberculin hypersensitivity] are an unessential part of the mechanism of defence against tuberculosis

Anesthesie et Analgesie

Paris vol 4 June 1938

Influence of Some Basal Anaesthetics on Curve of Saturation of Haemoglobin and Ether Saturated Vessels of Arterial Blood in Normal Persons in Dogs—D Carlens and P Soulé
Modern Methods of Anaesthesia—L Dautrebande
Technique of Basal Narcosis of Spinal Conduction—L Mathieu and F French
Regional Anaesthesia by Arterial Route—J Cornard
Controversies during Ether Anaesthesia—H Vincent M Thiercelin and others
Anaesthesia in Experiments on Operation Theatres—M Thiercelin
Premedication with Diluted Solutions—J Bierry and G Bovet
Treatment of Pain in Obstetrics—P Bailly

Annales de Medecine

Paris vol 44 July 1938

Diabetes insipidus (Diabète sucré Polyurie phosphatique)—A B Marian
Case of Hanseniasis Visceralis—C Carrière
Experiments on Tuberculous Bacilli in Healthy Persons—F Meersseman
Anaemia Haemorrhagic Anaemia Consequent upon Gastric Dilatation—M P Weil V Ourmatsky and L Lamy

Expectoration of Tubercle Bacilli—In nine apparently healthy persons—students of medicine and soldiers—tubercle bacilli were discovered by means of guinea pig inoculation The observation is rare only six healthy persons being positive out of a total of 349 Dutrey by direct examination of slides discovered only three tubercle carriers out of 4 115 persons

Annals of Internal Medicine

Lancaster Pa vol 11 June 1938

Mistaking Other Diseases for Acute Coronary Thrombosis—J B Herrick
Infarction of Heart II Symptomatology of Acute Attack—W B Bean
Electrocardiographic Studies in Clinical and Experimental Pulmonary Embolization—W S Love jun G W Brauer and N Winslow
Subacute Bacterial Endocarditis following Removal of Teeth or Tonsils—L Feldman and I M Tice
Myocardosis Search for Early Recognition of Coronary Artery Disease—A E Parsonnet
Physiological Effects of Extensive Sympathectomy for Essential Hypertension Further Observations—E V Allen and A W Adson
Gastric Lesions associated with Pernicious Anaemia—R N Washburn and H M Rozenthal
Tuberculosis in Medical and Nursing Hospital Personnel—J A Myers B Frank H S Diehl and R E Boynton
Acid Base Water Balance—E C Mason and A A Helbaum
Dementia Praecox Problem—G W Dishong
Rheumatic Erythemas Critical Survey—H Kiel
Congenital Heart block Report of Case of Suspected Interventricular Septal Defect (Maladie de Roger) with Complete Heart block—C D Mohl
Post-operative Pulmonary Atelectasis Report of Case treated by Artificial Pneumothorax—J A Schindler and W B Gnagi jun

Infarction of Heart—The clinical symptoms in an acute attack of infarction of the heart are analysed in 300 cases Correct diagnosis was uncommon in the absence of pain and mistakes in diagnosis resulted from misinterpretation of the pain In one fifth of the cases a definite prodromal period with slight pain occurred The relative frequency of the different symptoms and signs are well shown in the large amount of material discussed

Subacute Bacterial Endocarditis following Removal of Teeth or Tonsils—The association of septic foci in the teeth and upper respiratory passages with subacute bacterial endocarditis is supported Five cases are reported in which the onset of the endocarditis appeared to follow the extraction of septic teeth or infected tonsils presumably because of the operative trauma causing a transient bacteriaemia It is advocated that to avoid such a catastrophe septic foci should only be removed when the patient is in the best possible condition of health

Arbeiten aus dem Reichsgesundheitsamte

Berlin vol 72 July 1938

Cytological Investigation of Paratyphoid and Colon Bacteria—G Piekarski
Normal Arsenic Content of Human Hair—J Wuhrer
Experiments on Meat Albumin II The Fermentative Digestion of Meat Proteins—K Beck and J Schormüller
Observations and Experiments on Tularaemia—E Heinemann
Contagious Anaemia of the Horse—J Fortner
Campaign against Venereal Disease—H Dornedden
Change of Turbidity in Dilute Solutions of Albumin by Means of Neutral Salts—V Schmitz
Attempts to Prevent Spread of Yellow Gall by Use of Weidner's Gel as Teat Lubricant in Milking—R Heim
Influence of Foreign Material in Tinctometric Estimation of Creatine—J Schormüller and H Mehr
Experiments on Meat Albumin III Carbohydrate protein Complexes in Meat Albumin—K Beck and J Schormüller
Diphtheria Campaign in German Empire—B Möllers
Experimental Feeding Tuberculosis in Swine—H Heinrich Hallwick and E Heinemann
Value of Experimental Infection of Guinea pigs for Diagnosis of Contagious Anaemia in Horse—H Wittfogel

Arsenic in Human Hair—In forensic medicine the presence or the amount of arsenic in hair (and nails) is often of supreme importance The author raises the question of its normal presence to a recognizable extent and reviews the rather scanty literature In thirty specimens from (*a*) known persons presumably arsenic free (*b*) unknown individuals of both sexes and (*c*) mixed hair cuttings from the hairdressers arsenic was found in every case sometimes under 5 mg but usually about 30 mg per 100 grammes of hair In four specimens from persons known to be suffering from chronic arsenical poisoning the content was about 500 mg per 100 grammes of hair He concludes that the margin is wide enough to prevent mistake in cases of arsenical poisoning

Prevention of Yellow Gall—Yellow gall is a streptococcal infection of the teats and udders of milch cows causing a yellow deposit in their milk It appears to be widespread in Germany An antiseptic water soluble lubricant prepared by a chemist (Dr Weidner) was used instead of vaseline and other fats as a teat lubricant in milking in the hope of preventing spread in the herd The results were not very successful

Diphtheria Control in Germany—The author describes the procedure laid down for early diagnosis and bacteriological recognition of diphtheria as observed in that country Stress is laid upon the search for mild missed and chronic carrier cases and the importance of swabbing the nasal passages as well as the throat but nothing is mentioned about similar examination of the other orifices of the body that may also be infected nor of the impetigo like sores that may occur on the face hands etc of diphtheria carriers The rules for isolation hospitalization and exclusion from school are detailed and the importance of immunization of children in homes and similar institutions is emphasized

Archiv fur Kinderheilkunde

Stuttgart vol 114 May 13 1938 Heft 1

Foetal Endocarditis—E Puschel
Raised Blood Pressure in Diphtheritic Children—I M Lutz
Relationship between Body Growth and Diseases of Certain Organs—A Loeschke
Eczema Shirts for Infants—E Angebrand
Diffuse Hepatopathies in Childhood—E. Muller

Stuttgart vol 114 June 14 1938 Heft 2

Still's Disease resulting in Agranulocytosis—E Türk
Rare Form of Tic—V Niederwieser
Transmission of Agglutinins from Mother to Newborn—L Schneider and G Papp
Peculiar Course of a Staphylogenous Lymphangitis in Two-months Infant—S Werner
Blood Sugar Examinations in Healthy and Toxic Children—Klingenberg
Familial Occurrence of Bilateral Ptosis—K Wingler
Effect of Insulin on Blood Sugar of Healthy Infants—F Neumuller

Stuttgart vol 114 July 19 1938 Heft 3

Atelectasis of Lung—A Preuss
Dosage of Anti-diphtheritic Serum—J Widwitz.
Further Examination of Effect of Antipyretics on Basal Metabolism of Feverish Child—A Banos and G Petrányi
Multiple Myelomata in Childhood—H Schaffa.

Archiv fur Ohren-, Nasen- und Kehlkopfheilkunde

Berlin vol 145 July 14 1938

*Researches on Development and Structure of Pyramidal Cells—A Rainer
*Pathological Granulation tumour Formation following Mastoid Operation—P P Falk
Treatment of Otogenous and Rhinogenous Meningitis by Insufflation of Narcylen Gas (Zoller's Method)—C R Griebol
Does Empyema of Maxillary Sinus of Dental Origin Exist?—C H Fischer
Treatment of Non healing Sinuses of Mastoid Antrum—H Kramm
Adenoid Vegetations in Elderly Persons—T v Bajkay

Pyramidal Air Cells—Air cells in the petrous pyramid are not the rule in temporal bones and must be looked upon as due to an excessive activity of the mucous membrane of the tympanic cavity A hereditary factor plays a part as does the presence or absence of marrow spaces in the bone Pneumatization of the pyramid continues all through life and the most wide distribution of air cells is often found in old people

Granulation Tumour—A double mastoid operation in a child aged 3 was followed by tumour formation consisting of unhealthy granulation tissue The tumour constantly recurred after scraping and the child died nine months after the first operation with a soft swelling behind the ear the size of a fist The pathology of this exceedingly rare complication is discussed in its relation to sarcoma tuberculosis and epulis and also in relation to general disturbances of the healing processes in diseases of metabolism—for example diabetes

Archiv fur Psychiatrie und Nervenkrankheiten

Berlin vol 108 June 17 1938

Quantitative Micro chemical Estimation of Alcohol in Cerebrospinal Fluid—E Gabriel and S Novotny
Pathography of French Symbolist Paul Verlaine—V Lunatschek
Effect of *Spiraea ulmaria* and *Alisma* on Central Nervous System—R Adelheim C Amsler E Rentz and V Nicolajev
*Liver Damage by Inoculated Malaria—J Jung and A Kratky
*Question of Damage to Central Nervous System by Short wave Treatment—O Schiersmann
Faulty Diagnoses in Cases of Frontal Tumours—R Lemke
White Matter Content of Cerebral Centres by Macroscopic Staining Method of Mulligan—H Scheibe
Electro encephalogram of Men (Fourteenth Communication)—H Berger
Internal Hydrocephalus with Hypophyseal Symptoms—Takeva Siko
Criticism of Reflex Epilepsy—A Fenig
Swiss Penal Code (December 21 1937) compared with Penal Reform in Germany from Psychiatric Standpoint—E Schultze

Liver Damage and Malaria—Of 281 patients therapeutically infected with malaria thirty eight died In thirty one necropsies liver damage was observed which in at least seven cases represented the cause of death The histological findings differed somewhat in early and late deaths The injection of glucose was of value in reducing the number of fatal cases

Cerebral Damage and Short wave Treatment—Schiersmann maintains that possibilities of damage by this method of treatment are not to be taken very seriously If the temperature sense is intact the patient is himself capable of appreciating and reporting an undesirable rise of temperature which is felt to be painful

Archives des Maladies du Cœur

Paris vol 31 June 1938

Permanent Shortening of P R Interval of Electrocardiogram with Normal Ventricular Complex—A Clerc R Levy and C Cristesco
Phrenogastric Syndrome of Coronary Disease—C Laubry P Soulie and R Heim de Balsac
Study of Total Thyroidectomy for Heart Failure—R Froment and M Jeune
Radiological Aspects of Azygos Vein in Course of Heart Failure—H Durieu and J Lequime

Phrenogastric Syndrome—Five cases are reported showing considerable elevation of the left diaphragm usually with excess gas in the stomach These appearances and symptoms of gastric disturbance might lead one to suspect a primary lesion of the digestive tract but in all cases the electrocardiogram strongly suggested an old myocardial infarction and a clear history of this was present in some of them The hypothesis is advanced that the phrenogastric syndrome is a reflex effect of the cardiac lesion, and that the phrenic nerve may be irritated by chronic pericardial and pleural lesions

Archives of Neurology and Psychiatry

Chicago vol 39 May 1938

Electro encephalography Localization of Seizure Waves in Epilepsy—H H Jasper and W A Hawke
Differential Features of Cerebellar and Vestibular Phenomena in *Macacus rhesus* Preliminary Report based on Experiments on 100 Monkeys—A Ferraro and S E Barrera
*Sensory Discrimination in Monkey Chimpanzee and Man after Lesions of Parietal Lobe—T C Ruch J F Fulton and W A German
Dystonia Musculorum Deformans Clinico-pathologic Study—C Davison and S P Goodhart
Acid base Balance of Blood in Patient with Hysterical Hyperventilation—J H Talbott S Cobb F S Coombs M E Cohen and W V Consolazio
*Ayala Index—N Savitsky and M M Kessler
*New Series of Anti convulsant Drugs tested by Experiments on Animals—H H Merritt and T J Putnam with Technical Assistance of D M Schwab
Astereognosis associated with Tumours in Region of Foramen Magnum—J E Rubinstein
Laurence Biedl Syndrome occurring in Brother and Sister—T K Rathmell and M A Burns
Somatotopic Localization in Extrapyramidal System—S P Goodhart and B H Balser
Pathogenesis of Encephalitis occurring with Vaccination Variola and Measles—K H Finley
Role of Vitamin C in Metabolism of Nerve Tissue—H Wortis and F J Marsh

Sensory Discrimination after Lesions of Parietal Lobe—In monkeys and chimpanzees trained to discriminate between weights of different magnitude, between patches of emery paper of different roughness, and between various solids lesions of parietal and precentral cortex were produced and the effects on these sensations studied Parallel clinical studies of cortical sensory localization were made In monkeys the lesions were without effect on weight discriminating ability in the chimpanzee the disturbances that occurred disappeared with retraining while in man a small but definite permanent sensory defect was produced It is also concluded that these functions are widely represented throughout the parietal lobe

The Ayala Index—The Ayala index indicates the difference between the initial and the final pressure after removal of a quantity of cerebrospinal fluid It is expressed as final pressure over initial pressure multiplied by the number of cubic centimetres of fluid removed Taking this figure as 10 the authors studied the index in 186 cases of increased intracranial pressure The index was found to be low (below 3 5) in cases of expanding lesions and high in otitic hydrocephalus and arterial hypertension The authors consider the index a useful point in differential diagnosis between otitic hydrocephalus and cerebral abscess They recommend its wider use

New Anti convulsant Drugs—Having first determined the strength of electrical current necessary to produce convulsions in cats by a special method of brain stimulation Merritt and Putnam then tested the effects of different drugs on this threshold Of the standard drugs phenobarbital was by far the most effective in raising the threshold but they also found five drugs (diphenylhydantoin, acetophenone acetophenone oxime benzophenone and propriophenone) which appeared to have an even greater anti convulsant and a less soporific effect The authors are proceeding to clinical trials of these drugs

Archives of Ophthalmology

Chicago vol 19 June 1938

Personal Experiences with Intracapsular Cataract Extractions—F V Dale
Practice of Dark Adaptation A Review—J B Feldman
Removal of Cataract by Aspiration—M J Blaess
Sir Hans Sloane's Account of an Efficacious Medicine for Some Forms of Eye Disease Episode in Eighteenth Century Ophthalmology—B Chance

Emergency Operations and Air Raid Casualties Minor Cases Reported—C M Swabb
Subtotal Hysterectomy for Cancer of Cervix Operative Mortality—M E Symonds
Packing of Internal Carotid Artery with Muscle in Treatment of Carotid-Cavernous Aneurysm—I S Cobb
Magnesium Content of Cerebrospinal Fluid Relationship to Intracranial Pressure Preliminary Report—I C Peden and C I Carman
Classification of Cerebrospinal Fluid Findings Related to Various Types—G J Guyer
Vitamin C and Relation to Cataract—E F Howey and O Fearon
Caustic Burns of Eye—W B Hubbard

Caustic Burns of Eye—Experimental work on rabbits in the case of alkali burns shows that the immediate treatment should be the use of plenty of tap water or weak acids such as 2 per cent acetic acid weak vinegar or weak hydrochloric acid Boric acid is not strong enough Attention should be paid to the fornices and irrigation continued till all free alkali has been removed The occasional use of 2 per cent tannic acid or 2 per cent acetic acid is indicated till healing is well established 0·1 to 0·2 per cent silver nitrate may be of value In the case of acid burns alkali must be avoided and the eye should be irrigated freely with water

British Journal of Radiology

London vol 11 August 1938

Pathological Disease of Bone Its Frequency Diagnosis and Complications—J F Brailsford
Effect of Gamma Radiation on Cells in vitro—F G Spear and A Glucksmann
Theory of Action of Radiations on Biological Materials Character of Recovery II Decay in Cellular Division—D E Lea

Human Biology

Baltimore vol 10 February 1938

Population Growth Equilibria and Extinction under Specified Breeding Conditions Development and Interpretation of Theory of Logistic Curve—V Volterra
Reliability of Dermatoglyphics in Twin Diagnosis—J W MacArthur
Variation in Sex Ratio at Birth in United States—A Cocco
Personal Appearance as related to Scholastic Records and Marriage Selection in College Women—S J Holmes and C L Hatch
Two Unlike Expressions of Symmetry of Finger Patterns—H Poll
Psychological Factors in Relation to Functional Imbalances—T Burrow
Tuberculosis and Civilization I Basic Facts and Figures in Epidemiology of Tuberculosis—G Wolff
Study of Weight and Stature of Negro City Children by Adolescent Age—A S Beckham
Measurement of Variations in Asymmetrical Data with Applications to Haemoglobin Statistics of Infants—T E Raiford
Some Physiological Phenomena fitted to Growth Equations II Brain Potentials—V P Weinbach

Variation in Sex Ratio at Birth—During the twenty years from 1915 to 1934 the sex ratio—that is the number of live male births per 1 000 live female births—in the United States varied between 1 053 and 1 060 The writer concludes from a survey of the statistical data that war economic upheaval climatic and geographical differences the general mortality infant mortality and stillbirth rate are not causally related to fluctuations in the sex ratio Differences in racial stock and maternal age at the child's birth appear to be important

Baltimore vol 10 May 1938

Quantitative Theory of Organic Growth Inquiries on Growth Laws II)—L von Bertalanffy
Malthus's Conception of Checks to Population—S M Levin
Masculinity of Stillbirths and Abortions in Relation to Duration of Uterogestation and to Stated Causes of Foetal Mortality—A Cocco
Tuberculosis and Civilization II Interpretation of the Aetiological Factors in Epidemiology of Tuberculosis—G Wolff
Anthropometric Studies from McCormick Fund—M C Hardy
Correlation of Bore Volume and Soft Tissue Volume in Human Finger tip—G E Burch and W V Sodeman

Masculinity of Stillbirths and Abortions—The analysis of official statistics from a selected area of the United States confirmed the general rule that the sex of stillbirths is more frequently male than female the sex ratio is 1 330 The identification of sex of miscarriages in the early months is difficult between the fifth and seventh month males predominate less over females than during the later period The pattern of the duration of intra uterine existence is thus shown to be different in the two sexes In a certain number of cases the stillbirth is attributed to a specific cause In the group of cases associated with difficult labour males greatly predominate cases in the category of foetal malformation however were more often females than males

Tuberculosis and Civilization—In tuberculosis besides the factor of infection the course of the disease is determined by the hereditary constitution of the subject and the influences of his social environment After making a comprehensive study of the existing knowledge of the subject the writer draws the conclusion that the transformation of the environment is the primary task in controlling the disease The effects of the world war occupation nutrition and overcrowding can all be shown to be significant In fact the mortality from tuberculosis in civilized countries is a sensitive index of the health of the community

Journal of Laryngology and Otology

London vol 53 August 1938

Some Factors in Relationship of Upper Respiratory Infection and Bronchiectasis—G E Hodge
Presence of Blood in Air Passages after Tonsillectomy—T Leegaard
Peculiar Case of Melanosarcoma of Pharynx—H Brunner

Blood in Air Passages after Tonsillectomy—The author proves by laryngoscopic and x ray investigations that blood and pharyngeal secretions frequently trickle into the airways during the performance of tonsillectomy When the operation is done under local anaesthesia in the sitting position and the pharyngeal mucous membrane is also anaesthetized blood is found in the airways in 80 per cent of the patients operated upon In order to carry out the x ray investigations 1 or 2 c.cm of iodized oil (Merck) were placed into the tonsil bed after the upper pole had been dissected free The contrast medium was shown to be present as far down as in the bronchioles of the lower lobes of the lungs In spite of this septic lung complications are comparatively rare They are more common when general anaesthesia is used apparently because the expulsive power of the cilia is damaged by the general anaesthetic agent

Journal of Physiology

London vol 93 July 14 1938

Carotid Sinus and Blood Regeneration—A L Latner
Osmotic Pressure of Foetal and Maternal Sera in Sheep—E F McCarthy
Transmission of Impulses by Ganglionic Direct Fibres—D P C Lloyd
Effect of Asphyxia upon Heart Rate of Rabbits at Different Ages—D J Bauer
Segmental Distribution of Certain Visceral Afferents Neurones of Pupillodilator Reflex in Cat—B A McSwiney and S F Suffolk
Carbonic Anhydrase Activity in Red Corpuscles Enzyme substrate Affinity Factors—V H Booth
Action of Adrenaline Acetylcholine and Other Substances on Nerve free Vessels (Human Placenta)—U S v Euler
Effects of Prolonged Muscular Exercise on Metabolism—J N Mills
Action of Adrenaline in acceleration Removal of Blood Sugar by Peripheral Tissues—H P Himsworth and D B McNair Scott

Journal of Tropical Medicine and Hygiene

London vol 41 July 1 1938

Brief Notes on Cysticercosis and Luetic Pseudo-cysticercosis—Aldo Castellani and G Acanfora
Agglutinins for Typhoid and *Salmonella enteritidis* in Serum of Individuals inoculated with Typhoid Vaccine Enteritidis Mouse Protection as Means of assaying Effectiveness of Typhoid Vaccines—M fio Mellanby R J Reedy and W A Randall
Trypanosomiasis gambiensis I Some Observations in Uganda and their Bearing on Prophylaxis—A A Forbes Brown

Pseudo cysticercosis—Small subcutaneous syphilitic fibromata may clinically resemble nodules of true cysticercosis but they respond to treatment by arsenicals

London vol 41 July 15 1938

First Survey of Rin worm in Egypt—N Gohar
Trypanosomiasis gambiensis II Some Observations in Uganda and their Bearing on Prophylaxis—A A Forbes Brown

Monatsschrift fur Kinderheilkunde

Berlin vol 73 June 29 1938 Hft 5 and 6

Koplik's Spots in Children with Exudative Diathesis—I H Alantar
Influence of Ultra violet Irradiation on Maturation of Growing Organism with Various Diets—H Bishoff
Sea water Therapy in Children—H Bruning
Clinical and Animal Experimental Studies on Normal and Pathological Physiology of Vitamin A—W Catel
Value of Tryptophane Reaction in Cerebrospinal Fluid for Differential Diagnosis of Tuberculous Meningitis—H Sonnemann
Treatment of Measles and its Complications with Pyridium—P Radu
Ascorbic Acid Content of Milk—T Baumgartel
Diagnostic Value of Tryptophane Reaction in Cerebrospinal Fluid in Tuberculous Meningitis—D N Bobeff
Enterococcal Endocarditis—T Rohleder
Bowel Changes in Coeliac Disease—F Kuhlmann
Advantages and Disadvantages of Prontosil Treatment—H Kohl
Principles and Experiences in Treatment of Premature Infants—K Hofmeier and K Kornig
Clinical Examination of Evipan as Hypnotic in Infants and Children—M Kazarowa
Rectal Absorption of Quinine in Child—F Horn and M L Thime
Measles and Rubella—Rietschel

Revue de la Tuberculose

Paris vol 4 April 1938

Richness of Tubercle Bacilli in Gramophilic Granules in Course of Pulmonary Tuberculosis—A Jeurissen
Discussion on Causes that normally keep Lung attached to Thorax and those that tend to cause Spontaneous Re expansion in Pneumothorax—F Parodi
Detection of Pulmonary Tuberculosis in Military Colleges of Rumania—G Vaja and G Petresco
Brief Reflections on Tuberculous Soil—L Jullien
Attempt at Medical Extrapleural Collapse Therapy—E Coulaud and P Barbier
So called Medical Extrapleural Pneumothorax—J Troisier P Chadourne and Charousset
Technique of Extrapleural Pneumothorax—Pierre Bourgeois
New Investigations on Pirquet Reaction in Probationers—E Rist and J Tuchila
Detection and Prophylaxis of Tuberculosis in Apprentices of Large Railway—V Bidermann and A Alibert
Miliary Picture Miliary Tuberculosis? Grave Pulmonary Disturbances Cure—Courcoux and Fay
Phrenicectomy associated with Therapeutic Pneumothorax—E Libert
Case of Spontaneous Subcutaneous and Mediastinal Emphysema in Consumptive—J Chenebault and P Marre
Progressive Pulmonary Tuberculosis following Surgical Intervention for Tuberculous Cervical Adenitis—Pham Ngoc Thach
Selective Pneumothorax and Lobar Dislocation—N N Stoichitza

Paris vol 4 May 1938

* Irritating Oleothorax—W Jullien and P Babeau
To what Extent does Intrapleural Pressure represent Pulmonary Retractility?—Baillet
Study of Sympathetic Nervous System in Tuberculous Persons by Means of Oto cardiac Reflex—J Bilaize
Glandulo pulmonary Tuberculosis of the Infantile Type in an Adult of 45—E Bernard and J Weil
Beneficial Contralateral Effect of Unilateral Thoracoplasty—V Bernou P Verain and Mlle Marecaux
Case of Old standing Pyopneumothorax cured by Aspiration without resorting to Thoracoplasty or Phrenicectomy—A Bernou L Canonne and L Marecaux
Case of Mixed (Intra and Extra pleural) Pneumothorax—O Monod and M Cord
Case of Extrapleural Pneumothorax in Two Stages—O Monod and G Benkocha
Transient Pulmonary Infiltrations—P Jacob
Acute Miliary Tuberculosis after Labour following Latent Caseous Tuberculosis of Fallopian Tubes—P Jacob
Post traumatic Massive Pulmonary Atelectasis—A P Coronel

Irritating Oleothorax—The authors have attempted to encourage retractility of the lung by deliberately provoking a reaction by means of gomenol injected into the inadequate pneumothorax cavity Four cases are reported

Strahlentherapie

Berlin vol 62 July 27 1938 Heft 3

Sensitisation of Monocellular Organism to Ultra violet and Visible Light—V Lichtenberg and E Leitmann
Effect of X Rays on Organic Structure of Skin—H Meltzer and E H Kuhtz
Course of Experimental Inflammation under Influence of X Rays (Spodogram Investigation)—H Meltzer and E H Kuhtz

(cont) H

Radiosensitiveness and Cellular Division I Experiments on Frog Eggs—W Luther
X Ray Treatment of Graves's Disease—D Negru
*X Ray Therapy of Affections of Pharyngeal Lymphatic Ring in Children—H Weissig
Significance of Joint Effect of Different Factors of Short-distance Therapy—H Chaoul
Radium Treatment of Cancer of Skin and Lip—J Korbler
Case of Inoperable Ovarian Carcinoma in Diabetic cured by X Ray Therapy—F Gal
Spectral Distribution of Heterogenous γ Radiation—G Grossmann
Problem of Tension in Deep X Ray Therapy—L Graf and J Graf
Biological Determination of Distribution of Radiation and of Depth Percentage Doses of Normal and Ultra deep γ Ray Radiation (180 to 200 kV with 0·95 to 1·55 mm h v l of Cu and 400 kV with 6 mm h v l of Cu)—H Langendorff L Graf and J Graf

X Ray Therapy of Tonsillar Affections—The best results were obtained in cases of pure tonsillar hyperplasia without inflammatory changes (90 per cent successes) In hyperplasia in the exudative diathesis the proportion of successes was 75 per cent The therapeutic results were less favourable in fibrous indurated tonsils, and poor in cases of tonsillitis following angina or scarlet fever The therapeutic technique is described

Zeitschrift fur Hygiene und Infektionskrankheiten

Berlin vol 120 July 23 1938

*Light sick Dwellings in Large Towns—W Buming
Fever Therapy in Animal Research I Problem and Procedure—F Sander
Dog as Probable Source of Infection in Small Outbreak of Paratyphoid B—J Caspersen
*Phenomenon of Swarming in Salmonella Group and its Use for Practical Purposes—S Gard
Action of Protozoa in Pure Culture upon Clarification of Domestic Sewage—G Jager
Outbreak of Typhoid occasioned by Infected Chicken Broth—H Kranz and Mancke
Postulates in Regard to Waterworks with Highly Impure Intake—M Grundel and K Stundl
New Salmonella Type in Men and Cats—F Kauffmann and E Jul Henningsen
*Comparative Experiments on Utility of Suspension and of Carrier Method in Testing Disinfectant Solutions—R W Vierthaler and C Shaw
Fluctuation of Food Values in Menus of Communal Kitchens—E Remy
Action of Germicidal Agents on Tubercle Bacilli (Human and Bovine Types) II Action of Inorganic Acids and Acids of Aliphatic Series—E Haider

Light sick Rooms—In spite of the necessity for health reasons of sufficient light and air in living rooms tall dwellings in large towns are built round small courtyards so that the lower stories are light sick The author gives elaborate figures, formulae, and graphs for calculating amount of indoor light, window area angle of sky view, etc and produces site plans showing how by rearrangement of the house blocks the essential amenities may be secured

Paratyphoid B conveyed by Dog—Paratyphoid B is occasionally conveyed by domestic animals rarely if ever by a dog The author describes in detail an outbreak limited to one household in a Norwegian village where suspicion fell upon a dog that had recently been ill The suspicion proved well founded as the specific agglutinin was discovered in the dog's blood

Swarming and its Practical Utility—Swarming or spreading of cultures of certain motile bacteria and notably the proteus group, on the surface of solid media is characteristic The author suggests that by the addition of appropriate anti serum to the media the swarming is inhibited and that this procedure could be used as a simplification of the method of preparing a monophasic antigen from diphasic stock

Comparison of Suspension and Carrier Methods—The apparent efficacy of disinfectants varies with the methods used in testing The authors instituted a series of experiments with a view to showing which of the two methods is the freer from experimental error such as the carrying over of adherent disinfectant to the culture media Centimetre squares of cotton wool batiste soaked in culture were used for carriers of the organisms in the latter method and ordinary tap water as the suspensory medium in the former The results are illustrated by graphs and diagrams On the whole the carrier method was found to be the more satisfactory

A NEW *Three-fold* SAFEGUARD

AGAINST DIETARY DEFICIENCIES

IRON, CALCIUM AND VITAMIN D IN ONE TABLET

Caldeferrum is a new combination of three essential nutritional factors — IRON CALCIUM, VITAMIN D — presented conveniently and economically in chocolate coated tablets

The composition of Caldeferrum is best expressed in terms of the intake assured by a daily dosage of four tablets

Four Caldeferrum Tablets supply

IRON 25 mgms (more than sufficient to satisfy even the increased demand during pregnancy and lactation)

CALCIUM 0·5 gm (almost as much as in an extra pint of milk)

VITAMIN D 2,000 international units (a substantial allowance to assist full utilisation of all available calcium)

It will thus be seen how thoroughly Caldeferrum Tablets can safeguard the expectant or nursing mother for example when given as a protective routine Such a combination also clearly provides scope for clinical elaboration as a nutritional measure of potential importance in many conditions of debility and convalescence when a tonic supplement is valuable

FOUR CALDEFERRUM TABLETS DAILY is a simple routine that can be carried out easily and economically by any class of patient The tablets are reasonable in size and the chocolate coating makes them pleasant to take.

CALDEFERRUM

IRON CALCIUM VITAMIN D

TABLETS

In bottles of 50 2/6 100 4/3 500 13/6 1 000 19 6

Prices (not applicable in Eire) are subject to usual professional discount

GLAXO LABORATORIES LTD., GREENFORD MIDDLESEX BYRon 3434

Adexolin — standardised concentrates of vitamins A and D

The A and D barrier to Infections

PROPHYLAXIS One to three Adexolin Capsules daily Children 1 capsule or 20 drops of the liquid Infants 2 drops in each bottle feed or 10 drops a day in fruit juice TREATMENT At the outset of an infection 4 5 Capsules (or 80 to 100 drops of the liquid) daily In acute infections up to one capsule (or 20 drops) every waking hour may be given

A sound nutritional barrier to infections may be built up by the administration of Adexolin concentrates of vitamins A and D —1 To fortify the epithelium and help to maintain general resistance, 2 To regulate calcium and phosphorus metabolism Adexolin is also valuable by virtue of its effect on the general well-being In principle it may be said that Adexolin treats the patient while specific remedies treat the disease The concentration of the two vitamins in Adexolin has been specially calculated to make possible the utmost flexibility of dosage

PRODUCT OF THE GLAXO LABORATORIES



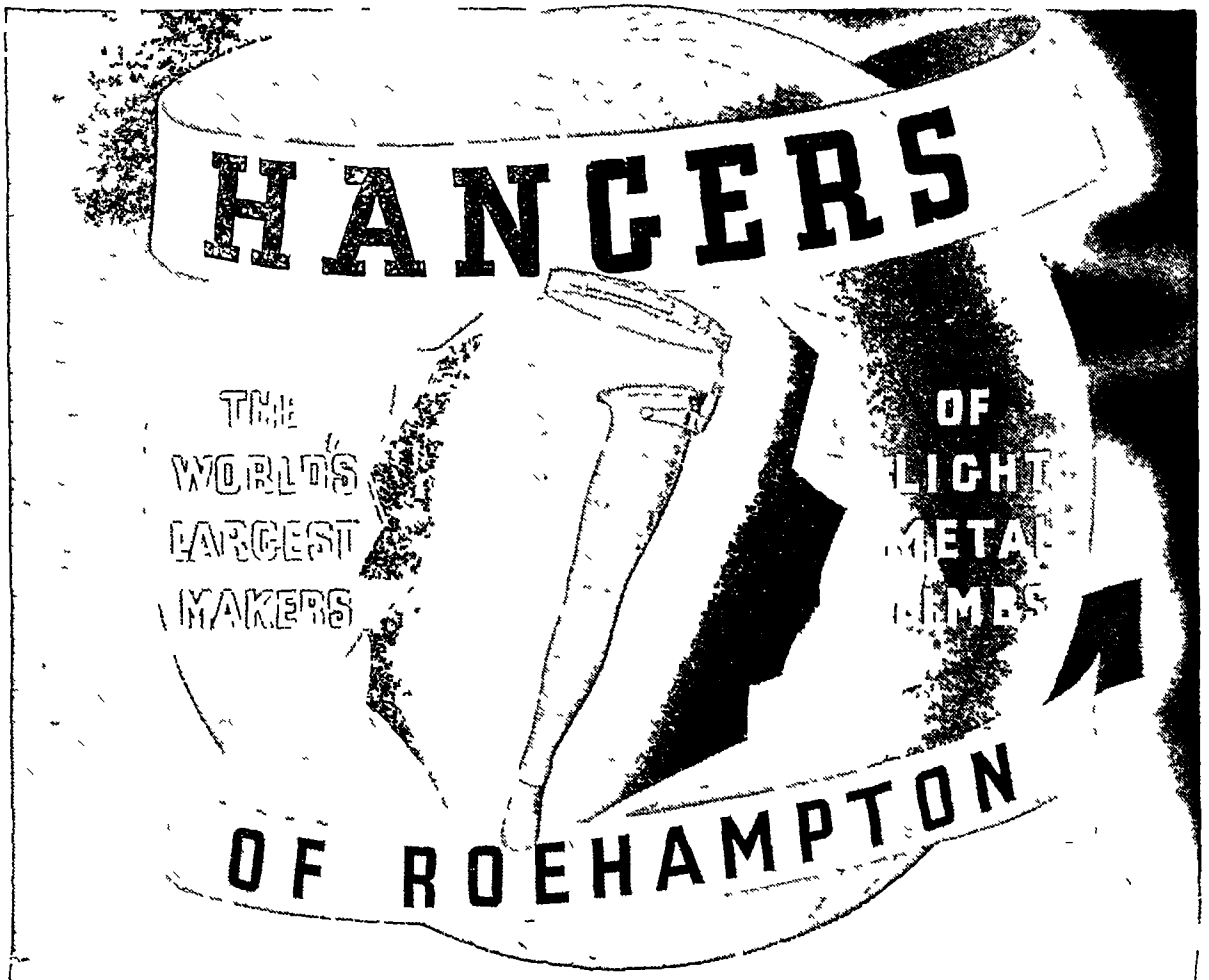
ADEXOLIN

CAPSULES 6 000 *international units of vitamin A and* 1 000 *of D per 3m Capsule Boxes of* 25 6 100 7 6 500 30/6 1 000 6

LIQUID 12 000 *international units of vitamin A and* 000 *of D per cc* ½-*oz phials* 2/6 2 *oz bottles* 7/6 4-*oz* 12/6 8-*oz* 6 *(Prices not applicable in Eire) Less usual professional discount*

GLAXO LABORATORIES LTD GREENFORD MIDDLESEX Phone BYRon 3434

GL G L 23



RECENTLY ISSUED, Post Free to the Medical Profession on Application

"Solvitur Ambulando"

72 pages, 37 Coloured Plates, deals exhaustively with the problem of providing prostheses for the lower extremities for every type of amputation and congenital deformity Many distinguished Surgeons have written to us in terms of the highest appreciation of the usefulness of this book

J. E. HANGER & CO., LTD.

Queen Mary's (Roehampton) Hospital for the Limbless,
ROEHAMPTON LONDON S W 15

Branches at —Aberdeen Belfast, Birmingham Bristol, Cambridge Cardiff Cosham Dublin, Edinburgh Exeter Glasgow Leeds, Liverpool, Manchester, Newcastle on Tyne and Nottingham

Panties

BY J ROUSSEL

IMPROVE HEALTH & FIGURE



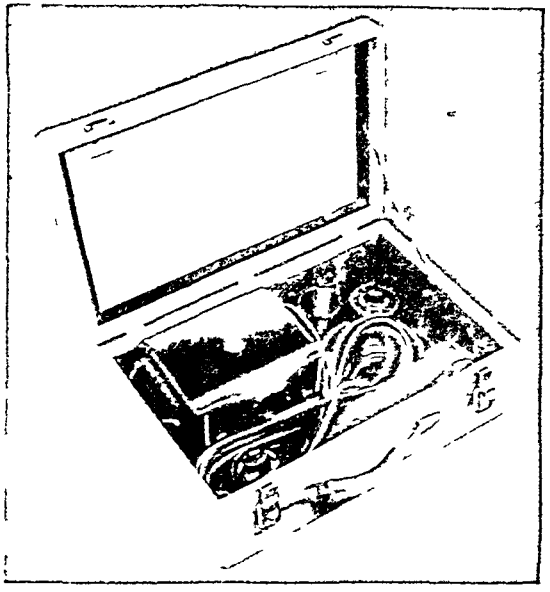
Designed in consultation with the medical profession Panties by J Roussel afford necessary support to the lower abdomen without undue constriction The varied tension of the elastic weave—exclusive to creations by J Roussel—exerts a gentle massaging action which disperses superfluous tissue and stimulates circulation through the abdominal region While the figure thus regains the natural line of youth the system is toned up and the organs encouraged in their natural functioning Doctors may permit patients to wear Roussel Panties in complete confidence that both health and figure will benefit. * Full particulars of other figure-control creations by J Roussel which are equally beneficial to general health are given in our illustrated catalogue We shall be pleased to send you a copy Please ask for booklet K. * A reduction of 2/- in the £ is made on purchases for personal use by members of the Medical Profession

ON SALE ONLY AT

J. Roussel LTD

179/181 REGENT ST W1 & 74 NEW BOND ST W1

Branches at Belfast Birmingham Bournemouth Bristol Edinburgh Glasgow Hove Leeds Leicester Liverpool Manchester Nottingham and Southport



The new Victor F-3 X-ray Unit

SHOCKPROOF • EFFICIENT • PRACTICAL • LOW PRICED

THE [illegible] radiological [illegible] these X-ray plant cannot always serve the demand for practice arise upon it will be found to [illegible] that the new Victor Model F 3 For here is a low-priced combination portable unit that can be used not only for a wide range of auxiliary service in the consulting room but which is also quickly convertible into a highly powerful portable set for use in bed side emergency cases

STUDY THESE FEATURES

Portable *and* mobile * Wide range * Shockproof * Climate Proof * Easy to use * Operable from any plug point * Highly flexible and adaptable * Compact case only 21 x 14 x 8 inches * Weighs only 45 lbs * Complete technique charts * Long life genuine Victor Coolidge tube * Accurate timer * Foot switch for screening * Convenient terms if desired *

For a demonstration without obligation or the free descriptive booklet simply fill up and post the convenient coupon

WITHOUT OBLIGATION

VICTOR X-RAY CORPORATION, Ltd.

15 19 AVENDISH PLACE LONDON W 1

☐ Please send the free booklet on the new Victor F 3 X Ray Unit

☐ Please have a representative arrange for a working demonstration of the F 3 Unit at my convenience

NAME [illegible]

ADDRESS [illegible]

TOWN [illegible]

A 12



...AND
...SES

...use the "Thermega" ...iding warm damp free ...e country use Thermega ...ness and ensuring warm beds

...application is ideal for relief of ...

...tions, or from Thermega Limited,

HAT

Thermega Heated BLANKETS & PADS

Blankets from 3 gns Pads from 31/6 3 Temperature Blankets for medical use £8 10s Single heat Blanket specially strengthened from £4 4s Various sizes and prices on application

Insist on Thermega It is vital that these appliances should be made by experienced manufacturers

...INTEREST ...medical ...subject ...latest

NAPOLEON
A MEDICAL APPROACH
by BORIS SOKOLOFF, MD

The author's findings dramatically focus upon the hateful bodily processes which caused Napoleon from an aggressively-active to a hesitantly-indifferent personality
8 Illustrations 10s 6d net

A study of Leprosy from Pre-Christian Times

THROUGH THE LEPER SQUINT
by ANTHONY WEYMOUTH

This book makes fascinating reading not only on account of the way in which leprosy is described but because of the clear manner in which the history of the world is linked up with the spread of the disease A full description of the modern method of fighting leprosy is included 25 Illustration 12 6d net

SELWYN & BLOUNT

This cookery book is based on the latest scientific standards Medical practitioners can particularly recommend it to those of their patients who have to get a full pennyworth of food value from every penny of their outlay

THE DOCTORS' COOKERY BOOK

21 Menus and 82 Recipes for Family Meals

21 PAGES OF PHOTOGRAPHS

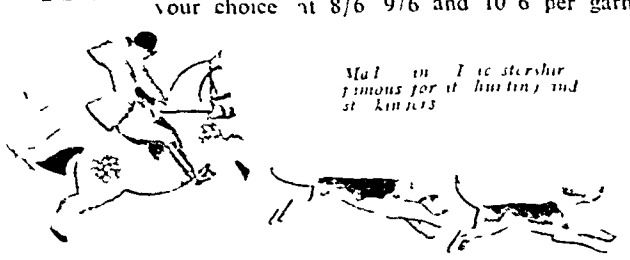
PUBLISHED BY THE BRITISH MEDICAL ASSOCIATION

Obtainable from all booksellers, news agents Smith's bookstalls and Co operative Societies ● All inquiries to the B M A, Tavistock Square, London, W C 1

PRICE 4P

Darcuna Underwear for Luxurious Comfort ....

Darcuna is luxury underwear and one of the most serviceable fabrics made In this rich quality wear a man feels well clad It is soft and delightful to the touch but at the same time the wearing quality is extremely good Darcuna is fully fashioned on the latest and best machines ensuring perfectly shaped well fitting garments There is only one uniform high quality but it is made in three weights for your choice at 8/6 9/6 and 10 6 per garment From most hosiers and outfitters



Meet on Leicestershire famous for its hunting and steeplechases

Darcuna Underwear by Two Steeples

Two Steeples specialities also include No 83 quality socks 4/6 per pair No 72 socks 3 6 per pair St Wolstan Wool Underwear from 5 6 per garment Also quality knitted Hacking Sweaters Waistcoats 6 6 Hose etc

Pattern booklet of Underwear and Socks sent on request to Dept 4 Two Steeples Ltd Wigston Leicestershire

In the most unexpected places



Illustrated above—a cottage on the lonely mountain road between Bala and Dinas Mawddwy North Wales where Player s can be obtained

Numerous letters from smokers tell of pleasure in finding their favourite Player s on sale here, there and everywhere in the most remote places The vast demand which alone makes this possible also ensures their constant freshness and is proof supplied by smokers themselves that there is no better Cigarette at 10 for 6d

MEDIUM OR MILD—CORK-TIPPED OR PLAIN Ask for which you prefer and please yourself whatever your taste

Player's Please

MEDIUM OR MILD

PLAYER'S NAVY CUT CIGARETTES "MEDIUM OR MILD PLAIN OR CORK TIPPED 10 for 6d. 20 for 11½d.
N.C.C.154

In acting as an executor or trustee, the Westminster Bank aims at putting itself in the position of a private trustee It is therefore its practice to employ the family solicitor, if there is one, or any other solicitor the client may name, by such means the Bank succeeds in combining domestic tradition with business efficiency A book showing the advantages of corporate executorship and the terms of appointment may be had at any branch or at the branch situated in B M A House, Tavistock Square, W C 1

WESTMINSTER BANK LIMITED

THE YORKSHIRE INSURANCE CO., LTD. ESTABLISHED 1824



ASSETS EXCEED £17,320,000

"MODERN PROTECTION"

a new form of policy which secures a tax free income for dependants in the event of untimely death Premiums from £9 p a per £100 a year income for all ages at entry up to 35 next birthday CASH BONUS ON SURVIVANCE

Quotations will be furnished upon application to the CHILF OFFICES { "YORKSHIRE HOUSE," 66/7, CORNHILL, LONDON, E C - - - - ST HELENS SQUARE, YORK - - - -

or any of the Company's Branches or Agents

(*All Classes of Insurance Business Transacted*)

CATALOGUE OF SECOND-HAND SURGICAL INSTRUMENTS



OSTEOLOGY, MICROSCOPES, POST FREE Telephone Temple Bar 206

Half Sets of Osteology, Articulated Skeletons and Disarticulated Skulls and Microscopes

MILLIKIN & LAWLEY, 67 & 68, CHANDOS PLACE, STRAND, W C 2

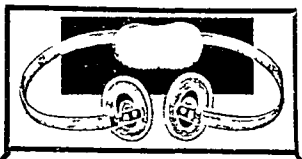
(Adjacent to Charing Cross Hospital Medical School)

If you have any OVERDUE ACCOUNTS which require firm but tactful handling write to —

NORWICH & EAST OF ENGLAND MEDICAL PROTECTION SOCIETY

2 & 4, VALENTINE STREET, NORWICH

(*Prospectus on application*)



DOCTORS PRESCRIBE the famous

SALMON ODY BALL & SOCKET TRUSS

Most scientific and reliable yet devised Perfect support comfort resiliency

Single 30/ Double 50/

Most of our clients are sent to us by Doctors

WRITE FOR BOOKLET

NOTE NEW ADDRESS

SALMON ODY LTD

Truss Makers for 130 years

74, NEW OXFORD ST., LONDON, W C 1

Phone Museum 2313

ARCH SUPPORT



The Picture of the Year



A BICKIEPEG BABY! A picture of health like every Bickiepeg child—no teething troubles to pull him down

To ensure a properly developed jaw with ample room for strong even teeth we suggest that there is nothing better than Bickiepegs tough little biscuit bones There's a hole at one end for a convenient ribbon to be threaded through, and they sell at 6d and 1/- per packet

Also BICKIEPEG Veal Bone and Vegetable Broth for babies from birth 2/ per jar

BICKIEPEGS

PROFESSIONAL SAMPLES of each are glad[ly] sent on request BICKIEPEGS LTD Nursery Food Specialists Dept 11 Welwyn Garden City Herts

B12

QUEEN non-irritant Toilet Preparations specially for prescription in Allergic cases

A COMPLETE range of toilet preparations entirely free from Orris in any of its forms or other irritants (B M J Medical World etc) A safe alternative to suspected cosmetics. Through any Chemist or direct from —

BOUTALLS LTD., 10 Southampton Place London W C 1

Telephone No. Central { 3313 2313

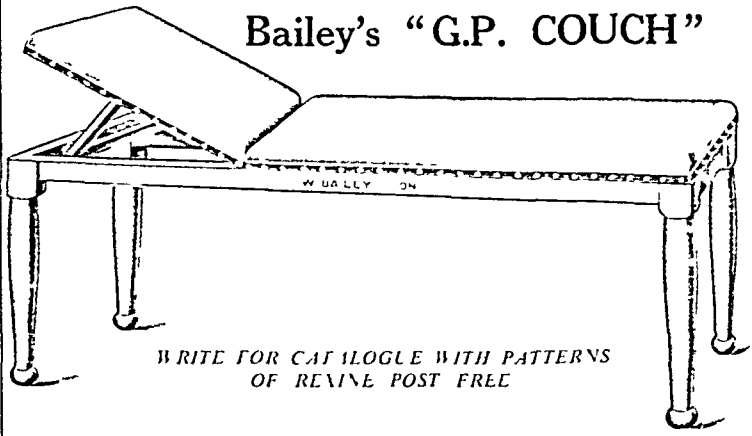
W. H. BAILEY & SON, LTD.

Telegrams Jayleaf, London

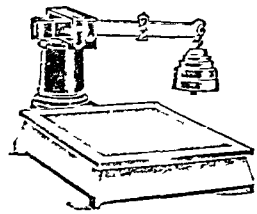
CONSULTING ROOM FURNITURE

LATEST REDUCED PRICES

Bailey's "G.P. COUCH"



WRITE FOR CATALOGUE WITH PATTERNS OF REXINE POST FREE



C R 1 51
PERSONAL WEIGHING MACHINE
[illegible] £3 9 0
Stand for Ditto raising machine to seat level extra £1 5 0
S P 1040—Label to fit on platform [illegible] extra 10/6 extra
Bailey's C R 3297 'G P COUCH' in polished oak upholstered rexine leather cloth £5 18 6
CHEAPER DESIGN with Bolted Legs £3 18 6

"A THOROUGHLY STRONG COUCH BROUGHT OUT AT A SPECIAL LOW PRICE TO MEET THE PRESENT DEMAND"

Surgical Instruments and Appliances - - 45, OXFORD STREET,
Hospital and Invalid Furniture - - 2, RATHBONE PLACE,
LONDON, W.1

£2,733 for £191

The above is one of many examples of the supreme value of

PERMANENT SICKNESS INSURANCE

The member paid £191 in premiums and drew £2,733 in benefit over a period of 32 years

HAVE YOU A POLICY ?

If not write for booklet 'B 30' to the Manager and Secretary

THE MEDICAL SICKNESS, ANNUITY & LIFE ASSURANCE SOCIETY, LTD.

300, HIGH HOLBORN, LONDON, W.C.1

TELEPHONE HOLBORN 5722

N B —Ask for a useful attachment for U K Telephone (pedestal style) holding Memo Block sent post free on application
General Agents (Wholesale only) for U K and Colonies

When patients need sparkling wine
ACKERMAN-LAURANCE
"Dry Royal"
"may be recommended with every confidence"
(Vide Report The Royal Institute of Public Health and Hygiene)
ANDERSON DOBSON & CO, LTD, 13, COOPER S ROW, LONDON, E C 3

Obtainable everywhere
Per bottle 8/6
Per half bottle 4/6
Per quarter bottle 2/6
Telephone Royal 1797/3

X-RAY CAR SERVICE
PORTABLE X-RAYS LTD
POWER ROAD, CHISWICK
TELEPHONE CHISWICK 4006

ANY HOUR ANY DAY ANY NIGHT ANYWHERE

FREQUENT MICTURITION
"YBWET" ABSORBENT BAGS
Male day pattern 35/
New Model Female day pattern 42/
"DUPLEX" BAGS
Male or Female day and night 70/-
"SANITUBE"
For helpless bedridden patients 70/
Our bags catch all leakage easing mind and body Invisible under clothing and easily emptied Now worn world wide Special patterns for motorists and aviators
Diagrams etc on request from
HILLIARD 123 Douglas Street Glasgow C 2

NAME PLATES
in BRONZE or BRASS
Estimates and Sketches sent free
H K LEWIS & Co Ltd
Medical and Scientific Stationers,
136, Gower St, London, W C 1

ATHEENIC Scotch Woven UNDERWEAR
From Factory to Wearer BY POST
Pure Wool Silk and Wool and Silk Garments in all sizes weights and styles for MEN WOMEN and CHILDREN are Guaranteed Unshrinkable Excellent wearing properties Also Real Scotch OUTERWEAR in latest styles HOMESPUNS in checks and mixtures Catalogue with patterns Post Free
Dept 3 ATHEENIC MILLS HAWICK Scotland

NAMEPLATES of character in Brass & Bronze
Send for Illustrated Brochure and Price List
F B HALL & CO 445 New Cross Rd S E 14 *TIDeway 3515*

NAME PLATES
in BRONZE and ENAMEL or BRASS
Send detail for sketch or leaflet
S J V A HERD Tel Clerkenwell 2441
30 CLERKENWELL ROAD E C 1

NAME PLATES in Bronze and Enamel
stainless Steel Brass or Chromium
Actual Makers Quick Delivery Low Price
The WHITE BRONZE Co 107 London Rd, CROYDON

NAMEPLATES Brass Bronze Stainless Steel
REDUCED PRICES
Send for List 18 to the Actual Makers
F OSBORNE & Co, Ltd Tel Euston 4824
117 Gower Street, London W C 1

BARNWOOD HOUSE
GLOUCESTER
A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS Within two miles of the G W and L M & S Railway Stations at Gloucester the Hospital is easily accessible by rail from London and all other parts of the United Kingdom It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres Voluntary Patients of both sexes also are received for treatment Special accommodation is also provided at five villa residences all of which stand in their own grounds and are entirely separate from the main hospital For particulars as to terms etc apply to G W T H FLEMING M R C S L R C P D P M Physician Superintendent
Telephone No 6207 Gloucester

TORQUAY
GRESHAM COURT HOTEL
RECENTLY OPENED A small luxury Hotel 2 mins Sea almost on level Luxurious comfort combined with an earnest desire to please
The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure M TEL 3658

HALLIFORD HOUSE, UPPER HALLIFORD, SHEPPERTON *Established in 1841*
This handsome secluded residence standing in a park of 36 acres situated 16 miles from London is licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections
Voluntary or certified cases received Terms moderate Patients are under the constant personal care of the Resident Medical Superintendent Dr R A Stewart from whom full particulars can be obtained Tel Sunbury on Thames 70

WYE HOUSE, BUXTON, AND CLINIC,
for the PREVENTION and TREATMENT of NERVOUS and MENTAL DISORDERS in both sexes Large country house beautifully situated in its own grounds Croquet lawns hard tennis court billiards wireless installation throughout Every facility for specialised modern treatment including psychotherapy occupational therapy ultra violet light diathermy Private rooms with special nurses if required Voluntary Temporary and Certified patients received —For terms apply to the Medical Superintendent HELEN S E. MURRAY M D
Nat Tel 130

"ECCLESFIELD," Staplehurst, Kent
(Removed from Ashford Middlesex)
PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large mansion beautifully situated in 100 acres of park land Extensive views Home farm R C Chapel Under the management of the Sisters of the Good Shepherd Apply Rev Mother Tel Staplehurst 61

HERMOSA, TEIGNMOUTH, S DEVON PAYING GUESTS
Highly recommended Restful home Good garden tennis courts Hot and cold in bedrooms South aspect Terms from 3 guineas weekly Phone 84

EPILEPSY
Attendance at school is a necessary part of the satisfactory treatment of Epilepsy in Children
COLTHURST HOUSE SCHOOL
meets all the requirements of children of middle class parentage Extensions made necessary by the success of the school have created several vacancies
Only bright and intelligent boys and girls are eligible for admission
Apply to the Director, Colthurst House School, Warford, Alderly Edge

THE GRANGE,
near ROTHERHAM
A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental Disorders Both certified and voluntary patients received Approved for temporary Patients This is a large country house with beautiful grounds and park five miles from Sheffield Tel No 40030 Ecclesfield Res Phys GILBERT E MOULD L R C P M R C S *Station* Grange Lane L & N E Rly

RUSSELLS
HEMEL HEMPSTEAD RD, WATFORD
Telephone WATFORD 3017
A convalescent home for the care and treatment of mild and recoverable nervous conditions in both sexes The house is situated high up in 40 acres of grounds 17 miles from London at the termination of the Watford by pass One Medical Officer is in residence and two others are in daily attendance Fees from ten guineas a week inclusive
Apply RESIDENT MEDICAL OFFICER

SPRINGFIELD HOUSE
Near BEDFORD (Phone 3117)
For Mental Disorders with or without Certificates
Resident Physician CEDRIC W BOWER
Ordinary Terms Five Guineas per week
(Including Separate Bedrooms where suitable)
Interviews in London by Appointment

BISHOPSTONE HOUSE, BEDFORD
A select Private Mental Home for Ladies Certified and Voluntary with separate House and Gardens for Voluntary Boarders Under personal supervision of a Resident Mental Specialist and Psychiatrist — Medical Supt Dr J LANGHAM MACAULAY Tel Bedford 2708

THE GROVE HOUSE
CHURCH STRETTON SHROPSHIRE
A private Home for the care of and treatment of a limited number of Ladies mentally afflicted Voluntary and Temporary Patients received under the new Mental Treatment Act 1930
Medical Superintendent Dr McCLINTOCK

CITY OF LONDON MENTAL HOSPITAL, DARTFORD KENT
Ladies and Gentlemen received for treatment under certificates and without certificates either VOLUNTARY or TEMPORARY PATIENT at a weekly fee of TWO GUINEAS and

Tel and Telegrams Haynes Brents
LITTLETON HALL BRENTWOOD ESSEX
Large grounds 400 ft above sea HOME for ladies Mentally afflicted Voluntary Boarders received Stations Brentwood and Shenfield mile Liverpool St 26 min Apply D Hall

LONDON, CORK HOTEL,
Upper Woburn Place near Euston Station
Accommodates 235 Visitors Modern Comforts
Excellent table A A and R A C
Room Bath and Breakfast from 3/6

THE CLINIC

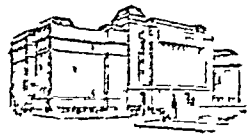
20 Devonshire Place
London, W.1

Tel Welbeck 4411 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns to 18 gns per week (Average—14 gns)
8 Operating Theatres
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary

150 State Registered Nurses
2 Resident Medical Officers (for emergencies)



NEW LODGE CLINIC, WINDSOR FOREST

This Clinic was founded in 1921 in order to provide for the scientific investigation and treatment of disease by a team of physicians and specialists
All forms of non infectious medical cases are admitted special attention being paid to disorders of digestion and metabolism arthritis anaemias asthma heart and kidney disease and functional and organic nervous disorders
Particulars can be obtained on application to the Secretary New Lodge Clinic, Windsor Forest Berks
Telephone 181 and 192 Winkfield Row

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date Lovely house and grounds (18 acres) Certified and uncertified cases taken Facilities for going to the seaside

ESTABLISHED OVER 200 YEARS

Apply to Med Supt for illustrated brochure Tel SALISBURY 2612.

CHEADLE ROYAL HOSPITAL

CHEADLE CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay N Wales is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES
The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary
In addition to the Main Building there are separate villas Extensive grounds Hard and grass tennis courts cricket and croquet ground and a court for badminton There are also wireless installations Golf may be had within easy distance Occupational therapy
VOLUNTARY TEMPORARY AND CERTIFIED PATIENTS received
The Hospital is nine miles from Manchester 0 minutes by rail from Liverpool and 3½ hours from London
For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT
Telephone GATLEY 2231 (3 lines)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds Detached Villas Chapel Garden and dairy produce from own farm Terms very moderate.

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 1½ acres of ornamental grounds with tennis courts etc which Voluntary Temporary or Certified Patients may visit by arrangement for long or short periods

Illustrated Brochure on application to the Medical Superintendent The Old Manor Salisbury Phone Salisbury 2251.

CALDECOTE HALL

NUNEATON
WARWICKSHIRE
(Phone Nuneaton 241)

Residential treatment of
FUNCTIONAL NERVOUS DISORDERS
Including Alcoholism and other Addictions
(Certifiable Cases are not received)

This beautiful mansion situated in the heart of the country (less than two hours from London by L M S R) and surrounded by charming pleasure grounds in which games and outdoor occupational therapy are available is devoted to the treatment of Functional Nervous Disorders by psychotherapeutic and ancillary methods

Illustrated brochure and particulars obtainable from T F CARVER M.D., D.P.M. Resident Medical Superintendent

CAMBERWELL HOUSE, 33, Peckham Road, London, S E 5

Telegrams "PSYCHOLIA LONDON
FOR THE TREATMENT OF MENTAL DISORDERS
Telephone RODNEY 4242 (2 lines)

Also completely detached villas for mild cases with private suites if desired Voluntary patients received Twenty acres of grounds Hard and Grass Tennis Courts Putting Greens Bowls Croquet Squash Rackets Recreation Hall with Badminton Court and all indoor amusements including Wireless and other Concerts Occupational Therapy Callisthenics and Dancing Classes *X* ray and Actino therapy Prolonged Immersion Baths Operating Theatre Pathological Laboratory Dental Surgery and Ophthalmic Dept Chapel Senior Physician Dr HUBERT JAMES NORMAN assisted by three Medical Officers also resident and visiting Consultants
An illustrated prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary

The Convalescent Branch is HOVE VILLA BRIGHTON and is 200 feet above sea level

PECKHAM HOUSE, 112, Peckham Road, London, S E 15

Telegrams "Alleviated London. Telephone Rodney 2641 2642

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders Certified voluntary and temporary patients are received Separate houses for treatment and accommodation of special cases adjoin the Institution *Occupational therapy physical drill and other forms of modern treatment* There is a seaside branch Kearsney Court near Dover to which patients may be sent for treatment or on holiday Motor drives are arranged when required Tennis courts Entertainments dances and indoor amusements held throughout the year Terms from £3 3s per week Illustrated prospectus and further particulars can be obtained from the Medical Superintendent.

ST. ANDREW'S HOSPITAL

FOR MENTAL DISORDERS

NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

President THE MOST HON THE MARQUESS OF EXETER C M G V D C

Medical Superintendent THOMAS TENNENT M D M R C P D P H D P M

This Registered Hospital is situated in 120 acres of park and pleasure grounds Voluntary patients who are suffering from incipient mental disorders or wish to prevent recurrent attacks of mental trouble temporary patients and certified patients of both sexes are received for treatment Careful clinical biochemical bacteriological and pathological examinations Private rooms with special nurses male or female in the Hospital or in one of the numerous villas in the grounds of the various branches can be provided

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted It is equipped with all the apparatus for the most modern treatment of Mental and Nervous Disorders It contains special departments for hydrotherapy by various methods including Turkish and Russian baths the prolonged immersion bath Vichy Douche Scotch Douche Electrical bath Plombieres treatment etc There is an Operating Theatre a Dental Surgery an X ray room an Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment It also contains Laboratories for biochemical bacteriological and pathological research

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres Milk meat fruit and vegetables are supplied to the Hospital from the farm gardens and orchards of Moulton Park Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves in farming gardening and fruit growing

BRYN-Y-NEUADD HALL

The seaside house of St Andrew's Hospital is beautifully situated in a park of 330 acres Llanfairfechan amidst the finest scenery in North Wales On the North West side of the Estate a mile of sea coast forms the boundary Patients may visit this Branch for a short seaside change or for longer periods The Hospital has its own private bathing house on the seashore There is trout fishing in the park

At all the branches of the Hospital there are cricket grounds football and hockey grounds lawn tennis courts (grass and hard courts) croquet grounds golf courses and bowling greens Ladies and gentlemen have their own gardens and facilities are provided for handicrafts such as carpentry etc

For terms and further particulars apply to the Medical Superintendent (Telephone No 2356 and 2357 Northampton) who can be seen in London by appointment

HAYDOCK LODGE

NEWTON-LE-WILLOWS LANCASHIRE

Telegs Street Ashton in Makerfield *Phone* Ashton in Makerfield 7311

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntary temporarily or under Certificate Patients are classified in separate buildings according to their mental condition

Situated in park and grounds of 400 acres Self supported by its own farm and gardens in which patients are encouraged to occupy themselves Every facility for indoor and outdoor recreation For terms prospectus etc apply MEDICAL SUPERINTENDENT

NORTHUMBERLAND HOUSE,

GREEN LANES, FINSBURY PARK, N 4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses Conveniently situated and easy of access from all parts Six acres of ground highly situated facing Finsbury Park Voluntary and Temporary Patients received without certification Occupational Therapy Psychotherapy and other modern forms of treatment

Telephone STAMFORD HILL 2688 Telegrams SUBSIDIARY LONDON

Convalescent Home KEARSNEY COURT DOVER For further particulars apply to the Medical Sup

COURT HALL, KENTON, near EXETER,

for the treatment of eight Ladies voluntary temporary or certified patients
Large gardens and own dairy

CLIFFDEN TEIGNMOUTH for early and convalescent cases A well appointed house with spacious balconies and extensive views of the South Devon coast Sub tropical gardens own dairy in 25 acres Private road to beach

Telephones

Resident Physicians BERTHA M MULES M D B S Starcross 59
ANNE S MULES M R C S L R C P Teignmouth 289

THE COPPICE, NOTTINGHAM

HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment It is beautifully situated in its own grounds on an eminence a short distance from Nottingham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted Occupational Therapy Voluntary and Temporary Patients received

Tel 64117 *For terms etc apply to the Medical Superintendent*

CHISWICK HOUSE, PINNER, MIDDLESEX

Telephone PINNER 234

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes

A modern country house 12 miles from Marble Arch in beautiful secluded grounds

Fees from 10 guineas per week inclusive Cases under Certificate Voluntary and Temporary patients received for treatment

Douglas Macaulay M D, D P M

STRETTON HOUSE,

Church Stretton, Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit. All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under the provisions of the Mental Treatment Act 1930 Bracing hill country See *Medical Directory* p 2328—Apply to the Medical Superintendent Phone 10 P O Church Stretton

FENSTANTON,

CHRISTCHURCH ROAD
Streatham Hill, S W 2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders *Certified* Voluntary and Temporary Patients received Large Mansion with 12 acres of grounds (*See Medical Directory* p 2312) Apply Resident Physician *Telephone* Tulse Hill 7181

BAILBROOK HOUSE, BATH

For sufferers from Nervous and Mental Disorders with or without certificates

The house is gloriously situated in wooded grounds of 20 acres with magnificent views of the City and the Avon Valley (See *Medical Directory* page 2322)

For terms apply A GUIRDHAM M A D M B Ch D P M Resident Physician
Telephone Batheaston 3139

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded grounds For Ladies and Gentlemen suffering from Nervous or Mental Illness Voluntary Patients Temporary Patients and Patients under Certificate are admitted for treatment Fees from 4 guineas a week upwards according to requirements A few vacancies exist for Ladies and Gentlemen at reduced fees on recommendation of the Patient's own Physician Apply to Dr J A SMALL Telephone 80 Norwich
Telegrams Small 80 Norwich

TYKEFORD ABBEY,

NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CARE

The Home is a Mansion of Historical interest standing in 15 acres of garden and park and is situated 14 miles from Northampton and 12 miles from Bedford on the main London to Northampton Road fifty miles from London Both sexes are accommodated Psychotherapeutic Treatment is used extensively in suitable cases *Radiant* Heat X ray and Ultra Violet Light Diathermy and Foam *Baths* Badminton Tennis etc

Apply Dr D E M DOUGLAS-MORRIS
Telephone Newport Pagnell 11

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDER

(20 miles from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on the lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital Convalescent or mild cases can be received in a delightful country mansion and grounds known as

HIGHFIELD HALL

situate about a mile away from the Hospital FEES TWO TO THREE GUINEAS PER WEEK

For further particulars apply to the Medical Superintendent W J T KINNEAR L R C P
ST ALBANS HERTS

BOWDEN HOUSE,

HARROW ON THE HILL,

For the residential treatment of Functional Nervous Disorders

No case under certificate nor under the M T A

This home which was founded in 1911 is designed to provide for psychoneurotics a curative environment associated with modern psychological treatment modified to suit each individual patient. The treatment is in the hands of three experienced psychotherapists and most patients receive three hours of analytical treatment per week. Occupational therapy of many varieties is available but not obligatory. Recreations include tennis badminton billiards etc

On admission patients are examined by the diagnostic physician who advises on all physical treatment. As far as possible all necessary pathological examinations are carried out by the pathologist in the laboratory on the premises

STAFF

H CRICHTON MILLER M A M D M R C P (*Senior Physician*) GRACE H. NICOLLE M A M B (*Resident Physician*)
ALFRED TORRIE, M A M B Ch B D P M (*Medical Superintendent*) MARY HALL, M B B Ch (*Pathologist*)



THE STANBOROUGHS HYDRO

Delightfully situated in private wooded park of 60 acres 300 feet above sea level. Only 18 miles from London.

Recent structural alterations have greatly improved the facilities. Additions to the equipment include the installation of 100 kV X Ray etc.

The well regulated Diet Department for the supervision of individual diets the Physiotherapy Departments including Hydrotherapy Electrotherapy Light Therapy Occupational Therapy in addition to outdoor amusements and the lawns and gardens make The Stanboroughs very desirable for rheumatic and metabolic disturbances neuroses and fatigue states

Surgical and Maternity Sections—
Two Resident Physicians.

Medical Superintendent —
J E CAIRNCROSS, L R C P & S

Prospectus and full information on application to the Manager

The Stanboroughs Hydro
Stanborough Park,
Watford Herts

Telephone Garston (Watford) 2623

CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy. Cases of alcoholism and drug addiction are admitted. The Physiotherapy Department has separate and fully equipped for X ray work helio therapy short wave therapy electro-therapy and hydrotherapy (swimming bath, prolonged baths Scotch and Vichy douches Plombieres treatment, electric and Turkish bath cabinets etc.) There is a fully equipped gymnasium under qualified instructor. Facilities are provided under special recreational therapists for all indoor and outdoor games including golf course, cricket football and hockey grounds lawn tennis and squash courts croquet and bowling greens.

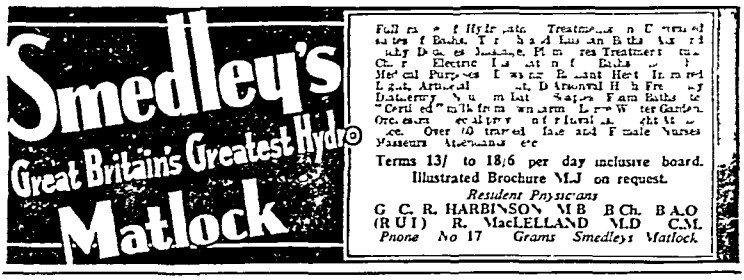
The Hospital has its own Cinema Library and Hairdressing Saloon. Terms include regular motor drives.

Private rooms suites or villas are available and special nurses can be provided.

The Hospital grounds extending to nearly 1000 acres are situated in delightful country and include an extensive farm (T T herd) gardens and orchards.

As the Hospital is well endowed terms are exceptionally moderate e g First Department, 3 to 30 guineas per week Second Department, and 1 guineas per week. Voluntary and certified patients are received. Medical Certificates given anywhere in the British Isles are valid for admission of patients. For prospectus necessary forms and further information apply to

Physician Superintendent, P K McCOWAN, J P., M D F R C P D P M Barrister at Law
July 1st. Tel Dumfries 1119



Full range of Hydriatic Treatments in Turkish and Russian Baths Vapour Baths Dowsing Douches Douche Massage Plombières Treatment Galvanic Electric Light and Infra Red Baths Medical Purposes Exercising Remedial Hot Pressure Deficiency Nutritional Sulphur Baths Certified milk from own farm Large Water Gardens Orchestra Medical supervision Light Meals Service. Over 100 trained Male and Female Nurses Masseurs Masseuses etc

Terms 13/ to 18/6 per day inclusive board.
Illustrated Brochure M.J on request.

Resident Physicians
G C. R. HARBINSON M B B Ch. B.A.O (R U I) R. MacLELLAND M.D C.M.
Phone No 17 Grams Smedleys Matlock

SHAFTESBURY HOUSE, FORMBY BY THE SEA Nr Liverpool

Specially built and licensed for the care and treatment of a limited number of Ladies and Gentlemen suffering from Nervous and Mental breakdown. Voluntary and certified patients received. Ladies also admitted as Temporary Patients without Certification. Terms moderate.

Apply RESIDENT PHYSICIAN who may be seen at 31 Rodney Street, Liverpool by appointment.
Tel No 8 Formby

ALCOHOLISM,

DRUG HABITS,
AND NERVOUS DISORDERS

25 minutes from London situated in charming grounds and country [illegible] ho
and
Fee
on
RES [illegible]
DET [illegible]
Con [illegible] L R C P D P M
CHISLEHURST 451

OLD HILL HOUSE
CHISLEHURST - KENT



HOME FOR EPILEPTICS

MAGHULL (near LIVERPOOL)

FARMING and OPEN AIR OCCUPATION for PATIENTS

A few vacancies in 1st and 2nd Class Houses
FEES 1st Class (men only), from £3 p w upwards 2nd Class (men and women) 32/ p w

For further particulars apply
C EDGAR GRISEWOOD A.C.A.,
Secretary 20 Exchange Street East, Liverpool, 2

SUNFIELD

CHILDREN'S HOME

Clent Grove, Clent,
Stourbridge, Worcestershire

PRIVATE APPROVED HOME for backward and retarded children of both sexes up to 12 years of age. Curative educational treatment on RUDOLF STEINERS Methods. Home like surroundings individual attention. House and grounds uniquely situated on Clent Hills. Illustrated prospectus terms etc from the Secretary

Phone Hagley 253

TOR-NA-DEE SANATORIUM

MURTLE DEESIDE ABERDEENSHIRE

FOR THE DIAGNOSIS AND TREATMENT OF ALL FORMS OF TUBERCULOSIS

Managing Director DAVID LAWSON, M D, F R S E

Southern aspect Low rainfall Pure bracing air Sheltered grounds Beautiful surroundings All modern equipment for diagnosis and treatment, including operating theatre **No extra charge for X Rays Artificial Pneumothorax, Ultra-Violet Light, or other special treatment**

Day and Night Nursing Staff All bedrooms have central heating electric light hot and cold running water, and wireless (headphones) Comfortable and airy public rooms

Medical Superintendent J M JOHNSTON M B M R C S D P H For terms and prospectus apply to the Secretary Telephone CULTS 107

PENDYFFRYN HALL SANATORIUM

BETWEEN CONWAY AND PENMAENMAWR, NORTH WALES

All Modern Methods of Treatment Available

Ideally situated for the treatment of Tuberculosis Sheltered from E and N E winds Climate mild and bracing Low rainfall high average of sunshine The Sanatorium is situated in its own park There are miles of graduated walks through pine gorse and heather rising to 1 000 ft and commanding extensive sea and mountain views Central heating electric light X ray installation Wireless in all rooms Full day and night nursing staff Special milk supply from a tuberculin tested herd Easily accessible from LONDON (4½ hours) MANCHESTER LIVERPOOL BIRMINGHAM and the North

Resident Physicians **Dennison Pickering M D, J W Pugh, M B, B Ch**

For particulars apply to the Secretary Pendyffryn Hall Nr Penmaenmawr North Wales Phone 70

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham, for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S S W sheltered from North and East elevation 800 feet Pure bracing air **Special Treatment by Artificial Pneumothorax** (X ray controlled) **Tuberculins and Ultra-violet Rays** are available when necessary without extra charge **X-ray plant** Fully equipped Dental Department Electric light Radiators hot and cold basins and Wireless in all rooms Up to date main drainage

Full day and night Nursing Staff Terms 5 gns to 7½ gns a week inclusive

Med Supt GEOFFREY A HOFFMAN B A M B I C Dub *1st Phys* MARGARET A HARRISON M B B S Lond *Pathologist* EDGAR N DAVEY M B B Ch *Consult Laryngologist* G N BARKER F R C S Edin D L O *Consulting Dental Surg* GEORGE V SAUNDERS L D S R C S Lond Apply Secretary The Cotswold Sanatorium Cranham Gloucester *Tel* 81 and 82 WITCOMBE *Grams* HOFFMAN BIRDLIP



SUNNYSIDE RESTORIUM, HASSOCKS, SUSSEX.

The Physical Treatment Centre that is different

50 minutes from London by frequent electric trains 15 minutes from Brighton Standing in 7 acres of lovely grounds at the foot of the South Downs

Climate, mild but not relaxing Maximum sunshine No fogs sheltered from cold winds

Comfort and Service combined with every facility for Physical Treatment without the irksome restrictions of nursing home or clinic

Treatments available include Foam and Medicated Baths Ultra violet and Infra red Ray Diathermy and other Electrical treatments Tetany Mud Packs etc Massage and Remedial Exercises Administered by fully qualified staff under the supervision of the Physician in Charge

Convalescent patients no longer requiring nursing home treatment specially catered for

Electric Lift to all floor Fully Licensed Separate Cuisine Special Dietary if required

Medical Practitioners are cordially invited to visit the Retirement which has been recently redecorated and enlarged Write for Brochure and Terms to Physician in Charge Sunnyside Restorium Hassocks Sussex Telephone Hassocks 103

MEDICAL CORRESPONDENCE COLLEGE

17 WELBECK STREET LONDON W 1

Tel Welbeck 8901

PROVIDES HIGHLY SUCCESSFUL ORAL AND POSTAL COACHING FOR ALL MEDICAL EXAMINATIONS

Special Preparations for all Surgical Qualifications

F R C S ENGLAND (Primary & Final) **M C C A N T A B M S LONDON F R C S EDINBURGH**

And all other Surgical Degrees and Diplomas

The remarkable success of Students of the Medical Correspondence College at the higher Surgical Examinations is specially noteworthy

Both at the Primary and Final F R C S England the majority of our Students are successful at the first attempt and Candidates who have failed at these Examinations on several previous occasions get through without difficulty after going through our course

The Surgical Tutors of the College all hold either the M S Lond or F R C S England or both and are highly experienced teachers

The Postal Courses are thoroughly clear concise and up to date and the test questions are carefully selected from those set at previous Examinations so as to embrace all part of the subject By working systematically through the Course the Student is brought up to the examination standard in the minimum time and much unnecessary reading is saved

VALUABLE BOOK

How to Pass the F R C S free on application to the Secretary

THE TAVISTOCK CLINIC

(The Institute of Medical Psychology)

MALET PLACE, W C 1

A Systematic Course of Lectures on PSYCHOTHERAPEUTIC THEORY AND METHOD extending over three terms, begins on October 6th, 1938

Lectures will be given on Mondays and Thursdays at 3 15, 4 30 and 5 45 p m for the first six weeks and subsequently at 4 30 p m only

The first term's lectures form a complete Course for those desiring only an introduction to the study of psychotherapy

Fee for the Course £8 8s

For the first term only, £3 3s

For detailed Syllabus apply to the Educational Secretary at the Clinic

THE TAVISTOCK CLINIC

(The Institute of Medical Psychology)

Malet Place W C 1

A WEEK END COURSE ON

MARRIAGE PROBLEMS

will begin on Saturday October 1st 1938 at 5 p m Lectures will be given from 11 a m to 1 p m on Saturday and from 11 a m to 1 p m on Sunday Fee for the Course £1 1

For details apply to the EDUCATIONAL SECRETARY at the Clinic

STAMMERING, SPEECH DEFECTS

BEHNKE METHOD Estab 1890 Classes & resident treated at 39 Earl's Court Sq S W 5 and in residence in the Summer days at Miss BEHNKE's Nursing Home Treatment at Clients' residences — Lectures on stammering and other speech defects — Lessons in education of pronunciation Individual physical and breathing exercises The method is scientifically correct effective — Gay Hearty Practical

Stammering Cleft Palate Speech Defects

39 Earl's Court Sq Miss BEHNKE 39 Earl's Court Sq

BRITISH POSTGRADUATE MEDICAL SCHOOL

(University of London)

DEPARTMENT OF MEDICINE

A Course of Six Lectures on

ARTHRITIS

will be given by

Dr C W BUCKLEY, M D, F R C P,

on

OCTOBER 4th, 11th, 18th, 25th, NOVEMBER 1st and 8th, 1938,

at 4 30 p m

DEPARTMENT OF SURGERY

A Course of Two Lectures on

CANCER OF THE BREAST

will be given by

Mr G GORDON-TAYLOR, O B E, M S, F R C S,

on

OCTOBER 14th and 21st, 1938,

at 2 30 p m

DEPARTMENT OF PATHOLOGY

A Course of Five Lectures on

CARBOHYDRATE METABOLISM

will be given by

Dr F G YOUNG, Ph D,

on

OCTOBER 12th, 19th, 26th, NOVEMBER 2nd and 9th, 1938,

at 4 30 p m

These lectures are for regular students of the School but a limited number of tickets are available without fee for medical practitioners

Applications for tickets should be addressed to the Dean British Postgraduate Medical School Ducane Road Shepherd s Bush London W 12

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)

CITY ROAD E.C.1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Dental Clinics and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Residential) Nearly 2 000 patients annually

RALPH B CANNINGS Secretary

POST-GRADUATE COURSE IN VENEREAL DISEASES

LONDON COUNTY COUNCIL (WHITECHAPEL) CLINIC, TURNER STREET E 1 (ADJOINING THE LONDON HOSPITAL)

A THREE MONTHS COURSE OF INSTRUCTION in MODERN METHODS in the DIAGNOSIS and TREATMENT of VENEREAL DISEASES will be given by Lieut.-Colonel E T Burke D S O M B Ch B the Director of the Clinic during October November and December 1938

Attendance at this course will qualify subject to the other conditions in the Regulations of the Ministry of Health for the Certificate enabling the possessor to hold the post of a Venereal Diseases Officer under the Council of a County or County Borough The course will consist of twenty five systematic lectures accompanied by lantern demonstrations on Mondays and Thursdays at 2 30 p m beginning on October 3rd and ending on December 22nd Every Wednesday at 2 p m cases will be demonstrated Those taking the course will also attend the practice of the Clinic in order to obtain tuition in intravenous injections etc During the three months 130 hours of attendance must be put in

Those intending to take the course must send their names to the Director on or before September 24th 1938 Fee £10 10s

NORTH EAST LONDON POST-GRADUATE COLLEGE

PRINCE OF WALES S GENERAL HOSPITAL N 15

The Practice of the Hospital is limited to Medical Practitioners Particulars from J BROWNING ALEXANDER M D Dean

LONDON HOSPITAL MEDICAL COLLEGE

(University of London)

SCHORSTEIN MEMORIAL LECTURE.

The above lecture will be delivered by PROFESSOR LEONARD G PARSONS M D F R C P Professor of Diseases of Children in the University of Birmingham on THURSDAY OCTOBER 13th at 4 30 p m in the ANATOMICAL THEATRE

Subject *The Haemolytic Anaemias of Childhood*

Members of the profession are cordially invited to attend

A E CLARK KENNEDY M D F R C P
Dean

Turner Street London E 1

41st ANNUAL EDITION

PATON'S LIST OF SCHOOLS

An aid to parents in the selection of Schools and Tutors

Crown 8vo 888 pages Price 5/ postage 6d

Contains particulars with illustrations of Preparatory Private and Public Schools for Boys and Girls Tutors Co-educational Schools Domestic Science Secretarial Training and Physical Training Colleges etc Schools on the Continent.

J & J PATON Educational Agents
143 Cannon Street London E C 4
ADVICE ALSO GIVEN FREE OF CHARGE

MANCHESTER ROYAL INFIRMARY

POSTGRADUATE DEMONSTRATIONS will be given on the Wards by members of the Honorary Staff on Friday afternoons at 4 15 p m from September 23rd until December 9th

M R C P LONDON
M R C P EDINBURGH
F R F P S GLASGOW

Short Intensive Oral and Postal Revision Courses in preparation for these qualifications

Apply SECRETARY Medical Correspondence College 19 Welbeck Street W 1

Free booklet The M R C P and How to Obtain It on application

ADVICE ON THE CHOICE OF SUITABLE SCHOOLS AND TUTORS

for BOYS and GIRLS with prospectuses of recommended establishments will be given free of charge to parents stating age of pupil district preferred range of fees and type of school required

J & J PATON
143 Cannon Street London E.C 4
Publishers of
Paton s List of Schools & Tutors. Post free 5/6.

F R C S (Edin)

EDINBURGH POSTAL COURSES

Full details of above and Oral Classes —
H C ORRIN F R C S Surgeon s Hall Edinburgh

UNIVERSITY OF BIRMINGHAM

FACULTY OF MEDICINE.

PROFESSORSHIP OF ANATOMY

The Council of the University invites applications for the Chair of Anatomy vacant by the resignation of Professor Robert D Lockhart.

The stipend offered is £1 600 per year The duties will commence January 1st, 1939

Applications and testimonials (forty copies) may be accompanied by references or other credentials and should be received by the undersigned on or before October 31st 1938

Further particulars may be obtained from

The University C G BURTON
Birmingham 3 Secretary
September 1938

EXPERIENCED COACHING IN PHYSIOLOGY Pathology and Medicine, by M D Lond (Hons) M R C P Lond B.Sc Physiology Lond All exams Classes held —Address, No 7502 B.M.A. House, Tavistock Square, W C 1

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17 RED LION SQ., LONDON, W.C.1

FOUNDED IN 1882

by E. S. WEYMOUTH, M.A. (Lond.)

POSTAL OR ORAL PREPARATION FOR ALL MEDICAL EXAMINATIONS

SOME SUCCESSES

M.D. (Lond.)	1901-37 (11 Gold Medallists during 1913-37)	413
M.S. (Lond.)	1901-37 (including 4 Gold Medallists)	24
M.B., B.S. (Lond.)	*Final* 1918-37 (Completed Exam.)	255
F.R.C.S. (Eng.), 1919-37	*Primary*	199
	Final	192
M.R.C.P. (Lond.)	1919-37	286
D.P.H.	(Various) 1906-37 (Completed Exam.)	348
F.R.C.S. (Edin.)	1918-37	65
M.R.C.S., L.R.C.P.	*Final* 1919-37 (Completed Exam.)	606
M.D.	Various	By Thesis. Many successes

Preparation for the above also for *Medical Preliminary* and all *examinations leading up* to M.R.C.S., L.R.C.P. or M.B. of various Universities also for M.R.C.P. (Edin.), D.P.M., D.O.M.S., D.T.M. & H., D.L.O., D.C.H., D.A., D.M.R.E., M.M.S.A., L.M.S.S.A., *D.C.O.G.* and some exams. of Dominions Universities.

ORAL CLASSES

M.R.C.P., M.D., Primary and Final F.R.C.S., F.R.C.S. (Edin.), also Final M.B., B.S. and M.R.C.S., L.R.C.P. Museum and Microscope Work. Also Private Tuition.

MEDICAL PROSPECTUS (47 pp.)

CONTENTS. The method and the cost of entering the Medical Profession. *Particulars of all Medical Examinations.* Postal Courses and Oral Classes. Suggestions for the Higher Medical Examinations. Suggestions for the Higher Surgical Examinations. Suggestions for the Special Diploma Examinations. Refresher Courses. Openings for Women. Hints for writing theses.

Medical Prospectus gratis, along with list of *Tutors, etc., on application to the Principal*, 17 Red Lion Sq., London, W.C.1. (Telephone: Holborn 6313.)

ADMINISTRATIVE COUNTY OF KENT

PUBLIC HEALTH DEPARTMENT

TUBERCULOSIS OFFICER (Male)

Applications are invited from registered Medical Practitioners for the whole-time appointment of Tuberculosis Officer.

The candidate appointed will be required to work under the direction of the County Medical Officer to devote the whole of his time to the duties of the office, to undertake such other work as may be assigned from time to time, and to reside in such part of the county as may be directed.

Applicants should not exceed 45 years of age and should have had at least three years' post-graduate experience in general medicine and surgery and tuberculosis including Dispensary and Sanatorium duties.

The salary is at the rate of £750 per annum rising, subject to satisfactory service, by three biennial increments of £50 and one of £37 10s. to a maximum of £937 10s., with travelling and subsistence allowances in accordance with the County Council's scale.

The post is designated as an established one under the Local Government and Other Officers' Superannuation Act, 1922, and is terminable by three months' notice on either side. The successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications and clinical experience, with special reference to practical experience in the diagnosis and treatment of tuberculosis, accompanied by copies of *three* recent testimonials, must be received by the County Medical Officer of Health, Sessions House, Maidstone, not later than Tuesday, September 20th, 1938. No personal canvass. Application will be treated in confidence.

SESSIONS HOUSE, MAIDSTONE. W. L. ELVIN, Clerk of the County Council.

September 5th, 1938.

ROYAL NAVAL DENTAL SERVICE

Applications are invited for appointment to commissions as DENTAL OFFICERS in the ROYAL NAVY.

Candidates who must be British subjects below the age of 28 years must hold the degree or diploma of a British University or College of Surgeons and be registered under the Dentists Acts or Medical Acts. Unmarried candidates are preferred. No examination in professional subjects will be held, but candidates will be required to attend at the Admiralty for interview and for physical examination as to their fitness for service in any part of the world.

Successful candidates will be appointed to short service commissions as Surgeon Lieutenants (D) and will receive a grant of £50 towards the cost of providing the necessary uniform on entry. Vacancies in the permanent list will be filled by selection from among officers holding short service commissions who desire to make the Royal Naval Dental Service their permanent career. Officers not transferred to the Permanent List will on the termination of their short service engagement after six years' service be eligible for a gratuity of £1 000.

Opportunities are available for officers on the permanent list for post-graduate study. The assistance of private income is not necessary for the purpose of supplementing official pay and allowances.

Naval Dental Officers are included in the Scheme for Marriage Allowance under the same conditions as for other Naval Officers.

Application Forms and copies of the regulations for entry and conditions of service, rates of pay and allowances, etc., may be obtained from the Medical Director-General of the Navy, Admiralty, S.W.1, and from the Deans of Dental Schools.

COUNTY BOROUGH OF EAST HAM

ASSISTANT MEDICAL OFFICER OF HEALTH (MALE)

Applications are invited for the appointment of an Assistant Medical Officer of Health at a salary of £500 rising by annual increments of £25 to a maximum salary of £600 plus residence, fuel and light (these emoluments being valued for superannuation purposes at £100 per annum) less 5 per cent. deduction for superannuation purposes.

Age not to exceed 45 years.

The successful candidate will be required to work under the direction of the Medical Officer of Health and to undertake primarily duties as resident Medical Officer at the Borough Infectious Diseases Hospital, together with such other duties as may be allocated to him by the Medical Officer of Health from time to time. He will be required to reside at the bungalow at the Hospital.

A Diploma in Public Health is desirable. Experience in the treatment of infectious diseases is essential.

The person appointed must devote the whole of his time to the duties of the Office and not engage in private practice, and will be required to pass a medical examination.

Applications on forms obtainable from the undersigned on receipt of a stamped addressed foolscap envelope must be returned with copies of not more than three recent testimonials, not later than noon on Friday, September 23rd, 1938.

Town Hall, East Ham, E.6. September 19, 1938.

By Order,
E. W. JOSLIN,
Town Clerk.

WELLINGTON HOSPITAL BOARD NEW ZEALAND

SURGICAL REGISTRAR

Applications addressed to the undersigned and endorsed Surgical Registrar are invited up to 9 a.m. on Monday, October 17th, 1938, for the position of Surgical Registrar to the Wellington Hospital.

Salary £500 per annum, resident or living-out allowance in lieu of quarters. Applicants to state the earliest date on which they can commence duty. Appointment to be for one year, subject to renewal. Preference will be given to the holder of a postgraduate qualification.

Applicants are requested to state age and experience and enclose copies of references.

J. B. I. COOK,
Secretary.

WELLINGTON HOSPITAL BOARD NEW ZEALAND

MEDICAL REGISTRAR

Application addressed to the undersigned and endorsed Medical Registrar are invited up to 9 a.m. on Monday, October 17th, 1938, for the position of Medical Registrar to the Wellington Hospital.

Salary £500 per annum, resident or living-out allowance in lieu of quarters. Duties to commence on January 1st, 1939. Appointment to be for one year, subject to renewal. Preference will be given to the holder of a postgraduate qualification.

Applicants are required to state age and experience and enclose copies of references.

J. B. I. COOK,
Secretary.

CITY OF BIRMINGHAM EDUCATION COMMITTEE

APPOINTMENT OF MALE ASSISTANT SCHOOL MEDICAL OFFICER

Required to begin duty as soon as possible a male Assistant School Medical Officer. Candidates must have had at least three years' experience in the practice of their profession subsequent to obtaining a registrable qualification. Salary according to Askwith Scale (£500 to £700 by annual increments of £25). In fixing commencing salary previous service in Class II. of Askwith Scale may be taken into account. £10 per annum travelling expenses allowed.

Forms of application (to be returned not later than first post on Monday, October 3rd) together with further information obtainable from the undersigned on receipt of stamped addressed foolscap envelope. Communications should be endorsed "Assistant School Medical Officer." Canvassing will disqualify.

Education Office, Margaret Street, Birmingham, 3. September 9th, 1938.

P. D. INNES,
Chief Education Officer.

HULL CORPORATION HEALTH DEPARTMENT

ASSISTANT MEDICAL OFFICER OF HEALTH (Female)

Applications are invited from duly qualified unmarried or widowed medical women under the age of 40 years and of not less than three years' standing in their profession for the post of Assistant Medical Officer of Health.

Salary £600 per annum rising, subject to satisfactory service, by annual increments of £25 to £700.

The duties consist mainly of work in the Maternity and Child Welfare Department, the School Medical Service and the Tuberculosis Department.

Candidates must have had special experience in Paediatrics and preference will be given to those possessing the Diploma in Public Health or similar qualification and to those with experience in a children's hospital.

The appointment will be subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1922.

Applications, on forms to be obtained from the undersigned, are returnable not later than 10 a.m. on Thursday, September 22nd, 1938.

NICOLAS GEBBIE, M.D.,
Medical Officer of Health.

Health Department,
Guildhall, Hull.
September, 1938.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

PUBLIC HEALTH LABORATORY

ASSISTANT BACTERIOLOGIST

The County Council of the West Riding of Yorkshire invite applications for the appointment of Assistant Bacteriologist.

Applicants must be registered Medical Practitioners with experience of Public Health Bacteriology and Clinical Pathology.

The salary will be £500 per annum rising by annual increments of £25 to £700 per annum.

The appointment will be subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1922.

Further particulars and form of application may be had from the undersigned by whom all applications together with copies of not more than three recent testimonials must be received not later than Monday, October 3rd, 1938.

J. CHARLES McGRATH,
Clerk of the County Council.

County Hall, Wakefield.
September, 1938.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

ASSISTANT TUBERCULOSIS OFFICER

The County Council of the West Riding of Yorkshire invite application for the appointment of Assistant Tuberculosis Officer. Candidates must be qualified in accordance with the Regulations of the Minister of Health. The position will be an advanced [illegible]

Salary £500 per annum, rising by annual increments of £25 to £700.

The appointment is subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1922.

Further particulars and form of application may be had from the undersigned by whom applications together with copies of not more than three recent testimonials should be sent not later than Monday, September [illegible], 1938.

J. CHARLES McGRATH,
Clerk of the County Council.

County Hall, Wakefield.
September, 1938.

INDIAN MEDICAL SERVICE

RECRUITMENT OF EUROPEAN OFFICERS

Applications are invited from Medical Men for Permanent Commissions in His Majesty's Indian Medical Service. The terms offered include a gratuity of £1 000 on retirement after six years service, or of £2,500 after 12 years service together with free return passages, for those who no longer desire to remain in the Service In other respects the terms will be as detailed below

British subjects of pure European de cent who are under 32 years of age who are registered under the Medical Acts in force in Great Britain and Northern Ireland are eligible to apply

CAREERS

The Indian Medical Service offers a permanent career with wide opportunities of medical experience including clinical preventive specialist and research work At the beginning of his career an officer is employed on the military side which has medical charge of the Indian Army Promotion is on a time scale up to the rank of Lieutenant-Colonel and by selection to the ranks of Colonel and Major General An officer may apply after one year s Indian Service to have his name registered for transfer to the civil side from which appointments are made to Civil Surgeoncies which are established at the principal civil centres to provide for the medical needs of Civil Officials and for general medical administrative purposes to specialist (for example public health and bacteriological) services to research posts and to professorships at the Medical Schools

RATES OF PAY

Years of Service	Rank	Basic Pay Rs. per mensem	Overseas Pay £ per month	Total £ per annum
1	Lieutenant	4 0	15	585
2	Captain	500	25	7 0
3	"	5 0	25	795
4	"	550	25	795
5	"	600	25	840
6	"	600	30	900
7	"	600	30	900
8	"	700	30	960
9	"	700	35	1020
10	"	700	35	1050
11	Major	800	35	1140
12	"	800	40	1200
13	"	800	40	1200
14	"	800	40	1200
15	"	800	40	1200
16	"	950	40	1335
17	"	950	40	1335
18	"	950	40	1335
19	"	1100	40	1470
20	"	1100	40	1470
21	Lieut.-Col	1350	40	1695
22	"	1350	40	1695
23	"	1350	40	1695
24	"	1 00	40	1830
25		1 00	40	1830

Note—(1) The rupee is at present stabilized at a rate equivalent to 1s 6d

(2) An officer promoted to the rank of Lieut Colonel before completion of 20 years service will receive pay at the rate of Rs. 1,00 per mensem (basic) plus £40 per month overseas pay

Extras—In addition to the above rates various allowances are admissible for a large number of special appointments on both the military and the civil side which may be held by members of the Indian Medical Service. Special high rates of pay are also attached to the numerous administrative appointments open to officers in both branches of the Service.

ANTEDATES IN COMMISSION

Candidates possessing certain higher medical qualifications or holding the Diploma in Public Health may be granted an antedate in their commissions Past service in certain hospital appointments may also render candidates eligible for an antedate Persons holding or about to hold resident posts at recognized hospitals may be seconded in those posts for a period The maximum period of antedate secondment or antedate and secondment combined admissible under this paragraph is limited to 18 months.

OUTFIT ALLOWANCE.

Officers on appointment will receive an allowance of £75 towards the cost of outfit.

PRIVATE PRACTICE

With the exception of Administrative Officers military or civil and officers holding certain special appointments officers are not debarred from taking private practice so long as it does not interfere with their proper duties.

LEAVE.

Leave can be taken at reasonable intervals and adequate rates of leave pay are provided Extra leave (known as study leave) which may not exceed twelve months in all during an officer s service may be granted to officers desirous of pursuing special courses of study of a postgraduate nature During such leave study allowance at present fixed at the rate of 12s a day in the United Kingdom £1 a day on the Continent of Europe and £1 10s a day in the United States of America and Canada is granted to an officer in addition to ordinary rates of leave pay

PENSIONS.

The rates of pensions are as follows —	Per annum.
After 17 years service for pension	£372 0s.
18 " "	£400 0s.
" 19 " " "	£428 0s
" 20 " "	£465 0s.
" 21 " " "	£502 0s.
22 " "	£539 10s
23 " "	£576 10s
" 24 " "	£614 0s.
25 " " "	£651 0s
26 " " "	£697 10s.
27 " "	£744 0s

There are additional pensions ranging from £65 to £350 per annum for officers who have held administrative appointments

PASSAGES

An officer on appointment is provided with free passage to India The families of officers who are married prior to the date of the officers embarkation on first appointment will also be provided with free passage to India subject to the payment of messing charges Officers and their families are also eligible for passage concessions under which they are granted a certain number of return passages home at Government expense during their service

INSTRUCTION PRIOR TO EMBARKATION

Officers are required to undergo courses of instruction at the Royal Army Medical College and at Aldershot, lasting approximately three months prior to their embarkation for India on first appointment. Information as to the rates of pay admissible during this period and subsequently up to arrival in India is contained in the memorandum referred to below

A memorandum giving full details regarding these appointments and forms of application may be obtained from the UNDER SECRETARY OF STATE FOR INDIA MILITARY DEPARTMENT INDIA OFFICE, LONDON S W 1 The Selection Committee will meet at the India Office on 11th October 1938 next and the selected candidates unless seconded for hospital appointment, will be required to join a course of instruction commencing on 1st November prior to sailing for India in February 1939 Applications should reach the India Office as soon as possible

INDIA OFFICE, SEPTEMBER, 1938.

IRAQ GOVERNMENT

APPOINTMENT OF EAR NOSE AND THROAT SPECIALIST

The Iraq Government invite applications from British Specialists for the above appointment of which the following are the particulars

Duties—To be LECTURER on Ear Nose and Throat diseases in the Royal College of Medicine Baghdad and CHIEF of one of the Units to these diseases at the ROYAL HOSPITAL BAGHDAD

Salary—Iraq Dinars 150 per mensem

Age must not exceed 45 years The successful candidate will be required to enter into contract for a period of five years Consultant practice is allowed provided that it does not interfere with the performance of official duties The teaching is the Medical College is in the English language

One Iraq dinar is equivalent to one pound sterling Salary will be subject to Iraq income tax which is 150 dinars exempt the next 150 dinars subject to 6 per cent tax and the remainder of the income 9 per cent

Forms of application and copies of the form of contract can be obtained from the Iraq Minister Royal Iraq Legation 22 Queen's Gate London S W 7 Particulars as to the Provident Fund leave and passage allowance are given in the form of contract No application can be considered unless received on the prescribed form

GOVERNMENT OF INDIA

Applications are invited for the appointments of

(a) PROFESSOR OF MALARIOLOGY AND RURAL HYGIENE (including VENEREOLOGY AND TUBERCULOSIS) and

(b) PROFESSOR OF VITAL STATISTICS AND EPIDEMIOLOGY

at the All India Institute of Hygiene and Public Health Calcutta Terms applicable to both appointments

Appointment for five years in first instance extensible at discretion of Government of India Pay (monthly) Rs 1 200 rising by biennial increments of Rs 50 to Rs 1 500 plus Overseas Pay of £30 a month (Rupee = 1s 6d approx) Free first class passage to India and return passage on satisfactory termination of services Provident Fund (Overseas Pay and return passage admissible only to appointees of non Asiatic domicile)

Officers of the Indian Medical Service and of Indian Provincial services are eligible to apply Special terms and conditions will be applicable to appointees from those categories

Further particulars and forms of application may be obtained on application by postcard from the High Commissioner for India General Department India House Aldwych London W C 2 Last date for receipt of applications October 21st 1938

CITY OF PORTSMOUTH

SAINT MARY'S MUNICIPAL HOSPITAL (1 050 Beds)

Applications are invited for the appointment of a JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER Applicants must be single gentlemen duly qualified and registered not exceeding 30 years and must have had at least one year's experience of hospital work Experience in anaesthetics will be an additional qualification The appointment is limited to a term of one year and the salary will be £250 per annum with residential emoluments valued at £125 per annum The appointment includes service at any institution belonging to the City Council and will be subject to termination by one month's notice on either side A resident Medical Superintendent is in attendance

Application forms may be obtained from and must be returned to the Medical Officer of Health the Guildhall Portsmouth not later than Monday September 26th 1938

Canvassing either directly or indirectly will be deemed a disqualification

F J SPARKS
Town Clerk

The Guildhall
Portsmouth
September 5th 1938

COUNTY MENTAL HOSPITAL
Whittingham near Preston

The Joint Committees of Lancaster and Whittingham Mental Hospital invite applications for the post of DENTAL SURGEON The appointment is a whole time one the salary £600 per annum rising by annual increments of £25 to £600 per annum The appointment may be terminated by one month's notice on either side

Annual leave three weeks

The appointment is subject to the provisions of the Asylums Officers Superannuation Act 1909

The duties to be performed under the direction of the Medical Superintendents of the respective hospitals and the place of residence be approved by the Committees Third-class travelling expenses between the two Hospitals or allowance of motor car mileage in lieu

The successful candidate will be required to pass a medical examination

Applications should be addressed to the Medical Superintendent County Mental Hospital Whittingham near Preston and should be delivered not later than Saturday October 1st 1938

COUNTY OF DORSET

MEDICAL OFFICER OF HEALTH

for Wareham Borough the Wareham and Purbeck Rural District and the Swanage Urban District

and

ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from medical practitioners not exceeding 40 years of age for the joint whole time appointment of Assistant County Medical Officer and Medical Officer of Health for the Wareham Borough the Wareham and Purbeck Rural District and the Swanage Urban District (population about 25 000)

The salary for the combined appointment will be £600 per annum together with a travelling allowance of £50 per annum and necessary out of pocket expenses according to the scales now in force

Applicants must be qualified in accordance with Article 8 of the Sanitary Officers (outside London) Regulations 1935 and hold the Diploma in Public Health or similar qualification

The candidate appointed will as regards his duties as Assistant County Medical Officer act under the direction of the County Medical Officer of Health and will be required to perform such duties as may be from time to time prescribed As regards his duties as Medical Officer of Health he will be subject to the control and direction of the District Councils concerned

The post will be designated under the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination He will also be required to reside within the area for which he is Medical Officer of Health and to take up his appointment as soon as possible

Candidates must apply on the prescribed form to be obtained from the undersigned by whom applications accompanied by copies of not more than three recent testimonials must be received not later than Friday September 30th 1938

Canvassing in any form will be a disqualification

C P BRUTTON
Clerk of the County Council

County Offices Dorchester
September 9th 1938

MIDDLESEX COUNTY COUNCIL

NORTH MIDDLESEX COUNTY HOSPITAL
Silver Street Edmonton N 18

Three Junior Resident ASSISTANT MEDICAL OFFICERS required—must be registered medical practitioners having held resident appointment in general hospital Duties in one case mainly obstetrical and gynaecological and in two remaining cases medical and surgical

Salary £150 p a with board lodging and laundry valued at £100 p a Appointments at present non pensionable are subject to medical examination and are for six months and may be extended further six months

Whole time appointments inclusive salaries and any fees received to be paid over to the County Council Work to be carried out under supervision of Medical Superintendent of Hospital and to include such duties as the County Council may from time to time direct Appointments held during pleasure of Council and terminable by one month's notice on either side

Applications stating age qualifications and experience enclosing copies of not more than three recent testimonials to be received by the undersigned in envelope endorsed A M O—N Mdx by September 23rd 1938 Forms not provided *Relationship to members or officers of County Council to be disclosed* and canvassing directly or indirectly disqualifies

C W RADCLIFFE Z
Clerk of the County Council

Guildhall
Westminster S W 1

COUNTY BOROUGH OF DEWSBURY

EDUCATION COMMITTEE

ASSISTANT SCHOOL DENTIST

The Education Committee invite applications from qualified and registered Dental Practitioners (men or women) for the post of Assistant School Dentist who will be responsible under the School Medical Officer for the Dental Inspection and Treatment of School Children and there will be in addition a certain amount of work in connection with Tuberculosis and Maternity and Child Welfare

The person appointed will be required to devote whole time to the duties of the office The salary attached to the post will be £440 per annum The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1922 and the successful candidate will be required to pass a medical examination Forms of application and list of duties may be obtained from the School Medical Officer Dr J F GALLOWAY Municipal Buildings Halifax Road Dewsbury and should be returned to me accompanied by three recent testimonials not later than first post on Thursday September 22nd 1938

Municipal Buildings LESLIE EMMERSON
Halifax Road Dewsbury Education Officer

MIDDLESEX COUNTY COUNCIL

APPOINTMENT OF MEDICAL STAFF

1 RESIDENT ASSISTANT MEDICAL OFFICERS

Salary £400 p a rising annually by £25 to £475 p a with board lodging and laundry valued at £100 p a The appointments are for period of four years only but in special cases the Council may decide to retain an officer on established staff with a maximum salary of £500 p a Contribution to superannuation fund compulsory subject to medical examination

Required at—

(a) CENTRAL MIDDLESEX COUNTY HOSPITAL Willesden N W 10

Previous resident medical appointments in general hospital and Diploma in Psychological Medicine are necessary

(b) WEST MIDDLESEX COUNTY HOSPITAL Isleworth

Previous resident appointments in general hospitals and experience in clinical medicine are necessary

(c) COUNTY SANATORIUM CLARE HALL Barnet

Candidates must be single men with previous resident hospital appointments Practical experience in diagnosis and treatment of tuberculosis desirable

2 RESIDENT CASUALTY MEDICAL OFFICER required at REDHILL COUNTY HOSPITAL Edgware to deal with casualties and admissions to the Hospital

Considerable all round experience necessary including previous posts as House Physician and House Surgeon in general hospitals

Salary £340 p a with board lodging and laundry valued at £100 p a The appointment is for six months in first instance and may be extended further six months Contributions to superannuation fund may be necessary

3 TWO JUNIOR RESIDENT ASSISTANT MEDICAL OFFICERS having held resident medical and/or surgical appointments in a general hospital required at REDHILL COUNTY HOSPITAL Edgware

Salary £250 p a with board lodging and laundry valued at £100 p a Appointment for six months in first instance and may be extended further six months Contribution to superannuation fund may be necessary

Conditions of Service—Successful candidates will work under supervision of their respective Medical Superintendent Whole time official duties including such duties as County Council may from time to time direct Salaries inclusive—any fees received must be paid over to Council Appointments subject to medical examination and held during pleasure of Council terminable by one month's notice on either side

Applications stating age qualifications and experience with copies of not more than three recent testimonials should reach the undersigned by October 1st 1938 in envelopes endorsed with name of institution and post applied for Relationship to any member or officer of Council to be disclosed and canvassing direct or indirect disqualifies No application forms

C W RADCLIFFE Z
Clerk of the County Council

Middlesex Guildhall
Westminster S W 1
September 5th 1938

SURREY COUNTY COUNCIL

TUBERCULOSIS OFFICER

Applications are invited for the post of Tuberculosis Officer which is a designated post under the Local Government and Other Officers Superannuation Act 1922 and the appointment will be subject to a satisfactory medical examination Salary £750 per annum rising by biennial increments of £50 to £950 per annum together with travelling expenses in accordance with the Council's scale

Candidates must be registered medical practitioners and have held resident appointment in a general hospital for at least six months and have had special practical experience in the diagnosis and treatment of tuberculosis in sanatoria or otherwise

The officer appointed will be required to devote his whole time to his official duties to work under the administrative control of the County Medical Officer of Health and to reside in such district as may be required The duties will include the charge of tuberculosis dispensaries the arrangement for the treatment of tuberculous patients otherwise than in sanatoria and such other duties as the Council may direct

The appointment is terminable by three months' notice on either side

Applications stating age qualifications and experience together with copies of not more than three recent testimonials must be sent to the County Medical Officer of Health County Hall Kingston upon Thames from whom further particulars may be obtained See also Forms of application are not supplied Envelopes to be endorsed Tuberculosis Officer

Canvassing directly or indirectly will be a disqualification

The last date for receipt of applications is first post on Monday September 26th 1938

DUDLEY ADAMS
Clerk of the County Council

County Hall
Kingston upon Thames
September 5th 1938

SURREY COUNTY COUNCIL

ASSISTANT MEDICAL OFFICER

Applications are invited for the appointment of an Assistant Medical Officer (male) Applicants must possess a qualification in Public Health The main duties will be in connection with the School Medical and Maternity and Child Welfare Services but the officer appointed will be required to undertake such other Public Health duties as may be allotted to him He will be attached to the staff of the County Medical Officer of Health who is also the County Education Officer for Surrey and will be stationed at Kingston-on-Thames

Salary £600 per annum by annual increments of £30 to £700 per annum Travelling expenses in connection with the duties will be allowed

The appointment will be subject to the approval of the Ministry of Health and to the Board of Education to the successful completion of a medical examination, to the provisions of the Local Government Superannuation Act 1937 and to the Medical Officers (Qualifications) Rules 1935 which prescribe that the appointment may be determined at any time by three months notice

Applications must be delivered not later than the first post on Monday September 26th 1938 and must be endorsed "Assistant Medical Officer" They should be addressed to the undersigned from whom forms of application may be obtained

Canvassing directly or indirectly disqualifies

DUDLEY AUKLAND
County Hall Clerk of the County Council
Kingston-upon-Thames
September 6th 1938

GLOUCESTERSHIRE

South Gloucestershire United District (Medical Officer of Health) Officer 1938

Applications are invited from registered Medical Practitioners for a Medical Officer who will act as MEDICAL OFFICER OF HEALTH for the area comprising the Dursley Rural District and the Thornbury Rural District in the County of Gloucester and Assistant Medical Officer of the County Council of Gloucestershire for the purpose of school inspection only

The person appointed must be qualified in accordance with Article 6 of the Sanitary Officers (outside London) Regulations 1935

The salary for the combined appointments will be £600 per annum rising by four annual increments to £640 per annum with a car allowance for travelling and office and the expenses thereof of £150 per annum

The officer appointed will be required to reside in the area between Thornbury and Dursley to devote his whole time to the duties of the above mentioned appointments and he will be restricted from engaging in private practice

The successful candidate must pass satisfactorily a medical examination and the appointments are subject to the provisions of the Local Government and Other Officers' Superannuation Act 1937

Applications stating age qualifications and experience must reach me the undersigned accompanied by copies of three recent testimonials not later than September 26th 1938

JOHN G WICKS
Clerk to the Joint Committee
Thornbury Bristol
August 18th 1938

LANCASHIRE COUNTY COUNCIL

PARK HOSPITAL DAVYHULME
near Manchester

APPOINTMENT OF JUNIOR RESIDENT MEDICAL OFFICER

Applications are invited from registered male Medical Practitioners for the appointment of Junior Resident Medical Officer at the above Hospital Candidates must be unmarried

Salary £250 per annum together with the usual residential allowances

The appointment will in the first instance be for a period of six months the successful applicant being eligible for reappointment for a further period of six months at the end of that period

The Hospital comprises 600 beds for acute cases is fully equipped in every respect and is recognized as a complete training school for nurses

The appointment will be terminable by one months notice on either side

Forms of application may be obtained from the County Medical Officer of Health Hospital and Medical Department County Offices Preston to whom all applications accompanied by copies of not more than two recent testimonials must be forwarded so as to be received not later than Friday September 30th 1938

GEORGE ETHERTON
Clerk of the County Council
County Offices Preston
September 5th 1938

CITY OF BIRMINGHAM MENTAL HOSPITAL

WINSON GREEN DIVISION

DEPUTY MEDICAL SUPERINTENDENT

The Committee of Visitors invite applications from suitably qualified medical men for the position of Deputy Medical Superintendent of the Winson Green Division at a commencing salary of £625 per annum plus residential emoluments consisting of uniform board quarters coal light and laundry all of the present estimated purposes at £140 per annum The above emoluments are for a married man but for a man not married they will consist of board and lodging and laundry

Applicants must have had several years experience in Mental Hospital practice and must possess the Diploma in Psychological Medicine Six months has had first or last six months a medical or surgical appointment in a General Hospital will be regarded as having an additional qualification The successful candidate must be a British subject

The candidate appointed will be required to pass a medical examination and to contribute under the Asylums Officers Superannuation Act 1909 He must live in the house of the Institution and will not be permitted to engage in any other work

All fees received in connection with particulars will be required to be paid into the Branch Fund but for making insurance reports reports on compensation cases and Coroners inquests the fees can be retained

Applicants who have had at least six months a medical or surgical resident appointment in a General Hospital will be regarded as having an additional qualification Previous mental hospital experience is not essential but experience in the administration of anaesthetics is desired

The candidate appointed will be required to pass a medical examination and will be placed on the permanent staff after one years satisfactory service when she will be required to contribute under the Asylum Officers Superannuation Act 1909 She will be required to reside in such an institution belonging to the Mental Hospital Committee as they may from time to time direct The appointment is subject to one months notice on either side

Applications stating full particulars of qualifications experience and appointments held accompanied by copies of three recent testimonials must be addressed to the undersigned so as to be received not later than September 26th 1938 Canvassing either directly or indirectly will be a disqualification

TOM CLERK'S OFFICE F H C WILTSHIRE
Council House Clerk to the Committee
Birmingham 1 of Visitors

CITY AND COUNTY OF NEWCASTLE UPON TYNE

APPOINTMENT OF ASSISTANT CHILD WELFARE MEDICAL OFFICER
(Male or Female)

Applications are invited from duly registered Medical Practitioners for the post of Assistant Child Welfare Medical Officer The person appointed will take part in the ordinary routine work of the child welfare centres but will not be required to assist in the working of the maternity services

Applicants will be required to have held a post as House Physician in a recognized teaching hospital (General or Children) and some experience of methods of medical or pathological research is desirable The possession of the Diploma in Child Health granted jointly by the Royal College of Physicians and the Royal College of Surgeons will be regarded as an additional qualification Salary £600 rising to £700 per annum by annual increments of £25

The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1937 and the successful candidate will be required to pass the necessary medical examination

Applications on the prescribed form which can be obtained on application to the Medical Officer of Health Health Department Town Hall Newcastle upon Tyne 1 must be submitted not later than Friday September 30th 1938

COUNTY BOROUGH OF ROCHDALE

PUBLIC HEALTH DEPARTMENT

The Health Committee invite applications from fully qualified registered Medical Practitioners (unmarried) for the appointment of Senior (male) ASSISTANT RESIDENT MEDICAL OFFICER at the Birch Hill Hospital (475 beds Medical Surgical and Children and Maternity)

Previous hospital experience including maternity and surgical work is essential

The appointment will include certain services in connection with the adjoining Public Assistance Institution

The salary will be at the rate of £300 per annum rising by annual increments of £25 to £400 per annum together with board residence and laundry emoluments valued at £100 per annum

The candidate appointed will be required to pass the Council's Medical Examination and will be subject to the provisions of the Local Government Superannuation Act 1937

Application must be made on the prescribed forms which may be obtained on application to the Medical Officer of Health and returned addressed to him at the Public Health Offices Baillie Street Rochdale not later than Thursday September 22nd 1938

Town Hall HARRY BANN
Rochdale Town Clerk
September 3rd 1938

CITY OF BIRMINGHAM MENTAL HOSPITAL

WINSON GREEN DIVISION

JUNIOR LADY ASSISTANT MEDICAL OFFICER

The Committee of Visitors invite applications from single ladies who are duly qualified and registered Medical Practitioners for the post of Junior Lady Assistant Medical Officer The successful candidate will be required to reside in the Hospital

The commencing salary will be £230 per annum plus the usual residential emoluments of board lodging laundry and attendance An increase of £30 will be granted on completion of twelve months satisfactory service and thereafter increases of £30 per annum up to a maximum salary of £450 per annum An additional £50 per annum will be paid to a holder of the D P M after appointment All fees received in connection with part work will be required to be paid into the Borough Fund but for making insurance reports reports on compensation cases and Coroners inquests the fees can be retained

Applicants who have had at least six months a medical or surgical resident appointment in a General Hospital will be regarded as having an additional qualification Previous mental hospital experience is not essential but experience in the administration of anaesthetics is desired

The candidate appointed will be required to pass a medical examination and will be placed on the permanent staff after one years satisfactory service when she will be required to contribute under the Asylum Officers Superannuation Act 1909 She will be required to reside in such an institution belonging to the Mental Hospital Committee as they may from time to time direct The appointment is subject to one months notice on either side

Applications stating full particulars of qualifications experience and appointments held accompanied by copies of three recent testimonials must be addressed to the undersigned so as to be received not later than September 26th 1938 Canvassing either directly or indirectly will be a disqualification

TOM CLERK'S OFFICE F H C WILTSHIRE
Council House Clerk to the Committee
Birmingham 1 of Visitors

COUNTY BOROUGH OF DEWSBURY

ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from qualified and registered medical practitioners for the appointment of Assistant Medical Officer of Health and Assistant School Medical Officer

Applicants should have had at least three years experience since qualification and possess the D P H Experience in city work and refresher course desirable The duties are in connection with School Medical work Child Welfare and Tuberculosis and there are also opportunities for experience in general Public Health work

The salary (£300) per annum rising by annual increments of £25 to £400 per annum The appointment will be subject to the provisions of the Local Government and Other Officers Superannuation Act 1937 and the successful candidate will be required to pass a medical examination

Particulars of the duties and terms and conditions of the appointment to either with application form may be obtained from Dr J F Galloway Medical Officer of Health Public Health Department Municipal Buildings Halifax Road Dewsbury to whom applications accompanied by copies of not more than three recent testimonials should be delivered not later than Thursday September 22nd 1938

Canvassing in any form will be a disqualification.

Town Hall HOLLAND BOOTH
Dewsbury Town Clerk
September 3rd 1938

CITY OF MANCHESTER

MONSALL HOSPITAL FOR INFECTIOUS DISEASES (600 Beds)

The Public Health Committee invites applications from registered medical men for the post of JUNIOR RESIDENT ASSISTANT MEDICAL OFFICER (Grade II) at the above named hospital

Preference will be given to applicants who have held resident surgical and medical posts in a general hospital and have had special experience in bacteriology

Salary £250 per annum with board residence and laundry in addition subject to the Manchester Corporation conditions of service

The appointment will be made in the first instance for a period of six months renewable for a further six months but not renewable thereafter

Full information and forms of application may be obtained from the Medical Officer of Health Town Hall Manchester 2 and applications for the post must be received by him not later than September 24th 1938

Town Hall F E WARBRECK HOWELL
Manchester 2 Town Clerk
September 6th 1938

LONDON COUNTY COUNCIL

Applications invited from Medical Practitioner of at least one year's standing to undermentioned positions Candidates must have held resident appointment in a general hospital for at least six months Married quarters not available

ASSISTANT MEDICAL OFFICERS (Grade I) – Salary £350 £25 £425 with board lodging and washing

(a) LAMBETH HOSPITAL Brook Drive Kennington Road S E 11 —Medical duties experience in diseases of children and anaesthetics desirable

(b) ST GILES HOSPITAL St Giles Road Camberwell S E 5 —General duties surgical experience desirable

*(c) ST NICHOLAS HOSPITAL Plumstead S E 18 —Duties mainly medical experience in tuberculosis and obstetrics desirable

ASSISTANT MEDICAL OFFICERS (Grade II) —Salary £250 a year together with board lodging and washing Appointment for one year only in first instance (renewable for a second year under certain conditions)

(d) ARCHWAY HOSPITAL Archway Road Highgate N 19 —Duties mainly medical

(e) FULHAM HOSPITAL St Dunstan's Road Hammersmith W 6

*No accommodation for a woman

† Appointee may be required to be non resident

(f) HIGHGATE HOSPITAL Dartmouth Park Hill N 19 —(Two positions)

(g) MILE END HOSPITAL Bancroft Road Mile End E 1

(h) ST ALFEGE'S HOSPITAL 48 Vanbrugh Hill Greenwich S E 10

Duties of the above positions are medical experience in anaesthetics desirable

(i) ST MARY ISLINGTON HOSPITAL High Gate Hill N 19 —Duties maternity and gynaecological obstetrical experience essential

(j) ST OLAVE'S HOSPITAL Lower Road Rotherhithe S E 16 —General medical duties experience in anaesthetics and obstetrics desirable

(k) ST STEPHEN'S HOSPITAL 369 Fulham Road S W 10 —Duties mainly medical and anaesthetics

Application forms obtainable (stamped addressed foolscap envelope necessary) from Medical Officer of Health Staff Division 21 County Hall S E 1 returnable by October 3rd

Canvassing disqualifies

NOTTINGHAM CITY HOSPITAL

The Health Committee invites applications from duly qualified medical practitioners for a position as ASSISTANT MEDICAL OFFICER at the above Hospital

The hospital contains 1 000 beds for the treatment of all classes of sick persons It is a recognized training school for nurses and is equipped with all modern requirements

Candidates must have held the post of House Physician or House Surgeon in a general hospital and preference will be given to those having had experience in a similar institution Experience in the administration of anaesthetics is also desirable

The salary will be £350 per annum rising by annual increments of £25 to £450 with rations and furnished apartments Quarters for married men are not available

The successful candidate will be required to pass a medical examination and to contribute to the Corporation Superannuation Fund The appointment is terminable by one month's notice on either side

Forms of application together with particulars of duties may be had from the undersigned to whom application with copies of not more than three recent testimonials and endorsed Medical Officer should be forwarded not later than October 1st 1938

Guildhall J E RICHARDS
Nottingham Town Clerk
September 15th 1938

THE ROYAL GWENT HOSPITAL
Newport Mon
(210 Beds Six Residents Two of these posts are recognized by the Royal College of Surgeons for the final Fellowship)

CASUALTY OFFICER required previous experience essential from September 26th next to April 30th 1939 Salary at the rate of £1 0 per annum with board residence and laundry

Applications stating age nationality and experience together with copies of three testimonial should be forwarded to the undersigned as early as possible

ALAN RUDDLE
Secretary Superintendent

(Newport is 2½ hours by train from London)

MANCHESTER ROYAL EYE HOSPITAL
Oxford Road Manchester

OUT PATIENT MEDICAL OFFICER required on October 1st Applicants must be fully qualified Medical Practitioners and must also have a good knowledge of refraction work Salary £400 per annum Morning work only

Applicants with three recent testimonials to Matron's assistment and as early as possible

H R NORTH
Gen Supt and Secretary

THE KING EDWARD VII WELSH NATIONAL MEMORIAL ASSOCIATION

Applications are invited from duly registered medical practitioners (male or female single) for the following posts at the Glan Ely Hospital (196 beds for pulmonary and surgical tuberculosis in men women and children) Fairwater near Cardiff

(a) RESIDENT MEDICAL OFFICER Salary £350 per annum plus maintenance Applicants should have held the post of House Physician or House Surgeon at a general hospital and have had institutional experience in the treatment of pulmonary tuberculosis

(b) ASSISTANT RESIDENT MEDICAL OFFICER Salary £200 per annum plus maintenance

Both appointments are tenable for one year

Applications stating age qualifications and experience together with copies of three recent testimonials should reach the undersigned not later than Thursday September 22nd 1938

Memorial Offices D A POWELL
Westgate Street Principal Medical Officer
Cardiff

NORTHWOLD (NORTH HACKNEY) SCHOOL TREATMENT CENTRE

Applications are invited for the following temporary positions at the Northwold (North Hackney) School Treatment Centre 8-9 Rossendale House Northwold Estate E 5

(a) MEDICAL OFFICER (for minor ailments in children) for one session (2 hours) a week during school terms Salary £66 per annum

(b) DENTAL ANAESTHETIST for one session (2½ hours) a fortnight during school terms Salary £37 10s per annum

(c) The services of an OCULIST (mainly for refraction work) for one session (2½ hours) a week during school terms Salary £60 per annum

Applications giving particulars of qualifications and experience should be sent to Mr W J Walters 44 Amhurst Park N 16 by September 26th 1938

COUNTY BOROUGH OF PRESTON

SHAROE GREEN HOSPITAL (250 Beds)

JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER (Female)

Applications are invited from fully qualified and registered practitioners for the above appointment Salary at the rate of £100 per annum with full board and residence The appointment will be for a period of six months and can be renewed for a period not exceeding six months

Applications stating age qualifications and experience together with copies of three recent testimonials should reach the Medical Superintendent not later than first post on October 1st 1938

WEST BROMWICH AND DISTRICT GENERAL HOSPITAL (INCORPORATED)
(140 Beds increasing to 210 Beds)

Applications are invited for the posts of (1) HOUSE PHYSICIAN and (2) CASUALTY HOUSE SURGEON (males) Candidates must be doubly qualified and unmarried Salaries at the rate of £200 per annum with board residence and laundry

The appointments are for six months and the candidates appointed will be required to take up their duties on October 1st next

Applications stating age and qualifications with copies of recent testimonials should be sent to the undersigned on or before September 23rd 1938

C J ADAMS
House Governor and Secretary
September 12th 1938

HULL AND SCULCOATES DISPENSARY

Applications are invited for the appointment of a MEDICAL OFFICER to devote the whole of his time to the work of the Institution at a salary of £400 per annum

Applications with copies of testimonials stating age and qualifications to be sent to the undersigned on or before September 22nd

By Order
1 Parliament Street I D McILWRAITH
Hull Hon Secretary

KING EDWARD VII HOSPITAL WINDSOR
(100 Beds)

HOUSE PHYSICIAN required for six months from October 4th 1938 Applicants must be fully qualified men or women registered and unmarried Salary at the rate of £150 per annum together with board residence and laundry

Applications stating age qualifications and experience accompanied by testimonials to be sent to the undersigned not later than September 23rd

V E CHURCHER Secretary

CITY OF LIVERPOOL

MILL ROAD INFIRMARY

DEPUTY MEDICAL SUPERINTENDENT AND SENIOR OBSTETRICAL AND GYNAECOLOGICAL OFFICER

Applications are invited for the appointment of a full time Resident Deputy Medical Superintendent and Senior Obstetrical and Gynaecological Officer for the Mill Road Infirmary (769 beds) at a salary of £450 rising by two annual increments of £25 to £500 per annum together with the usual residential allowances

The main duties of the Officer appointed would be in connexion with the obstetrical and gynaecological departments 1 400 deliveries take place annually in the Maternity Department

Applicants must be single possessing one of the higher qualifications in medicine or surgery and have had considerable experience since qualification

The person appointed will be required to assist the Medical Superintendent in the administration of the Hospital training of nurses etc and will deputise for the Medical Superintendent when required

Any fees received in connexion with the appointment to be handed over to the City Council

Applications upon forms obtainable from the Medical Officer of Health Hospitals Department Municipal Annexe Liverpool to be endorsed Deputy Medical Superintendent and returned to the undersigned so as to be received not later than Wednesday October 5th 1938

Canvassing members of the City Council will be regarded as a disqualification

Municipal Buildings W H BAINES
Liverpool 2 Town Clerk
September 1938

HULL CORPORATION HEALTH DEPARTMENT

HULL MUNICIPAL MATERNITY HOME AND INFANTS HOSPITAL (116 Beds)

JUNIOR RESIDENT MEDICAL OFFICER (Woman)

Applications are invited from unmarried or widowed Women Medical Practitioners for the appointment of Junior Resident Medical Officer at the above Institution Salary £100 per annum together with board washing and residence at the Maternity Home The appointment will be for six months with a possible extension for a further period of six months

Applications on forms to be obtained from the undersigned are returnable not later than Saturday October 1st 1938

NICOLAS GEBBIE M D
Health Department Medical Officer of Health
Guildhall Hull
September 1938

KING'S COLLEGE NEWCASTLE UPON TYNE
(University of Durham)

DEPARTMENT OF BACTERIOLOGY

Applications are invited for the vacant post of DEMONSTRATOR IN BACTERIOLOGY The salary offered is £300 per annum and the successful applicant will be expected to take up his duties as soon as possible

The demonstratorship which is a whole time appointment is tenable for the period to September 30th 1939 and does not lead to appointment on the permanent staff of the Department In special circumstances however a demonstrator may be reappointed for a second or at most a third year

Applications stating age qualifications and experience and giving the names of two persons to whom reference may be made should be lodged with the undersigned not later than Saturday October 1st 1938

King's College W G B OLIVER
Newcastle upon Tyne 2 Registrar
September 1938

CHESHIRE COUNTY COUNCIL

Clatterbridge (County) General Hospital (near Birkenhead)

JUNIOR RESIDENT ASSISTANT MEDICAL OFFICER (Male)

Applications are invited for the above appointment which is for a period of six months at a salary of £250 per annum together with board residence and laundry allowances

The appointment may be terminated at a shorter period of six months

There is a Non resident Medical Superintendent a Resident Deputy Medical Superintendent and a Consulting Staff from Teaching Hospitals

Applications to be made on forms obtainable from the undersigned and returned not later than September 25th 1938

IAN MACKAY
County Medical Officer of Health
County Public Health Department
24 Nicholas Street Chester

KING EDWARD MEMORIAL HOSPITAL
Ealing (145 Beds)

Applications are invited for the posts of RESIDENT MEDICAL OFFICER (male) Work mainly surgical Six months appointment with possibility of re-election for a further period Salary £175 per annum with board residence and emoluments Applicants must have had at least one year (preferably two years) in House appointments

HOUSE SURGEON (male) to assist in the Eye Gynaecological and Ear Nose and Throat Departments Six months appointment with possibility of re-election for a further period Salary £150 per annum with board residence and emoluments

Applicants should have experience and qualifications and a knowledge of anaesthetics Copies of two recent testimonials to be sent to the undersigned not later than (at least two years) in House appointments

R A MICKELWRIGHT
House Governor

METROPOLITAN HOSPITAL
Kingsland Road E8 (110 Beds)

There are vacancies for the following appointments —

SENIOR HOUSE PHYSICIAN
SENIOR HOUSE SURGEON
JUNIOR HOUSE PHYSICIAN
JUNIOR HOUSE SURGEON
MALES Salary £150 p a

Appointment in the first instance will be for a period of six months but a further appointment will be considered and if satisfactory will be confirmed

Forms of application must be obtained from the undersigned and returned duly completed by September 24th Past members of the Resident Staff are candidates for the two senior appointments

FRANK JENNINGS
House Governor and Secretary

HOSPITAL OF ST JOHN AND ST ELIZABETH
60 Grove End Road N W 8

Applications are invited for the post of RESIDENT HOUSE SURGEON (male) The post is recognized for the degree of M S London University The appointment will be for six months from November 1st 1938 Salary at the rate of £75 per annum with full board

Applications to either with copies of three testimonials should reach the undersigned not later than September 30th

Applicants will be required to attend a meeting of the Medical Committee at 8 30 p m on October 4th at the Hospital

I DUDLEY HOBBS B A
Secretary

BATTERSEA GENERAL HOSPITAL
London S W 11 (165 Beds)

Applications are invited for the post of CASUALTY OFFICER (part time—four mornings a week) at a salary of £60 per annum Candidates must be fully qualified and registered and preference will be given to candidates working for a higher medical or surgical degree The appointment is for a period of six months and the successful candidate will be required to commence duty on November 1st 1938

Applications with copies of two testimonials to be sent to the Secretary not later than September 28th 1938

EVELINA HOSPITAL FOR SICK CHILDREN
Southwark S E 1

Applications are invited for the post of HOUSE PHYSICIAN (male) for six months from Oct ber 1th (first two months in the Casualty and Out patient Department) Salary at the rate of £120 per annum with board and residence

Applications with copies of three recent testimonials should be sent to the undersigned from whom particulars can be obtained not later than first post on Tuesday September 20th

W H SIDNELL House Governor

KING GEORGE HOSPITAL ILFORD
near London (407 Beds)

RESIDENT ANAESTHETIST (male) required for six months from October 1st Salary at the rate of £150 per annum Forms of application may be obtained from the undersigned to whom they should be returned duly completed by September 23rd

G AUSTIN HEPWORTH
Secretary and Superintendent

KING EDWARD MEMORIAL HOSPITAL
Ealing (145 Beds)

Applications are invited for the appointment of CONSULTING PHYSICIAN FOR DISEASES OF CHILDREN

Particulars may be obtained from the undersigned

R A MICKELWRIGHT
House Governor

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL
Holborn London W C 1

Applications are invited for the appointment of THIRD HOUSE SURGEON (male) required for November 1st for six months Salary at the rate of £100 per annum with board residence and laundry

At the end of this period of six months the second house surgeon will be promoted to the next higher grade then for a further six months as First House Surgeon and RMO to the Staff if recommended by the Medical Committee

Non Candidates must be duly qualified Medical Practitioners registered in this country and must have had experience in Ophthalmology Intending candidates should call upon the members of the House Staff at the Hospital

Applications accompanied by copies of testimonials are to be sent to the Secretary (from whom further particulars can be obtained) on or before September 6th 1938

ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road London S W 3

Applications are invited for the two posts of FULL TIME ASSISTANT RADIOLOGISTS at the Hospital One for the Diagnostic Department and one for the Therapeutic Department

Applicants must be Registered Medical Practitioners who hold a Diploma in Radiology

The appointment will be for one year commencing on October 1st 1938 at a salary at the rate of £400 per annum each

Applications to be made on a form which will be supplied by the Secretary together with three (copies only) of testimonials should be sent to the Secretary on or before Monday September 19th 1938

CLEMENT COBBOLD Secretary

ROYAL LONDON OPHTHALMIC HOSPITAL
(MOORFIELDS EYE HOSPITAL)
City Road E C 1

Applications are invited for the post of OUT PATIENT OFFICER to attend on Monday and Thursday (mornings) each week Candidates must be Registered Medical Practitioners

Salary at the rate of £100 per annum The Out Patient Officer will be appointed for a period of one year and will be eligible for reappointment

Copies of regulations can be obtained on application

Applications with testimonials stating age and qualifications to either with photograph must be received by the undersigned not later than October 1st 1938

A J M TARRANT
Secretary

ROYAL NORTHERN HOSPITAL
Holloway N 7
(Borough of Islington Tuberculosis Dispensary (North))

Applications are invited for the appointment of TUBERCULOSIS OFFICER (Non-resident) in the above Dispensary vacant on November 7th 1938

Candidates must possess a registered British qualification and have had previous experience in the treatment of Tuberculosis

The appointment is a whole time post with salary at the rate of £700 per annum

Particulars with regard to duties and the submission of testimonials etc may be obtained from the undersigned to whom applications should be sent not later than September 23rd

GILBERT G PANTER Secretary

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St Quintin Avenue North Kensington W 10
(Ladbroke 0133)

The Board of Management invite application for the post of HONORARY ASSISTANT PHYSICIAN with beds Applicants must be graduates of a University and must hold the M R C P (London) and the successful candidate will be required to see Out patients

Application accompanied by copies of three testimonials should be sent to the undersigned at the Hospital from whom any further information can be obtained and should reach him not later than October 1st 1938

H J ELEY
Secretary

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St Quintin Avenue North Kensington W 10
(75 Beds)

HOUSE PHYSICIAN (male) required for six months from October 1st 1938 Salary at the rate of £140 p a for the first three months and £140 p a for the second three months with board residence and laundry

Applications with copies of three recent testimonials must be submitted on a form to be obtained from the undersigned and must reach him not later than Tuesday September 20th 1938

H J ELEY
Secretary

THE HOSPITAL FOR SICK CHILDREN
Great Ormond Street London W C 1

Three OUT PATIENT SURGICAL ASSISTANTS are required *Duties to commence on October 10th 1938* Honorarium £100 per annum The appointment is tenable in the first instance for one year but is renewable Duties will include attendance upon members of the Surgical Staff in the Out Patient Department on two mornings a week

Candidates must possess a legal qualification to practise and have held a responsible resident appointment at a General Hospital Preference will be given to those holding the Fellowship of the Royal College of Surgeons of England

Applications must be received by noon on Monday September 26th 1938 and candidates must be prepared to attend for interview by the Joint Committee at 4 45 p m on Wednesday October 5th 1938 Full instructions and forms of application are obtainable from the undersigned

HERBERT F RUTHERFORD
August 1938 Secretary

THE HOSPITAL FOR SICK CHILDREN
Great Ormond Street London, W C 1

An OUT PATIENT MEDICAL OFFICER (part time and non resident) is required on October 10th 1938 Salary £100 per annum

This appointment is tenable in the first instance for one year but may be held for a period of two years subject to re-election The duties will include those of the former Out Patient Medical Registrar Candidates must possess a legal qualification to practise and have held a responsible resident appointment at a General Hospital

Applications must be received by noon on Monday September 26th 1938 and candidates must be prepared to attend for interview by the Joint Committee at 4 45 p m on Wednesday October 5th 1938 Full instructions and forms of application are obtainable from the undersigned

HERBERT F RUTHERFORD
August 1938 Secretary

THE HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London W C 1

Two HOUSE PHYSICIANS and two HOUSE SURGEONS are required Duties to commence on October 15th 1938 The appointments are tenable for six months Salaries at the rate of £40 per annum Candidates must be unmarried possess a legal qualification to practise and have held a responsible resident appointment at a General Hospital

Applications must be received by noon on Monday September 26th 1938 and candidates must be prepared to attend for interview by the Joint Committee at 4 45 p m on Wednesday October 5th 1938 Further particulars and forms of application are obtainable from the undersigned

HERBERT F RUTHERFORD
August 1938 Secretary

THE GROSVENOR HOSPITAL FOR WOMEN
Vincent Square London S W 1

GYNAECOLOGICAL SURGEON

Applications are invited from Gynaecological Surgeons to fill a vacancy on the Staff of the Hospital for which position the present Chief Assistant will be applying and should he be appointed there will be a vacancy for the post of Chief Assistant Candidates must hold the degree of F R C S (Eng) and their applications together with copies of three recent testimonials should reach the Secretary of the Hospital not later than Monday October 10th

HONORARY ANAESTHETIST Applications are invited for the above appointment Candidates should send particulars as to their qualifications to either with copies of three recent testimonials to the undersigned not later than Monday October 10th

EDWARD DEW
Secretary

SAINT MARY'S HOSPITAL FOR WOMEN AND CHILDREN
Plaistow E 13

Applications are invited for the posts of HONORARY ANAESTHETISTS on Friday mornings (Gynaecological) Monday and Thursday mornings (Dental) Candidates must be duly qualified and registered Applications with copies of three testimonials to be sent as soon as possible to the undersigned

By Order of the Committee
ERNEST WILKES
Secretary

THE WEIR HOSPITAL
Weir Road Balham S W 12
(30 Beds)

SENIOR RESIDENT MEDICAL OFFICER (male unmarried) required October 10th Salary £100 per annum with board residence and laundry Candidates must be fully qualified and duly registered

Applications with copies of three testimonials to be sent to the Secretary from whom further information may be obtained

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association, B M A House, Tavistock Square, W C 1 (in the case of Scottish appointments, with the Scottish Secretary, 7, Drumsheugh Gardens, Edinburgh)

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—*(contd.)*	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY *(Medical Officer)*	MID-RHONDDA MEDICAL AID SOCIETY *(Assistant Medical Officer)*	MIDDLESBROUGH EDUCATION COMMITTEE *(Senior Assistant School Medical Officer)*
BLAENAVON MEDICAL SOCIETY *(Chief Medical Officer)*	NEATH AND DISTRICT *(Medical Aid Association)*	COUNTY OF ROXBURGH *(Assistant Medical Officer of Health)*
GILFACH GOCH GLAMORGAN *(Workmen's Medical Scheme)*	OGMORE VALLEY GLAMORGAN *(Wynnham Colliery Medical Aid Society)* *(Workmen's Medical Scheme)*	**DISPENSARY APPOINTMENTS**
LLWYNYPIA CLYDACH VALE PENYGRAIG GLAMORGAN *(Workmen's Medical Scheme)*	OAKDALE MON *(Medical Officer for Medical Aid Association)*	LIMERICK CITY *(Whole time Dispensary Medical Officers)*

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association, B M A House, Tavistock Square, W C 1

Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch	Town or District	Hon Sec of Division or Branch
NEW SOUTH WALES *(All Friendly Society Appointments)*	The Federal Secretary New South Wales Branch 135 Macquarie Street Sydney N S W	**VICTORIA** *(All Institute or Medical Dispensaries)*	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria	**WESTERN AUSTRALIA** *(Contract and Lodge Practices)*	The Hon Sec Western Australian Branch British Medical Association Shell House 205 St. George's Terrace Perth Western Australia
QUEENSLAND *(Brisbane Associate Friendly Societies Institute)*	The Hon Sec Queensland Branch British Medical Association B M A House 225 Wickham Terrace Brisbane B 17				

September 14, 1938 By Order of the Council G C ANDERSON, *Secretary*

HULL ROYAL INFIRMARY

Applications are invited from registered medical practitioners for the following posts (male) —

1 HOUSE SURGEON TO THE OPHTHALMIC AND EAR NOSE AND THROAT DEPARTMENTS vacant September 2nd The post is recognized for the clinical work required in the regulations for the D O M S and D L O

2 SECOND HOUSE PHYSICIAN vacant September 30th The post is recognized by the University of London for the M D Branch I (Medicine) Examination

Salary (for each post) at the rate of £1 0 per annum plus board residence and laundry

The appointments will be for six months but will be determinable at any time by one month's notice on either side

Applications giving age experience and nationality together with copies of recent testimonials should be sent to the undersigned

R J CARLESS
September 5th 1938 House Governor

HOVE GENERAL HOSPITAL HOVE. (70 Beds)

Applications are invited for the appointment of JUNIOR RESIDENT MEDICAL OFFICER (male) Salary £120 per annum with board quarters and laundry

Applications stating age and qualifications together with three recent testimonials to be forwarded to the undersigned

K C BOOKER
Secretary Superintendent

DARLINGTON MEMORIAL HOSPITAL

Wanted—HOUSE SURGEON for Adult Surgical Wards Previous Surgical experience an advantage Salary £1 0 per annum with board residence and laundry State age qualifications and experience to either with two recent testimonials to be addressed to the undersigned

A RIDDLE
Secretary Superintendent.

ROYAL SALOP INFIRMARY SHREWSBURY (146 Beds (Enlarging to 206 Beds)

APPOINTMENT OF RESIDENT SURGICAL OFFICER

Applications are invited from fully qualified men for the appointment of Resident Surgical Officer vacant immediately

The appointment is for a period of twelve months at a salary of £ 0 per annum with board residence etc The Resident Surgical Officer is Senior Resident Officer of the Hospital

House Staff comprises House Physician and two House Surgeons

Application stating age qualifications experience nationality and accompanied by copies of three recent testimonials to be sent to the undersigned immediately

Board Room J W NOBLE
September 5th 1938 Secretary Superintendent

ROYAL HOSPITAL RICHMOND SURREY

Application to be sent in by September 21st *1938* for the following post

JUNIOR HOUSE SURGEON (male) £100 per annum

Board furnished apartments and laundry Candidates must be fully qualified registered and single Form of application can be obtained from the undersigned

G M EDEN
Secretary Superintendent

DONCASTER ROYAL INFIRMARY (185 Beds)

HOUSE PHYSICIAN (male) required Six House Surgeon are resident Salary at the rate of £150 per annum with residence board and laundry This large industrial area offers excellent opportunities for gaining experience

Applications accompanied by not more than three testimonials to be sent to the undersigned immediately R LANCASTER
Secretary-Superintendent

THE PRINCE OF WALES'S HOSPITAL Devonport
(Formerly Royal Albert Hospital Devonport.)
(64 Beds)

Applications are invited for the post of SENIOR HOUSE SURGEON Salary £130 per annum with board residence and laundry

Duties to commence October 1st Appointment is tenable for six months and is subject to renewal Applicants must be registered under the Medical Acts

The Hospital is officially recognized for the surgical practice required before admission to the Final Fellowship Examination of the Royal College of Surgeons of England

Applications stating age and qualifications with copies of three recent testimonials must reach the undersigned by September 23rd

ARTHUR R CASH
General Supt and Secretary
Prince of Wales's Hospital
Greenbank Road Plymouth
September 5th 1938

THE PRINCE OF WALES'S HOSPITAL, Devonport
(Formerly Royal Albert Hospital Devonport)
(64 Beds)

Applications are invited for the post of JUNIOR HOUSE SURGEON Salary £120 per annum with board residence and laundry

Duties to commence forthwith Appointment is tenable for six months and is subject to renewal or promotion to the senior position when this post becomes vacant Applicants must be registered under the Medical Acts

Applications stating age and qualifications with copies of three recent testimonials to reach the undersigned immediately

ARTHUR R CASH
General Supt and Secretary
Prince of Wales's Hospital
Greenbank Road Plymouth

(Appointments continued on p 57)

CHARGES for ADVERTISEMENTS

CIRCULATION OF THIS ISSUE 11,000 COPIES

CLASSIFIED The *Minimum* charge is 9/-, which covers up to 30 words. Extra words are charged 6d. for 5 words.

Example—25 words would be charged at 9/- for 30. Name and address should be included when counting words for cost.

If *Box Number* is used it should be reckoned as 3 words in the total.

Replies should be addressed separately to each Box No. care of this office.

Advertisements accompanied by remittance should reach this office not later than NOON—TUESDAY for FIRST INSERTION IN CURRENT ISSUE. Please write CLEARLY.

DISPLAYED Whole page £21 and pro rata to one-eighth page. Special positions, dates and rate on application.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

ADVERTISEMENT MANAGER, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, W.C.1

EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA

TOBACCO. GOOD SMOKES at a low price; quality guaranteed. Box of 50 6/3, post free.—Sole Manufacturer: J. J. FREEMAN & CO., LTD., 90 Piccadilly, London, W.1. (GRO. 1599.)

"BIZIM" CIGARETTES

THESE luxurious deliciously satisfying smokes 50's or 100 at 6/3 per 100, 25's 6d. per 1000, post free.—Sole Manufacturers: J. J. FREEMAN & CO., LTD., 90 Piccadilly, London, W.1. (GRO. 1599.)

"SOLACE CIRCLES" TOBACCO

THE finest combination ever discovered of Choice Natural Tobaccos. Every pipeful an indescribable pleasure. 12/6 per ½ lb. tin, post free.—Sole Manufacturers: J. J. FREEMAN & CO., LTD., 90 Piccadilly, London, W.1. (GRO. 1599.)

TYPEWRITING—SPECIALISTS IN TYPING Medical and scientific papers, lectures, theses and books. Shorthand typists always available. Proof reading, indexing.—MARGARET WATSON, LTD., 16 Pilace Chambers, Bridge Street, S.W.1. WHItehall 3639.

TYPEWRITING, DUPLICATING, TRANSLATIONS.—Experts in Medical work. TESTIMONIALS, THESES, etc., accurately copied in style that commands attention.—WOBURN BUREAU, Drayton House, Gordon Street, London, W.C.1 (close B.M.A. House). EUSton 1775.

ASSISTANCIES

WANTED IMMEDIATELY INDOOR AND Outdoor ASSISTANTS for town and country practices with and without view to Partnership. Good salaries offered. State full particulars.—BRITISH MEDICAL BUREAU, 33 Cross Street, Manchester 2.

WANTED NOW INDOOR ASSISTANT FOR seaside town, Cornish Coast. Would suit newly qualified man. Own car an advantage. Interview arranged. Commencing salary £300, car allowance £52.—Address No. 8822, B.M.A. House, Tavistock Square, W.C.1.

WANTED OCTOBER 1st MALE ASSISTANT, married or BHS. Must be interested Branch practice in rural district. Excellent Cricket Club. Salary £300 first annum, £350 second, car allowance. Modern house for. Prospects suitable man.—Address No. 8815, B.M.A. House, Tavistock Square, W.C.1.

WANTED FOR OCTOBER 1st (OR NEAR) Outdoor male ASSISTANT for good-class suburb of Manchester. Salary £350 p.a. to include allowance for own car. State age, nationality and experience. Prospects.—Address No. 8841, B.M.A. House, Tavistock Square, W.C.1.

WANTED OCTOBER 1st 1938 INDOOR male ASSISTANT with view near Manchester. British Protestant. Salary £350 p.a. plus board and lodging and car allowance £52 p.a.—Address No. 8833, B.M.A. House, Tavistock Square, W.C.1.

WANTED OCTOBER 1st OUTDOOR MALE ASSISTANT. British. Mixed general practice South Coast resort. Salary £400, car allowance £52, 3 weeks. Full personal particulars essential. Photo returnable.—Address No. 8810, B.M.A. House, Tavistock Square, W.C.1.

WANTED FOR OCTOBER 1st OR LITTLE later young INDOOR ASSISTANT for practice in Leicestershire. Work light and ample time for reading allowed. Salary offered £300 p.a. Car available.—Address No. 8688, B.M.A. House, Tavistock Square, W.C.1.

WANTED OCTOBER OUTDOOR MALE ASSISTANT. British unmarried. Mixed practice in North little midwifery or night work. Salary £400. Car allowance £52. Applicant to furnish three testimonials and photograph.—Address No. 8819, B.M.A. House, Tavistock Square, W.C.1.

WANTED IN JANUARY 1939 ASSISTANT for large general practice in pleasant town in Natal, S. Africa. Appointments include hospital. Surgery essential. Salary to start at £500 living in or £600 living out.—Address No. 8668, B.M.A. House, Tavistock Square, W.C.1.

WANTED [illegible] MALE ASSISTANT [illegible] Medical [illegible] Cricket [illegible] Salary [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED A [illegible] ASSISTANT [illegible] Salary [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED A [illegible] ASSISTANT (MALE OR FEMALE) [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED A [illegible] ASSISTANT, IRISH [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED A [illegible] ASSISTANT, WELSH OR [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED MALE INDOOR ASSISTANT [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED EXPERIENCED OUTDOOR ASSISTANT [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED INDOOR ASSISTANT, SINGLE, [illegible] in University [illegible] Salary £200 [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED IN SOUTH YORKSHIRE TOWN [illegible] ASSISTANT [illegible] Salary £350 p.a. [illegible] B.M.A. House, Tavistock Square, W.C.1.

WANTED YOUNG SINGLE ASSISTANT early October. Outdoor. Should [illegible] with own car. [illegible] off duty. Golf. Hospital experience essential.—Address No. 8037, B.M.A. House, Tavistock Square, W.C.1.

WANTED SINGLE MALE BRITISH ASSISTANT for Glamorgan Colliery Practice. Salary £400 with rooms and attendance, £50 car allowance. Cottage Hospital. Dispenser and other assistants kept.—Address No. 8418, B.M.A. House, Tavistock Square, W.C.1.

WANTED ASSISTANT OUTDOOR, YORKshire practice. Salary £400 p.a. Car allowance £50. State age, nationality and experience.—Address No. 8830, B.M.A. House, Tavistock Square, W.C.1.

WANTED YOUNG MARRIED ASSISTANT for mixed practice in Midlands. Salary £400 p.a. plus house and car allowance. Reply stating nationality and religion.—Address No. 8840, B.M.A. House, Tavistock Square, W.C.1.

WANTED ASSISTANT WITH VIEW TO PARTNERSHIP in sound practice, East Coast. Panel 3,600, receipts last year £4,190. After preliminary assistantship quarter share at 2 years, purchase. Salary £350 all found. Write giving full particulars.—Address No. 8831, B.M.A. House, Tavistock Square, W.C.1.

WANTED ASSISTANT, WEST WALES. View to Partnership. £350 with house, £50 car allowance. Good opportunity for keen man. Hospital practice available.—Address No. 8847, B.M.A. House, Tavistock Square, W.C.1.

WANTED PART TIME ASSISTANT IN Northern university city to assist at evening surgery (2 hours) and do emergency work. Salary £160 p.a. plus [illegible] between 8 p.m.—9 a.m. Salary £160 p.a. plus board lodgings. Full particulars.—Address No. 8824, B.M.A. House, Tavistock Square, W.C.1.

WANTED MARRIED ASSISTANTSHIP BY MRCS LRCP Englishman aged 34 Experienced Total abstainer—Address No 8734 BMA House Tavistock Square WC1

WANTED ASSISTANT WITH VIEW TO PARTNERSHIP Free from experience of General Practice and married man preferred Suitable house available Large practice and first class partnership in one of West Country Cities—Address No 8581 BMA House Tavistock Square WC1

WANTED PART TIME ASSISTANT NEAR Leeds Woman graduate under 30 for branch School in Yorkshire—Address No 8811 BMA House Tavistock Square WC1

ASSISTANTSHIP WANTED AGED 0 English wife Three years general experience Diploma Public Health—Address No 8849 BMA House Tavistock Square WC1

ASSISTANT WANTED WITH A VIEW TO PARTNERSHIP in a large mixed and very old established general and Industrial practice in Leeds Group of Panel Practices Hospital Appointments Graduate of English medical qualification Excellent experience Preferred Commencement with hospital experience—Address No 8796 BMA House Tavistock Square WC1

ASSISTANT WANTED BRITISH MALE Salary £400 plus car Large Mixed urban and rural practice Midlands Five partners—Address No 8765 BMA House Tavistock Square WC1

ASSISTANT (OUTDOOR) REQUIRED FOR good growing general practice in West Midlands Irish Protestant preferred Two partners Prospect partnership to suitable man Furnish short particulars to—Address No 8859 BMA House Tavistock Square WC1

ASSISTANTSHIP—SCOTTISH GRADUATE aged 30 married some years experience of hospital and general practice wishes assistant ship with view to partnership London or South Coast preferred—Address No 8857 BMA House Tavistock Square WC1

OUTDOOR ASSISTANT WANTED SOUTH west country town with modern cottage hospital Some experience in general practice preferred Share later for suitable man Apply stating full particulars—Address No 8836 BMA House Tavistock Square WC1

OUTDOOR ASSISTANTSHIP WANTED BY Irish Graduate RCS 28 with or without car East End Other Yorkshire or South England Hospital and GP experience—Address No 8816 BMA House Tavistock Square WC1

LADY DOCTOR REQUIRES ASSISTANTSHIP in or near London or South preferred Well experienced GP and hospital Own car if required—Address No 8833 BMA House Tavistock Square WC1

RESIDENT ASSISTANT WANTED WITH A view to possible succession for a very old established practice in a good working-class district of North London Only light duties required Suit middle aged or other practitioner not desiring strenuous work Unequivocal references essential Apply giving fullest particulars—Address No 8739 BMA House Tavistock Square WC1

SENIOR PRACTITIONER HIGHLY EXPERIenced trustworthy references free for PART or WHOLE TIME WORK London or South Locum management branch travel patient etc Drive car—Address No 8832 BMA House Tavistock Square WC1

WOMAN MB ChB DPH SIXTEEN months hospital experience including mid wifery wishes to ASSIST general practitioner Scotland preferred—Address No 8817 BMA House Tavistock Square WC1

WOMAN ASSISTANT (OUTDOOR) REquired for busy working-class practice in South East London Car provided Suit recent graduate—Address No 8813 BMA House Tavistock Square WC1

WOMAN DOCTOR WISHES ASSISTANTSHIP PART TIME WORK or LONG LOCUMS in London Free early October Experienced panel practice Would buy nucleus preferably NW London—Apply 77 The Avenue NW6

YOUNG UNMARRIED OUTDOOR MALE ASSISTANT wanted partnership later for practice near Manchester Scotsman preferred Salary £400 and £10 car allowance and garage—Address No 8840 BMA House Tavistock Square WC1

LOCUMS

LADY DOCTOR LRCP AND S LM DPH takes charge and dispensing experienced desires LOCUMS in London SW from Oct 1st to 31st—Phone Ladbroke 63 (before 11 am) or Address No 8837 BMA House Tavistock Square WC1

PUBLIC HEALTH LOCUM OR TEMPORARY WORK MOH with experience in all departments Own car—Address No 8119 BMA House Tavistock Square WC1

MEDICAL POSTS DISPENSERS

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request qualified and with practical experience in private practice and dispensing work also trained in laboratory technique of the LONDON COLLEGE OF PHARMACY FOR WOMEN Preparations for Examinations—Write wire or phone (Bayswater 0779) Secretary 7 Westbourne Park Road W

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed

Applications should be separately enclosed and clearly addressed

Address No

B M A House

Tavistock Square W C 1

All communications are forwarded to advertisers under plain cover

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY and Secretary Dispensers can be supplied to Doctors Sessions January April and September—Apply Principals School of Pharmacy Drayton House Gordon Street WC1 Phone Euston 3930

DISPENSING CAREER FOR YOUNG LADIES FULL TRAINING for Apothecaries Hall Certificate Enrolments every three months—Apply The Principal Central School of Pharmacy 28 Moreton Street London SW1 Telephone Victoria 1641

DOCTORS REQUIRING QUALIFIED Dispensers Nurse Dispensers Secretary Dispensers or Chauffeuse Dispensers are invited to write wire or phone Temple Bar 5858 THE DISPENSERS BUREAU 3 Lindsay House 171 Shaftesbury Avenue London WC2

GENTLEWOMAN 26 CONVALESCENT nervous breakdown desires LIGHT POST Congenial home preferably doctor's family Home county diploma shorthand typist chauffeuse home duties References Part board paid—Address No 8686 BMA House Tavistock Square WC1

LADY (35) DESIRES POST AS RECEPTIONIST good knowledge general practice and panel routine Light therapy and some dispensing seven years references—Address No 8801 BMA House Tavistock Square WC1

LADY DISPENSER BOOKKEEPER (42) HALL certificate seeks post in London or suburbs Well educated adaptable able to drive car Experienced in GP—Address No 8818 BMA House Tavistock Square WC1

LADY DISPENSER BOOKKEEPER HALL age 32 desires post Ten years experience—Address No 8734 BMA House Tavistock Square WC1

RESIDENT DISPENSER REQUIRED London SW Well educated able to drive car Send full particulars to—Address No 8825 BMA House Tavistock Square WC1

LADY DISPENSER BOOKKEEPER QUALIfied 10 years varied experience excellent refs seeks post Doctor or Institution Willing to act as housekeeper Able to drive car—Address No 8810 BMA House Tavistock Square WC1

ROYAL SOCIETY OF MEDICINE require whole time ASSISTANT EDITOR of PROCEEDINGS Applicants whether male or female must hold medical qualifications Initial salary according to experience but not less than £300 per annum Knowledge of languages and editorial or parallel experience desirable Application stating age and experience should be received before Thursday September 29th by the Secretary Royal Society of Medicine 1 Wimpole Street W1

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION 85 Eccleston Square SW1 (Telephone Victoria 7200) supplies qualified Dispensers Bookkeepers Laboratory Assistants Sanitary Assistants Male Nurses Mental and Special Treatment Orderlies Dental Clerk Orderlies Porters Caretakers etc without charge to prospective employers

VAD AND EX NURSE WITH FIVE years' nursing training seeks POST with doctor or clinic—Miss E V Frost 11 Barkston Gardens SW5

YOUNG LADY SEEKS POST AS CHAUFFEUSE RECEPTIONIST to doctor Excellent driver with good knowledge of London—Address No 8839 BMA House Tavistock Square WC1

PARTNERSHIPS

JUNIOR PARTNER WANTED FOR PRACTICE in Northumberland seaside resort Married man 30-35 preferred SHARE about £1000 and house on rental available Excellent prospects for energetic man Small panel—Address No 8568 BMA House Tavistock Square WC1

LIVERPOOL—JUNIOR PARTNER REQUIRED with some experience in general practice and interested in Anaesthesia On third share at two years purchase No agent—Address No 8807 BMA House Tavistock Square WC1

MIDLAND CITY — PARTNERSHIP IN pleasant part Panel 3 000 £2 212 last year Half share at £3 000 or near offer Choice of house—THE WESTERN MEDICAL AGENCY 2 Clare Street Bristol 1 (Bristol 2659) and 15 Bedford Street Strand WC2 (Temple Bar 2532)

MD, DOMS REQUIRES PARTNERSHIP with view to SUCCESSION in Ophthalmic Practice with hospital appointment Strictly confidential Ample capital available—Address No 8843 BMA House Tavistock Square WC1

OXFORD MB AGED 40 TEN YEARS' experience GP seeks town PARTNERSHIP or PRACTICE in South or West Good panel Share worth £1 000 Non-basement house Educational facilities for girls Ample capital—Address No 8813 BMA House Tavistock Square WC1

PARTNER WANTED IN GENERAL PRACtice Receipts approx £4 600 panel 4 000 London W—Address No 8844 BMA House Tavistock Square WC1

SOMERSET COAST — PARTNERSHIP IN country town Panel over 1 400 Average £3 400 p a increasing Third share to commence Two years purchase House rent—THE WESTERN MEDICAL AGENCY 2 Clare Street Bristol 1 (Bristol 2659) and 15 Bedford Street Strand WC2 (Temple Bar 2532)

SOUTH WEST ENGLAND — MEDICAL PARTNER wanted in good-class practice Hospital appointment All ports Panel 4 000 QUARTER SHARE of £4 600 at two years purchase increase later—Address No 8830 BMA House Tavistock Square WC1

PARTNER WANTED IN COUNTRY PRAC[illegible] ... £600 to £700 ... Must have ... yrs and have ... qualifications ... Address No 8501 BMA House Tavistock Square WC1

PRACTICES

WANTED IMMEDIATELY UNOPPOSED entry PRACTICE ... with Panel ... Address No 8401 BMA House Tavistock Square WC1

WANTED URGENTLY PRACTICE IN ... Welsh ... BMA House Tavistock Square WC1

WANTED URGENTLY PRACTICE LONDON ... Suitable ... Wealthy ... BMA House Tavistock Square WC1

BRISTOL—WE HAVE A GENUINE BUYER ... PRACTICE ... the City ... BMA House Tavistock Square WC1

DEATH VACANCY CLEVEDON ... PRACTICE ... Panel ... Receipts ... weekly ... Address No 8503 BMA House Tavistock Square WC1

DOCTOR'S ATTRACTIVE DOUBLE FRONTED HOUSE situated in ... Three ... 4 ... 37 years ... NUCLEUS of ... BMA House Tavistock Square WC1

E MIDLANDS—OLD ESTABLISHED PRACTICE in growing ... Receipts £650 ... Good house with ... on account of ill health—Address No 8503 BMA House Tavistock Square WC1

LONDON WEST—DOCTOR GOING ABROAD wishes to dispose of ... PRACTICE to suitable successor such as ex Service man ... subject negotiation Convenient house ... about £1 000—Address No 8683 BMA House Tavistock Square WC1

MIDLAND SUBURB INCREASING MIDDLE and working class PRACTICE very suitable for two friends in partnership or could be run by one man and assistant Receipts last year £3 000 panel 1 900 Modern house two reception 5 bed rooms separate professional rooms ... surgery also *Premium for practice* two years purchase Houses at valuation—Address No 8835 BMA House Tavistock Square WC1

MEDICAL PRACTICE FOR SALE AT Leytonstone (E 11) Gross fees £1 055 (panel £428 general £630) Chartered accountants figures Write Box 240 ENTREPRENEURS LTD 7 Queen Street E C 4

MEDICAL PRACTICE FOR SALE IN TOWN near Glasgow Large panel Death vacancy For further particulars apply to HUNTER AND ROBERTSON Writers 35 High Street Paisley

MEDICAL PRACTICE IN DUNDEE FOR Sale Gross income approximately £1 000 Good house can be rented For further particulars apply CRAWFORD HERRON AND CAMERON Solicitors 257 West George Street Glasgow

NORTHANTS — UNOPPOSED COUNTRY PRACTICE in good part Good schools and all sports Low expenses Panel 900 Receipts £1 600 p a Two years purchase or near offer House sale or rent THE WESTERN MEDICAL AGENCY 22 Clare Street Bristol 1 (Bristol 22689) and 15 Bedford Street Strand W C 2 (Temple Bar 2532)

OLD ESTABLISHED COUNTRY PRACTICE for sale £600 p a good appointments and panel nice roomy house £60 and garden rates £15—Address No 8547 B M A House Tavistock Square W C 1

OLD ESTABLISHED PRACTICE ... £600 ... BMA House ... W C 1

PRACTICE TO ... BMA House ... W C 1

UNOPPOSED ... BMA House ... W C 1

WOMAN ... BMA House ... W C 1

WOMAN ... BMA House ... W C 1

HOUSES CONSULTING ROOMS

ESTABLISHED 1 0

BEDFORD & CO.

10 WIGMORE STREET CAVENDISH SQUARE W 1

Specialists in Professional Houses Flats, and Consulting Rooms

ESTABLISHED 1 9

ELLIOTT, SON & BOYTON

(H C Lowe F.S.I.)

1 BRUTON STREET BERKELEY SQUARE W 1

CONSULTING ROOMS in the Harley Street ... Queen Anne ... Cavendish Square district ...

AT 16 WELBECK STREET—LUXURY SERVICE SUITES ... private bath ... single and double ... Moderate rents—Welbeck ... Address No 8850 BMA House Tavistock Square W C 1

BATH—*CONSULTING ROOM TO LET IN* The Circus (Baths Harley Street)—Address No 880 BMA House Tavistock Square W C 1

CONSULTING ROOMS GROUND AND first floor to let from September quarter Charming sunny situation ... rooms inclusive in rent Exceptional opportunity for dentist—Apply CARETAKER 6 Park Crescent Portland Place W 1

CONSULTING ROOM WELBECK STREET ... heating and telephone service included Constant hot water £150 per annum—Address No 8815 B M A House Tavistock Square W C 1

COTTAGE TO LET FOR ONE YEAR ON cliff edge overlooking Oswald's Bay Lulworth Cove Dorset Lounge four bedrooms bathroom etc Electric light Completely furnished Ideal *for professional or literary people* Quiet and inspiringly beautiful—Address No 8804 B M A House Tavistock Square W C 1

DEVONSHIRE STREET TWO DOORS FROM Harley Street an excellent CONSULTING SUITE *of three good rooms in one of the finest* professional houses Rent only £250 p a or single rooms may be had at £100 p a with plate on the door and all services Vacant Sept 29th 1938—Address No 7610 B M A House Tavistock Square W C 1

FOUR ROOMS TO LET PROMINENT position at corner of Great Ormond Street—Apply Estate Office 29 Orde Hall Street W C 1

HARLEY STREET AND MEDICAL DISTRICT

... specialise ... communication

BERTRAM & CO., ... years and E[illegible] A[illegible]

3 Cavendish Street W Paddington 3[illegible] 2

HARLEY STREET LARGE CONSULTING ROOM ... BMA House Tavistock Square W C 1

QUEEN ANNE STREET—ONLY £40 PA CONSULTING ... BMA House Tavistock Square W C 1

SOUTH WEST LONDON SHOP RECONDITIONED ... BMA House Tavistock Square W C 1

IDEAL DOCTOR'S HIGH PLACE CONSULT ... BMA House Tavistock Square W C 1

UNIQUE OPPORTUNITY — CHARMING CONSULTING ROOM ... BMA House Tavistock Square W C 1

VACANT SEPTEMBER 29—ONE OF THE ... PROFESSIONAL MAISONETTES in Harley ... BMA House Tavistock Square W C 1

WELL FURNISHED WEST END CONSULT ING ROOM and SURGERY to let ... every ... Surgery ... Surgery included if ... Wednesdays 9 30 to 10 30 to 5 30

HARLEY STREET AND DISTRICT—A NUM ber of excellent CONSULTING ROOMS ... and part time ... at moderate rents Early application ... Etkood and Co 10 Henrietta Place Cavendish Square W 1 Lan 601

MISCELLANEOUS SALES etc

INCOME TAX

YOUR burden is OUR business Tax Specialists to the Medical Profession

HARDY & HARDY

13 CHANCERY LANE LONDON W C 2

Telephones Holborn 6003

Write for free copy of Advice on Income Tax

COVERS FOR BINDING

Vols I and II of the BRITISH MEDICAL JOURNAL for 1937 and previous years can be had, price 2s 6d by parcel post 2s 10d each

Orders with appropriate remittance, should be addressed to

THE SECRETARY,
BRITISH MEDICAL JOURNAL
B M A HOUSE TAVISTOCK SQ
LONDON W C 1

IMPORTANT

to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE Specially Cut Fitted and Measured to each individual figure made from finest Quality Materials and in the Best Possible Style cost no more than mass production ready-made clothes

The invaluable Practical Experience and Advice of our 14 Expert West End Cutters and Fitters is always at your disposal

ALL "HALLZONE" productions are HAND FINISHED IN EVERY ESSENTIAL DETAIL

SPECIAL OFFER

JACKET & VEST (in black or grey)	£5 5
Lined best quality Art Satin Art Silk or	Up a
SOLID FANCY WORSTED TROUSERS	£1 12
The Ideal Suit for Professional or Business	wear
LOUNGE SUITS	to measure from £6 6
OVERCOATS	£5 5
DINNER SUITS	£8 8
DRESS SUITS	from £10 10
PLUS FOUR SUITS	from £5 5s
THE IDEAL Suit for Country and Sporting Wear	
GOLD MEDAL RIDING BREECHES from	£2 2
RIDING HABITS	£5 5
RIDING BOOTS	£3 3
COSTUMES & LONG COATS	£6 6

UNSOLICITED APPRECIATION

I sincerely advise all medical men who wish to have satisfaction to patronise Harry Hall Ltd as all the clothes I have had from them during 35 years have been perfect in Fit Cut and Finish

(Signed) S. J. A. M.A. MB. F.R.C.P.S.

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self measurement Form or Pattern Garments

Visitors to London can order and fit same day Special Patterns would then be sent for Perfect Fitting Clothes supplied after without trying on

HARRY HALL, LTD

Governing Director Harry Hall

"THE" Coat Breeche Habit and Costume specialist

131 OXFORD ST., W.1 115 CHEAPSIDE, E.C.2

Telephones

GERrard 3405 3406 and 3407 NATional 4617

Makers of Finest Quality Bespoke Civil Sporting and Hunting Clothes for Ladies and Gentlemen

Highest Award 12 Gold Medal

Patrons over 10 years

THE DOCTOR IN PRACTICE OR ABOUT TO ENTER THEREIN SHOULD BE ADEQUATELY PROTECTED BY INSURANCE IN RESPECT OF

HIS LIFE
HIS HEALTH
HIS HOME
HIS PRACTICE
AND
HIS CAR

□

FOR ALL THESE CONSULT

The

Medical Insurance Agency

(Limited by Guarantee)

BRITISH MEDICAL ASSOCIATION HOUSE
TAVISTOCK SQUARE W.C.1

□

WE CAN ALSO ARRANGE ADDITIONAL CAPITAL FOR THE PURCHASE OF A PRACTICE OR PARTNERSHIP

State age next birthday when writing

APPOINTMENTS—Contd.

WEST SUFFOLK GENERAL HOSPITAL
Bury St Edmunds
(112 Beds)

Applications are invited for the following posts:—

HOUSE SURGEON. Duties include the charge of the Surgical Beds. Salary £150 per annum with board lodging and laundry. Vacancy end of September.

HOUSE PHYSICIAN. Duties include charge of the Medical Beds Maternity Ward and Casualty and Administration of Anaesthetics. Salary £150 per annum with board lodging and Laundry. Vacancy end of September.

Applicants for both posts must be registered Practitioners. Applications stating age experience and nationality with copies of three recent testimonial to be sent to the Secretary. Both appointments are for six months.

September 14th 1938.

ANCOATS HOSPITAL MANCHESTER 4

SURGICAL REGISTRAR REQUIRED

Applications are invited from duly qualified Medical Practitioners. Duties: To assist the Honorary Surgeon in the Out-patient Department Surgical Clinic on Tuesday and Friday mornings. Honorarium £50 per annum. Appointment for twelve months and is renewable.

Applications stating age qualifications experience and full particulars to be forwarded to the undersigned on or before October 4th together with copies of three recent testimonials.

By Order of the Board
HERBERT J. DAFFORNE
Gen. Supt. and Secretary

ST JOHN'S HOSPITAL LEWISHAM S.E.13

Applications are invited for the resident post of HOUSE PHYSICIAN (male) tenable for six months from October 1st. 1938 at a remuneration of £160 per annum.

Applications with copies of testimonials should reach the undersigned by September 20th.

J. C. GILBERT
Secretary Superintendent.

SMALL ADVERTISEMENT FOR INSERTION IN BRITISH MEDICAL JOURNAL

The MINIMUM charge is 9s which covers up to 30 words. Extra words are charged 1s 6d for 5 or less. Example 33 words would be charged as for 35. Name and address should be included when counting words for cost.

If BOX NUMBER is used it should be reckoned as 5 words in the total.

PLEASE WRITE CLEARLY—ONE WORD IN EACH SPACE

1						
2						
3						
4						
5						
6					(30 words)	9/
7						10/6
8						12/
9						13/6
10						15/-

To the Advertisement Manager BRITISH MEDICAL JOURNAL B.M.A. House Tavistock Square London, W.C.1

Please insert my advertisement in ..... issues dated .....

Name .....
Address .....

I enclose remittance value £ .....

Date .....

WORCESTER COUNTY AND CITY HOSPITAL
[illegible]

[illegible] ASSISTANT MEDICAL OFFICER [illegible]

BRITISH RED CROSS SOCIETY CLINIC FOR RHEUMATISM
[illegible]

HONORARY DERMATOLOGIST
HONORARY NEUROLOGIST
[illegible]

KING GEORGE HOSPITAL HEWORD
[illegible]

ASSISTANT CASUALTY OFFICER AND HOUSE SURGEON TO SECOND DEPARTMENTS [illegible]
C. AUSTIN HEYWORTH
Secretary and Superintendent

[illegible]

[illegible]

[illegible]

PERCIVAL TURNER
LTD
MEDICAL AGENCY

ESTABLISHED 60 YEARS

25 MADEN LANE STRAND W C2
(Corner of Bedford Street)

Telegrams Ipsomian London
Phones Temple Bar 2011 (3 lines)
After office hours Walton-on-Thames 1 5

Assistants and Locums Provided without fee to Principals. Practices Investigated Book keeping Debt Collecting etc

MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE EXCLUSIVE OF HOUSE PROPERTY £50 FULL TERMS ON REQUEST

FOR DISPOSAL

WILTS—COUNTRY PRACTICE old established unopposed £950 p a Panel 0 Excellent house for sale. Premises about 2 year purchase —1

KENT COAST—PARTNERSHIP ½ or ¼ share of nearly £3 00 Panel over 600 Nice house offer sale or rental Premium yrs purchase —

LONDON E—PARTNERSHIP two fifths share with succession later about £1 00 p a Panel 2,500 Ample accommodation on rental Premium 2 years purchase —3

NEAR HYDE PARK—HIGH CLASS income about £1 4 0 ample accommodation Rent £100 p.a. Premium for lease £2 0 Practice £1,00 —4

WEST END AND CITY PRACTICE—PARTNERSHIP ½ SHARE of approx £3 000 p a Premium £3 000 Would consider assistant with view —5

SUSSEX COAST—£1 360 P A INCREASING Non-panel non-dpg Fees 16 up Premium 2 years purch Good house (5 bed) tennis etc Sell or let —6

LONDON S E—ABOUT £2 600 P A Panel 1 800 Half share for disposal at £— 0 —7

OUTER LONDON SUBURB S E—Residential. Over £1 000 increasin Panel 300 Good fees Nice corner house to rent or sell —8

HANTS COAST—NON PANEL NON DISPENSING Over £1 000 p a. Better class Scope panel Vendor specialising Excellent house 5 bed, etc. Premium only £1 000 —9

BUCKS — WELL ESTABLISHED £9/1 000 p.a House receptions 4 bed etc Would sell or let.—10

SURREY—NEAR LONDON £800 P A rapidly increasing Panel now 6 0 Small house £78 p.a Premium £1 ,50 —11

LONDON S W—LOCK UP LADY'S PRACTICE £485 p a Panel 60 (approx) Premium £600 —12

NEAR PROSPEROUS MIDLAND TOWN—Country PRACTICE about £7'0 p a good class select panel increasing and scope choice of house Premium 1½ years purchase —13

NORTHERN TOWN—ABOUT £2 000 p a Very old-estd Panel Clubs and Appts £1,,00 p a Visits 5/ to 6/ Irem £3 600 incl book debts etc House only £'00 —14

KENT COAST—WOMAN'S PRACTICE Average £400 p a Panel over 200 Visiting fees 5/ to 10/6 Premium £,00 House 4 bed etc Rent £85 p a —15

MIDDLESEX — HALF SHARE OF £1 000 p a with scope Panel 700 Appts over £100 p a Premium £600 Nice house to rent —16

LONDON W 5—ABOUT £550 P A Panel 860 Visits 3/6 to 5/ Premium 2 years purchase House 4 bed etc to rent —17

LONDON N W—ONE FIFTH SHARE of over £5 000 p a Panel 6 000 Appts over £160 Fees 2/6 to 10/6 Prem 2 years purch Small maisonette to let —18

MIDDLESEX—SUBURB £1 030 P A Panel 600 increasing. P M S £100 Premium 2 years purch Comfy house (4 bed) sell or let —19

SURREY SUBURB—HALF SHARE of £3 000 p a Old-est increasing modern house garden and garage to let Premium £3 000 — 0

LANCSTOWN—OLD EST INCREASING £1 100 p a Select panel of 1 000 Nice house ample accommodation Premium £1 550 incl drugs and surgery furniture —21

SOUTH COAST—OLD EST NEARLY £1 400 p a. increasing Fair panel mixed middle and better class Detached house garden and garage for sale or might let Premium £2 500 —22.

BIRMINGHAM NEAR — NEARLY £800 p a good scope panel nearly 800 developing area House garden garage for sale at £8 0 or let at 27s 6d p w Premium £1 500 —23

NO CHARGE TO PURCHASERS
FINANCIAL ASSISTANCE ARRANGED

ASSISTANTS — VACANCIES IN Town and Country Indoor and Outdoor List on application.

THE MEDICAL AGENCY, Ltd.
DUDLEY HOUSE, 36 38, SOUTHAMPTON ST, STRAND, W C 2
Telephones—Temple Bar 1034-1054 Established in 1893 by J A REASIDE.

ESSEX —Well-established mixed G P Excellent house separate Surgery Receipts nearly £1 900 Panel over 500 Premium 2½ years purchase or offer

SOUTH AFRICA —Well-established G P situated in Cape Town non-dispensing Suitable house available if desired Receipts over £1 400 Fees 7 6 up 3 App transferable Premium 1 000 gns.

LONDON W (within 10 mins West End) —Mixed G P Residential locality House to rent Receipts £— 00 Panel over 1 400 Fees 3 6 up Premium £4 000 or near offer

LONDON S E. (under 10 mins London Bridge) —Receipts over £2, 00 Panel 3,,00 inc House to rent Premium 2½ years purchase or near offer

MIDDLESEX (near River) —ASSISTANTSHIP with view to Partnership Old-established mixed G P Receipts approximately £6 000 Panel 3 500 Commencing 1/5th share Salary £500

COUNTY DURHAM —Mixed G P Receipts (approximately) £,,000 Panel over 2 000 Clubs and 1 Appointment Premium £4 000 or near offer to include Book Debts Drugs, etc.

LONDON —PARTNERSHIP in growing Suburban G P Suitable house available Receipts nearly £5 000 Panel (approximately) 4 000 Premium for share worth £1 000 p a with view to larger share 2 years purchase Excellent scope

WEST COUNTRY —PARTNERSHIP Old-established Town and Country Practice suitable to competent Surgeon One third share offered with view to half Receipts £4 000 Large panel Premium 2 years purchase

HOME COUNTIES —PARTNERSHIP in better class G P situated in growing locality Suitable for Surgeon Share worth about £1 300 2 years purchase House to rent or sale Many other available details on request

LONDON S E —PARTNERSHIP old-established mixed middle and working-class Mostly cash and panel House to rent. Receipts £2,600 Panel 1 800 Fees 2 6 up Half-share £2 750 Practice expanding.

MANY OTHERS FOR SALE DETAILS ON REQUEST

ESTABLISHED 1877

LEE & MARTIN, LTD.
The Birmingham Medical Agency,
71 TEMPLE ROW BIRMINGHAM
Telegrams Locum Birmingham *Telephone* 5963 Bham

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED
MAXIMUM FEE £.0 if exclusively entrusted to us

ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORT NOTICE also ASSISTANTS

WANTED TO PURCHASE

1 BIRMINGHAM (or within 0 miles thereof) —Good Mixed PRACTICE with a Panel of 1 000 over and receipts of from £1 500-£3 000 URGENTLY REQUIRED CAPITAL AVAILABLE

2 NORTH WEST MIDLANDS —Good Mixed PRACTICE wanted immediately Receipts should be from £1 000 upwards and must have substantial Panel Good house required CAPITAL AVAILABLE

FOR DISPOSAL

1 NORTHANTS — Old established unopposed country PRACTICE Receipts £1 600 p a Panel 500 Excellent house which may be rented

— MIDLANDS —Rapidly increasing mixed private and panel PRACTICE Receipts av £1 600 p a Panel 1 100 Good house to rent Good scope

3 STAFFS —Rapidly increasing mixed private and panel PRACTICE Receipts last year £1 0 0 and panel 1 ,30 over Excellent house with all services

4 SOUTH WALES —Well established middle and working-class PRACTICE Receipts £,,200 p a Panel 1 100 ample scope to increase and good house

5 MIDLANDS —Old-established industrial and working-class PRACTICE Receipts av £1 068 p a Panel 96, Scope to increase and good house

6 GLOUCESTERSHIRE —Well-established middle and working-class PRACTICE Receipts av £1 250 p a Panel 1 200 Excellent house with all services

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partnerships on very reasonable terms Full particulars on application

RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE

Telephone Welbeck 2728
Telegrams ASSISTIAMO LONDON"

NURSES
MALE OR FEMALE

TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES

Nurses reside on the premises and are available for urgent calls Day and Night

THE NURSES' ASSOCIATION
(In conjunction with the MALE NURSES ASSOCIATION)
29 York St. Baker St London, W1
Mrs MILLICENT HICKS *Supt*
W J HICKS *Secretary*

ESTABLISHED 1868

PEACOCK & HADLEY, Ltd,
MEDICAL TRANSFER AGENCY,
57-68 Chandos Place Bedford St Strand W C 2

Telegrams Herbana Lesquare London
Telephone Temple Bar 5564

LOCUM TENENS and ASSISTANTS supplied free of charge to principals.

FOR DISPOSAL.

1 BUCKS (half hour Waterloo) — Unopposed PRACTICE Old-established Receipts nearly about £1 ,00 p a panel 00 increasing Charming house rent £1,0 Premium £3 000 Good scope

2 NEAR CHELSEA S W — Well-established PRACTICE Receipts last year estimated at nearly £1 000 including panel Nice surgery accommodation Premium £8 0 or near offer

3 A number of small PRACTICES at low premiums Excellent opportunities for practitioners wishing to get a practice with scope

4 NEAR HOLLOWAY N — Old-established PRACTICE Receipts average £500 including good increasing panel Nice house and garden rent £96 p a Vendor elderly retiring Premium moderate Good scope

5 NORTHANTS — Delightful old-established country PRACTICE Receipts £1 4 0 p a panel 950 Fine old family house Premium for practice and house £3 8 0 Good schools

6 WELL KNOWN TOWN (½ hours London) — Well-established PRACTICE Receipts average £730 p a panel 7 8 Charming house with good garden on rental Premium £850 Good scope

7 NEAR HENDON N W — Old-established PRACTICE Receipts £6'0 p a panel 835 Very nice corner house rent £100 p.a Also branch Vendor retiring Good scope Premium £1 300

8 NEAR FULHAM S W — Well-established PRACTICE Receipts last year about £8,,5 panel nearly 500 increasing Nice house on rental Premium £1 2 0

9 —WANTED IN LONDON OR PROVINCES PRACTICES with incomes £800 to £,,000 Many purchasers waiting and quick transactions for immediate cash

No charge made to purchasers or for inquiries

THE WESTERN MEDICAL AGENCY

Dr K H BENNETT and Dr W J PARAMORE who give personal attention to every client.

22 CLARE STREET BRISTOL 1
Teleg Medical Bristol *Tel* Bristol 22689

15 BEDFORD ST., STRAND W C2
Tel Temple Bar 4532

THE NEW MENTAL NURSES CO OPERATION

66 Queen's Gardens, Lancaster Gate W.2
(Late of 13) Edgware Road W.2)

Specially trained Nurses for Mental and Nerve cases (All Nurses are insured under the Employers Liability Act 1906) Apply the Supt.

Telegrams Psyconurse, Padd Lond. *Telephone* No 6105 Padd.

British Medical Bureau

(The SCHOLASTIC, CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1880)

Tele Address
Triform, Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1

Telephone Euston 1644 1645

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical, Scholastic, and Accountancy business and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult The Manager in all transactions requiring the services of a Medical Agent
Members of the British Medical Association may take advantage of a reduced scale of charges applicable to them

REDUCTION IN FEES

In cases where the Bureau are sole Agents the commission in respect of any sale of goodwill, book debts, furniture drugs fittings and other effects (excluding sales of any freehold or leasehold property, or of practices, effects, etc, outside Great Britain) is limited to a maximum fee of Fifty Pounds

FULL TERMS ON APPLICATION

Practices and Partnerships for Disposal — **Full Particulars sent free**

1 LONDON WEST—Good class non dispensing PRACTICE averaging £2,200 in one of the best residential parts No panel Attractive house in quiet district to rent Premium one and three quarter years purchase

2 HOME COUNTY—Medical Woman's PRACTICE averaging over £1 600 p a, in growing country town Panel 250 Well situated house for sale Practice capable considerable development and admirably suitable for two medical women or medical man whose wife is also qualified Premium £3 000 to include valuable stock of drugs

3 LONDON, N—Middle-class PRACTICE, about £3 000 p a, in residential district Panel about 1 150 increasing Good well situated residence to rent Premium one and three quarter years purchase

4 LONDON (Belgravia)—Good class non dispensing PRACTICE Receipts past year, £1,180 No panel Fees 10s 6d to £1 1s Conveniently situated house Price for lease £950 Unlimited scope Premium £1 500

5 HOME COUNTY—PARTNERSHIP in Practice, averaging £3 500 p a in beautifully situated country town Panel about 1,350 Choice of house Incoming partner must be experienced and aged about 35 40 Premium one half share two years purchase Hospital

6 LONDON, N 7—PRACTICE about £2,000 p a, including valuable appointments and panel 1 200 Small house, garage and garden for sale or rent Premium £4 400 or near offer

7 LONDON, S E 20—PRACTICE, averaging £1 750 p a in suburban district (appointments returning about £350 p a) Panel 966 Modernized house with garage and garden Rent £100 p a Premium 1¾ years purchase

8 SOUTH OF ENGLAND—PARTNERSHIP in non dispensing Practice £7,800 p a in pleasant residential town and watering place Panel 2 000 Good house to be purchased One seventh share at first Premium two years purchase Partner should be aged 28 35 and possess the M D or M R C P

9 LONDON, S W—PARTNERSHIP in mixed class Practice £4 360 p a in residential suburb Panel 2 500 Very nice house with good garden for sale Two fifths share at first at two years purchase

10 SOUTH COAST—PARTNERSHIP in steadily increasing Practice of £2 000 a year in growing district Panel 1 000 One third share at first at two years' purchase Preliminary Assistantship

11 LANCS—Mixed PRACTICE, over £1,000 p a, in large town Panel over 1 000 Pleasantly situated house for sale Scope Premium £1 800 to include drugs etc

12 EASTERN COUNTIES—Middle and working class town PRACTICE Cash receipts past 12 months £3 600 Panel 2 500 House (5 bedrooms etc) to rent on lease Premium two years purchase or near offer

13 S W of ENGLAND—Non dispensing general and surgical PRACTICE averaging £1 636 p a in favourite watering place Small panel House for sale or rent Good hospital Premium £2 800

14 KENT—PARTNERSHIP in Practice in industrial town Cash receipts last year £3 646 Panel about 1 400 House with 6 bedrooms and dressing rooms to rent Share of about £1 200 p a two years purchase

15 HERTS—PRACTICE about £750 p a in growing residential district Panel 540 Nice house garage and garden price £1,600 Purchaser should be English or Scottish and under 35 years of age Premium £1,400

16 MIDLANDS—PRACTICE in very attractive village about 70 miles from London Receipts past year nearly £750 Panel 535 Detached modern house for sale or rent Premium 1½ years purchase to include stock of drugs

17 SUSSEX—NUCLEUS, near coast Receipts past year £270 Panel about 200 Charming house and garden for sale Alternative house to rent if desired Premium £450

18 EASTERN COUNTIES—PARTNERSHIP in old established middle and working class practice £3 600, in country town Panel 2 500 House available to rent Premium one third share two years purchase

19 S COAST—Non-dispensing PRACTICE of £1,250 p a in health resort No panel but ample scope Commodious well built residence with garage and garden for sale Premium £1 000

20 S MIDLANDS—PARTNERSHIP in Practice £4 400 p a in progressive town Panel 2,000 House for sale or rent One fourth share two years' purchase Graduate of Oxford Cambridge or London preferred

21 EAST ANGLIA—A Medical Woman's PRACTICE in a nice town Cash receipts year ended April 5th, 1938 £454 Panel 300 Semi detached house (6 bedrooms), and half an acre of garden Premium £750

22 UNIVERSITY TOWN—THIRD PARTNER required (after preliminary Assistantship) in old established Practice averaging £5,820 p a Panel 2,200 Premium for one sixth share two years' purchase

23 MIDDLESEX—Old-established PRACTICE of £1 000 p a in developing town Panel 880 Corner house with garage and garden for sale Premium two years' purchase

24 LONDON W—Well established non dispensing non panel PRACTICE of £1 000 p a in nice suburb House, with garage and small garden for sale Premium £1,000

25 S MIDLANDS—Well established PRACTICE about £700 p a, in good town Panel 758 Detached corner house with garage and garden to rent Premium £850

26 KENT—Steadily increasing Medical Woman's PRACTICE within 10 miles of Charing Cross Receipts this year over £600 Panel 193 Detached house with garage and garden to rent Premium £850 or near offer

27 S WALES—Old-established PRACTICE over £800 p a in small town Panel 600 Detached house (4 bed rooms), for sale Premium 1¾ years' purchase

28 S E COAST—Easily worked middle class PRACTICE over £650 p a in summer resort House (6 bed etc) in best part with small garden and garage, for sale Branch surgery rented at 10s weekly Panel 200 Scope Prem £1 200

29 LONDON, W 12—Old established PRACTICE about £800 p a in suburban district Panel 900 Good house (4 bedrooms etc) Freehold for sale Prem two years pur

30 S E COAST—Medical Woman's PRACTICE of about £400 in a popular seaside resort Panel 208 House with garage for sale or to rent Premium £650

31 SURREY—PARTNERSHIP (after a preliminary Assistantship) in growing residential district about 10 miles from London Cash receipts average about £2 350 p a Panel 1 050 A three eighths share is for disposal at two years purchase

British Medical Bureau

(The SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)
[ESTD 1890]

Tele Address Triform Westcent—London
TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1
Telephone Euston 1644 1645

Practices and Partnerships for Disposal (continued)

32 SURREY—PARTNERSHIP in Practice of about £3 000 p.a. in residential district Panel 6 0 Modern house (5 bedrooms) garage garden To rent Preference would be given to an F R C S One half share £3 000

33 E ANGLIA—Old-established country PRACTICE of about £2,000 p.a. within easy distance of coast Panel 1 00 Well built house to rent Premium two years purchase

34 S WALES COUNTY TOWN—PARTNERSHIP in Practice £2 800 p.a. Panel over 1 000 One half share on reasonable terms Partner must hold F R C S Eng Hospital and excellent opportunity for surgical scope and appointment on staff Preliminary Assistantship

35 S E COAST—PARTNERSHIP in non dispensing Practice about £4,500 p.a. Panel 1 400 One fifth or one fourth share at two years purchase Preliminary Assistantship Scotsman preferred

36 LONDON N 12—Middle class increasing PRACTICE in growing district Receipts past year £420 Panel 163 Modern Labour saving house for sale or rent Premium £6 0

37 S WALES—Contract and small private panel PRACTICE over £1 900 p.a. in industrial district Panel over 2 100 House with surgery premises to rent Prospect of appointment Premium £3 500

38 S COAST HEALTH RESORT—OPHTHALMIC PRACTICE Receipts 1938 £1 600 House to rent Unlimited scope Premium one year's purchase

39 LONDON SW—ELECTRO THERAPEUTICAL PRACTICE Receipts 1937 £1 727 Large consulting room and treatment room to rent Premium £1 600 plus apparatus valued about £750

40 LONDON N—LOCK UP PRACTICE £398 p.a. run by medical woman Panel 327 Rent at surgery 25s weekly Good scope Premium £550

41 N WALES—Popular seaside resort—Good class chiefly non dispensing PRACTICE averaging £870 p.a. No panel Excellently situated detached residence for sale Good scope Premium £1 400

42 LONDON E—Cash and panel PRACTICE averaging £2 800 p.a. Panel 1 300 House (5 bedrooms) Rent £156 p.a. Scope Premium two and a half years purchase to include drugs etc

43 W MIDLANDS—PARTNERSHIP in Practice averaging £6 000 p.a. in market town Panel 3 500 One sixth share at first at two years purchase Incoming partner should be aged 28/30 and able to do general surgery and minor E N and T work Hospital Preliminary Assistantship

44 N MIDLANDS—PRACTICE in residential district near progressive town Receipts 1937 £770 Panel about 100 House for sale Good scope Premium £900

45 S OF ENGLAND—Well established SANATORIUM for the open air treatment Receipts at present at rate of about £3 000 p.a. Prem £1 000 include furniture etc

46 LONDON S E—PRACTICE averaging £800 p.a. in populous suburb Panel 800 Detached double fronted house Price of leasehold £1 250 Scope Premium £1 750

47 FRENCH RIVIERA—Old established PRACTICE M D essential Vendor at present in England

48 S W ENGLAND—Country PRACTICE over £1 400 in beautiful part Panel about 1 100 Exceptionally nice modern house standing in own grounds for sale Hunting and shooting Scope Premium two years purchase

49 Consulting Ear Nose and Throat PRACTICE in industrial city Receipts average £1 350 p.a. (in addition appointments worth about £850 p.a.) Centrally situated house to rent Purchaser should hold F R C S and have specialist experience Premium two years purchase

50 MIDDLESEX—PARTNERSHIP in steadily increasing town Practice about £2 000 p.a. Panel 1 800 House to rent Premium one half share two years purchase Applicant should be English or Scottish

51 SURREY—Medical Woman's PRACTICE over £300 p.a. in outlying suburban district Panel 130 House for sale or rent Scope Premium £300

52 S AFRICA—Medical Woman holding D O M S required in Ophthalmic Practice Experienced in operative work and not over 40 preferred SHARE about £1 000 offered after ASSISTANTSHIP

53 S COAST—PARTNERSHIP in Practice over £3 000 p.a. in seaside resort Panel about 2 000 Semi detached house (5 bedrooms) for sale or rent Premium one half share £3 000 Excellent hospital and scope for surgery

54 N E ENGLAND—PARTNERSHIP in non panel Practice doing about £6 000 in one of the chief towns House available One sixth share at two years purchase Partner should be surgically inclined

55 MIDLAND SPA—PARTNERSHIP in Practice about £1 900 p.a. Panel 1 200 Excellent house for sale Premium one half share £1 800

56 WEST END OF LONDON—Good class non-dispensing PRACTICE about £1 150 No panel Large house to rent Premium lease and practice £3 000

57 BUCKS—PRACTICE in growing town Receipts last year £894 Panel about 790 House for sale Well equipped hospital Premium £1 500

58 PARTNERSHIP in increasing Ear Nose and Throat Practice in provincial town Partner must hold F R C S

59 MIDDLESEX—FOURTH PARTNER required in Practice over £7 600 p.a. in residential district on the Thames Panel 1 600 House (5 bedrooms) to rent Scope Premium 6/30 hs share £3 100

60 LONDON N W—PARTNERSHIP in Practice averaging about £5,200 p.a. Panel about 6 000 Maisonette (2 beds etc) to rent One fifth share at first at 2 years pur

COLONIES—A few Colonial PRACTICES Incomes range from about £750 p.a. upwards

Purchasers can raise additional capital for the purchase of approved practices or shares
Particulars will be forwarded on application

All communications to be addressed to The Manager

Manager W M SCOBIE.

SCOTTISH BRANCH, 21, Alva Street, Edinburgh, 2

Telephone Edinburgh 3 69

FOR DISPOSAL.

A S OF SCOTLAND—Country PRACTICE in lovely district Receipts approximately £1 000 Panel 760 Exceptionally convenient house Price £2 000 Premium for practice one and a half years purchase

B SCOTLAND—Old established City PRACTICE Receipts approximately £2 400 Panel 2 500 House, price £900 Premium two years purchase or near offer

C YORKSHIRE—Country PRACTICE Receipts £1 200 Panel 560 Excellent house with garage Price £1 200 freehold Premium one and three quarter years purchase

D E OF SCOTLAND—Country town Receipts last year £685 (appointments £11– panel 565) Excellent house with garage and garden Price £1 450 Premium £1 000

E N OF SCOTLAND—Country PRACTICE Long established Receipts approximately £1 000 Panel 275

F EDINBURGH—PRACTICE doing £450 House must be bought Premium practice and house £1 650

G CENTRAL SCOTLAND—Country town PARTNERSHIP both partners retiring Suitable for two or one with assistant Receipts average £2,357 Panel 1 343 Excellent houses prices £1 500 and £1,250 Premium for practice two years purchase

For further details apply The Manager 21 Alva Street Edinburgh

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager to whom all communications should be addressed

RELIABLE LOCUMS and ASSISTANTS are URGENTLY REQUIRED by ALL OFFICES of the BUREAU

BRITISH MEDICAL BUREAU

(The Scholastic, Clerical and Medical Association Ltd.)

(*FOUNDED* 1880)

NORTHERN BRANCH

33, CROSS ST., MANCHESTER, 2.

Telephones {Manchester - Blackfriars 3925 / Manchester - Rusholme 2549 (*Night Calls*)

Telegrams "Locum, Manchester"

Branch Offices at Leeds and Belfast

Recommended with every confidence to the profession by the BRITISH MEDICAL ASSOCIATION as a thoroughly trustworthy medium for the transaction of all Medical Agency business

TRANSFER OF PRACTICES AND PARTNERSHIPS INTRODUCTION OF RELIABLE ASSISTANTS AND LOCUM TENENS at Short Notice VALUATION and INVESTIGATION OF PRACTICES, Etc

FOR DISPOSAL

Full particulars free on request

Practices and Partnerships wanted Large list of bona fide purchasers with ample capital available Enquiries invited from prospective vendors All information treated in strict confidence

LANCS TOWN —Very old established mixed Panel and Private PRACTICE Cash receipts last year £1 372 Panel 1 925 Scope Good house 2 reception 4 bedrooms 3 Professional rooms (separate entrance) Premium—Practice 1½ years purchase —No 1131

CHESHIRE TOWN near Manchester —DEATH VACANCY —Old-established mixed Panel and Private PRACTICE Cash receipts last year £3 646 Panel 2 138 Scope Excellent detached house (in own grounds) 2 reception rooms study 4 bedrooms 3 Professional rooms garage with servant s quarters and garden For sale at valuation Premium—Practice—best offer —No 1135

SHEFFIELD —Sound old established working class PRACTICE in present hands 34 years Average cash receipts £815 p a Panel 1 196 Good house 8 rooms etc Price £750 or may be rented at £65 p a Premium—1½ years purchase —No 1163

NEAR MANCHESTER —Sound old established mixed Panel and Private PRACTICE in present hands over 30 years Cash receipts over £1 800 p a Panel 2 304 Good corner house 2 reception 4 bedrooms garage and small garden Separate Professional rooms Rent £68 p a Premium—1½ years purchase (to include valuable book debts) —No 1165

NORTH WEST LANCS —PARTNERSHIP in old established middle and better working class Practice in pleasant town near Coast owing to retirement of senior partner Cash receipts last year £6 037 Panel 3 600 and appointments £450 p a Suitable for well qualified physician or one holding diploma in ophthalmology Possible Hospital appointment Purchaser may choose own residence Premium—⅓th or ¼th share—2 years purchase (to include drugs book debts etc) —No 1158

CHESHIRE —Old established mixed Panel and Private PRACTICE in pleasant Country town Average cash receipts £2 727 p a Panel 1 592 Attractive house 3 reception 5 bedrooms garage and large garden with tennis court to rent Premium—1½ years purchase —No 1140

NORTHUMBERLAND —Old established mixed Panel and Private PRACTICE near to Coast and large town Cash receipts £1 600 p a Panel nearly 2 000 Good detached house 2 reception 4 bedrooms garage and nice garden Rent £78 p a Premium—1½ years purchase —No 1166

NORTH LANCS —YORKSHIRE BORDER —Old established unopposed Country PRACTICE in present hands 20 years Cash receipts £1 000 p a Panel and appointments approximately £420 p a Well built house with ample accommodation central heating electric light garage and garden of 2 acres Rent £75 p a Premium—£1 500 Vendor retiring —No 1119

CUMBERLAND —Old established unopposed Country PRACTICE near to Sea and Lakes Receipts approximately £1 000 p a Panel 340 plus mileage and dispensing fees Good detached house 8 rooms 2 Professional rooms garage and large garden Rent £40 p a Premium—1½ years purchase —No 1167

DERBYSHIRE —Old-established PRACTICE capable of great increase Cash receipts last year £740 (increasing) Panel 862 Excellent house 2 reception 4 bedrooms 3 Professional rooms (separate entrance) garage and good garden Premium—Practice and house £1 600 —No 989

NORTH EAST COAST —Old-established mixed Panel and Private PRACTICE Cash receipts last year £2 160 Panel 2 220 Appointments (transferable) over £400 p a Good house 2 reception 3 bedrooms 3 Professional rooms garage and small garden Price £700 Premium—1½ years purchase —No 1094

MANCHESTER —Old-established mixed class PRACTICE in suburbs average cash receipts £1 380 p a Panel 838 Good corner house 5 bedrooms 3 Professional rooms garage Premium—1½ years purchase —No 1150

NORTH STAFFS —Very old-established better working and middle-class PRACTICE Cash receipts last year £2 431 Panel 1 225 Scope as district developing Excellent house 2 reception 4 bedrooms maid s room separate surgery premises garage and garden For sale Freehold Premium—Practice —1½ years purchase or near offer —No 1120

NORTH WEST LANCS —DEATH VACANCY —Well-established PRACTICE in beautiful Country district near lakes and sea Cash receipts last year £1 350 Panel 195 Good house 2 reception 5 bedrooms garage and garden Rent £50 p a Premium—£1 000 or near offer —No 1161

NORTH WEST LANCS —Old-established mixed Panel and Private PRACTICE in large town Cash receipts last year £1 102 Panel over 1 000 Good house pleasantly situated 2 reception 5 bedrooms garage and small garden Premium—Practice—1½ years purchase —No 1105

SHROPSHIRE —Old established unopposed Country PRACTICE Cash receipts last year £638 Panel 450 Modern house 2 reception 5 bedrooms 3 Professional rooms garage and large garden Electric light Rent £50 p a Premium—best offer —No 1086

NORTHANTS —Sound unopposed Country PRACTICE Cash receipts approx £1 600 p a of which £950 is derived from Panel and transferable appointments Panel 900 Excellent house, 7 bedrooms 3 Professional rooms garage and pretty garden Electricity Main drainage and water supply For £1 200 or would let on lease Premium—2 years purchase —No 1160

NEAR MANCHESTER —Very old-established middle and working-class PRACTICE in prosperous town Very suitable for two friends in partnership or may be run by one man and an Assistant Cash receipts last year £3 3 0 Panel 3 000 Nice modern house 2 reception 4 bedrooms separate Professional rooms garage and large garden For sale at valuation Premium—best offer —No 1137

NEAR MANCHESTER —Very old established middle and better working class PRACTICE Cash receipts over £2 500 p a Panel 1 450 Excellent detached house 2 reception 6 bedrooms garage and garden with tennis court Price £1 000 Premium—1½ years purchase —No 1108

MIDLANDS —Increasing middle and working class PRACTICE in large town Cash receipts last year £1 050 Panel over 1 700 Scope Excellent modern house 2 reception 4 bedrooms garage and large garden For sale Freehold Premium—Practice—£2 000 —No 1171

LADY DOCTOR S PRACTICE —LIVERPOOL —Well-established and capable of increase Cash receipts about £600 Panel 4 0 Good house 4 bedrooms to rent Premium—1½ years purchase —No 1157

NORTH MIDLANDS —Old-established mixed Panel and Private PRACTICE in County district near large town Average cash receipts £1 067 p a Panel 970 and transferable appointments £200 p a Excellent detached house 2 reception 6 bedrooms Professional rooms garage and large garden Premium £1 250 —Premium—1½ years purchase —No 1117

NORTH WALES COAST —Good class PRACTICE in select resort Cash receipts last year £905 No Panel or appointments Nice detached house with splendid accommodation garage and garden Premium—Practice —2 years purchase —No 1152

MANCHESTER —Old established middle and working-class PRACTICE in suburb Cash receipts last year £2 527 Panel 2 200 Good scope Good semi detached house 2 reception 3 bedrooms garage and small garden Premium—1½ years purchase —No 1154

LINCOLNSHIRE —PRACTICE or SHARE in prosperous town Satisfactory whose wife is also a doctor Gross receipts average £4 200 p a Panel —900 Good house to rent Premium—whole Practice or one third share—2 years purchase —No 1164

LANCS TOWN —Sound mixed Panel and Private PRACTICE close to coast In present hands 38 years Cash receipts last year £1 487 Panel 1 400 Nice detached house 2 reception 3 bedrooms garage and large garden For sale —Practice—£2 000 —No 1153

YORKSHIRE (W R) —Old-established mixed Panel and Private PRACTICE Cash receipts about £1 200 p a Panel 900 Scope Excellent detached house 2 reception 4 bedrooms garage and garden Premium—1½ years purchase near offer —No 1125

NORTH STAFFS —Old-established mixed Panel and Private PRACTICE Cash receipts over £3 000 p a Panel 4 000 Large detached house with accommodation and garage for sale Premium—Practice—best offer —No 1129

MIDLAND SPA —PARTNERSHIP in old-established PRACTICE Cash receipts last year £2 500 Panel 1 200 Possible Hospital appointment House available with garage and garden Premium—1 share—2 years purchase No 1124

LINCOLNSHIRE —Very old-established PRACTICE in pleasant town Cash receipts last year £2 471 Panel about 1 300 Scope Hospital Good house 5 bedrooms garden and garage To rent Premium £3 150 —No 1132

— WANTED —

ASSISTANTS and LOCUMS

For Immediate Engagements

Apply with full particulars to above address

All communications to be addressed to the Branch Manager BRITISH MEDICAL BUREAU 33 CROSS STREET MANCHESTER

BOVRIL MEDICAL AGENCY, LTD.

ALDINE HOUSE,
10 13 BEDFORD STREET, STRAND, LONDON, W C 2

Telegrams BOVMEDICAL, LESQUARE, LONDON Telephone TEMPLE BAR 1616 (3 Lines)

Chairman and Managing Director Dr J FIELD HALL

The maximum commission payable on the sale of any Practice or Partnership in Great Britain placed exclusively in the hands of this Agency is £50 (fifty pounds) which sum covers goodwill drugs surgery fittings, fixtures and furniture, instruments and book debts but not house property Schedule of Terms will be forwarded on application.

Accountancy and legal services furnished by the Agency where desired at moderate inclusive charges
No charge is made to Principals for the introduction of Locum Tenens or Assistants

1 MIDLANDS —COUNTY TOWN —PARTNERSHIP —ONE THIRD OR ONE HALF SHARE in old-established mixed-class Practice having exceptional scope for increase Gross cash receipts for past 12 months approximately £2,000 p a including panel of £1 100 p a and P M S £4 0 p a Fees from 3 6 Suitable house with ample accommodation garden garage electric light Rent about £70 p a Premium 2 years purchase Ingoing partner must be experienced preferably Scottish or English and married

2 LONDON S E.—PARTNERSHIP —ONE HALF SHARE in well-established good mixed Practice producing approximately £2 600 p a including panel of about 1 400 Fees from 1 6 Suitable house available with 5 bedrooms, etc Premium 2 years purchase Ingoing partner must be experienced and energetic worker

3 LONDON S W —CENTRAL DISTRICT —Recently established better class non-dispensing PRACTICE with scope for OPHTHALMOLOGY producing nearly £1,400 p a of which about £400 is derived from refractions Fees 10 6 to 21 House contains 2 reception 6 bedrooms and Professional rooms. Private leasehold £9 0 p a Premium £1 000 part by arrangement if wished

4 MANCHESTER —Very old-established middle and working-class PRACTICE averaging for last 3 years £1 360 p a Panel of 840 Appointments about £150 p a Fees from 3 6 House with 3 bedrooms etc garden garage electric light. Price freehold £800 Premium for quick sale 1½ years purchase part by instalments.

5 LONDON EAST —Old-established mixed-class PRACTICE averaging about £2,700 p a including panel of about 1 300 and increasing. Separate surgery premises Premium 2 years purchase

6 LONDON N W —GROWING RESIDENTIAL DISTRICT —PARTNERSHIP —Guaranteed share in rapidly expanding Practice producing to commence about £1,400 p a with increase later Suitable detached house on rental at £52 p a. Ingoing partner must be experienced and energetic.

7 KENT —RAPIDLY EXPANDING DISTRICT —Well-established middle and working-class PRACTICE producing about £1 700 p a including panel of nearly 1 400 Good house with 2 reception 5 bedrooms, etc. large garden Inclusive rent £130 p a Premium 2 years purchase

8 MIDDLESEX —DEVELOPING AREA —Well established mixed class PRACTICE averaging over £1 000 p a including panel of 880 and appointments worth about £100 p.a. Corner house with 2 reception 4 bedrooms etc garden garage Rent £100 p a Premium £2 000 or near offer for quick sale

9 KENT COAST —PARTNERSHIP —ONE THIRD or ONE HALF SHARE in middle-class Practice averaging £3 650 p a Panel of about 2,000 Excellent modern house available by purchase or rental Premium 2 years purchase Ingoing partner must be experienced and well qualified.

10 YORKS —Country PRACTICE —Old-established income about £1 030 p a with scope for increase About £350 of present income is derived from panel of some 400 patients Good freehold house with ample accommodation garden and garage Price for practice and house £3 600 of which about £1 900 may be left on mortgage

11 GLOS —NEAR WYE VALLEY —Very sound PRACTICE producing about £1 300 p a including panel of 1 150 patients and appointments worth about £80 p.a Low expenses Detached house with large garden 5 bedrooms etc Freehold Premium 1½ years purchase

12 FAVOURITE SOUTH COAST RESORT —Private and better class PRACTICE averaging over £1 000 p a Minimum fee 5/ No dispensing Scope for panel if desired Modernized house with ample accommodation. Premium £1 000

13 UNOPPOSED COUNTRY within easy distance North of London. Income about £1 600 of which about £1 000 is from panel appointments and club Convenient family residence with 6-7 bedrooms etc. Freehold for sale or let on lease Premium 2 years purchase

14 ESSEX —PARTNERSHIP after ASSISTANTSHIP of 3 months in chiefly better class practice offering considerable scope Good house available on rental Share worth £600/£900 p a at 2 years purchase

15 WEST LONDON RESIDENTIAL DISTRICT —Old-established chiefly upper and middle class PRACTICE averaging approximately £1 500 p a. Selected panel of 114 patients but scope for increase if wished. Fees 5/ to 21/ Non-dispensing Scope for increase as large blocks of modern flats in course of erection Excellent house with ample accommodation. Premium £3 000

16 LINCS —MARKET TOWN —Old-established PRACTICE in prosperous district producing nearly £2 500 p.a. Panel of nearly 1 300 Substantial house (2 reception 7 bedrooms, etc good garden) Rent £75 p a Premium 1½ years purchase or near offer for quick sale

17 MIDLANDS —GOOD RESIDENTIAL COUNTRY DISTRICT —Contract PRACTICE at present producing about £750 p a., but capable of considerable expansion Choice of 2 houses. Mod rate premium for quick sale Vendor retiring through ill health

18 OUTLYING NORTHERN SUBURB —Recently established PRACTICE on new estate producing about £300 p.a including panel of 350 House with 2 reception 3 bedrooms etc. Garden. Price £670 Reasonable

19 —A half-share in old-established good-class £ 0 p a Panel of about 1 500 and various appointments producing about £600 p.a Good house with ample accommodation, large garden etc. Freehold for sale Good schools and social facilities. Premium 2 years purchase Ingoing partner should be experienced and have knowledge of

20 NORTH WES P —One-fifth share (with increase later) producing about £5,200 p.a. including panel of about 600 Suitable maisonette with 2 reception 2 bedrooms, etc. Inclusive rental £90 p.a. Premium 2 years purchase

21 DURHAM COUNTY —Old-established industrial PRACTICE producing £2,000 p a of which only about £4 0 is derived from private work. Panel of over 2 100 units. Practice has been held by the vendor for about 20 years Premium £4 000 to include book debts drugs, surgery furniture etc (part by arrangement) or £3 600 cash down.

22 COAST TOWN WITHIN 0 MILES OF LONDON —Well-established PRACTICE producing about £1 600 p.a., of which about £1 100 p.a. is derived from panel of approximately 1 300 patients, P N.S etc. Good freehold house available Thoroughly modernized and redecorated central heating Ample accommodation garden garage Price £1 000 Premium 2 years purchase Scope for anyone who can do surgery

23 CITY LOCK UP —Old-established PRACTICE producing about £1,250 p.a gross, or approximately £ 00 p a net Fees 10 6 and 21 Good deal of electrotherapy done Premium £1 000 with furniture equipment, etc. at valuation. Hours Mondays to Fridays only 10 to 5

24 WEST END —Opportunity for physician desirous of entering West End PRACTICE M R C P minimum qualification essential. Full details on personal application.

25 EAST LONDON —Well-established PRACTICE producing about £1,550 p a., of which about £750 p.a is derived from panel of about 1 350 patients, P M.S., and Public Assistance work. Large proportion of cash. Premium 2 years purchase

26 SURREY —WITHIN 15 MILES OF LONDON —PARTNERSHIP —ONE HALF SHARE in a very good mixed-class Practice situated in growing residential district Gross cash receipts approximately £3 000 p.a with substantial panel Very nice house with all modern conveniences and beautiful garden (2 reception 4 bedrooms, etc.) Can be rented or purchased. Premium 2 years purchase. Ingoing partner must be experienced in surgery

27 LONDON S W —Old-established mixed-class PRACTICE producing for last 12 months £7 0 including panel of 2 0 Flat can be rented at £78 p a. Premium £1,200

28 LONDON EAST —Middle and working-class PRACTICE producing over £500 p.a. with good scope Panel of about 750 Fees from 2, Tea-roomed corner house Price for lease £550 Premium £500 to include drugs, surgery fittings etc, and some furniture

29 DEVON COAST —POPULAR HOLIDAY RESORT —Old-established non-dispensing PRACTICE averaging for the past 3 years £1 600 p.a including panel of 400 Suitable house with ample accommodation. Freehold £1,700 or would rent. Premium £2,800

30 NORTH WELSH COAST —Good middle-class non panel PRACTICE averaging about £900 p a with good scope Detached house overlooking beautiful bay with ample accommodation Sport of all kinds. Good schools. Premium 2 years purchase Ill health reason for sale

31 WEST MIDLANDS —PARTNERSHIP with succession in 2 or 3 years. Mixed-class Practice in attractive country town in very pleasant surroundings. Average receipts for last 3 years £1 800 p.a. Panel of about 850 On succession ideal house available 3 reception large lounge hall billiard room, 5 bedrooms etc excellent Practice accommodation nice garden garage Premium for half share £1 650

32 BEDS —PARTNERSHIP —ONE THIRD SHARE in well-established mixed-class Practice producing £1 675 p.a. Panel of 760 Suitable house easily obtainable Premium £1 000 Definite scope.

33 WELSH COAST —Well-established good mixed PRACTICE producing over £2 000 p.a. including panel of 1 4 0 Suitable house with ample accommodation good garden and garage Rent £50 p a. Premium £3 000 for quick sale

34 SURREY —RAPIDLY EXPANDING DISTRICT —PRACTICE at present produces about £700 p.a. but could be much increased Panel of 3 0 (discouraged) No midwifery Excellent house with all modern conveniences Premium for Practice and house £3 000

35 S W ENGLAND —FAVOURITE COAST TOWN —HALF SHARE after preliminary assistantship in chiefly better-class Practice producing nearly £2,000 p.a. Small panel Choice of residence Must be experienced and preferably knowledge of E N T Premium 2 years purchase part by arrangement.

36 LONDON S W —WITHIN EASY REACH OF CITY AND WEST END —Well-established chiefly middle and better-class PRACTICE with surgical scope producing about £1 450 p.a. Selected panel of 75 Fees 5 and 7,6. Good sized first floor flat with all conveniences. Purchaser should be able to do surgery and F R.C.S would be advantageous.

37 SOUTH WALES —Old-established mainly contract PRACTICE producing last year £2,200 of which £2,050 is from contract work and panel Suitable house available Future prospects are considered to be excellent, as new works have recently been erected in the district Premium £3 500

38 KENT COAST —FAVOURITE SEASIDE RESORT —Old-established middle-class PRACTICE producing about £670 p.a. Small panel 200 patients. Very good house in best end of the town with ample accommodation Freehold available Premium £1 200 Eminently suitable for retired army officer wishing to augment pension, or there is scope for younger man.

39 SUSSEX —FAVOURITE COAST TOWN —Old-established PRACTICE producing about £800 p.a. including panel which brings in about £150 p.a. Good house on two floors, 2 reception, 4 bedrooms, etc. Freehold for sale. Premium 2 years purchase

40 NORTHANTS —ASSISTANTSHIP with view to Partnership in an old established country Practice with good future prospects. Initial salary £500 p a. including car allowance the assistant to live out. Full details on application.

ASSISTANTS REQUIRED —Several good vacancies. Full details on application.

The Agency has made arrangements for special facilities on very favourable terms, to be afforded to approved purchasers for the advance of part of the premium for any suitable practice or partnership Full details on application.

INDEX TO ADVERTISEMENTS

PUBLISHERS

Archives of Disease in Childhood Cover iii
British Medical Association 7 36
Churchill J & A Ltd 2
Lewis H K & Co Ltd 3
Nursing Illustrated 6
Oxford University Press 4
Paul Stanley 6
Saunders W B & Co Ltd 5
Selwyn & Blount 36
Wright John & Sons Ltd 2

ASSURANCE & INSURANCE

London & Counties Medical Prot Soc Ltd Supp i
Medical Insurance Agency 57
Medical Sickness Ann & Life Assce Socty Ltd 39
Yorkshire Insurance Co 38

BANKS & FINANCE

British Medical Finance 64
Westminster Bank Ltd 38

CHEMISTS

Abbott Laboratories Ltd 29
Allen & Hanburys Ltd 15
Bayer Products Ltd 25
Belzema Ointment 19
Bell & Croyden 12
Boutalls Ltd 38
British Drug Houses Ltd 13 17 19
Burroughs Wellcome & Co 31
Continental Laboratories Ltd 20
Duncan Flockhart & Co 15
Eli Lilly & Co Ltd 22
Fassett & Johnson Ltd 17
Fellows Med Mfg Co Ltd 18
Giles Schacht & Co Cover ii
Glaxo Laboratories Ltd 33
Maw S Son & Sons Ltd 10
May & Baker Ltd Supp iii
Menley & James Ltd 12 26 27
Reckitt & Sons 22

Chemists—*continued*

Riddell Francis 14
Saccharin Corpn Ltd 24
Scott & Turner Ltd. 23
Valentine's Liver Extract 16
Wander A Ltd 16
Wyeth F J Bro Ltd 28

CIGARETTES & TOBACCO

Carreras Ltd Supp ii
Du Maurier 9
Player's Navy Cut 37

FOODS, BEVERAGES

Allen & Hanburys Ltd Cover iv
Bickiepegs Ltd 38
Benger's Food Ltd 20
Genatosan Ltd 21
Harden Bros & Lindsay Ltd Cover ii
Marmite Food Extract Co Ltd 16
Millers Mutual Assn 14
Nestlé's Milk Products 15
Ramlosa Table Water 6

FOOTWEAR, TAILORING & CLOTHING, etc

Atheenic Mills 40
Baber C H 8
Deimel Fabric Co 2
Roussel J Ltd 35
Two Steeples 36

MOTORS & ACCESSORIES

Mann Egerton Co Ltd Supp i
Wakefield C C & Co Ltd 7

NAME PLATES, etc

Hall F B & Co 40
Herd S J & A 40
Lewis H K & Co Ltd 40
Osborne F & Co Ltd 40
White Bronze Co 40

SURGICAL APPARATUS

Allen & Hanburys Ltd 10
Bailey W H & Son 39
Hanger J E & Co Ltd 34
Hilliard 40
Millikin & Lawley 38
Robinson & Son Ltd 24
Salmon Ody 38
Salt & Son Ltd Supp iv
Thermega Ltd 36

VACCINES, SERA, etc

Evans Sons Lescher & Webb 32
Thackray C F Ltd 30

WINES, SPIRITS, etc

Anderson Dobson & Co Ltd 40

X-RAYS & ELECTRO-MEDICAL

Hanovia Ltd Supp ii
Portable X Rays Ltd 40
Victor X Ray Corporation Ltd 35

HOMES & INSTITUTIONS

Pages 40 41 42 43

HOUSE AGENTS

Page 56

HOSPITALS & CLINICS

London Clinic 41
New Lodge Clinic 41

SANATORIA

Cotswold Sanatorium 44
Pendyffryn Hall Sanatorium 44
Tor na Dee Sanatorium 44

SPAS, HEALTH RESORTS, & HYDROS

Smedley's Hydro 43
Stanboroughs Hydro 43
Sunnyside Restorium 44

MEDICAL SCHOOLS, TUTORS, & LECTURERS

Pages 44 45 45

NURSING, etc

Page 59

TRANSFER AGENTS

Bovril Medical Agency Ltd 63
British Medical Bureau 60 61 62
Lee & Martin Ltd 63
Medical Agency 4

CONTRACT PRACTICE

Page 63

HOSPITAL VACANCIES, etc

Pages 45 46 47 48 49 50 51 52 53 53

CLASSIFIED ADVERTISEMENTS— (Wanted & Vacant)

Pages 54 55

GENERAL

Norwich & E of Eng M J Prot Soc 33
P & O Steam Navigation Co 5
Tampax Ltd 11

BMF

A Comprehensive Financial Service for Medical Men

THE scope of the facilities offered by the Company has been greatly extended and finance can now be obtained by a doctor for ANY purpose connected with the running of his practice or his house. The charges are unusually low and the service is strictly confidential as between the Company and the doctor. Further particulars and proposal forms may be obtained from the Company

BRITISH MEDICAL FINANCE LTD.
TAVISTOCK HOUSE SOUTH, TAVISTOCK SQUARE, LONDON, W.C.1

Published by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Eyre and Spottiswoode Limited East Harding St Fleet St London E C 4 Printed in Great Britain Entered as Second Class at New York, U.S.A., Post Office

A SPECIALIST PUBLICATION OF THE BRITISH MEDICAL ASSOCIATION

ARCHIVES of DISEASE in CHILDHOOD

Edited by

CHARLES HARRIS, M.D., F.R.C.P., and ALAN MONCRIEFF, M.D., F.R.C.P.

with the help of

H. C. CAMERON, M.D., F.R.C.P.
H. A. T. FAIRBANK, D.S.O., M.S., F.R.C.S.
LEONARD FINDLAY, D.Sc., M.D., F.R.C.P.
A. DINGWALL FORDYCE, M.D., F.R.C.P.Ed.
REGINALD MILLER, M.D., F.R.C.P.
C. MAX PAGE, D.S.O., M.S., F.R.C.S.
LEONARD G. PARSONS, F.D., F.R.C.P.
SIR FREDERIC STILL, K.C.V.O., M.D., F.R.C.P.
HUGH THURSFIELD, D.M., F.R.C.P.
EDITOR OF THE *British Medical Journal*

SEPTEMBER, 1938

CONTENTS

Wilms' embryoma By Rudy O. Stern, F.D., and G. H. Nevins, M.D., M.R.C.P.

Oesophagitis in infancy By J. H. Ebbs, M.D., D.C.H.

Symmetrical degeneration of the neostriatum in Chinese infants By W. J. C. Verhaart

Clinical ascariasis in children By Cicely D. Williams, D.M., M.R.C.P., D.T.M. & H.

Precocious puberty, with a report on a case of pineal syndrome By A. V. Neale, M.D., M.R.C.P.

Congenital pyloric stenosis in first and second cousins By E. A. Cockayne, D.M., F.R.C.P.

Nutritional oedema in children in Egypt By H. Shukry, M.R.C.P., M. A. Mahdi, M.Sc., Ph.arm., and A. A. El Gholmy, M.D.

Spontaneous subarachnoid haemorrhage in children By H. G. Miller, M.B.

Congenital haemolytic anaemia with normal fragility of the red blood cells By J. Schiff, M.D.

Case reports

Hydatid cyst of the spinal canal successfully treated by operation By J. S. Y. Rogers, D.S.O., F.R.C.M. and G. R. Tudhope, M.D., Ph.D., D.P.H.

Tetany in the new born By O. Lloyd, M.B., B.S.

Cranio carpo tarsal dystrophy By E. A. Freeman, F.R.C.S. and J. H. Sheldon, M.D., F.R.C.P.

British Paediatric Association Proceedings of the Eleventh Annual General Meeting

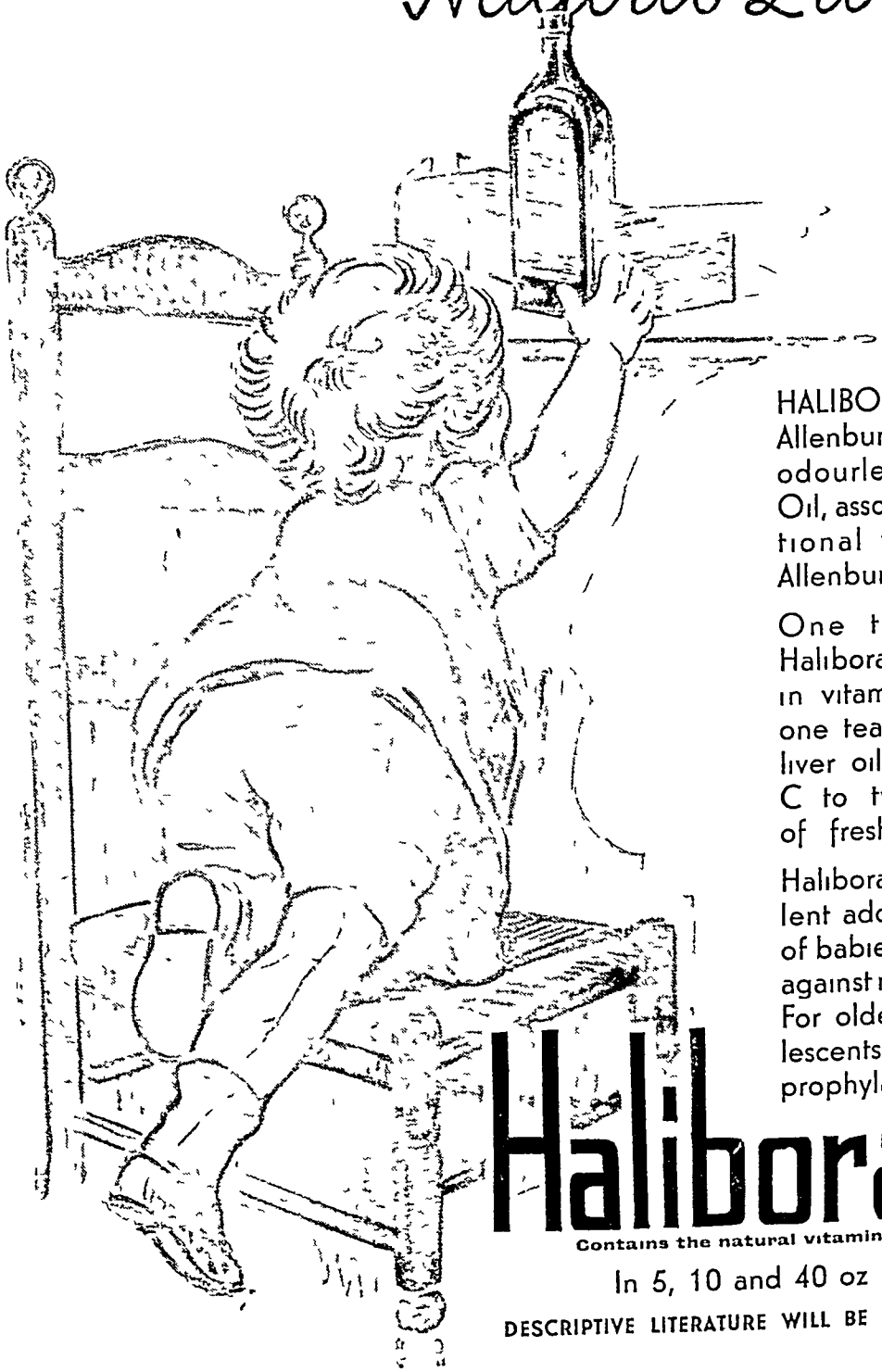
Published March June September and December

Yearly subscription (4 numbers), 25/ To members, 20/-
Single Number, 7/6

Applications with remittance should be addressed to

Archives of Disease in Childhood, B.M.A. House, Tavistock Square, London, W.C.1

The nicest way of taking Halibut Liver Oil



HALIBORANGE presents Allenburys tasteless and odourless Halibut-Liver Oil, associated with additional vitamin D and Allenburys Orange Juice

One teaspoonful of Haliborange is equivalent in vitamins A and D to one teaspoonful of cod-liver oil, and in vitamin C to two teaspoonfuls of fresh orange juice

Haliborange is an excellent addition to the diet of babies as a precaution against rickets and scurvy For older children, adolescents, or adults, it is a prophylactic vitamin tonic

Haliborange

Contains the natural vitamins A C and D

In 5, 10 and 40 oz bottles

DESCRIPTIVE LITERATURE WILL BE SENT ON REQUEST

ALLEN & HANBURYS LTD., LONDON, E.2

Telephone Bishopsgate 3201 (12 lines) Telegrams Grenburys Beth London

BRITISH MEDICAL JOURNAL

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION



SATURDAY SEPTEMBER 24 1938

PRINCIPAL CONTENTS

Partial Gastrectomy for Peptic Ulcer	p 645	Leading Articles	p 665
Prognosis of Anxiety States	649	Annotations	667
Obstetrical "Flying Squad"	654	Correspondence	677
Septal Deflection	656	Surgery in General Practice. Fracture of Carpal Scaphoid	671
Treatment of Urinary Infections	657	Reviews	661
		Epidemiology Section	688

WITH SUPPLEMENT AND EPITOME

LONDON

BRITISH MEDICAL ASSOCIATION

TAVISTOCK SQUARE

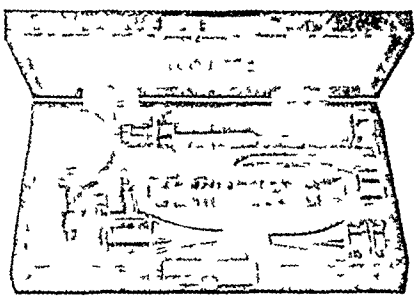
No 4055, WEEKLY, PRICE 1 3

Copyright

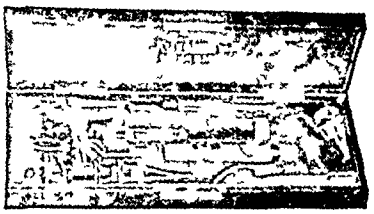
REGISTERED AS A NEWSPAPER

KLINOSTIK INSTRUMENTS FOR DIAGNOSIS

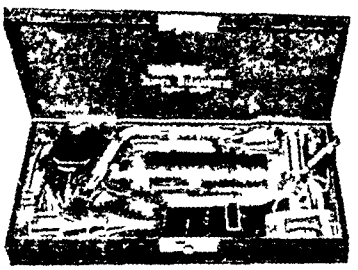
CHROMIUM PLATED
BRITISH THROUGHOUT



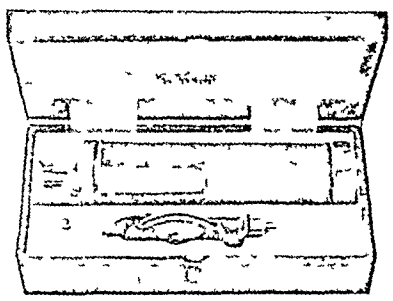
STANDARD COMBINATION DIAGNOSTIC SET No 80 Price 80/-



576-OBLONG STANDARD DIAGNOSTIC SET
Price £5 7 6

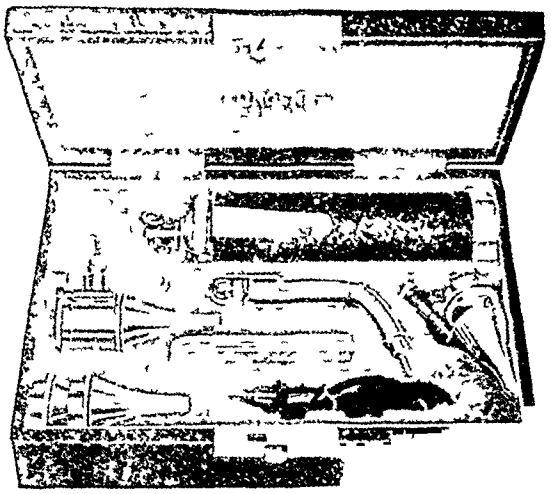


"SIX-16 OBLONG"
With Instant Focus Multipurpose Headlight
Price, £6 16 0



MAY ELECTRIC OPHTHALMOSCOPE
With Super Handle and spare Bulb
Price 60/

"FOUR-14" SUPER DIAGNOSTIC SET



May Electric Ophthalmoscope Auriscope with three Specula Nasal Speculum Illuminated Tongue Depressor
Super Battery Handle
Price £4 14 0

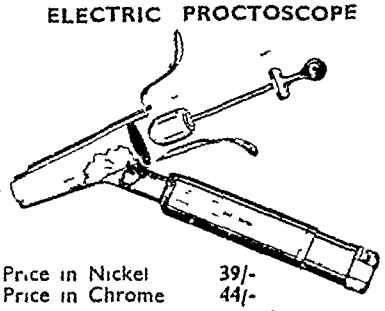


INSTANT FOCUS MULTIPURPOSE HEADLIGHT
Fitted with Optical Lens Gives Focus Range from Spot to Large Field
The Headlight can be rotated through any angle It projects a clear circular disc of light without shadows
Price 27/6



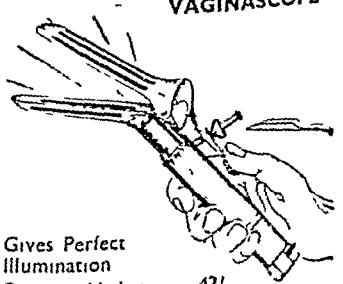
ATTACHE CASE SET
With Focusing Swivel Headlamp Electric Proctoscope and Electric Bi Valve Vaginascope Price £10 15 0

ELECTRIC PROCTOSCOPE



Price in Nickel 39/-
Price in Chrome 44/-
For all Rectal Diagnosis and Injection Treatment of Haemorrhoids

BI-VALVE ELECTRIC VAGINASCOPE



Gives Perfect Illumination
Price in Nickel 42/
Price in Chrome - 47/6

AVAILABLE FROM ALL SURGICAL INSTRUMENT MAKERS

JOHN SMITH & SON (Glasgow) LTD.

Established 1751

Manufacturers of Electric Diagnostic Instruments

26-30 GIBSON STREET, HILLHEAD, GLASGOW, W.2.

Cable and Telegraphic Address "KLINOSTIK, GLASGOW"

BRITISH MEDICAL JOURNAL

SEPTEMBER 24 1938

TABLE OF CONTENTS

ADDRESSES AND PAPERS

Late Results of Partial Gastrectomy for Peptic Ulcer JOHN MORLEY ch M F R C S and F H BENTLEY F R C S 645

Prognosis of Anxiety States ARTHUR HARRIS M D D P M 649

Obstetrical "Flying Squad" E. FARQUHAR MURRAY M D F R C S 654

Septal Deflection W S SYME M B ch B F R F P S 656

Calcium Mandelate and Sulphanilamide in Treatment of Urinary Infections H DROLLER, M D 657

SURGICAL SERIES

Fracture of the Carpal Scaphoid H A BRITTAIN, M ch F R C S 671

CLINICAL MEMORANDA

Localized Hypertrophic Emphysema KENNETH ROYES B A B M 659

A Case of Complete Hypospadias J J MURRAY M B ch B and S BOOKHALTER, M D 659

Aneurysm of the Common Iliac Artery J NUTTALL HORNE M B 660

Recurrent Ectopic Gestation D G C WHYTE M B 660

REVIEWS

Political Arithmetic 661

A Survey of Bile 661

Key to Biological Literature 662

Malaria and Ankylostomiasis in Pregnancy 662

The Science of Nutrition 662

Notes on Books 663

GENERAL ARTICLES AND NEWS

Children with Defective Hearing Committee's Report 673

Nova et Vetera

George III (1738-1820) 664

Presidents of the New York Academy of Medicine 664

TREACHER COLLINS PRIZE 674

LONDON HOSPITALS AND AIR RAIDS 687

PREPARATIONS AND APPLIANCES 663

UNIVERSITIES AND COLLEGES 684

MEDICAL NEWS 687

LEADING ARTICLES

Chemotherapy of Gonorrhoea 665

Social Service 666

ANNOTATIONS

Vasomotor Control of the Cerebral Circulation 667

The Nature of Viruses 667

Vitamin E 668

Diagnosis of Syphilis 669

Radiotherapy of Carcinoma of the Cervix 669

Acute Laryngotracheobronchitis 670

SUPPLEMENT

Treatment and Evacuation of Gas Casualties E H HALL, M B, B Ch. D P H Major R.A.M.C

War Hospitals
Colonel C I ELLIS M D

HOSPITAL ACCOMMODATION FOR AIR RAID CASUALTIES IN SCOTLAND

INDIRECT METHODS OF ADVERTISING

AMENDMENTS TO THE POISONS LIST

PUBLIC HEALTH NOTES

INSURANCE MEDICAL SERVICE

CORRESPONDENCE

POSTGRADUATE NEWS

NAVAL MILITARY AND AIR FORCE APPOINTMENTS

Association Notices Vacancies and Appointments Diary

OBITUARY

T M Burn Murdoch M B 685

K H Watkins M S F R C S 685

Mr A J Story 686

Sir R H Woods M ch F R C S I 686

J Corcoran L R C P and S Ed 687

EPIDEMIOLOGY SECTION

TABLE OF INFECTIOUS DISEASES AND VITAL STATISTICS 688

EPIDEMIOLOGICAL NOTES 689

CORRESPONDENCE

Hepatitis after Prophylactic Serum S A PROPERT M R C P 677

Convalescent Serum in Infantile Paralysis G R GIRDLESTONE F P.C S 678

Human Oil from the Omentum G R OSBORN M B 679

A Strict Vegetarian Diet W J DANN Ph D J M RABINOWITCH 679

Tannic Acid Dressings in Wounds of the Fingers W D PARK M B 680

The Occipito posterior Case H WOOD-HILL M R C S R C BLIST M D 681

Treatment of Malaria RYAN MACMAHON L M S S A 681

Tuberculosis Dispensaries or Chest Clinics? W PATON PHILIP M B PHILIP ELLMAN M D 681

Fracture of the Neck of the Femur R WATSON JONES F R C S 682

Aural Vertigo A. J WRIGHT F R C S 682

Catarrhal Jaundice A. J QUICK M D W N LEAK, M D 683

The Harris Prostatectomy CLIFFORD MORSON O B E F R C S 684

Faecal Accumulation in the Rectum W W SHRUBSHALL L R C P and S Ed A W DOCKAR, M B 684

Peritonsillar Abscess H V FOXTON M D 684

LOCAL NEWS

ENGLAND AND WALES—

Epsom College Pensions and Scholarships 674

L C C Nurses 674

Control of Puerperal Sepsis 675

The Croydon Obstetric Service 675

Cancer Research in Yorkshire 675

Food Investigation 675

SCOTLAND—

Dundee Royal Infirmary's Needs 676

Tuberculosis Trust 676

Scottish Mental Hospitals Pathological Board 676

INDIA—

Bengal Housing Conditions 676

The Punjab Epidemiological Bureau 677

LETTERS AND ANSWERS

Cleaning Slides for Blood Films 690

Income Tax 690

Uterine Swabs in Puerperal Pyrexia 690

Effects of Oestrogens 690

A KEY TO CURRENT MEDICAL LITERATURE will be found at the end of the JOURNAL

No 18a

Dressing for Scalp Wounds



THIS technique is one of many shown in detail in the sectionalised film, "The Use of 'Elastoplast' in Modern Surgery." If you would care to see it, please communicate with *T J Smith & Nephew, Ltd., Dept B* 14, *Hull,* for details of its exhibition

B M A BRANCH Secretaries are invited to write for available dates for projections

Elastoplast THE MODERN SURGICAL DRESSING

ELASTIC ADHESIVE BANDAGES, PLASTERS, DRESSINGS

J. & A. CHURCHILL LTD.

Arresting Pictures ★ ***SEVEN NEW BOOKS*** ★ *Lucid Text*

A NEW BOOK 87 Illustrations 12s 6d

ELEMENTARY ANATOMY AND PHYSIOLOGY

By **JAMES WHILLIS, M.D., M.S., F.R.C.S.**

University Reader in Anatomy, Guy's Hospital Medical School

Correlates structure and function and emphasises the essential interdependence of Anatomy and Physiology

---

A NEW BOOK 4 Plates and 33 Text figures 12s 6d

BIOCHEMISTRY FOR MEDICAL STUDENTS

By **W. V. THORPE, M.A., Ph.D.**

Reader in Chemical Physiology, University of Birmingham

This volume is an endeavour to supply the student of medicine or dentistry with those biochemical facts that he will require especially

---

NEW (9th) EDITION 21 Plates, 20 in Colour 360 Text-figures 18s

DISEASES OF THE EYE

By **SIR JOHN HERBERT PARSONS, *C.B.E.*, D.Sc., F.R.C.S., F.R.S.**

Consulting Ophthalmic Surgeon, University College Hospital, London

This favourite book gives detail of new drugs and new methods of treatment

---

NEW (3rd) EDITION 299 Illustrations 36s

A TEXTBOOK OF SURGICAL PATHOLOGY

By **C. F. W. ILLINGWORTH, M.D., F.R.C.S.Ed.**, and **B. M. DICK, M.B., F.R.C.S.Ed.**

Lecturers in Clinical Surgery, University of Edinburgh

The appearance of a third edition within three years is adequate testimony of the continued usefulness and popularity of this work. It is well written and contains for its size a surprising amount of information.

—THE LANCET

Also by C. F. W. Illingworth, F.R.C.S.Ed.— A Short Textbook of Surgery 21s

---

NEW (2nd) EDITION 125 Text-figures and 13 Plates 21s

DISEASES OF INFANCY AND CHILDHOOD

By **WILFRID SHELDON, M.D., F.R.C.P.**

Physician for Diseases of Children, King's College Hospital; Physician to Out-Patients, The Hospital for Sick Children, Great Ormond Street, London

The author is to be congratulated on his production of a reliable survey of the diseases of infancy and childhood, a book to be highly commended. —GLASGOW MEDICAL JOURNAL

A NEW BOOK 187 Illustrations 15s

A SHORT TEXTBOOK OF MIDWIFERY

By **G. F. GIBBERD, M.B., M.S., F.R.C.S., M.C.O.G.**

Assistant Obstetric Surgeon, Guy's Hospital; Obstetric Surgeon to In Patients, Queen Charlotte's Maternity Hospital

The author and publishers deserve the greatest possible praise for this work, which is of a practical character, illustrated by excellent photomicrographs and line drawings. This is undoubtedly one of the best books available on the subject of modern midwifery. —THE PRACTITIONER

NEW (6th) EDITION 169 Illustrations 24s.

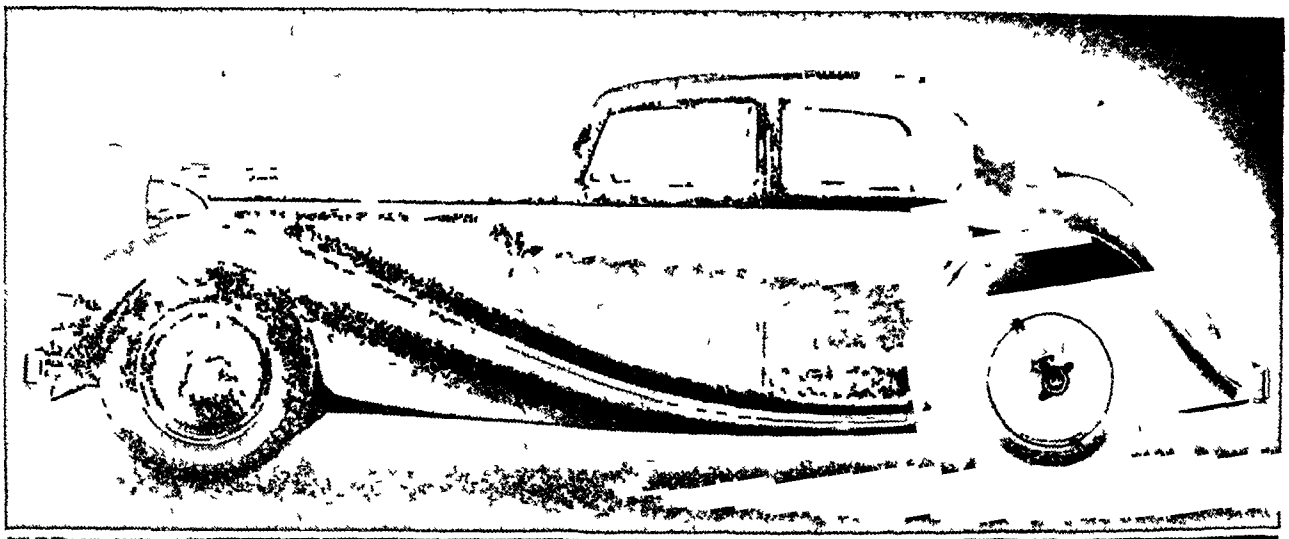
FORENSIC MEDICINE—A Textbook for Students and Practitioners

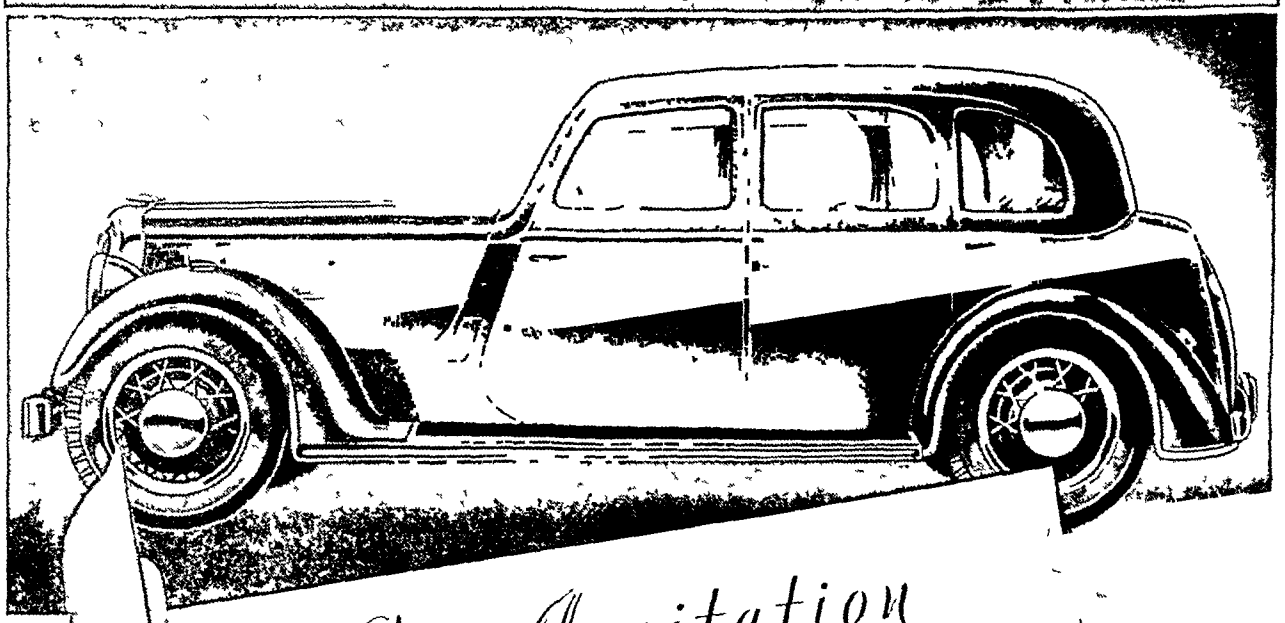
By **SYDNEY SMITH, M.D., F.R.C.P., D.P.H.**

Regius Professor of Forensic Medicine, University of Edinburgh

"The book is an excellent exposition of the subject, full in text and very complete in description, well illustrated and readable. —GLASGOW MEDICAL JOURNAL

104 GLOUCESTER PLACE, LONDON W.1





An Invitation

TO THE MEDICAL PROFESSION

Henlys, England's Leading Motor Agents, invite the investigation by medical men of the many outstanding advantages to be gained by some to Henlys for new or used cars

If you prefer a new car, Henlys are distributors for SS, Jaguar, Rover, Alvis, Austin and Studebaker, and agents for other outstanding productions, including Morris, Riley, Daimler, Humber, Hillman, Armstrong, etc

If your choice is a used car, Henlys offer you the largest selection in the country—7 days' free trial, and a guarantee with every example £100 and over

20 EQUAL MONTHLY PAYMENTS BUY ANY NEW CAR

To the medical profession, Henlys offer special car purchase terms Any make of new car can be bought from Henlys and paid for by 20 equal monthly payments—the most favourable rate obtainable anywhere

Any car will be taken in part exchange Write, 'phone or call now for further particulars

THE LARGEST & FINEST SELECTION OF NEW & USED CARS IN ENGLAND

HENLYS

HENLY HOUSE 385 EUSTON ROAD N.W.1 PHONE EUSTON 1444 DEVONSHIRE HOUSE PICCADILLY W.1 AND AT MANCHESTER BRISTOL AND BOURNEMOUTH

HENRY KIMPTON'S PUBLICATIONS

UP-TO DATE — *NEW (THIRD) EDITION* — *READY NOW*

TEXTBOOK OF PATHOLOGY

By WILLIAM BOYD MD MRCP(Edin) FRCP(Lond)
THIRD EDITION THOROUGHLY REVISED

Royal Octavo 1064 pages with 459 Engravings and 16 Coloured Plates — Cloth
Price 45s net

Much new material has been added to cover the many advances in this field since the previous edition appeared

NEW (SECOND) EDITION — *READY SHORTLY*

THE PRACTICE OF MEDICINE

By JONATHAN CAMPBELL MEAKINS MD LLD
SECOND EDITION REVISED AND ENLARGED

Large Octavo, 1408 pages with 521 Illustrations, including 43 in Colour — Cloth
Price 30s net

The text book is remarkably complete and we have no hesitation in recommending it as a reliable and up-to-date guide to medical practice —*British Medical Journal's Review of the 1934 Edition*

NEW (SIXTH) EDITION — *THIS DAY*

A TEXTBOOK OF PHYSIOLOGY

By WILLIAM D ZOETHOUT PhD
SIXTH EDITION, REVISED AND ENLARGED

Royal Octavo 714 pages with 291 Illustrations — Cloth
Price 18s net (Postage 8d)

This work is intended for those having a limited length of time for the acquisition of a basic knowledge of the subject

NEW BOOK — *JUST OUT*

THE ESSENTIALS OF PHARMACOLOGY, MATERIA MEDICA AND THERAPEUTICS FOR MEDICAL STUDENTS

By D M MACDONALD MD FRCPE

Foolscap Octavo 279 pages — Cloth
Price 7s 6d net (Postage 4d)

The essential idea which suggested an addition to an already large number of text books is to impress upon the student the importance of a clear and practical knowledge of pharmacy and materia medica in order to cultivate intelligent prescribing and to avoid slavery to proprietary preparations and to type formulæ on the other

NEW (EIGHTH) EDITION — *READY NOW*

PHYSIOLOGY IN MODERN MEDICINE

By the late J J R MACLEOD, MB
Edited by PHILIP BARD
Professor of Physiology Johns Hopkins University School of Medicine
EIGHTH EDITION REVISED AND RE WRITTEN

Royal Octavo 1086 pages with 333 Illustrations — Cloth
Price 36s net (Postage 9d)

In this new edition the present editor has followed a practice adopted by Prof Macleod Each major division of the work is written by one who is actively engaged in the study of the subject he treats The greater part of the book has been entirely rewritten

NEW BOOK — *JUST READY*

TEXTBOOK OF PERIODONTIA
(Oral Medicine)

By SAMUEL CHARLES MILLER, D D S

Royal Octavo, 631 pages, with Illustrations, many Coloured — Cloth
Price 35s net (Postage 8d)

NEW (THIRD) EDITION — *READY NOW*

AN INTRODUCTION TO CLINICAL PERIMETRY

By H M TRAQUAIR MD FRCS(Edin)
THIRD EDITION REVISED AND ENLARGED

Demy Quarto, xv + 320 pages — Price 30s net (Postage 9d) — Cloth

A work which has already won for itself the place of a standard work on the subject —*The Lancet*

By his painstaking and accurate investigations on the pathology of the visual fields Dr H M Traquair has put the whole of English speaking ophthalmology into his debt —*British Medical Journal*

NEW BOOK — *READY NOW*

GENERAL HYGIENE AND PREVENTIVE MEDICINE
A Text book for College Students, Medical Students, Nurses, Public Health Workers and Social Workers

By JOHN WEINZIRL MS PhD DrPH
Edited by ADOLPH WEINZIRL, BS MD CPH

Royal Octavo 424 pages — Price 18s net. (Postage 9d) — Cloth

This book will prove a valuable contribution to the subject of hygiene Student in advanced course medical student nurse public health worker and teachers in training will find it a useful adjunct to their equipment

NEW BOOK — *READY NOW*

ATLAS OF SKELETAL MATURATION

By T WINGATE TODD, MB ChB(Manch) FRCS(Eng.)

Demy Quarto 72 Radiographic Plates of the Hand — Cloth
Price 31s 6d net (Postage 9d)

This atlas contains 72 half tones of roentgenograms selected as typical of the successive stages in ossification in the hand of boys and girls from three months until the date in adolescence when all epiphyses are united There are more than a hundred pages of text dealing with general problems involved in the study and particular problems of the hand.

263, High Holborn **HENRY KIMPTON** **London. W.C.1**

The Hearing Aid Par Excellence

BŌNOCHORD P. 3



Vest Pocket Valve Amplifier

SMALL AS A MICROTELEPHONE, YET WITH THE HIGHEST OUTPUT EVER OBTAINED FROM A POCKET VALVE DEAF AID

Since their introduction the main obstacle to the general use of valve amplified deaf aids has been their bulk and weight Attempts have been made to produce them in a form suitable for wear on the person without inconvenience, but in every case performance has been sacrificed to size, or the instrument has been ungainly for pocket use

The BŌNOCHORD P3 is a 3 valve amplifier with piezo electric microphone, which will fit *easily* into a waistcoat pocket with separate batteries Special valves designed for us have made this possible, together with the use of small components developed by our Research Department In spite of its small size the aid has the amazingly high maximum output of 60 decibels Let us send you full details of this new instrument, which we believe will do much to establish the general use of valve aids

ALLEN & HANBURYS LTD., Acoustic Department **48 Wigmore Street,**

and at

LIVERPOOL
ALEXANDER & FOWLER
Pembroke Place
Tel No Royal 3242

NEWCASTLE ON TYNE
BRADY & MARTIN LTD
29 Mosley Street
Tel No Newcastle 20849

MANCHESTER
J A PRESTY
27 Byrom Street St John Street
Tel No Blackfriars 2712

EXETER
BROOM REID & HARRIS
3 Queen Street
Tel No Exeter 3218

BIRMINGHAM
J CANNON
225 Warwick Road Olton
Tel No Acocks Green 1479

EDINBURGH
J D DUNAN B Sc M P S
11 Randolph Place
Tel No Edinburgh 24546

ABERDEEN
FRASER & McKAY
34 Upperkirkgate
Tel No Aberdeen 962

BAXTER'S INTRAVENOUS SOLUTIONS

IN

"VACOLITERS"

AND

BAXTER'S BLOOD TRANSFUSION APPARATUS

WE INVITE YOU TO AN EXHIBITION
OF THE ABOVE APPARATUS ON OUR

STANDS (Nos. 30 & 31)

AT THE

LONDON MEDICAL EXHIBITION

OCTOBER 17th-21st

JOHN BELL & CROYDEN, WIGMORE STREET, LONDON, W.1

Chapter 3 from BACK TO ACTIVITY ★

The *walking* lesson



★ How the patient is taught to walk with the limb in a semi-finished state and how the final adjustments are made as the walking lessons proceed is discussed very fully in "BACK TO ACTIVITY by E R Desoutter A copy of this book which is a complete survey as to what extent Desoutter Artificial Limbs can help those who have undergone amputation will gladly be sent on request

The patient is at first taught the correct stump movements and made to time his steps with the aid of a metronome Later some lessons in walking down steps e

DESOUTTER

DESOUTTER BROTHERS LTD 73 BAKER STREET LONDON W 1 *Welbeck 3924 5-6*

BRANCHES IN ALL PRINCIPAL TOWNS

AS AN ANTACID OR IN FEBRILE CONDITIONS



LEMBAR JUSTIFIES THE DOCTOR'S HIGHEST RECOMMENDATION

COMPOSITION

	% *Composition*
Natural Lemon Juice	35 0
Cane Sugar	25 0
Glucose (Dextrose)	4 0
Sol Extracts Barley (Maltose and Dextrin)	5 75
Starch	2 25
Water	28 0

100 *gms provides* 154 *Calories*

Tested and approved by a leading London Hospital Prescribe it for any condition in which lemon juice and barley water are allowed

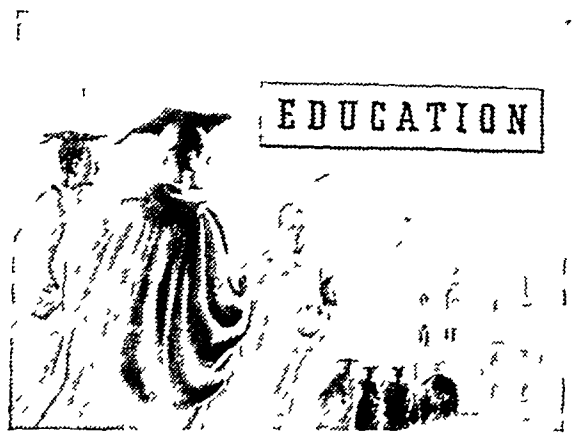
RAYNER'S

LEMBAR

Made from finest fresh lemons, good Scotch barley and Glucose (with cane sugar) More efficient, better flavour and more economical than ordinary lemon and barley *A bottle makes a gallon* It keeps indefinitely

SAMPLE sent with pleasure also useful booklet with special diet sheets and sickroom recipes from a London Hospital Write to Rayner & Co Ltd Medical Dept B London, N 18

2/- a bottle at all leading chemists and grocers



If the average patient could appreciate the importance of education as well as the doctor does, the problem of constipation would be simplified Lack of intelligence or discipline often makes necessary a treatment that will help the patient to establish a regular bowel movement

Where diet and exercise alone are insufficient, 'Petrolagar' is found to be a mild but thorough adjunct 'Petrolagar' mixes intimately with the bowel contents, to promote soft, easily passed stools

Education is important in the production of 'Petrolagar' too Every step in the manufacturing process is controlled by highly trained chemists whose university education and actual experience qualify them for their responsible positions Accuracy is always the rule by which they maintain the standard quality and efficiency associated with 'Petrolagar'

'Petrolagar' is a palatable emulsion of pure liquid petrolatum (65% by volume) and agar agar, for the treatment of constipation

PETROLAGAR LABORATORIES LTD,
Oldhill Street, London, N 16



Prescribing with Confidence

The advantages of Rhinitol in the treatment of

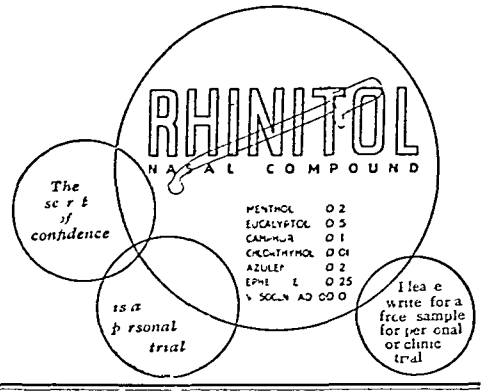
COLDS

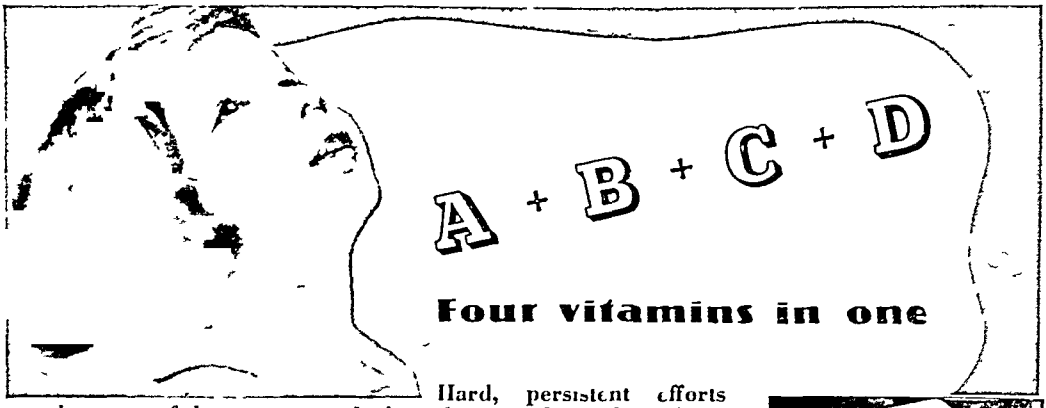
NASAL CONGESTION and CATARRH

and all other affections of the upper respiratory tract are —

1 Its very low ephedrine content.
2 Its property of emulsifying with body fluid owing to the vasogen vehicle
3 Its complete freedom from irritant or toxic effect
4 Its rapid yet prolonged action

E T PEARSON & CO, LTD MITCHAM, SURREY





Hard, persistent efforts on the part of laboratory and clinical research workers have established the fact that vitamin deficiencies are a serious cause of disease The modern practitioner has a right to expect the potency of vitamin products to be clearly and accurately defined on every packing 'Nestrovite' is definitely standardised

'Nestrovite' Tablets in boxes of 20 and 100 Emulsion in bottles of 4½ fl oz

NESTROVITE

Trade Mark Brand

Vitamin Tablets and Emulsion

Distributors Roche Products Limited Welwyn Garden City Herts

ROCHE



Modern Iron Therapy

Iron Jelloids are an elegant and reliable means of administering the protocarbonate of iron The preparation has none of the disadvantages of Pil Blaud The iron content remains fresh and unoxidized indefinitely and injury to teeth is avoided

The Jelloids are highly effective in the treatment of achlorhydric anaemia and indeed in all the simple anaemias in which massive iron therapy is indicated

Iron Jelloids

You are cordially invited to apply for samples for clinical test

The Iron Jelloid Company Ltd King George s Avenue Watford Herts

COLITIS

Colitis-Scourge of Civilisation

COLITIS—Chronic

(Simple Mucous Muco-Membranous Post Dysenteric)

Alternating intervals of constipation and diarrhoea often occur in cases of colitis Kaylene ol is applicable in either phase Its soothing and adsorptive actions combat the *irritative diarrhoea* and *its softening and lubricating actions counteract constipation* during the intervals

DOSE—KAYLENE OL 1 or 2 dessertspoonsful three times a day, half hour *before meals, or in mild cases half hour before breakfast and at bedtime*

Kaylene ol c Phenolphthalein (0 5 per cent) is taken when constipation is particularly troublesome Dosage as for Kaylene ol

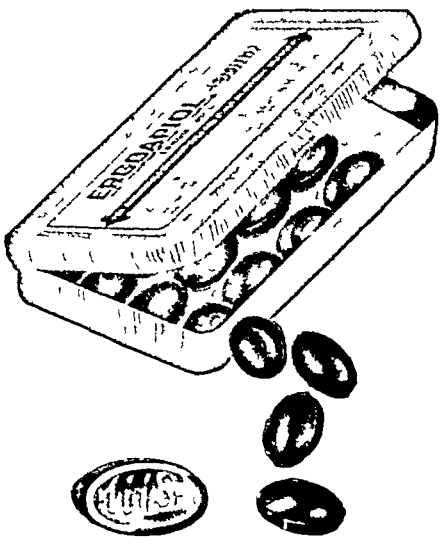
KAYLENE-OL

(KAYLENE BRAND OF COLLOIDAL KAOLIN WITH HIGHLY VISCOUS LIQUID PARAFFIN)

Samples and literature from the manufacturers

KAYLENE, LIMITED, *Sole Distributors* ADSORBENTS LTD
WATERLOO ROAD, LONDON, N W 2

ERGOAPIOL (SMITH)



AMENORRHEA - DYSMENORRHEA MENORRHAGIA - MENOPAUSE

Today, as for years, Ergoapiol (Smith) is the accepted medicament in combating those menstrual anomalies which may be traced to constitutional disturbances, atonicity of the reproductive organs, inflammatory conditions of the uterus or its appendages, mental emotion or exposure to the elements

The physician readily can ascertain whether his prescription for Ergoapiol (Smith) has been correctly filled by dividing the capsule at the seam, thus revealing the initials M H S embossed on the *inner* surface, as shown in photographic enlargement

Literature on request

MARTIN H. SMITH CO. NEW YORK U.S.A.
THOS. CHRISTY & CO. LTD., 4, OLD SWAN LANE, LONDON, E.C.4
Agents for Great Britain and Ireland



ASTHMA

BRONCHOVYDRIN

inhalation therapy with the "Weil" Asthma Inhaler. Prevents and [illegible] asthma attacks. Obviates injections. Orig Bottles cont. 12 5 c.c.

DR. O. WEIL CHEMICAL WORKS

SOLE AGENT IN GREAT BRITAIN

FRANCIS [illegible] LTD., Axtell House [illegible] St., Regent St., London, W.1

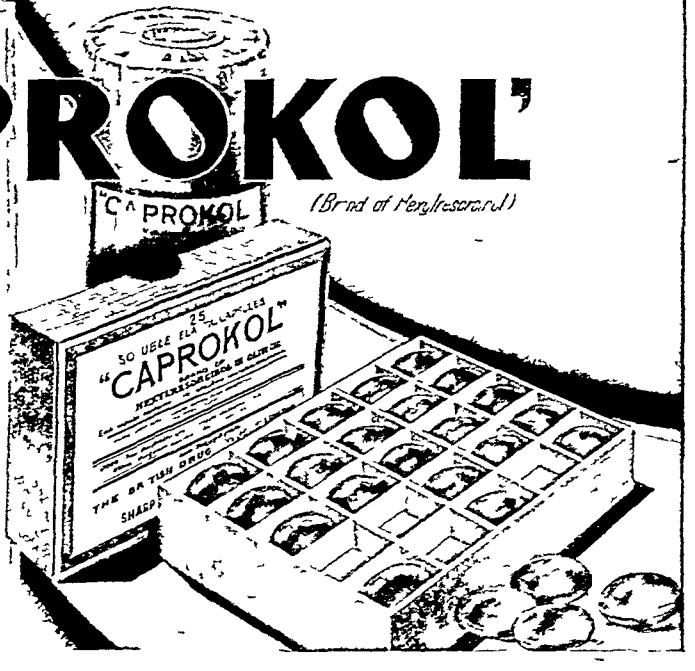
'CAPROKOL'

(Brand of Menfluramine)

For the aged patient

Comfort and tranquillity for the aged patient with cessation of depressing symptoms, follow immediately upon the regular daily administration of Caprokol

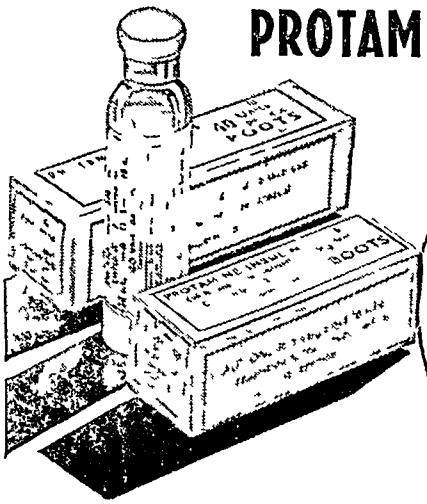
Sample on request



SOLE SELLING AGENTS THE BRITISH DRUG HOUSES LTD *and* SHARP & DOHME LTD LONDON

FOR THE TREATMENT OF DIABETES

PROTAMINE INSULIN (with Zinc) Suspension-Boots



Supplied as follows

40 units per c c
5 c c rubber capped vials 2/4
10 c c rubber-capped vials 4/6
80 units per c c
5 c c rubber-capped vials 4/6
Prices net

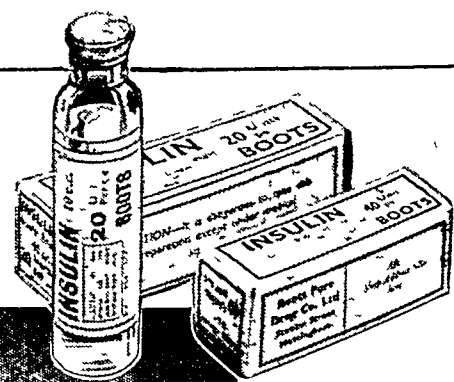
Accurately standardized and tested before issue May be used alone or with Insulin according to the needs of individual patients

Cases of Diabetes of moderate severity can usually be controlled by one injection of Protamine Insulin (with Zinc) Suspension-Boots a day, given before breakfast

INSULIN . . . BOOTS ONE QUALITY ONLY

THE HIGHEST OBTAINABLE—PURITY AND POTENCY GUARANTEED

Literature sent on request



WHOLESALE AND EXPORT DEPARTMENT
BOOTS PURE DRUG CO., LTD. NOTTINGHAM . . . ENGLAND

FORMALGAR

FORMERLY KNOWN AS GARGARISMA FORMALIN CO (HEWLETT'S)

An excellent preparation containing Formalin, Glyc Acid Carbolic, Tinct Pyrethri, etc When diluted in the proportion of one drachm in eight ounces of water, it forms an efficient Gargle for infectious Sore Throat, etc, or an Antiseptic Mouth Wash

MEDICAL OPINIONS

"This is a most economical, efficient, and pleasant Gargle and Mouth Wash It is highly concentrated, one fluid drachm being sufficient for an eight ounce bottle It has been employed by dental surgeons for use after extractions etc, and is also suitable for general purposes' —*Medical Annual*

Dr G H speaks very highly of Gargarisma Formalin Co used twice daily (Gargle—one drachm to eight ounces water) for throat irritation in professional singers

"I have tried your Gargarisma Formalin Co and find the patients like it"—E W S, L D S Eng

Introduced and prepared only by

C. J. HEWLETT & SON, LTD.

35/42, Charlotte Road and 83/85, Curtain Road, LONDON, EC 2

NICOTINIC ACID B.D.H.

Prolonged adherence to a special, restricted diet, such as may be prescribed for a patient with gastric ulcer, in addition to producing premonitory or frank symptoms of scurvy or beriberi, may be responsible for the onset of pellagrous symptoms Recent reports (*Lancet, January* 29, 1938, *p* 252, *ibid p* 253, *April* 23, 1938, *p* 944) indicate that the risk of even frank pellagra appearing in such circumstances is not so remote as might at first appear

The specificity of nicotinic acid in pellagra is established and Nicotinic Acid B D H should be prescribed whenever the condition is encountered

This product, also Ascorbic Acid B D H (Vitamin C) and Vitamin B_1 B D H, should be given prophylactically to all patients who are receiving a restricted diet in order that the manifestation of symptoms of vitamin deficiency may be prevented.

Sample on request

THE BRITISH DRUG HOUSES LTD LONDON N 1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

NEA/S/2

OVALTINE



SEBEK was identified with the Sun God RA

IN NUTRITIONAL CRISES

WHILE the average adult is able to maintain a healthy existence on the ordinary everyday diet there are certain periods in the life of each individual when an increased demand for the vital food elements arises Outstanding examples are the period of adolescence the pregnant and nursing states and the stage of convalescence after severe and lowering illnesses

Ovaltine is an eminently satisfactory adjunct to the ordinary dietary at all such times Composed of fresh full cream milk eggs and malt extract in proportions adjusted to meet physiological requirements it provides in an agreeable form calcium phosphorus vitamins and other important food elements

Ovaltine is a metabolic stimulant and digestive which assists the assimilation of other foods and promotes general good health It can therefore be taken regularly with advantage in place of tea coffee or other beverages A noteworthy feature is its delightful taste which is appreciated by people of all ages

A liberal supply for clinical trial sent free on request

A WANDER, Ltd., 184, Queen's Gate, S W 7
Laboratories and Works KING S LANGLEY HERTS

M27





A pleasant and beneficial night's rest is assured . . . . .

when 'Endrine' is used immediately before retiring It ensures easy breathing during the night by quickly relieving nasal catarrh

'ENDRINE'
Brand Regd

NASAL COMPOUND

Samples on request from

JOHN WYETH & BROTHER LTD.,
25, OLDHILL PLACE, LONDON, N 16
DISTRIBUTORS FOR PETROLAGAR LABORATORIES LTD

'PANOPEPTON'

LEAN BEEF—the entire group of nitrogenous substances those natively soluble and those rendered soluble by physiological hydrolysis amino acids and polypeptids with the natural savoury extractives and minerals

ENTIRE WHEAT GRAIN—the peculiar complex of nitrogenous substances those naturally soluble and those rendered soluble by physiological hydrolysis amino acids and polypeptids the farinaceous substance converted into dextrin and maltose and with the associated savoury constituents and minerals

Of the beef nothing is excluded but the indigestible connective tissue and lipoid Of the wheat nothing is excluded but the insoluble inert cellulose and silica of the shell of the grain

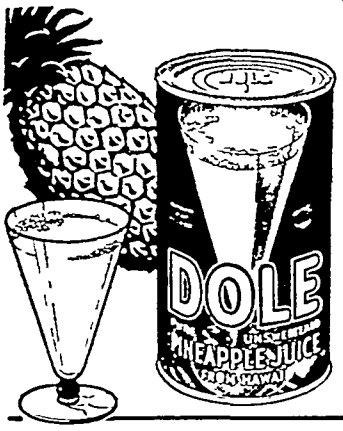
'Panopepton' is of a uniform standardized composition, it is highly agreeable, requires no preparation It is a potent restorative and emergency food in serious straits, a fortunate recourse for the invalid

Supplied in 12-oz bottles

A Free sample will be sent to Members of the Medical Profession on request

Originated and Manufactured by
Fairchild Bros & Foster (Inc N Y)
NEW YORK and 65 Holborn Viaduct
LONDON E.C 1

Agents
Burroughs Wellcome & Co,
LONDON SYDNEY and CAPE TOWN



Your patients will thank you for recommending such a *delicious* fruit drink

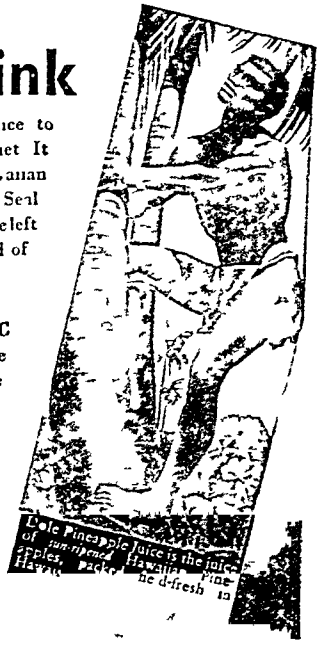
You can safely recommend Dole Pineapple Juice to patients who would like a new fruit juice in their diet It is the pure unsweetened juice of sun ripened Hawaiian Pineapple packed by the exclusive Dole Fast Seal Vacuum Packing Process The typical analysis on the left shows you what Dole Pineapple Juice is composed of

+ + +

It is a good source of Vitamins A B and C and natural fruit sugars Dole Pineapple Juice has received the Seal of Acceptance of the American Medical Association Committee on Food Taste and test this tangy drink yourself—write us on your letter head and we will send you a sample tin

TYPICAL ANALYSIS

Moisture	85 3 %
Ash	0 4 %
Fat (ether extract)	0 3 %
Protein (N × 6 25)	0 3 %
Crude fibre	0 02%
Titratable acidity as citric acid	0 9 %
Reducing sugars as invert sugar	12 4 %
Carbohydrates other than sugar (by difference)	0 38%



DOLE HAWAIIAN PINEAPPLE JUICE

J. K. HUSBAND & CO. LTD., 10 EASTCHEAP, LONDON, E.C 3

B.D.H. COMMON COLD VACCINES

The common cold is regarded as being due primarily to infection by a virus, with secondary invasion by the organisms usually found in the upper respiratory tract It is believed that these organisms which are normal inhabitants of the naso-pharynx may, under certain conditions, assume a pathological rôle

No vaccine against the infecting virus is at present available, and the value of the Common Cold Vaccines lies in their power to diminish the activity of the secondary invaders Three vaccines against these invaders are prepared in the B D H laboratories

B D H Common Cold Vaccine (Anticatarrhal)
B D H Influenza Vaccine (Mixed)
B D H Influenza Vaccine (British Army Formula)

DOSAGE The vaccines are generally used for prophylaxis, a course of four injections being given 0 25 c c, 0 5 c c, 1 0 c c, 1 0 c c at weekly intervals, they may be given, also, therapeutically—small doses being employed

Literature on request

THE BRITISH DRUG HOUSES LTD. LONDON N.1

Telephone Clerkenwell 3000 Telegrams Tetradome Telex London

VS/S 18a

SERENOL

biological non-toxic

SEDATIVE

Formula

Campho Sulphonate of sparteine	6 0 grains
Campho Sulphonate of ephedrine	2 5
Extract of boldo	10 0
Extract of crataegus	20 0 ,,
Extract of salvia	10 0 ,,
Tincture of marrubium	10 0 ,,
Glycerine extract of thyroid (1 equals 1 of fresh gland)	0 10 ,,
Valerian	50 0 ,,
Hexamethylene tetramine	10 0 ,,
Excipient q s	ad 1 000 c c

PRICE 4/6 per 4 oz bottle

Sample and Literature on request

Serenol is a sedative with action on the centres of the nervous vegetative system, sympathetic and parasympathetic, and on the cortical centres Recent knowledge has shown the interaction of nervous vegetative system and endocrine system, and on this knowledge SERENOL is based It is thus a biological, not a symptomatic, sedative, and, unlike many other sedatives, has not a direct depressant action on the cortical cerebral centres

Serenol is indicated in conditions of anxiety and general irritability, insomnia, hyperthyroidism, hyperadrenalism (as in neurocirculatory asthenia, effort syndrome), the so-called nervous palpitations of the heart, etc

Serenol is given in the following dosage For mild cases one to two dessertspoonsful on retiring For more severe cases one dessertspoonful at 10 a m , one dessertspoonful at 4 p m and two dessertspoonsful on retiring

Serenol, being a biological sedative containing no barbiturate, is not habit forming

CONTINENTAL LABORATORIES LTD. 30 MARSHAM STREET, LONDON, S W 1

Most practitioners continue to recommend as an Antacid and mild Aperient the century-old but still unrivalled

DINNEFORD'S

Pure Fluid **MAGNESIA**

DINNEFORD & CO LTD , CLIPSTONE STREET, LONDON, W

CFH

MEDICAL FACTS ABOUT TEA

In order to remove certain popular misconceptions about the chemical properties of Tea, thorough clinical and laboratory investigations have been conducted The following is a brief summary of the main results of these investigations —

(*a*) Tea as normally drunk is harmless and has no ill effects whatever on the human body The amount of caffeine and tea tannin in tea is pharmacologically small

(*b*) Tea tannin is a different substance from the tannic acid of the Pharmacopœia, which is a Pyrogallic tannin, and the two should not be confused

(*c*) Clinical experiments have shown that the action of tea tannin is very much milder than that of tannic acid, and the different composition of the two tannins is proved by the fact that the tannic acid of the Pharmacopœia is about 25 times stronger as an acid than tea tannin

(*d*) Many common beverages besides tea contain similar tannins

(*e*) A thorough investigation reported in "The Analyst" (1936, Lxi, 310) could find no tea on the market which was free from tannin If there were any such teas, they would be almost entirely tasteless

ISSUED BY THE INTERNATIONAL TEA MARKET EXPANSION BOARD LTD

INDICATIONS FOR 'SANATOGEN' No 14

CARDIAC INEFFICIENCY

Some Unfounded Beliefs.

Two distinguished cardiologists have recently drawn attention to some common yet unfounded beliefs about cardio-vascular disease It seems to be established that the dyspnoea, dizziness and other symptoms frequently attributed to myocardial degeneration are more often than not due to quite other causes, such as hyperpiesis, obesity, or some "vasomotor disturbance of psychoneurotic origin" We have it on the authority of Lewis that physical strain however severe "never injures the normal heart fibres, never produces injurious dilatation and never exhausts the heart's reserve" Not, apparently, in a healthy, normal individual does the heart become flabby or dilated by reason of age, or even of toxaemia One thing that seems to be certain is that in all cases of suspected cardiac inefficiency the minimum strain should be put on the digestive organs Especially is bulky food to be avoided It is in this part of the treatment that 'SANATOGEN' often proves so helpful

'SANATOGEN' is a carbohydrate-free product of ninety-five per cent pure milk casein with five per cent sodium glycerophosphate It is readily digested and absorbed, leaving no appreciable residue, and it is non-irritating to the intestinal mucous membrane

"I have tried your product 'SANATOGEN and have been quite satisfied with the results This patient was a heart case, and had been unable to retain food in stomach She got into a very low condition which of course reacted on her heart condition I am pleased to say she has now much improved and continues to use SANATOGEN —M B B Ch

'I have used 'SANATOGEN for a woman of 74 frail definitely myocardial and very difficult to feed The result has been most gratifying She has shown steady improvement from the first dose Her digestion and appetite are now as good as they were two years ago and she is able to take milk again which has not been the case for a long time She has only complained of cardiac distress once since taking the SANATOGEN Before this she had it almost daily She lives in my house so I have every opportunity of observing her —L R C P, L R C S

'SANATOGEN'

(Trade Mark)

A brand of Casein and Sodium Glycerophosphate

Sold by all chemists price 2/3 to 19/9

DOSAGE For children and adults two teaspoonsful three times daily or according to circumstances For infants ½ teaspoonful added to each bottle feed

The word SANATOGEN is the Trade Mark of Genatosan Ltd and denotes the Brand of Casein and Sodium Glycerophosphate manufactured by GENATOSAN Ltd exclusively by GENATOSAN Ltd Loughborough Leicestershire

Clinical samples and literature available on request to

GENATOSAN LTD., LOUGHBOROUGH, LEICESTERSHIRE

"COMMON COLD"

AND

ANTI-CATARRH VACCINE (EVANS)

(LOCAL STRAINS)

For Prophylaxis and Treatment

The facilities of the pathological laboratories at **EVANS BIOLOGICAL INSTITUTE** enable us to issue vaccines prepared from organisms collected in the locality in which the vaccine is to be used It will be appreciated that such vaccines are highly specific, producing a greater proportion of successful results than is usual with ordinary Stock Vaccines

The following formulæ have been evolved af er many years experience as having a comprehensive selection of organisms as found in numbers of typical cases in the correct proportions

COMMON COLD & ANTI CATARRH VACCINE (EVANS)
(No 3 for Prophylaxis)

M catarrhalis	200 *million*	per cc
Diplococci pneumoniæ	200 ,,	
Streptococci	200 ,,	
B Friedlander	100 ,,	
B septi	100 ,,	
Staphylococci (alb et aur)	200 ,,	
M tetragoni	100 ,,	
B influenzæ	100 ,,	

COMMON COLD & ANTI CATARRH VACCINE (EVANS)
(No 1 for Treatment)

M catarrhalis	50 *million*	per cc
Diplococci pneumoniæ	50 ,,	
Streptococci	50 ,,	
B Friedlander	25 ,,	
B septi	25 ,,	
Staphylococci (alb et aur)	50 ,,	
M tetragoni	25 ,,	
B influenzæ	25 ,,	

DOSAGE—PROPHYLACTIC (Vaccine No 3)

As different patients vary in their reaction to vaccine treatment it is only possible to suggest the average procedure A brochure which deals fully with the question of dosage will be sent on application In general a serie of three injections (given before the season during which the person is usually susceptible) is recommended The initial dose is 0 25 cc followed by 0 5 cc after an interval of seven days and a further 1 cc. after another week o so

DOSAGE—CURATIVE (Vaccine No 1)

In acute conditions an initial do e of 0 1 cc. or 0 2 cc. and in chronic conditions 0 25 cc. The initial do e may be repeated after three days If no reaction is produced subsequent injections can be larger

'COMMON COLD' AND ANTI CATARRH VACCINES (EVANS) (Local Strains) are issued as follows

Boxes of 3×1 cc. Ampoules No 3 Vaccine (Prophylaxis) 7/- per box
Boxes of 6×1 cc Ampoules No 1 Vaccine (Treatment) 14/- per box
Also in 5 cc. 10 cc. and 25 cc. bottles and in single Ampoules

Made in England at THE EVANS BIOLOGICAL INSTITUTE by

Evans Sons Lescher & Webb Ltd.

Liverpool & London

"Vitamin B_1 deficiency an outstanding fault

in the diet of many millions of people"

(B M J, 16 Oct, 1937, p 753)

The reduction in Vitamin B_1 intake, due to changes in dietary habits during the last hundred years, normally amounts to at least 50 per cent, and may be as much as 70 per cent It has been demonstrated, both experimentally and clinically, that a shortage of Vitamin B acts as a limiting factor in the maintenance of health and nutrition, and often results in gastro-intestinal disorders, loss of appetite, indigestion, constipation and, if long continued, to neuritis and arthritis

The logical way to rectify such shortage is to restore to the diet the Vitamin B-containing substance whose removal is responsible for the deficiency

This substance is available in the form of Bemax

For years it has been the policy of the proprietors of Bemax to ensure its Vitamin B_1 activity by biological assay of *every day s output* So far as is known, Bemax is the only food product for which such a claim is or can be made

The quantity of Vitamin B_1 supplied by the normal daily dose of Bemax—one tablespoonful—is 200 International Units, an amount sufficient to raise a deficient diet to an optimal level

The normal daily dose of Bemax supplies, in addition to Vitamin B_1, significant quantities of Vitamin B and B_2, Copper, Iron and Phosphorus as well as rich quantities of Vitamin E and other essential dietary elements

Bemax is an entirely natural product consisting only of stabilised wheat germs selected for their Vitamin B_1 activity with no addition whatsoever Clinical sample and literature on request The Bemax Laboratories, 23, Upper Mall, Hammersmith, W 6

Sterility and Habitual Abortion

The increasing use of Vitamin E for habitual abortion and sterility of dietary origin demands a wheat germ oil of proven high activity and of stable Vitamin value Such an oil is available for the medical profession in Fertilol

FERTILOL

Wheat Germ Oil Capsules

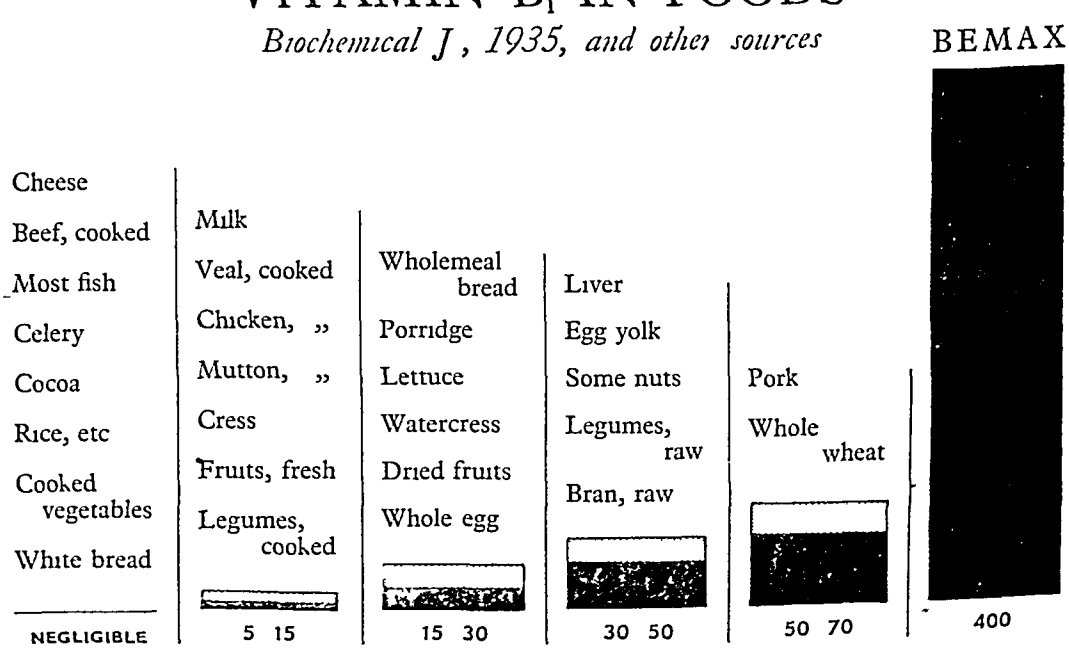
A highly active source of Vitamin E

A complimentary box of Fertilol Capsules and brochure sent on request

Vitamins Ltd,
(Dept B 68), Upper Mall, London, W 6

VITAMIN B_1 IN FOODS

Biochemical J, 1935, and other sources



The figures represent International Units per ounce

The Bemax Laboratories (Dept B 68), 23, Upper Mall, London, W 6

CRUNCHY FOODS

and the digestive juices

The view that the process of digestion begins in the mouth is accepted by most physicians The importance of a free flow of saliva cannot, therefore, be underestimated

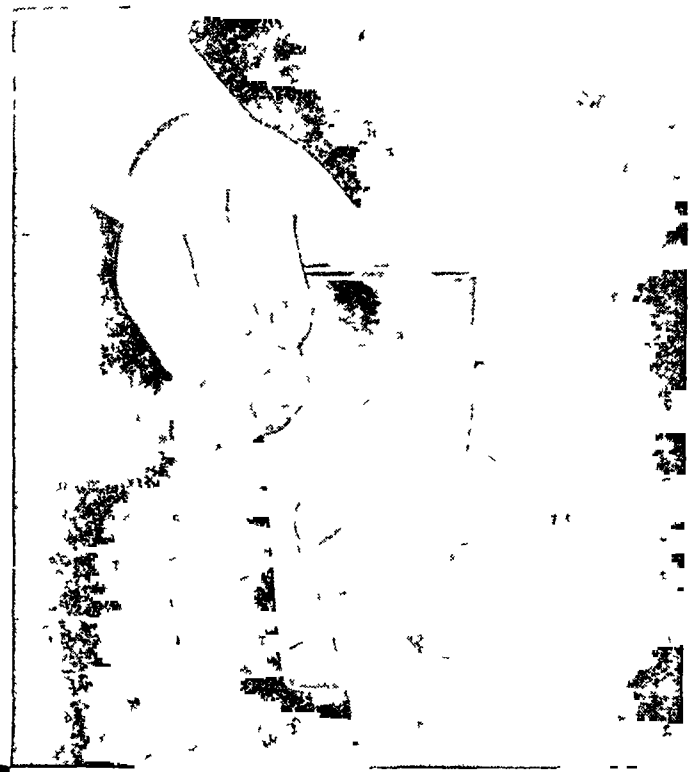
Crunchy foods which must be masticated thoroughly before they can be swallowed, naturally increase the flow of saliva It is generally believed that such crunchy foods therefore reach the stomach in an easily assimilated form, and also that softer foods taken at the same time will derive benefit from the extra saliva

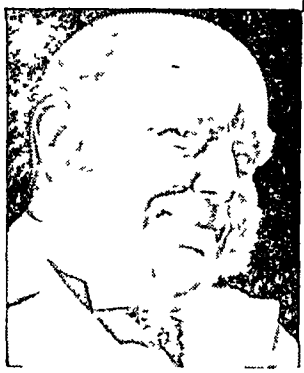
For these reasons many doctors recommend patients to include Ryvita in their diet A complimentary carton of Ryvita will gladly be supplied on request

THE RYVITA COMPANY LIMITED

96-98 Southwark Street, London, SE1

Bakeries in Birmingham





AS A FLUID INTAKE



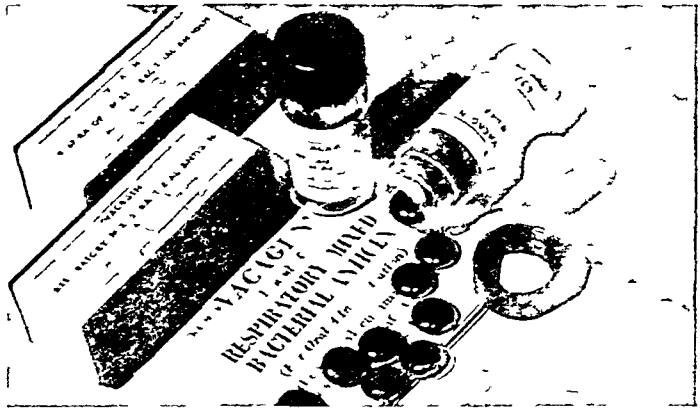
Medical opinion supports the use of barley water for this purpose And when you prescribe Robinson s 'Patent' Barley you can rely on pure barley packed in sealed hygienic containers—obviously better than pearl barley from an open sack Your patients will appreciate the fact that stewing is quite unnecessary and that small quantities of barley water can be freshly made as required As a fluid intake in cases of influenza and febrile conditions you can safely prescribe

BARLEY WATER
made from
ROBINSON'S
"PATENT" BARLEY

Descriptive pamphlet and clinical trial sample of Robinson s Patent Barley will gladly be sent on application to KEEN ROBINSON & CO LTD Dept O 188 Carrow Works Norwich

EVS—1.3

COMMON COLDS—INFLUENZA



TRADE **'VACAGEN'** MARK

RESPIRATORY MIXED VACCINE

For Oral Administration

For the prophylactic immunization against bacterial infections of the respiratory tract

'VACAGEN' RESPIRATORY MIXED VACCINE tablets are prepared with soluble antigenic substances which are released upon reaching the intestines and are rapidly absorbed, thus promoting the formation of antibodies which help in combating the infection

Supplied in vials containing 20 enteric-coated tablets

FORMULA *Each tablet contains the soluble antigenic fraction of* —

25 000 MILLION PNEUMOCOCCI * (DIPLOCOCCUS PNEUMONIAE)
15 000 MILLION STREPTOCOCCUS** (STREPTOCOCCUS HAEMOLYTICUS)
5 000 MILLION INFLUENZA BACILLUS (HAEMOPHILUS INFLUENZAE)
5 000 MILLION M. CATARRHALIS (NEISSERIA CATARRHALIS)
5 000 MILLION STAPHYLOCOCCUS AUREUS
5 000 MILLION FRIEDLANDER BACILLUS

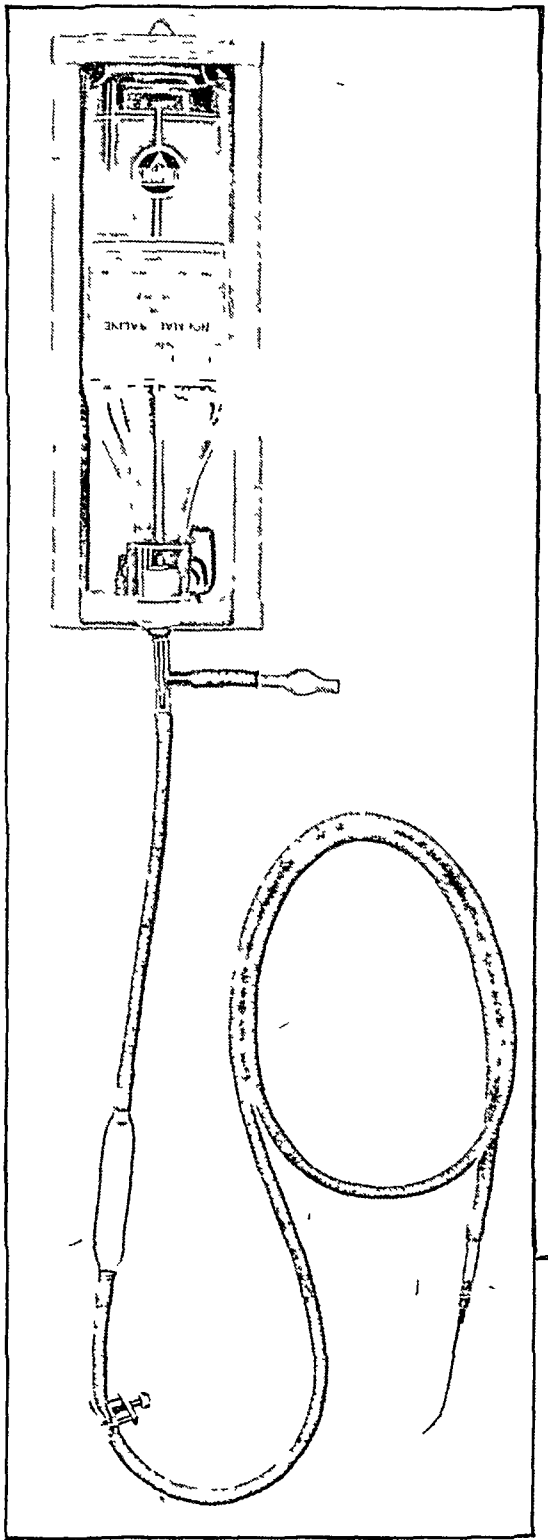
** Types I, II & III ** Hemolytic non Hemolytic & Viridans*

Literature supplied on request

SHARP & DOHME LTD

Mulford Biological Laboratories

76-78 CITY ROAD, LONDON, E.C.1



Crookes transfusion bottle apparatus ready for use

CONTEMPORARY TRANSFUSION PRACTICE

An All-British Achievement

The original, and still the premier, transfusion apparatus in the Collosol Transfusion Ampoule or in bottles.

The 20-oz and 40-oz porcelain stoppered bottles (illustrated) are prepared specially for hospital use

A wide range is now offered The solutions are the finest available, and will keep indefinitely The apparatus is designed for ease and speed in handling The cost is extremely low and bulk quotations will gladly be sent

Full information is contained in the new edition of "Contemporary Transfusion Practice" now available, which will be sent upon request

THE CROOKES LABORATORIES
(British Colloids Ltd)
PARK ROYAL, LONDON, N.W.10



TGS



'ENTORAL'

TRADE MARK BRAND

ORAL COLD VACCINE

FOR PROPHYLACTIC IMMUNISATION TO RESPIRATORY INFECTIONS AND PARTICULARLY TO THE COMMON COLD

'ENTORAL' IS AN IMMUNISING ANTIGEN WHICH, WHEN GIVEN ORALLY, WILL PRODUCE HETEROPHILE ANTIBODY IN SUFFICIENT AMOUNTS TO INCREASE MATERIALLY THE RESISTANCE OF INDIVIDUALS TO RESPIRATORY INFECTIONS ISSUED IN PACKAGES OF 20 AND 60 'PULVULES' BRAND FILLED CAPSULES

Lilly TRADE MARK

ELI LILLY AND COMPANY LIMITED

2, 3 and 4, DEAN STREET, LONDON, W 1

Distributing Agent in Britain for

ELI LILLY AND COMPANY, INDIANAPOLIS, U S A

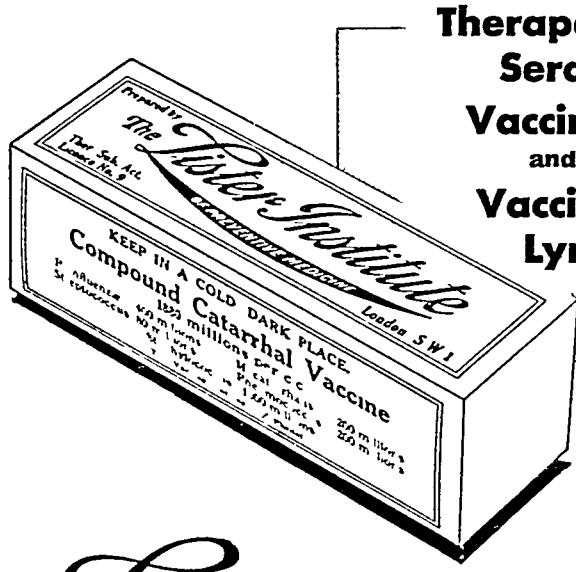
Cadburys have perfected a

SPECIAL CHOCOLATE

which is Sugar Free and therefore a suitable addition to the dietary of diabetics

This chocolate is extremely palatable, and because Cadburys have unlimited facilities for laboratory research and the subsequent manufacture and marketing of such a product it sells at a very low price. Further details and analysis with a sample of this Special Chocolate will be gladly forwarded to anyone interested. Please write to Cadburys Laboratories, Bournville.

CADBURY BROS BOURNVILLE ENGLAND



The Lister Institute
OF PREVENTIVE MEDICINE

Therapeutic Substances Act Licence No 9

Compound Catarrhal Vaccine

In catarrhal conditions of the respiratory passages mixed infections are found more often than pure infections with one type of organism *Bacillus influenzæ* Pneumococcus, and *Micrococcus catarrhalis* are believed to be the commonest primarily infecting organisms, but Streptococcus and Staphylococcus seem to be responsible for many of the secondary infections A mixed vaccine has been prepared from these five kinds of bacteria It is generally given as a prophylactic but may also be used in acute respiratory infections

DOSAGE—Prophylaxis 1st dose 20 million *B influenzæ* 10 million *Streptococcus*, 25 million *M catarrhalis* 25 million *Pneumococcus* 125 million *Staphylococcus* Subsequent doses at intervals of 7 to 10 days gradually rising to 8 times the original dose Then 4 to 8 times the initial dose every 4 to 8 weeks

Treatment—½ to ⅓ of prophylactic doses

PRICES—

Ampoules containing 235 million organisms per c.c. each	2/6
470 " "	2 6
940 " "	2/6
1 880 " "	2/6
10 c.c. rubber capped vials containing 470 940 or 1880 million organisms per c.c. each	15/
25 " "	25/

Sole Distributors for the Lister Institute

Allen & Hanburys Ltd.

London, E 2

THE SIGN OF A GL PRODUCT

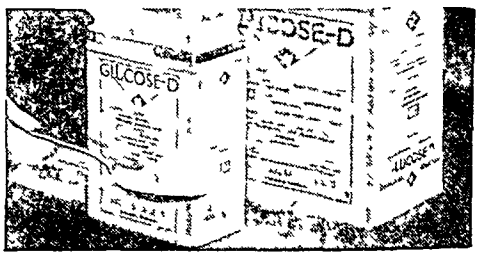
GLUCOSE-D

for the

SUNSHINE-DRESSED CHILD

Supplements
ENERGY

treats
KETOSIS





For many children, the usual increase of activity in summer seems to result in an aftermath of exhaustion and drowsiness Metabolic upsets, especially incomplete oxidation of fats (ketosis), are common Often the child is subject to travel sickness

A regular course of Glucose-D is a simple and rational method of providing the extra, assimilable carbohydrate that will avert these symptoms Glucose-D provides the necessary impetus to fat-oxidation and builds a reserve of glycogen to meet increased expenditure of energy It is a rational method because Glucose-D also provides elements in which the restricted (low fat) diet of the bilious child is likely to be deficient, *i e*, calcium, phosphorus, vitamin D

To sum up, Glucose-D is recommended as a useful dietetic supplement to *keep the well child well* And it is of special value in restoring the nervy, irritable, drowsy child to normal vigour

Finely powdered medicinal glucose with calcium glycerophosphate and Ostelin vitamin D

In 1 lb tins 1/9 three times quantity 4/6 seven times, 10/6 These prices (not applicable in Eire) are subje t to the usual professional discount

GLAXO LABORATORIES LTD GREENFORD MIDDLESEX BYRON 3434

BRITISH MEDICAL JOURNAL

LONDON SATURDAY SEPTEMBER 24 1938

LATE RESULTS OF PARTIAL GASTRECTOMY FOR PEPTIC ULCER

BY

JOHN MORLEY, Ch M, F R C S

Professor of Surgery Manchester University Honorary Surgeon Manchester Royal Infirmary

AND

F H BENTLEY, B Sc, M B, F R C S

Chief Assistant Professorial Surgical Unit Manchester Royal Infirmary

(From the Department of Surgery University of Manchester and the Manchester Royal Infirmary)

The operation of partial gastrectomy provides a unique opportunity for considering the relation between gastric function and the general health of the patient as a whole It is generally recognized that disturbance of this relation after partial gastrectomy does sometimes lead to constitutional changes although there is conflict between different authorities as to the incidence of such changes

Ten years ago Morley reviewed the results of his experiences with the Polya and the Billroth I (Schoemaker) forms of gastrectomy, and came to the conclusion that whereas a Polya gastrectomy carried with it a serious liability to anaemia the liability was diminished after a Schoemaker operation which was less destructive of gastric activity It was considered wise to review the results particularly of the Schoemaker operation after a further number of years and the present investigation was undertaken to determine the health of a series of individuals more than four years after partial gastrectomy having special regard to gastric activity and blood changes

Material

Sixty seven patients who had had partial gastrectomy performed by one of us (J M) were examined The interval since operation was from four to sixteen years with an average of eight and a half years These sixty seven patients were not a consecutive series but were those who could be traced and who were willing to come for examination out of 130 cases Fifty eight of the sixty seven patients had undergone Schoemaker gastrectomy and nine Polya gastrectomy for the following conditions (Table I)

TABLE I—*Operation Details*

	Gastric Ulcer	Gastric Ulcer and Duodenal Ulcer	Gastric Ulcer and Healed Duodenal Ulcer	Duodenal Ulcer	Anastomotic Ulcer	Total
Schoemaker	44	6	4	3	1	58
Polya	8	—	—	1	—	9

Methods

Each patient was investigated by general examination blood count and fractional gastric analysis Fractional gastric analysis was carried out as follows the patient fasting from the night before (about twelve hours) swallowed a Ryle's tube Any resting gastric secretion was withdrawn and 10 oz of oatmeal gruel given by mouth At fifteen minute intervals 10 c cm samples were withdrawn At the end of an hour 0·25 mg of histamine was injected subcutaneously and four further samples of gastric contents were withdrawn at fifteen minute intervals The gruel test meal was used because we were anxious to know the response of the stomach to food and to have an indication of the emptying time of the stomach and of regurgitation of intestinal fluids through the stoma Histamine was later injected so that the stomach might have the maximal acid secreting stimulus In each sample the free and total acids were determined using Topfer's reagent and phenolphthalein as indicators the presence of starch was tested for by iodine and the presence or absence of bile judged by the colour of the specimen

A blood count was performed by means of the Thoma-Zeiss haemocytometer and haemoglobin determined colorimetrically after reduction of the blood with carbon monoxide

Results

Gastric function has been assessed from the test meal findings and on this basis the cases can be divided into two broad groups (1) those whose gastric function is depressed and (2) those whose function is active The criteria of the former group are emptying time below one and a half hours (average one hour) free acid values below 20 c cm N/10 acid (the majority in this group have no free acid) bile regurgitation freely occurring The criteria of the group with active gastric function will be readily inferred emptying time above one and a half hours free acid above 20 c cm N/10 acid no bile regurgitation It is significant, and will be referred to later that where bile regurgitation was absent free acid values above 20 c cm N/10 acid were usual

In considering the results of the blood counts we have accepted 85 per cent haemoglobin as being the lowest limit of the normal (Janet Vaughan, 1936), so that we have regarded a haemoglobin percentage of 80 or below as constituting anaemia In all our cases of anaemia the haemoglobin percentage will be found to be quoted

POLYA GASTRECTOMY —*9 cases 4 male 5 female Number of years since operation maximum 16 minimum 6 average 12*

Gastric Function

Depressed in all cases Free bile regurgitation occurred in all No free acid detected in any case Average emptying time three quarters of an hour

Blood Picture

Normal count 3 cases—2 male 1 female
Microcytic anaemia 5 cases—2 male 3 female Haemoglobin percentages 82 (a treated anaemia was previously 40) 80 63 54 38
Macrocytic anaemia 1 case—a female Operation 1925 1928 microcytic anaemia (Hb 48 / colour index 0 48) 1935 macrocytic anaemia (Hb 38 / colour index 1 32)

General Health

Good 6 cases (Criteria of good health no illnesses no complaints working)
Good until pernicious anaemia developed now good again under treatment 1 case
Fair 2 cases Both have microcytic anaemia with complaints of the anaemia

Ulcer Symptoms Since Operation —No case

SCHOLMAKER GASTRECTOMY —*58 cases 43 male 15 female Number of years since operation maximum 14 minimum 4 average 8 In 45 cases gastric function was depressed (Group 1) In 13 cases gastric function was active (Group 2)*

GROUP 1 CASES 45 cases—31 male 14 female

Gastric Function

Depressed in all cases Bile regurgitation present Free acid in 34 cases no free acid detected in 11 cases free acid was between 1 and 20 c cm N/10 acid Average emptying time 1 hour In 27 of these cases gastric function was greatly depressed (comparable with the Polya cases)

Blood Picture

Normal count 33 cases—25 male 8 female
Microcytic anaemia 12 cases—6 male 6 female Haemoglobin percentages 80 80 80 80 80 80 80 78 72 70 60 55

General Health

Good 38 cases
Good for 6 years then developed gastric carcinoma 1 case
Fair 6 cases 4 have microcytic anaemia with complaints of the anaemia

Ulcer Symptoms Since Operation 1 case

GROUP 2 CASES 13 cases—12 male 1 female

Gastric Function

Active No bile regurgitation Free acid above 20 c cm N/10 acid average 52 c cm Stomach not empty in 14 hours

Blood Picture

Normal count 12 cases—11 male 1 female
Microcytic anaemia 1 case—a male Haemoglobin 80 / Patient recently in sanatorium ? phthisis

General Health

Good 10 cases
Good for 7 years then developed gastric carcinoma 1 case
Fair 2 cases (one has thyrotoxicosis)

Ulcer Symptoms Since Operation

1 case has uneasy feeling in epigastrium unless eating often Free acid 80 c cm N/10 acid
2 cases have pain after food Free acid 47 and 58 c cm N/10 acid respectively

Gastric Activity after Partial Gastrectomy (Polya and Schoemaker)

The chief functions of the normal stomach appear to be the early breakdown of food constituents by ferments, the intimate mixing of the food and its slow rhythmic delivery in semi-fluid form to the duodenum, and the solution of mineral constituents of the food by hydrochloric acid but in the present state of our knowledge there is no uniformly satisfactory test for these functions We have therefore used the information of the gruel-histamine test meal to assess gastric activity in the present series The information consists of emptying time, amount of free acid in the stomach contents and an estimation of any regurgitation of intestinal fluids through the stoma as judged by the presence of bile in the samples

Using these criteria, it is seen that gastric activity was depressed in forty-five out of fifty-eight Schoemaker cases, and in all the nine Polya cases There were differing degrees of depression In the Polya cases gastric activity was abolished rather than depressed, for the stomach emptied very rapidly, no free acid was detectable, and bile regurgitation was so free that the samples resembled pure bile A similar drastic reduction was found in twenty-seven of the forty-five Group 1 Schoemaker cases (depressed gastric activity) In the remaining eighteen Group 1 cases gastric activity was less completely abolished, and in thirteen (Group 2) cases gastric activity was normal That is, in the Schoemaker cases gastric activity was greatly depressed (abolished) in nearly a half, depressed in almost one-third, and normal in about a quarter

The three factors available from the gruel histamine test meal are together of much more value in assessing gastric activity than a consideration of the level of acid secretion alone There are, however, one or two points of interest as regards acid secretion in these cases, especially as various opinions are held concerning the capacity of the stomach to secrete free acid after partial gastrectomy Originally it was considered by many that secretion of free acid was almost entirely abolished, but this is clearly not so and series of cases have more recently been published (Klein *et al*, 1933) showing that achlorhydria or relative achlorhydria is achieved only in about 50 per cent of cases of partial gastrectomy Snell (1937) points out the large number of variables which enter into the problem and which make a constant result unlikely

In our series of nine Polya gastrectomies no free acid was demonstrated in any case, and in fifty eight Schoemaker gastrectomies there was no free acid in thirty four cases, relative achlorhydria in eleven, normal acid values in ten, and high values in three That is, about 60 per cent showed achlorhydria and 20 per cent relative achlorhydria The higher incidence of achlorhydria in our series may be accounted for by the large number of gastrectomies done for gastric rather than duodenal ulcers It is recognized that reduction of free acid following gastrectomy for duodenal ulcer is less likely to occur than when gastrectomy is done for gastric ulcer, and in this connexion it is interesting to note that two of our three cases with high acid values were gastrectomies for duodenal ulcer

The mechanism as well as the degree of reduction of free acid after partial gastrectomy is the subject of dispute Certainly not enough of the fundic mucosa is removed to cut off the source of hydrochloric acid, unless it is believed that the capacity of this remaining portion of the stomach to secrete acid is diminished as a result of removal of the pyloric end of the stomach A hormonal connexion between these two parts of the stomach has often been suggested but never conclusively demonstrated, and the experimental results of Priestley and Mann (1932) appear to rule out such connexion Recently, however Hill, O'Brien, and Wilhelmj (1937) have shown in dogs that the reduction in acidity following partial gastrectomy is greater than can be accounted for by dilution and neutralization alone, and, further that when a pouch is made of the fundic part of the stomach and its secretion collected much more acid secretion occurs where the pylorus is intact than where the pylorus has been removed They conclude that there is a pathway between the pyloric and fundic parts of the stomach, possibly hormonal, possibly

nervous The significance of this factor in man cannot yet be assessed for it is to be noted that these results were obtained in short term experiments in dogs, and as Snell has observed the human stomach has a strong tendency to return so far as the surgical procedure allows to its original state of both secretory and motor activity The occurrence of acid values of 80 to 90 c cm N/10 acid (as occurred in three of our cases eight years after partial gastrectomy) does not suggest a lowering of acid secretion in those cases

The factor of simple dilution and neutralization is stressed by Walters (1936) as the factor chiefly responsible for diminished acid values after partial gastrectomy and the significance of this factor is further emphasized in our results It was a notable feature of our case groups that achlorhydria was usually accompanied by free bile regurgitation and that when free acid was demonstrable there was very little or no regurgitation of bile This occurrence of free acid without bile and achlorhydria with bile was so marked that it is not reasonable to consider it to be a coincidence but rather that the presence of bile indicates dilution and neutralization and that free acid is probably secreted in many of the achlorhydric cases only to be rendered incapable of detection by free regurgitation of duodenal contents and by rapid emptying of the stomach This observation is further supported by the nine Polya cases in none of which was free acid detected and in all of which regurgitation of bile was a pronounced feature It should be observed however that it is unlikely that free acid secretion is of significance in such cases because of its prompt dilution and neutralization

Although the Polya series is a small one it would appear that Polya gastrectomy leaves a very rapidly emptying stomach with free regurgitation of intestinal fluids and consequently no detectable free acid and that Schoemaker gastrectomy gives a similar result in some cases but that in many regurgitation is not so free emptying of the stomach is not so rapid and reduction of free acid not so great It does not seem reasonable to conclude that there is much difference between the amount of acid secreted after the two operations or that true achlorhydria is produced in more than a few cases Whether the differences between the two types of gastrectomy are of significance either locally as regards further ulcer formation, or constitutionally, will be discussed below

Blood Picture after Partial Gastrectomy

The occurrence of anaemia after partial gastrectomy has frequently been noted and although expectations of a macrocytic anaemia have only occasionally been realized microcytic anaemias of varying degrees of severity have often been observed Now that it is understood that a macrocytic anaemia follows absence of intrinsic factor (haemopoietin) from the alimentary secretions and that the first part of the duodenum probably shares with the pyloric part of the stomach in the secretion of intrinsic factor development of a macrocytic anaemia after partial gastrectomy is not to be expected to occur frequently Such expectations are borne out in our results In sixty-seven patients there were nineteen with anaemia—eighteen of them microcytic in type and one who was originally microcytic and subsequently became macrocytic

Of the nine patients with Polya gastrectomy six were anaemic with haemoglobin ranging from 80 to 38 per cent all these cases were microcytic in type originally but one subsequently developed true macrocytic (pernicious) anaemia Of fifty eight patients undergoing Schoemaker gastrectomy thirteen were anaemic all microcytic in character with haemoglobin ranging from 80 to 55 per cent

Investigation of the relation between gastric function and anaemia in the fifty eight Schoemaker cases revealed a very interesting condition Thirteen patients had anaemia and twelve of them belonged to the group in which gastric function was depressed (forty-five cases) Only one occurred in the group in which gastric function was active (thirteen cases) and there was reason to doubt the gastric origin of this anaemia because of a history of sanatorium treatment for lung disease (? pulmonary tuberculosis) It was stated above that in the forty five Group 1 cases (gastric function depressed) there were varying degrees of depression and that gastric function was largely abolished in twenty seven of the cases and was less severely depressed in eighteen It is therefore interesting to note that ten of the patients with anaemia belonged to this subgroup of twenty seven cases whose gastric function was largely abolished That is

> Ten patients were anaemic out of twenty seven whose gastric function was largely abolished
>
> Two patients were anaemic out of eighteen whose gastric function was depressed
>
> One patient was anaemic out of thirteen whose gastric function was active (The anaemia was probably not gastric in origin)

This suggests that the cause of the anaemia may be associated with the gastric conditions peculiar to the Group 1 cases The question of the intrinsic factor does not we consider, enter into the problem here for none of the anaemias are macrocytic in type The three significant features of gastric activity of Group 1 cases are rapid emptying free regurgitation of intestinal fluids and absence of free acid in the gastric contents Free regurgitation of intestinal fluids dilutes and neutralizes any acid secreted by the stomach Absence of free acid does not in itself lead to anaemia (Bloomfield and Polland 1933, Wilkinson 1937) but it may predispose to anaemia by interfering with normal solution of iron in the stomach and possibly with its absorption in the upper jejunum (Witts 1936) The role of hydrochloric acid in this connexion has however, not been entirely proved, and the other factor that of rapid emptying of the stomach may be of greater significance by causing incompletely mixed under digested food constituents to be hurried through the duodenum and upper part of the jejunum and so interfering with iron absorption The cause of these microcytic anaemias thus may be diminished iron absorption resulting from severe depression of gastric activity It is well known that considerable improvement is obtained in such post gastrectomy anaemias by the administration of massive doses of iron.

This conclusion which emerges from a study of the Schoemaker gastrectomy results is further supported by those of the Polya operations Depression of gastric function was particularly severe in the nine patients with Polya gastrectomy and among them there were six patients with microcytic anaemia (one subsequently becoming macrocytic) Table II contrasts the test meal findings in the anaemic patients with those in patients showing a normal blood picture

It will be noted that of the sixty seven patients in this investigation forty-seven were males and twenty females Of the nineteen cases of anaemia nine were males and ten females—that is a greater tendency to anaemia is found in females than in males This would be expected from the normal tendency for women to have a lower haemoglobin percentage than men and from their peculiar

liability to achlorhydric anaemia The gastric origin of anaemia in these cases is, however, stressed by the fact that a definite proportion of the cases of anaemia occurred in men = Idiopathic microcytic anaemia in men is described by Witts (1930) as a haematological curiosity

TABLE II

	Microcytic Anaemia (19 cases Hb 80% or less)	With Normal Blood (48 cases Hb more than 80%)
Form of gastrectomy	Polya 6 Schoemaker 13	Polya 3 Schoemaker 45
Sex	Male 9 Female 10	Male 38 Female 10
Emptying time (average)	42 minutes	80 minutes
Bile		
Present + +	18	20
traces	1	16
None	0	12
Acidity		
No free acid	17	27
Below 20 c cm	1	9
Above 20 c cm	1 (sanatorium case)	12

The case of microcytic anaemia subsequently becoming macrocytic is of interest Wilkinson (1933), Janet Vaughan (1932), and Heck and Walters (1936) have described cases showing that an anaemia may change from typical microcytic to macrocytic type within a few weeks, particularly under the influence of iron therapy In the present instance it is known that iron was given for some months before the patient was sent in 1935 for blood examination, and it may be that this is a comparable occurrence We feel, however, that the problem may be a more complicated one and that there is not enough evidence to form a conclusion

If depression of gastric function leads to anaemia it would be expected that the operation that produced more severe depression would have the higher incidence The following figures are therefore of significance The same standard of anaemia is adopted as in this paper

Gordon Taylor 1929
Fifty two Polya gastrectomies two to seven years after operation Anaemia in twenty eight cases

Morley 1928
Twenty Polya gastrectomies average period since operation seven years Anaemia in sixteen cases

Total of Morley's figures (that is 1928 and 1938)
Twenty five Polya gastrectomies average period since operation nine years Anaemia in nineteen cases

It is thus clear that in the hands of one surgeon a gastrectomy that produces severe depression of gastric activity has a much higher incidence of post-operative anaemia (Polya, nineteen out of twenty-five) than a gastrectomy that is less destructive of gastric function (Schoemaker, thirteen out of fifty eight) And it follows that where gastrectomy is performed for gastric ulcer one aim should be to construct the stoma so that the emptying time of the stomach is prolonged and regurgitation of intestinal fluids lessened, if the risk of post-operative anaemia is to be reduced as much as possible It is our opinion that this is more readily to be obtained with the Schoemaker modification of the Billroth I operation than with the Polya gastrectomy These remarks apply to the treatment of gastric ulcer In duodenal ulcer where the risk of recurrence is much greater, the more destructive Polya operation has definite advantages

General Health after Partial Gastrectomy

In our sixty-seven cases the general health was good in fifty five—that is to say, there had been no serious illness, and the patients made no complaints and were able to do full work

In two cases gastric carcinoma developed after six to seven years of perfectly good health following Schoemaker gastrectomy It so happened that each patient was examined within a few weeks of the onset of symptoms of carcinoma In one case gastric function was depressed and in the other it was active The occurrence of carcinoma must have been unconnected with the original ulcers, for in neither case was there any digestive upset or premonitory symptom until a sudden onset of digestive trouble six to seven years after operation, while histological examination of the original ulcers proved their benign character

In ten cases the general health was fair, and efficiency could be described as about 50 per cent Six of these cases had microcytic anaemia and the complaints were those of the anaemia As there were nineteen cases of anaemia in the whole series it is seen that in thirteen—that is, in about two thirds of the anaemic cases—the anaemia was not producing any symptoms Apart from the tendency to anaemia in the cases where gastric function was depressed, there was no appreciable difference between the general health of those cases and of those in which gastric function was active It is of value to note that severe depression of gastric activity appears to affect adversely only the blood-forming mechanism and has no other ill effects on the general bodily processes

Four patients complained of abdominal pain in relation to food—one whose gastric function was depressed and three whose function was active Since there were fifty four cases (Polya and Schoemaker) in the former group and only thirteen in the latter it is evident that, while depression of gastric activity carries with it a risk of anaemia, it carries a greater certainty of freedom from ulcer symptoms It is generally considered that such freedom is associated with marked reduction or abolition of free acid, and this conclusion is in accord with our findings It is a most interesting point, for whereas acidity *per se* does not appear a sufficient explanation of the aetiology of peptic ulcer, yet marked reduction in free acid, and not merely removal of the ulcer bearing area, is necessary if risk of further ulcer symptoms is to be avoided so far as possible

Summary

1 Nine cases of Polya gastrectomy and fifty eight cases of Schoemaker gastrectomy were investigated more than four years after operation

2 Different degrees of depression of gastric activity were found, and the mechanism of this depression is discussed

3 Where gastric activity was severely depressed there was a high incidence of microcytic anaemia It is suggested that absence of free acid plus rapid emptying of the stomach may interfere with the absorption of iron and so cause anaemia

4 Depression of gastric activity was less severe after Schoemaker gastrectomy than after the Polya operation, and the incidence of anaemia was therefore correspondingly less after the former operation

5 Where gastric activity was not depressed there was a risk of further ulcer symptoms

6 The bearing of these results on the technique of gastrectomy is discussed

We wish to acknowledge our indebtedness to Dr J F Wilkinson, director of the medical research laboratory, at the

Manchester Royal Infirmary for allowing us to utilize the resources of his laboratory for this investigation

REFERENCES

Bloomfield A L and Polland W S (1933) *Gastric Anacidity* The Macmillan Company New York
Gordon Taylor G (1929) *Brit J Surg* 16 641
Heck F J and Walters W (1936) *Proc Mayo Clin* 11 118
Hill J C O Brien F T and Wilhelmj C M (1937) *Arch Surg* 34 909
Klein E *et al* (1933) *Trans Amer gastro enterol Ass* 36 197
Morley J (1928) *Brit J Surg* 16 239
Priestley J T and Mann F C (1932) *Arch Surg* Chicago 25 395
Snell A M (1937) *Amer J Surg* 35 45
Vaughan Janet M (1932) *Lancet* 2 1264
—— (1936) *The Anaemias* Oxford Medical Publications London
Walters Waltman (1936) *Ann Surg* 104 585
Wilkinson J F (1933) *Quart J Med* n.s 2 300
—— (1937) Personal communication
Witts L J (1930) *Guy's Hosp Rep* 80 417
—— (1936) *St Bart's Hosp J* 43 167

THE PROGNOSIS OF ANXIETY STATES

BY

ARTHUR HARRIS, B A, M D, D P M

Assistant Medical Officer St Bernard's Hospital Southall
Honorary Medical Psychologist West End Hospital
Child Guidance Clinic

Anxiety is regarded by McDougall (1936) as the emotion produced when in the course of striving towards some goal we doubt whether we shall achieve the desired end It is a derived emotion and sharply to be distinguished from fear which is a primary emotion Henderson and Gillespie (1936) define anxiety in the psychiatric sense as a fear of danger usually from within—that is impending physical illness Fear and anxiety seem clinically to be different degrees of the same emotion and may be regarded as pathological when they are aroused without reasonable cause

Pathological anxiety is a common feature of every form of psychosis and may be the most prominent one in the prodromal stages When it occurs as the sole abnormality apart from depression the condition is known as anxiety neurosis or anxiety state Lewis (1934) and Curran (1937b) have recently pointed out that anxiety is a common concomitant of depression and conversely, that depression is a common concomitant of anxiety, so that it is impossible to draw a sharp dividing line between depressive states on the one hand and anxiety states on the other No frankly psychotic syndrome however will be diagnosed as an anxiety state

Little has been written about the course of an anxiety state but many observers have noticed a strong tendency for hypochondriasis to accompany anxiety and with the passage of time partly to replace it one of the most comprehensive papers on the subject being by Brown (1936) Ross (1923) and Yaskin (1936), among many others consider that the development of a psychosis is exceedingly rare

Difficulty of Measuring Anxiety

In scientific work quantitative measurement is a necessity and consequently many efforts have been made to devise a measure of anxiety so far with little success Since mental processes cannot be measured the problem is usually attacked through the autonomic nervous system the close connexion between which and anxiety has been demonstrated by Cannon and his co-workers (1915) Jones (1936) finds that anxiety and sympathetic activity are apparently synonymous both being evoked by adrenaline and abolished by acetylcholine One method which has been regarded as very promising is that of the psychogalvanic reflex but Landis (1932) in a comprehensive summary of the literature states that quantitatively the method is useless although it is produced by sympathetic action, and in a later paper (1933) he envisages the possibility of a satisfactory technique being worked out Odegaard (1932) believes that an index of the vegetative emotional reaction in general can be obtained from it Solomon and Fentress (1936) however in a careful investigation found no correlation between the galvanic skin reflex and autonomic activity following on a previous paper (1934) in which they put forward the possibility of measuring bound and unbound energy Psychological methods have also been tried such as the measurement of the reaction time to word stimuli (Ebaugh 1936) but quantitative exactitude has not been claimed for them Culpin and Smith (1930) have found some correlation between a clinical estimate of anxiety and performance on the Schuster dotting machine

The above mentioned difficulty of measurement is most noticeable in the publication of results of the various modes of treatment such as baths massage and other physiotherapeutic measures (Engelhorn 1910) injection of polyglandular extracts (Leopold-Levi 1933) continuous narcosis (Strom Olsen and McCowan 1934), psychotherapy (Wenger 1934 Luff and Garrod 1935 Yaskin 1936 Neustatter 1935 Huddleson, 1927) and institutional treatment combined with psychotherapy (Ross 1936) Such terms as improved moderately improved and slightly improved are in general use although they are obviously unsatisfactory elastic and liable to variation according to the degree of optimism of the therapist concerned Ross (1936) Luff and Garrod (1935) Curran (1937a) and Neustatter (1935) have given definitions of these terms but none of them include details of the condition of the patients when first interviewed and the degree of improvement is not measured by objective standards

The prognostic studies of anxiety states published up to the present time fall into two groups the first of which is the above mentioned results of treatment Systematic follow-ups were not always undertaken but Luff and Garrod have traced their cases for three years and Ross some of his cases for five years and the rest for three years Both have used the method of follow up by letter Luff and Garrod have 220 anxiety states in their series and 30 per cent of the cases treated were untraceable Ross makes no distinction between hysteria and anxiety neurosis Nearly 50 per cent of his cases were untraceable

It is extremely difficult to compare these results on account of the differences in diagnostic grouping of cases criteria and classification of end results and methods but the percentage of cases whose progress was satisfactory varied between 40 and 80 and that of cases developing psychoses and committing suicide was always very small

The second group consists of clinical impressions and gives no figures For example Wechsler (1929) stresses the skill of the psychotherapist the age of the patient and the degree of introversion expressing the opinion that the illness in the case of female patients may stop at the menopause Karpman (1931) holds the view that the provision of psychotherapy of an analytical type is all important and Ross emphasizes the purposive character of the illness attaching considerable prognostic importance to the question of whether it is providing a satisfactory solution to the patient's difficulties or merely transferring

him from the frying-pan to the fire The last-named author also regards the personality of the patient as of great significance in this respect, especially his concept of himself ' Blessed are the humble, for they shall be cured " As a corrective to the assumptions of some writers Curran (1937a) studied cases which have received little or no treatment His main conclusions were that spontaneous recovery can occur and that there is no special liability to organic disease in these cases

There has been extraordinarily little attempt to make a statistical study of factors which may possibly affect the prognosis Luff and Garrod find that length of treatment and the age of the patient have little effect on the result, but that psychopathic heredity and adverse early environment are definitely unfavourable

The frequency with which organic conditions are misdiagnosed as functional is of considerable importance with regard to the prognosis of anxiety states and has been interestingly dealt with by Comroe (1936) Following the widespread acceptance of the implication of Cannon's work (1915) on the emotional reaction, many conditions previously recognized as having a vague neurotic background—such as nervous dyspepsia, the Army D A H, and mucous colitis—are acknowledged to be manifestations of pathological anxiety They are therefore very closely allied to anxiety neurosis or even identical with it Many workers go further and postulate the initiation of organic changes through disturbance of the autonomic nervous system Conditions the aetiology of which has been explained on these lines are gastro duodenal ulcer, ulcerative colitis, bronchial asthma, and the various allergic conditions, hyperpiesis, nephrolithiasis, rheumatism (Halliday, 1937), and many others The whole very extensive literature is well summarized by Dunbar (1935) The incidence of organic disease in patients suffering from anxiety states is therefore of interest, but the only inquiry into it that I can find is that of Curran

Objects of Present Investigation

The objects were threefold (1) To obtain a reliable follow up over a period of not less than ten years of an adequate number of cases of anxiety neurosis and to record the findings in readily comprehensible terms (2) To determine what factors affect the prognosis, so as to afford some guidance in this respect (3) To determine whether anxiety neurosis predisposes to any organic condition

Methods of Investigation

The cases chosen were those seen at the Maudsley Hospital during the years 1924, 1925, and 1926 in which the diagnoses were "anxiety neurosis," "anxiety state," anxiety, "anxiety with depression," and "anxiety hysteria ' Cases where the diagnosis was doubtful and given in some such terms as ' anxiety state, ? schizophrenia, ' were rejected, as also were four cases developing an agitated depression within a fortnight of admission to hospital Patients under the age of 15 at the time of their first visit to hospital were also rejected, as it was felt that the conditions termed anxiety states in children were not necessarily identical with the anxiety states of adults and that it would be confusing to group them together Patients over the age of 45 at the time of their first visit to hospital were also excluded, as it was felt that the many factors operative during the involutional period would be impossible to assess and would make the results difficult to interpret The procedure adopted was to send out a circular to all the patients concerned, inquiring after their health and asking them to call at the hospital if possible Where no reply was received a call was made at the address in question in an endeavour to see the patient, if he no longer lived there further efforts were made to trace him Finally, a list of the untraceable cases was sent to the Registrar-General and a search for them made in the register of deaths, also to the Board of Control with the object of ascertaining how many were in or had been in mental hospitals An interview with the patient was always sought, but proved impracticable in a few cases in which adequate information was obtainable in other ways—namely, an interview with a close relative who was living with the patient, a report from the hospital of which he or she was an inmate, and in one case a letter from her doctor in answer to a questionary The following examples will show how unreliable letters from patients can be

A married woman writes that her nerves are completely cured and that she is getting on very well When interviewed she complains of palpitation, shortness of breath, and extreme fatigability, ascribing these symptoms to her heart A cardiologist reports that she is a well compensated case of mitral stenosis and that her cardiac condition cannot possibly account for any of her symptoms

A single man writes ' I am fairly well at present in health I have been fairly well since I saw you as a patient ten years ago " He had actually been treated for schizophrenia for two years in a mental hospital and is now living with his parents in a docile, mildly demented condition

Classification of Cases

The above-mentioned difficulty of measurement was tackled by means of the following simple system of classification according to severity based on the social consequences of the illness It depends on the patient's reaction to the anxiety rather than on the degree of anxiety, but it is just this aspect to which the attention of both the patient and the community is usually directed

Grade 1 —Unable to pursue their occupations on account of anxiety symptoms and consequently supported by the Public Assistance Committee or by their relatives or friends

Grade 2 —Able to work and earn a living, but forced by their symptoms to modify their lives considerably, resulting in much limitation of their interests and activities

Grade 3 —Able to lead normal lives, but at times seriously inconvenienced by symptoms or suffering from some persistent phobia

Such a classification does not take into account the inherent strength of the patient's personality, as does that of Luff and Garrod It merely describes his reaction to his present environment I submit, however, that in the present state of our knowledge it is impossible to prophesy how a patient will react to varying circumstances with any degree of accuracy, and any attempt to do so is futile in a study such as this The distinction between Grades 1 and 2 is of the greatest social importance, both for the welfare of the community and for the preservation of the individual's position in it as a respected member The distinction between Grades 2 and 3 usually becomes apparent if one questions the patient as to whether he is prevented by his symptoms or fears from engaging in any normal activity For example, inability to go out alone, to walk along a crowded street, to talk to strangers, or to attend a cinema or football match would place a patient in Grade 2, whereas if he is able to do these things at the expense of occasional fits of palpitation, trembling, sweating, etc, he will fall into Grade 3 The test is what the patient can do rather than what he feels in the first

two grades The distinction between Grade 3 and normality on the other hand depends on the presence or absence of symptoms—a readily applicable criterion I have considered the inclusion of a fourth grade comprised of people who are not regarded by their companions or themselves as ill but have obviously unsatisfactory personalities and temperaments worrying over trifles dismayed by difficulties with pronounced hypochondriacal trends and so on I rejected the idea since the differentiation of such a group from the normal must depend entirely on the opinion of the physician and so can only result in the type of confusion that I am trying to avoid

In practice I found this system very easy to apply and closely related to the subjective feelings of the patient concerning the severity of his illness As an example of a case the grading of which was not obvious at first sight a married woman complained of a phobia of open spaces and large rooms By questioning her it was elicited that she was able to go out to do her household shopping but suffered from anxiety attacks in consequence She was fond of visiting her sister who lived some five or six miles away but rarely did so as she felt that the price that she would have to pay in the shape of unpleasant symptoms was too great She was unable to attend a performance in a large cinema near her home although she felt quite comfortable in the small ones It was obvious from this information that she fitted into Grade 2

When the material had been collected it was analysed with regard to the various factors that might conceivably affect prognosis Their incidence in the cases that recovered and in the cases that did not recover was determined and the two were compared A full medical history was taken in each case and particulars of any illness obtained from the patient himself and from any hospital where he had been treated

Results

A total of 259 suitable cases were discovered in the records and satisfactory follow ups were obtained in 123 cases Of these thirty eight were well, sixty were suffering from anxiety states nine had developed psychoses and sixteen were dead Five of those who had died were traced through the Registrar General and two of those who had developed psychoses were traced through the Board of Control Of the remainder 120 were untraceable ten were living out of London and six either were unwilling to be interviewed or their relatives were unwilling to show them the hospital letter in two cases due to fear of upsetting the patient on account of the bad state of his nerves The high percentage of untraceability is unfortunate and I think, due largely to the migrant habits of the London population a large proportion of whom live in lodgings and change them frequently

Patients Who are Well—Thirty four patients were interviewed, and in the remaining four the account of their present condition and their past history was obtained from the wife or mother of the patient As regards duration of recovery thirty two had been well for eight years or over so far as their neurotic illness was concerned one had been well for between five and eight years three for between three and five years and two for between two and three years All the Grade 2 and 3 cases except one had been well for over eight years

Cases Still Suffering from Anxiety States—Of the sixty patients in this group fifty four were interviewed in three other cases the wife was interviewed in two cases a report was received from the mental hospitals in which they were voluntary patients and in the case of the remaining patient who lived out of London her doctor was good enough to answer a questionary on her history and present state of health With regard to their present condition eleven cases were in Grade 1 twenty one were in Grade 2 and twenty eight were in Grade 3 Nine of the eleven patients in Grade 1 were very chronic cases and had done no work for ten years In only one case was the condition worse than that at the time of the first visit to Maudsley Hospital

Intermittent Cases—Three of the recovered cases had suffered relapses and eight of the anxiety states had undergone remissions It seemed in these to be a matter of chance whether they were classed as recovered or not according to the particular phase in which one found them at the time of the inquiry The duration of the remissions varied from nine months to eleven years This type of case accounted for half of the recovered cases who had been well for less than eight years It is worth noting that only eleven of the cases were intermittent and that only five other cases showed marked fluctuations in severity so that the state of these patients appears to be fairly constant It must be realized however that the source from which this information was obtained—namely the patients memory—was not really reliable

Cases which Developed Psychoses—The psychosis developed was schizophrenia in seven cases and recurrent depression in two cases In five of the schizophrenic cases from the notes made at the time the diagnosis of anxiety state seemed very doubtful and it is extremely probable that they represent mistakes in diagnosis One other has been treated for twelve years in the out patient department as a chronic anxiety state and has only within the last two or three months developed delusions of persecution of a bizarre type—an undoubted early schizophrenic reaction Two of the patients who appeared in the next group died in mental hospitals where they were under treatment for schizophrenia and agitated depression respectively It is impossible to be sure that all these cases were traced especially in view of the smallness of the number reached through the Board of Control There are many possibilities of leakage the chief being that psychotics may not be brought to the notice of the authorities

Patients Who had Died—The causes of death were suicide in three cases pulmonary tuberculosis in three cases chronic nephritis in two cases and in one case each accident cerebellar tumour thyroidectomy appendicitis and generalized peritonitis carcinoma of the breast carcinoma of the stomach and bronchopneumonia

Features of Prognostic Importance

I now come to the second object of my investigation—namely the discovery of which features are and which features are not of prognostic importance I will discuss each feature separately utilizing the ninety eight cases in the recovered and still anxiety state groups for the purpose

Table showing whether or not it was the Patient's First Attack of Neurosis

	Recovered	Still Ill
First attack	35	49
1 previous attack	1	7
2 or more previous attacks	2	4

Of the three recovered cases who had had previous attacks, two had suffered relapses since their visit to Maudsley Hospital and so are regarded as in the intermittent group In other words, only one of the fourteen patients who had had previous attacks made a satisfactory permanent recovery The occurrence of a previous attack therefore seems prognostically unfavourable for permanent recovery

Duration of Illness before First Visit to Out-patients Department in the Eighty four Cases where it was the First Attack

	Recovered	Still Ill
Under 1 year	21	12
Between 1 and 2 years	9	4
Over 2 years	4	33
Unascertainable	1	0

There was a recovery rate of 65 per cent in those cases where the duration was less than two years and of 11 per cent in those where it was over two years These figures are statistically significant Of the eleven cases at present in Grade 1 eight had a history of over two years duration before their first visit to the hospital

It will be seen that the prognosis is better and the patient is more likely to recover completely if the attack has not lasted for more than two years On the other hand the chances of complete recovery are small if the condition has lasted over two years, but the outlook for return to work is always quite good Nevertheless the possibility that the patient will persist in Grade 1 must be borne in mind, as this occurred in 24 per cent of the cases with a history of over two years

Severity of the Illness

Grade at Time of First Attendance at Hospital	Recovered	Still Ill
1	19	37
2	7	21
3	12	2

We see from this that the outlook in Grade 3 cases is very good, but that the outlook in Grade 1 and 2 cases is comparatively poor These figures are statistically significant

Amount of Treatment Received—On the whole more energy was expended before a Grade 1 case reached Grade 3 than in the return of a Grade 3 case to complete health The best results were obtained in cases which responded rapidly, and those which had required prolonged treatment were on the whole disappointing

Unfavourable Environment—I define 'unfavourable environment' as severe financial or family worries which would present serious difficulty to a healthy person—for example, desertion by a husband, prolonged unemployment, or much ill-health in children or spouse It was present in eight of the recovered cases and twenty two of the anxiety states during the past ten years—that is, 21 per cent and 37 per cent respectively It seemed, therefore, to have a less definitely adverse effect than one would expect, but the number of cases involved is too small for any importance to be attached to this finding

Psychopathic Family History—I define "psychopathic family history" as psychosis or severe neurosis—namely, definite nervous breakdown—in one or more parents or siblings It was present in thirteen of the recovered cases and twenty-four of the anxiety states—that is, 34 per cent and 41 per cent respectively This suggests that it is of no real significance from a prognostic point of view, but one must bear in mind the difficulty of obtaining accurate information from the patients (Slater, 1935) and the possible multiplicity of genetic factors involved

Obvious Precipitating Cause—It is commonly supposed that if neurotic illness has some obvious precipitating cause in the form of some definite psychic trauma the outlook is better than if it develops insidiously "out of the blue" Some physicians may be more ready to find a precipitating cause than others, but in this series of cases the out-patient officers appeared to have no individual predilections in this respect It was present in six of the recovered cases and twenty-two of the anxiety states, so that if any conclusion can be drawn from such a small number of cases it does not appear to be a favourable prognostic factor The patient will always tend to exaggerate the part played by the trauma, which must be a matter of some doubt There was one case in which the condition was precipitated by head injury and which made a good recovery, but I regard it as in a different category from psychic traumata

The Menopause—There were six cases in which the onset of the disease was at the menopause Four of these recovered and two were still "anxiety states" Three of the recovered patients have subsequently reached the menopause, none of them experienced any return of symptoms at that time Twelve of the "anxiety states" have subsequently reached the menopause, and only one of these experienced any exacerbation of symptoms during it

Pregnancy—Of the nulliparae who have had children since their first attendance at hospital three recovered completely Two of the patients dated their recovery from a pregnancy and two "anxiety states" described spontaneously, as a curious fact which they had noted, that they experienced a remission during pregnancy and that their anxiety returned within about a fortnight of their confinement This affords some slight indication that pregnancy may exercise a beneficial effect

SYMPTOMATOLOGY

Efforts were made to group these cases according to their symptomatology—namely, the predominance of neurasthenic symptoms, hypochondriacal symptoms, etc—but every scheme tried proved unworkable on account of the great variety of symptoms and the multitude of combinations in which they appeared It was possible, however, to isolate a small group of twelve cases in which the anxiety was not diffuse, as in the majority, but concentrated in definite phobias or clear cut anxiety attacks, suggesting a mechanism analogous to the conditioned reflex Three of these recovered and nine persisted as anxiety states Examination of individual cases showed that definite phobias and clear-cut isolated anxiety attacks tend to persist longer than generalized anxiety and militate against complete recovery They not infrequently remain as residual symptoms in cases which have improved from Grade 2 to Grade 3, for example

The chief factor in the determination of the symptomatology seems to be the personality of the patient The outcome in markedly introverted patients appeared quite good, and certainly no worse than in the rest Personality traits of the type generally known as psychopathic, shown by persistently inadequate response to difficulties or anti-social behaviour, were definitely unfavourable, and many of these patients persisted in Grade 1

OTHER FACTORS

Other possible prognostic factors investigated were sex, age, civil state, occupation, and physique on the lines indi-

cated by Kretschmer (1925) and by Draper (1930) but no significant results were obtained The figures are given in the following table

	Recovered	Still Ill
Sex		
Males	17	18
Females	21	42
Age at onset of illness		
15 to 25	12	16
25 to 35	13	29
35 to 45	13	15
Civil state		
Married women	12	29
Single women	6	9
Women married since first attendance at hospital	3	4
Married men	13	12
Single men	2	3
Men married since first attendance at hospital	2	3
Occupation		
Women Housewives	15	29
Office and shop workers etc	3	9
Factory and domestic workers	3	4
Men Office and shop workers	6	4
Artisans	9	11
Labourers	2	3
Physique		
Pyknic	11	14
Leptosomatic	15	34
Athletic	8	6

I must now turn to the third object of my investigation—namely the physical diseases to which these patients are liable

PHYSICAL DISEASES DEVELOPED BY THE PATIENTS

In only one case does the error of regarding an organic condition as functional appear to have beeen made the patient dying a year later of compression of the medulla by a cerebellar cyst The organic illnesses developed by the ninety-eight patients in the recovered and anxiety state groups subsequent to their first visit to Maudsley Hospital were as follows gastric ulcer with subsequent pyloric stenosis successfully treated by operation one case haematemesis of unknown origin (in spite of full investigation) one case gastric carcinoma, one case arthritis four cases muscular rheumatism five cases cystitis, two cases, renal calculi one case toxaemia of pregnancy one case eczema two cases urticaria one case herpes zoster one case phlebitis two cases pneumonia two cases salpingitis one case small pox one case diphtheria one case Laparotomy was performed in four cases with no benefit to the patient in spite of division of adhesions slinging operations etc Acute appendicitis occurred in one case and removal of nasal polypus and resection of septum was necessary in one case An operation for hernia was performed in one case tonsillectomy in two cases colporrhaphy in one case and myomectomy in one case The blood pressure was taken in every case seen and definite hyperpiesis (180/100 or over) was found in five cases four of which were suffering from anxiety states while the fifth had extensive renal damage due to calculi but no neurosis There were no cases of bronchial asthma or hay fever and the sole representative of the whole allergic group was one rather doubtful case of urticaria alleged by the patient to have been diagnosed as such by his panel doctor The syndrome of vagotonia was carefully looked for, but nothing resembling it was seen except in one case a man who was subject to fainting fits with a pulse rate in the neighbourhood of 65 On the other hand the rapid labile pulse dilated pupil and moist skin of sympathetic overaction was common in the anxiety states as was only to be expected Hyperthyroidism was observed at the onset of four cases although they now show no signs of it and three of them are classified as recovered As regards functional somatic symptoms severe dyspepsia occurred in eighteen cases and nervous diarrhoea in two cases one of which subsequently progressed to mucous colitis We see therefore that twenty-one cases were severely troubled with gastric symptoms but that in only three of them was there evidence of an organic lesion The patient who had carcinoma suffered from gastric symptoms for only six weeks before his operation

The incidence of arthritis of various types seems rather high as also does that of muscular rheumatism —that is vague pains and stiffness in various parts of the body and actually nearly 10 per cent of the cases (nine out of ninety-eight) in the groups recovered and anxiety states had suffered severe disability at one time or another from some disease of the rheumatic group *However quoting from a Report of the* Ministry of Health (1924) 2·76 per cent of the total list strength were attended by their insurance practitioner for rheumatic disease in the year 1922 alone so that it is probably no higher than among the general population

Four of the cases of hyperpiesis were in the age group 35 to 45 and the fifth was in the age group 25 to 35 There were nineteen cases in the age group 15 to 25 which can be presumed to be immune from the development of hyperpiesis leaving seventy nine cases in the age groups 25 to 35 and 35 to 45 This gives an incidence of 6 per cent not a strikingly high figure I think that the absence of vagotonic and allergic disturbances is noteworthy and feel that there must be a sympathetic overactivity in these patients which prevents their appearance A mild degree of hyperthyroidism is not uncommon in a recently developed anxiety state but calls for no special treatment and does not affect the prognosis

Concerning the observations that anxiety in the course of time tends to be converted to hypochondriasis I found some cases in which this was a striking feature It was by no means universal however and did not occur in the majority of cases Six of the recovered cases and ten of the anxiety states give evidence of hypochondriasis at the present time the percentage of the total being 16·5 It may seem somewhat anomalous to *talk of hypochondriasis in patients who are well but I* have done so in the type of person who complains of no symptoms but is unduly fussy about his diet or other matters supposedly affecting his health

Summary and Conclusions

An attempt was made to ascertain the present condition and past history of 259 cases which had been diagnosed as anxiety states between ten and twelve years ago From the material collected a search was made for features of prognostic significance and for any evidence of increased susceptibility to organic disease Of the cases 46 per cent were untraceable and 6 per cent were traceable but inaccessible so that a satisfactory follow up was obtained in only 48 per cent Of these 31 per cent were well 49 per cent were suffering from anxiety states 7 per cent had developed psychoses and 13 per cent were dead It is probable that the great majority, if not all of those who had died were traced

The main prognostic points elicited were as follows Anxiety and its clinical manifestations may persist unchanged for ten years and over, and the percentage of cases in which it is converted to hypochondriasis is small The prognosis is fairly good if the condition is of less than two years duration, and, conversely, it is poor but not hopeless for ultimate and permanent recovery if the condition is of longer than two years standing On the other hand, the patient s chances of returning to work are always quite good, as only 20 per cent of those unable to work persisted in that state If the patient's habits or mode of life remain substantially unchanged by the anxiety the prognosis is good The outlook in cases with markedly psychopathic personalities is poor

There was no evidence of increased susceptibility to organic disease in these patients

The difficulties and possible fallacies are discussed

REFERENCES

Brown, F (1936) *J ment Sci* 82, 295
Cannon, W B (1915) *Bodily Changes in Pain Hunger Fear and Rage* London
Comroe, B I (1936) *J nerv ment Dis* 83, 679
Culpin, M , and Smith M (1930) Industrial Health Research Board Report No 61 London
Curran, D (1937a) *Lancet* 2, 1005
—— (1937b) *J ment Sci* 83, 156
Draper, G (1930) *Disease and the Man* London
Dunbar, H F (1935) *Emotions and Bodily Changes* Columbia Univ Press, New York
Ebaugh F G (1936) *J ment Sci* 82, 731
Engelhorn, E (1910) *Munch med Wschr* 57, 2136
Halliday, J L (1937) *British Medical Journal* 1, 213, 264
Henderson D K , and Gillespie R D (1936) *Textbook of Psychiatry* Oxford University Press, London
Huddleson, J H (1927) *Milit Surg* 60 161
Jones M S (1936) *J ment Sci* 82 785
Kirpman, B (1931) *Arch Neurol Psychiat* 26 1257
Kretschmer, E (1925) *Physique and Character* London
Landis, C (1932) *Psychiat Quart* 6, 262
—— (1933) Ibid , 7 107
Leopold Levi (1933) *Bull Acad Med* Paris, 110, 793
Lewis, A J (1934) *J ment Sci* 80, 329
Luff, M G , and Garrod M (1935) *British Medical Journal* 2, 54
McDougall, W (1936) *Outline of Psychology* London
Neustatter, W L (1935) *Lancet* 1 796
Ödegaard O (1932) *Brit J med Psychol* 12, 132
Report of the Ministry of Health No 23 (1924) Incidence of Rheumatic Diseases London
Ross T A (1923) *The Common Neuroses* London
—— (1934) *Lancet* 2 885
—— (1936) *An Enquiry into Prognosis in the Neuroses* Cambridge
Slater E (1935) *Ann Eugenics* 6, 172
Solomon A P and Fentress T L (1934) *J nerv ment Dis* 80, 163
—— —— (1936) *Arch Neurol Psychiat* 35 770
Strom Olsen R , and McCowan M L M (1934) *J ment Sci* , 80 658
Wechsler I S (1929) *The Neuroses* London
Wenger P (1934) *Wien med Wschr* 84 320
Yaskin J C (1936) *Amer J Psychiat* 93, 107

At the International Congress of Microbiology in London in July 1936 Professor Johan stated that as a result of the successful immunization against diphtheria of large numbers of children in Hungary a law making immunization compulsory would probably come into force in 1937 The English text of the Order is now available and public health experts will watch its operation with close interest Immunization, apparently with three doses of toxoid, must be carried out in the second year of life and again in the sixth year, unless the child has suffered from diphtheria, or undergone an equivalent series of injections or is excused because of illness Curiously enough there is no mention in the Order of immunization with alum toxoid which is effective in two doses, nor of Schick testing either before or after immunization

THE OBSTETRICAL "FLYING SQUAD"*

BY

E. FARQUHAR MURRAY, M D., F.R.C.S.

Professor of Midwifery and Gynaecology University of Durham College of Medicine

The emergency service—the so called "flying squad"—is now an essential part of a modern maternity service The expert attention, and the surgical and other adjuvants which are included in the outfit, meet a long felt want

The bulk of midwifery in this country is conducted in the homes of patients, the majority of whom are not in a position to pay for expert service This knowledge has often handicapped the doctor in charge of the case, who has had to tackle major problems single handed or to send the patient into a maternity hospital

Expert service before the war, so far as working class patients were concerned, was mainly immobilized in maternity hospitals Post-war there has been a slow relaxation of this system Health authorities offered consultations in puerperal pyrexia, and very gradually a more extended service of expert advice or assistance was offered at all stages This is still far from being universal or comprehensive In the Newcastle area, with few exceptions, the authorities offer the doctors a fully comprehensive service at all stages

The emergency service, which is everywhere adopted in that area, is a something by itself The essential points are that expert attention is immediately forthcoming, while the outfit, which is accompanied by a nurse, contains all reasonable surgical requirements and also those things which are often lacking in an industrial household, such as blankets, hot-water bottles, basins, and so on It is especially designed to deal with those acute crises which may occur in the most carefully supervised case but are more liable to happen in the present somewhat disjointed system of maternity service Shock and post partum or ante-partum haemorrhage are typical examples of the cases most urgently in need of such a service, but threatened or actual eclampsia and difficult labours or "failed forceps" cases would derive benefit also

It is obvious that expert service given on the spot to a patient who is shocked and collapsed from post partum haemorrhage and with a retained placenta is preferable to the delay and handling of a desperately ill woman entailed by sending her in an ambulance to hospital For local calls the service can be in the patient's house as soon as an ambulance would be likely to arrive, and for distant calls long before the patient could have reached a hospital

Working of the Service

A doctor faced with an emergency sends a message to the maternity hospital giving his name, the name and address of the patient, and the name of the consultant on the panel he wishes to attend He may also give some details of the nature of the case This message is sent by private telephone or by a telephone kiosk, or by one of the police-box telephones On receipt of the message the hospital telephones for a taxi and details a nurse to go with the outfit, which is kept packed and ready The consultant is telephoned, and if he is not in then the others on the panel are approached When one is ob

* Read in the Section of Obstetrics and Gynaecology at the Annual Meeting of the British Medical Association, Plymouth 1938

tained he is given the message, and goes direct to the patient's house taking his usual outfit with him

There is a friendly rivalry as to whether the nurse or the consultant will reach the patient first On arrival at the case the nurse discharges the taxi which can be sent for when necessary For cases over five miles from Newcastle the consultant calls at the maternity hospital and takes the nurse and outfit with him in order to save needless transport charges The nurse detailed is usually one of the district staff nurses but a more junior nurse is occasionally sent It is most important that the outfit should be clearly labelled with details of the contents of each package so that a nurse unacquainted with its contents can find them readily The Newcastle outfit consists of a large tin a large package a drum and some oddments such as a cylinder of oxygen and a container of gum saline It can easily be carried in the boot of a motor car

The panel of four is composed of those engaged in private consulting practice in the city For consultations other than emergency doctors make their own arrangements direct with the consultant as in private practice

The outfit with a nurse in attendance has been placed at the disposal of the Newcastle doctors since it contains many things that might be most useful in a difficult case and yet not one that requires the presence of an expert Those doctors using it have to be responsible for the fee for the use of the outfit and for transport charges

The service started in October 1935 and there was only one call that year In 1936 there were eleven calls and in 1937 twenty one calls There were thirteen calls in the first half of 1938 A steadily increasing demand is made on the service but not nearly as large as it should be Badly shocked exsanguinated and sometimes moribund women are still sent to hospital from time to time In 1936 eleven women were admitted suffering from shock and loss of blood mostly due to placenta praevia and died within a few hours of admission It is impossible to believe that some of these deaths could not have been avoided had the emergency service been called in

Certain of these disappointments are explained by failure of the authorities to give the service sufficient publicity The profession is a constantly changing one and annual reminders should be sent out There is also the instinctive tendency to ignore literature received in open envelopes with halfpenny stamps Other disappointments are due to the deep-rooted belief in hospitals and the marvels that they can accomplish held by the relatives who no doubt bring pressure to bear They are unaware that the residential staff may only be a very junior house surgeon Another factor is a dread on the part of certain doctors that the patient will be required to pay a part or the whole of the charges incurred by calling in what is believed to be a free service Whatever the explanation, my colleagues and I are convinced that we have saved a number of lives—and in just such cases as those which simply cannot be saved when first seen at the maternity hospital

Cases Attended

The service was called to forty-six cases as follows One or two were purely consultative

P P H	2	Failed version	1
P P H and shock	11	Prolonged labour	1
Retained placenta	5	Prolapse of cervix	1
Retained placenta and P P H	7	Pulmonary embolism	1
Miscarriage and haemorrhage	9	Ruptured uterus	1
Septic abortion	1	Collapse	1
Failed forceps	4	Acute yellow atrophy	1

Results

There were five deaths among those treated the causes were as follows

1 Obstructed labour due to a double monster When first seen the patient was moribund

2 Collapse some days after an abortion The patient was dying of hyperacute sepsis

3 Acute yellow atrophy The patient died some days later

4 P P H and shock with retained placenta The patient had a huge fibroid which was mistaken for a second child She got over the immediate danger but the fibroid became infected and she died some three months later when an attempt was made to remove it.

5 Failed forceps case The patient was exhausted and shocked and the foetus was anencephalic She appeared to get over the confinement but collapsed suddenly next day The cause of death is uncertain

Apart from these deaths most of the other patients were exhausted and in many instances badly shocked and even exsanguinated Some were described as fainting and pulseless Not one of these patients was lost In nine cases they were so critically ill that they could not be moved merely restorative measures were employed and occasionally some slight operative procedure was performed and when they had sufficiently recovered they were removed to hospital some hours later for nursing and possibly further treatment In a number of cases an extensive repair was carried out after dealing with the urgent symptoms

Expenses and Fees

As regards expenses there is a charge of one guinea for the use of the outfit with the nurse in attendance This is payable to the hospital as also are any transport charges incurred The fees payable to the consultant are based on the agreement we have with the individual authority for general services Northumberland County Council pay the following fees

> A primary consulting fee of two guineas with a mileage rate for every mile travelled going and coming of 2s 6d (3s between 9 p m and 9 a m) Operative fees are additional and range from six guineas for an abdominal operation to two guineas for a transfusion Forceps deliveries repairs versions and removal of placentae are intermediate in cost

It would interest those present to know that for some years past we have had a fairly comprehensive service agreement with both the Northumberland and the Durham County Councils Recently they have both adopted the emergency service In 1935 the panel of four consultants received a grand total of £126 from the former county and in 1936 roughly £200 from the latter The advent of the emergency service will only add a very little to the expenses incurred by these authorities

Conclusion

The need for such a service was advocated by me in the *British Medical Journal* of April 13 1929 and in *Public Health* the same year I find that Bellshill gave a practical trial of the suggestion in 1931 Newcastle was the first medical school centre to put it into operation Its running is simplicity itself but for efficiency there must be a central call office responsible for receiving the messages The panel should consist of all the recognized consultants in the work in any area who care to serve In more outlying areas the panel could comprise those general practitioners conversant with obstetrics who

commend themselves to their local colleagues in a consultant capacity The details of the outfit can be elaborated or amended according to the wishes of those who use it

I feel convinced that a modified outfit should be at the disposal of every doctor and midwife, to make good the deficiencies of many industrial homes Some emergencies are preventable, and will tend to be eliminated by the improved standard of medical and nursing supervision which is being developed and by the closer co operation which will result between the two services

Outfit for the Emergency Service

This outfit is contained in (i) a bundle, (ii) a square case, (iii) a drum, and (iv) oddments

Bundle (weight 21 lb measurements 20 × 10 × 10 in)

- 2 brown blankets
- 2 sheets
- 4 hot water bottles
- 2 mackintoshes (1 sheet, 1 apron)
- Bed pan
- Rectal saline apparatus
- Tin containing 1 oz glucose

Square case (weight 27 lb, measurements 20 × 10 × 10 in)

- 2 pint measure
- 1 small and 2 large basins
- Obstetric straps
- Flask of sterile water
- Saline tablets
- Lotion thermometer
- 2 sterile dressing towels and mackintosh
- 1 hand towel
- 1 pair of sterile gloves
- 1 bag of sterile swabs
- 2 pairs dissecting forceps
- 6 pairs artery forceps
- 3 scalpels
- Needles
- Aneurysm needle
- Scissors
- Kidney dish
- Nail brush
- Intravenous saline apparatus
- Intra uterine douche apparatus with Bozeman's nozzle
- Hypodermic syringe
- 10 c.cm. Record syringe
- Sims's speculum
- Catgut
- Silkworm gut
- Rubber catheter
- Dettol
- Pituitary
- Erbolin
- Morphine digitalis strychnine, lobeline
- Atropine
- Brandy
- Adrenaline
- Camphor in oil
- Tinct. iodine
- Spirit soap
- Anaesthetic mask
- Methylated spirit
- Coramine
- Minim measure
- 2 oz. measure
- Novocain
- Chloroform
- Ether
- Drop corks

Drum (weight 12 lb height 10½ in, circumference 32½ in)

- Wool
- Gauze (2 rolls)
- Lint
- Gloves (2 pairs)
- 2 sterile gowns
- 2 sterile masks
- Doctor's hand towel
- 4 dressing towels

Oddments

- Oxygen cylinder with tubing and funnel
- Flask of gum saline
- CO_2 apparatus for babies

SEPTAL DEFLECTION*

BY

W. S. SYME, M.B., Ch.B., F.R.F.P.S.

Assistant Surgeon Ear Nose and Throat Department, Western Infirmary Glasgow

I have for some time had an uneasy feeling that there is a tendency to blame this deformity for many more ills than it deserves and consequently to employ operative correction much more often than is actually necessary Let me admit at once that there are many reasons for this A twisted septum is a definite, quickly seen abnormality and a handy explanation of many ills of obscure origin The operation of submucous resection is a pleasant and straightforward one—being, in fact, the favourite operation of many specialists It does not cause extreme discomfort for the patient, and, if performed with care according to reliable technique, does not result in any lasting harm So that even in the case of the most careful and scrupulous among us a septum bent or a little to one side is sometimes an undisguised blessing

This paper is based on an investigation of a series of cases in which a diagnosis of septal deflection was made by various examiners The frequency with which deflection occurs to a varying degree with or without ill effect would suggest that it is not the condition of the septum which causes disease but the liability to congestive and infective processes in the presence of a narrowed airway How often are we right in assuming that this irregularity in development requires to be changed artificially by operation? And are we not too frequently apt to forget the compensatory character of Nature? It is often only during a routine examination of the nose that a septal deflection is discovered with no associated complaints of obstructed breathing, headache, catarrh, etc This state exists in many cases with very severe deviation Other factors must therefore be present to give rise to the conditions commonly credited to a septal deflection With regard to its frequency, are we right in saying that because the nasal septum is not exactly in the middle line it is abnormal? At any rate in European skulls and on clinical examination it would seem to be more the rule than the exception, the percentage being variously quoted as between 60 and 80 It has been seen in infants of a few weeks old, occurring more often in males than in females and slightly more to the left than to the right For some reason it is the exception in aboriginal skulls is this because of a purity of racial development, whereas through the ages many races have combined to give the European his ultimate size and shape? The majority of septal deviations are not associated with disease or discomfort

The Role of Trauma

With regard to the origin of septal deviation, few of the patients examined in this investigation can recall an injury likely to have been the cause Opinions differ very greatly as to the part played by trauma, some say it is the common cause, others that it is the exception It certainly seems possible for many injuries to the nose to occur in early childhood—as in falling, for example—that would not be recollected in adult life Such injuries may twist the cartilage without external change, and, in fact, traumatic changes will be found mostly in the cartilage Although it is impossible to say how far injury has influenced the development, there remain, I think, a majority of cases in which the origin would seem to be developmental And why not? Should the septum be the one structure to be absolutely straight and in the dead centre? Superficial examination, even a casual glance, will show that none of us has two equal sides to the face It is interesting to note, on radiographing the skull, how often a difference in size exists and how often a septum is deflected to the smaller side The nasal cavity, turbinals, and sinuses are frequently noticeably smaller on the convex than on the concave side It does not necessarily follow, because of the high percentage of septal deviations, that there is a perceptible difference between traumatic and non traumatic causes in this regard Acceptable suggestions as to the cause include defective development of the septum itself and its upper and lower boundaries This would occur with the high palate so common as the result of adenoids, with an abnormally low cribriform plate and flat nasal bridge, and is even more likely still when both these conditions exist

Effects of Septal Deflection

Unless so great as to be noticeable externally, a septal deviation attracts attention by interfering with breathing and the drainage of the nasal cavity and sinuses Middle

*Read in the Section of Oto Rhino Laryngology at the Annual Meeting of the British Medical Association Plymouth, 1938

ear and tubal conditions, especially catarrhal ones are found with great frequency in association with septal deviation but the suggestion is made that these are most commonly seen after the establishment of sinus disease When severe it may cause pain by pressing on the lateral nasal wall The blockage of sinus drainage is by far the most troublesome effect and the one calling most persistently for relief In these cases the septal deflection is commonly most acute high up and many probably the majority are the result of injury Is there any difference between the effect of a sudden change of the size and shape of the nasal cavity by traumatic deviation of the septum and the result of a septum deflected during development? It seems reasonable to suppose that given equal conditions of infection the case with a traumatic deviation of the septum will be likely to have more trouble from a sinusitis than the developmental case or the case of long standing In the former there is not only the effect of the trauma but also the larger turbinals In the latter there has been an accommodation of structures and functions to meet the irregularities as for example the shrinking or the smaller development of turbinals Why does a septal deflection produce a greater liability to disease? A sudden traumatic change in aeration and drainage is understandable as a cause of trouble but in regard to other bodily aberrations are the parts concerned more susceptible to bodily disease than those absolutely normal? If so and if the septal deflection is looked upon as an abnormality then those liable to disease from this cause are in the majority There certainly seems to be a tendency for diseased conditions such as sinusitis to be found more often on the side of the septal deflection Is this definitely due to the presence of the septal deflection or does the septal deflection not rather make drainage difficult and so the relief of disease and symptoms? Is not sinus disease at first part of an ordinary rhinitis, showing itself as an entity only when the resolution does not progress as in the nasal cavity itself? In those cases of septal deflection with no symptoms Nature has made compensation for the difference in size of the two nasal cavities—for example the larger inferior turbinal on the concave side The position of the septum does not seem to have any pathogenic effect its action is purely physical and is shown after the onset of disease especially by interfering with efficient drainage of sinuses

Grounds for Operation

It is interesting to wonder on what grounds we should perform submucous resection of the septum I suppose most of us would agree that a badly deflected septum obviously obstructing breathing to the patient s discomfort a similar septum preventing the drainage of sinuses and impeding the return of the patient to good health or a septum by its pressure on opposing surfaces causing acute pain are all circumstances warranting procedures for moving the septum out of the way Most of us would agree that the operation of submucous resection in one form or another is best suited to this purpose Attention to the septum in this way will reduce the necessity for turbinotomy to a minimum Apart however from these more insistent conditions many minor disorders of the nose and its vicinity are found in conjunction with a septal deflection where the question of operating on the septum also frequently arises Possibly in this group of cases our tendency is to interfere too often with the septum and it is I think here that the results of such interference do not seem to favour it The results at any rate in some hands are disappointing and I believe for at least two reasons First the psychological one—both for ourselves and for our patient—that although generally no harm is done our surgical procedure has not removed the original disorder Secondly that owing to the presence of so definite a condition as a septal deviation many minor but more persistent disorders escape our notice Even although so many deflections produce no symptoms can we with one such individual ever be right in advising the straightening of the septum as a preventive of serious disease in view of the ever present possibility of nasal infection or should we rather wait for the acute symptoms to arise and then do our submucous resection in case trouble should arise again? This is an age of prevention in medicine but I think there will be few among us who would be willing to go to these extreme lengths just in case

CALCIUM MANDELATE AND SULPHANILAMIDE IN TREATMENT OF URINARY INFECTIONS

BY

H DROLLER, M D Munich, L R C P Ed

Clinical Assistant Medical Department Royal Infirmary Sheffield

Mandelic acid has its well defined indications in the treatment of urinary infections It is most efficacious against *B coli* and enterococci but usually fails in *B proteus* and staphylococcal infections Schnohr (1937) Hryntschak (1937) Melton and Rosenheim (1938) and Kunstmann (1938) report series of cases treated with the calcium salt of mandelic acid This salt is an insoluble tasteless powder which does not mix with water and can be given with milk or jam Calcium mandelate is marketed by British Drug Houses as mandecal and this was the preparation used in the present series of tests

Recently the group of compounds of which sulphonamide prontosil, and streptocide are the best known members has been used extensively in the treatment of urinary infections (Garrod 1938 Cokkinis 1938) To compare the efficacy of calcium mandelate with the sulphonamide group of urinary antiseptics we took two series of cases of urinary infections and tried to treat each series according to indications set out below with the respective drug

Indications for the Use of Mandecal—Mandecal has the same indications as all the other mandelates The renal function should be good so that the urine may speedily attain a *p*H of 5·5 or less Mandecal is most effective against *B coli*

Indications for the Use of Sulphanilamide—Sulphanilamide exerts its bacteriostatic action best in an alkaline medium The kidney function may be good or moderately impaired It is equally effective against *B coli* haemolytic streptococci and *B proteus* It does not act on enterococci

Two questions arise Which drug fulfils the optimal requirements in sterilizing the urine in the shortest time with the least amount of toxicity in a given infection? and Which treatment is the cheaper?

1 Mandecal

Mandecal was found to acidify the urine of healthy individuals very quickly In a self experiment the urine became strongly acid within eighty minutes of the in

gestion of 4·5 grammes of mandecal (*p*H 7·6 to *p*H 5). On ingestion of mandecal, free mandelic acid is rapidly and almost completely excreted by the kidneys the calcium is fixed to an acid radical and an acid urine is excreted to maintain the acid-base balance

TABLE I—*Cases treated with Mandecal (71 per cent Cures)*

Type of Case	No	Cures	Failures
(1) Chronic urinary infections	12	9	3
Pyonephrosis	1	—	1
(2) Urinary infection occurring together with			
Chronic nephritis	1	—	1
Focal nephritis	1	1	—
(3) Hypertension	2	2	—
Microcytic anaemia	2	1	1
Rheumatoid arthritis	1	—	1
Diabetes mellitus	3	2	1
Ulcerative colitis	3	2	1
Various conditions	5	5	—
Total	31	22	9

Causative Organisms—In all but two cases *B coli* was the organism concerned, the exceptions being two mixed infections one with enterococci and haemolytic streptococci, the other with *B coli* and haemolytic streptococci

Clinical Results—Using a standard dosage of 4·5 grammes of mandecal four times daily, we could prove that calcium mandelate acidifies the urine sufficiently to be an effective urinary antiseptic The salt is pleasant to take, and in no case was the vomiting noticed which is so common after ammonium mandelate medication The cases treated have been divided into three groups (1) those showing signs and symptoms of cystopyelitis, (2) those suffering from haematogenous bilateral renal disease and concurrent urinary infections, and (3) cases in which a bacilluria was discovered on routine examination, without clinical symptoms of urinary infection Those cases in which treatment failed are shown in Table II

TABLE II—*Cases in which Treatment Failed*

Diagnosis	Urine Culture	Duration of Treatment	Remarks
Group 1		Days	
Cystitis (male aged 52)	Heavy mixed inf enterococci and haem strept	10	
Pyelitis (female aged 5)	Moderate growth of coliform bacilli	17	Urine difficult to acidify lowest *p*H 6·7
Cystitis (male aged 21)	Heavy *B coli*	12	*p*H never below 6·1
Cystitis (male aged 20)		10	
Group 2			
Chronic nephritis	*B coli* and haem strept	10	Could not concentrate sufficiently S G 1010
Group 3			
Microcytic anaemia	*B coli*	11	
Rheum arthritis	,,	14	
Ulcerative colitis	,,	14	
Diabetes mellitus	,,	5	Left ward before investigations were finished

The duration of treatment varied from three to twenty-six days, the average being nine days Hryntschak is of the opinion that calcium mandelate should not be used for periods longer than ten days, but I have never observed any nausea coming on after this time No toxic symptoms were noticed, and the only difficulty encountered in taking the powder was due to the fact that mandecal floats on water

The results compare favourably with those obtained with ammonium mandelate (Holling and Platt, 1936, Kunstmann, 1938) Hryntschak and Rosenheim both agree that mandecal is easier to take and less nauseating than ammonium mandelate, Kunstmann, however, found it less palatable We can fully confirm the former authors' findings

The cost of treatment with mandecal for a period of seven days amounts, according to the manufacturers (B D H), to 8s 4d (hospital price)

2 Sulphanilamide

Since 1935 the number of favourable reports on the treatment of urinary infections with sulphanilamide has been steadily growing This drug has the advantage of rendering the urine slightly alkaline (Marshall *et al* 1938), and can be used during the acute stages of pyelitis and cystitis It is directly bactericidal, and is more active in an alkaline medium (Helmholz, 1937a, 1937b)

TABLE III—*Patients treated with Sulphanilamide (75 per cent Cures)*

Type of Case	No	Cures	Failures
Acute pyelitis	2	2	—
Chronic pyelitis	3	1	2
Chronic urinary infection	2	2	—
Urinary infection combined with Acute nephritis	2	2	—
Chronic nephritis	2	—	2
Chronic peritonitis	1	1	—
Diabetes	3	2	1
Myxoedema	1	1	—
Ulcerative colitis	1	1	—
Pulmonary tuberculosis	1	1	—
Rheumatoid arthritis	2	2	—
Total	20	15	5

Clinical Results—A standard dose of 1·5 grammes of sulphanilamide a day was used, as suggested by Kenny *et al* (1937) Only one toxic sign was noticed—namely, cyanosis It occurred in three cases one was an acute nephritis, the other two being chronic renal failure where isosthenuria already existed All three patients lost their cyanosis quickly after cessation of treatment with sulphanilamide The cases were again divided into three groups in the same manner as those treated with mandelate

Failures

Chronic cystopyelitis in a man of 52, heavy mixed infection with enterococci and haemolytic streptococci Treatment was continued for only ten days because the patient left hospital (Previous mandecal treatment without success)

Chronic pyelitis in a man of 34 Left hydronephrosis, right kidney not functioning at all Enterococci and lacto-fermenting coliform bacilli Patient developed cyanosis drug stopped on tenth day Chronic nephritis Both this and the previous patient were already beyond an expectation of cure Both had isosthenuria and rising non protein nitrogen One was a case of mixed infection with haemolytic streptococci, the other with enterococci and coliform bacilli, the latter developed cyanosis after seventeen days treatment when the drug was discontinued

Diabetic cystitis in a female of 65 due to *Staph aureus* Treatment for a fortnight did not remove the infection This is interesting in view of a finding of Becker (1937) who reported good results in staphylococcal cystitis

The duration of treatment varied from three to twenty-seven days with an average of ten days The cost of treatment was about 6d (hospital price)

Causative Organisms in Sulphanilamide Series

	Cures	Failures
B coli	8	—
B coli and haem strepts	3	1
B coli and enterococci	1	2
Enterococci and haem strepts	—	1
B coli and *B proteus*	3	—
Staph aureus	—	1

(The mandecal series with only two exceptions contain infections with *B coli* according to the indications set out above)

Conclusions

The danger of neglecting urinary infections is only slowly being realized Evidence is accumulating that when they are insidious in their onset they may lead to a form of renal failure with contracted kidneys which shows certain typical pathological changes (Fahr 1938) It is therefore necessary to treat all cases of urinary infection however slight until the urine becomes sterile

Two drugs are at our service Mandelic acid is indicated in chronic infections with good renal function and concentrating power in the presence of pure *B coli* infections The calcium salt of mandelic acid is more pleasant to take and is as efficacious in sterilizing the urine as any other mandelate The sulphonamide group of drugs is indicated in mixed infections and in the presence of haemolytic streptococci and *B proteus* Mandecal shows no toxic symptoms at all whereas sulphanilamide in the dosage indicated brought on cyanosis in only three cases No other toxic symptom was observed

Summary

An account is given of two series of cases of urinary infection treated with mandecal and sulphanilamide respectively Cures were obtained in 71 per cent of the mandecal and 75 per cent of the sulphanilamide series

I wish to thank Dr R Platt for his kind criticism and for his permission to publish this paper I am also indebted to British Drug Houses Ltd for a supply of mandecal

References

Becker W (1937) *Dtsch med Wschr* 7 221
Cokkinis A J (1938) *British Medical Journal* 1 1151
Fahr Th (1938) *Virchows Arch* 301 140
Garrod L P (1938) *Lancet* 1 1178
Helmholz, H F (1937a) *J Amer med Ass* 109 1039
—— (1937b) *Proc Mayo Clin* 12 377
Holling H E and Platt R (1936) *Lancet* 1 769
Hryntschak T (1937) *Med Klinik* 33 1097
Kenny M *et al* (1937) *Lancet* 2 119
Kunstmann H (1938) *Munch med Wschr* 85 790
Marshall E K *et al* (1938) *J Amer med Ass* 110 252
Melton G and Rosenheim M L (1938) *Lancet* 1 494
Schnohr E (1937) Ibid 1 1104

H J Burstein (*Urol cutan Rev* 1938 42 575) records a case of double kidney with Y-shaped ureter and ureteral calculus in a female infant aged 18 months in whom nephrectomy resulted in a cure The child was in good health a year after the operation The condition was an embryological malformation and the symptoms of frequent micturition pyuria and fever were due to hydronephrosis infection and stone formation The diagnosis was made by careful examination including cystoscopy retrograde pyelography and intravenous urography In the differential diagnosis congenital hydronephrosis congenital idiopathic dilatation of the ureters congenital ureterocele hydronephrosis due to anomalous vessels and other causes and polycystic disease of the kidneys had to be excluded.

Clinical Memoranda

Localized Hypertrophic Emphysema

One of the debated causes of hypertrophic emphysema is often said to be intermittent or partial bronchial obstruction and in this relation the following case may be of interest

Case Report

A Hindu of 28 years was killed in a motor-car accident reliable evidence stating that there were no respiratory movements when the body was examined immediately after the collision His health was stated to have been good with the exception of a spasmodic non productive cough which he had had for some months and which came on at weekly or fortnightly intervals and lasted for half an hour or more

At post mortem examination nine hours later the cadaver was that of a well nourished adult There were severe abrasions and contusions on the forehead right cheek occipital and suboccipital regions There was fairly extensive basal haemorrhage and laceration of the pons In addition however the postero-lateral segment of the middle lobe of the right lung had a number of small bullae on the surface and it was much softer than the remainder of the lung On dissection it became evident that a well-defined part of the right middle lobe was emphysematous The bronchus supplying this section was traced and just distal to its junction with the main bronchus to the middle lobe a small flap of the mucous membrane was found The bronchus was three eighths of an inch in diameter and the flap which was one tenth of an inch in thickness occluded five eighths of the bore of the bronchus There was a small pledget of mucus on the distal surface of the flap Unfortunately it was impossible to preserve or photograph the specimen

There was no clubbing of the fingers and no other abnormality was found

It appears that the flap of mucous membrane acted as a partial valve and gave rise to the localized hypertrophic emphysema The bouts of coughing may have been caused by mucus occluding the bronchus completely

KENNETH ROYES B A B M B Ch Oxon
Jamaica Health Officer Port Royal

A Case of Complete Hypospadias

Cases of complete hypospadias with bilateral undescended testicles are relatively rare The following case history may be of interest from both the anatomical and psychological aspects

Case Record

X Y aged 13 years 9 months was admitted to hospital as a girl patient on January 29 1938 *He* complained of a swelling in the right groin which had been noticed only a few days previously On examination he was found to have a sturdy physique of the male type the shoulder girdle was broader than the pelvic girdle the chest was flat and showed no signs of breast development the muscles were well developed and there was little subcutaneous fat. The distribution of pubic hair was of the male type and he had well marked hirsuties of the face The penis was rudimentary about one inch long, and it had a hooded prepuce The scrotum was completely divided and resembled the labia majora There were no labia minora The urethral orifice was situated just below the base of the penis above a rudimentary vagina which was four inches deep and less than a centimetre in diameter A lump was palpable in the right inguinal canal and a smaller lump could be felt in the left groin

Orchidopexy was carried out by Mr J F Gill on January 31 1938 At the time of operation the right testicle was found lying in the lower end of the inguinal canal it was

of normal size There was an associated hernial sac, which was opened, the pelvic organs were palpated through this opening No uterus or ovaries could be felt On the left side a small testicle was found lying in the lower part of the inguinal canal After freeing the spermatic vessels each testicle was brought down and sutured to the bottom of the corresponding half of the scrotum On April 21, 1938, Mr Gill carried out a one-stage plastic construction of a penile urethra Flaps of mucous membrane were raised on each side of the urethra and sutured over an inserted rubber catheter Healing occurred by primary union

There is no history of a similar condition in any member of the patient's family His parents are of average intelligence, the father is asthmatic, and he has one married sister, aged 25 At birth there was some doubt as to his sex, but it was decided that the child was a girl, and it was brought up as such

He had always been an extremely shy child He had no friends either inside or outside school, and never confided in his parents nor in his sister He liked to play with dolls, and sewed clothes for them He was also fond of cricket and football, and preferred to play with boys His I Q was only 80, and he liked history, domestic subjects, and first aid best There was no sexual history, and no information could be obtained from dreams or fantasies, as he would not relate any of these Leading questions were of no avail He said he preferred to be a girl, since he was brought up as one

Shortly after completion of the operations, however, he asserted himself to an extreme degree He was no longer shy with the other children in the ward (all girls), he played with them, and at times his attitude was overbearing and aggressive In his play he took the role of "mother" and tended to the smaller girls, sometimes kindly, at other times not so kindly He felt a good deal happier, was less introverted, and did not seem to be bewildered at the drastic change in his sexual identity As psychotherapeutic treatment was considered to be a necessary measure to help establish him in his masculine role, he was sent from hospital to a child guidance clinic as an in patient

We are indebted to Mr J F Gill F R C S, consulting surgeon, and to Dr D V Marshall, F R C S Ed, senior medical officer, for their permission to publish this case

J J MURRAY M B, Ch B
S BOOKHALTER M D
Assistant Medical Officers Beverley Road Hospital, Hull

Aneurysm of the Common Iliac Artery

A fatal case of retroperitoneal haemorrhage following rupture of an aneurysm is here recorded, on account of the clinical picture and the rarity of the lesion

CASE RECORD

Clinical History—The patient, a man aged 69 was brought into hospital in a collapsed state; stimulant treatment was given and in about an hour he was able to give a history He had had left sided lumbago for three weeks, and had a left inguinal hernia and a smaller right inguinal hernia, a truss being worn for the former but failing to control it

Examination revealed only a lowered blood pressure, and no cause for collapse Four hours later a large mass was found on the left side of the abdomen, occupying an area similar to that occupied by a spleen reaching the umbilicus The mass was not movable its edges were ill defined, and the posterior limit not detectable it was tender and pulsation of a transmitted type was noted Below this mass, just above the left inguinal ligament lay a second firmer mass giving a direct pulsation this smaller mass was considered by the patient to be a hernia The urine contained albumin but no blood

For ten hours the patient's condition remained unchanged, then he became rapidly worse and died sixteen hours after admission

Post mortem Examination—There were no signs of any external injury The abdomen contained 6 ounces of free blood in the peritoneal cavity A very large retroperitoneal mass occupied the left side of the abdomen, this proved to be a haematoma of the left perirenal space, containing about three to four pints of blood The effusion of blood extended across the mid line to the right kidney region, upwards as far as the diaphragm, into the transverse mesocolon, and downwards into the pelvic cavity The origin of the haemorrhage was found to be a saccular aneurysm the size of a cricket ball, arising from the left common iliac artery The greater part of the wall of the vessel was involved, and the sac was partly filled with laminated blood clot Rupture of the sac had taken place near the origin of the artery from the aorta, and the site of rupture communicated with the haematoma The aorta showed little atheroma in the abdominal part, but some changes in the arch, and there was calcification of the coronaries The left renal artery was normal There was no sign of a left inguinal hernia, and the mass described as a hernia was the aneurysm A small right inguinal hernia was noted The other organs showed no important changes, and no evidence of syphilis was found

Microscopical examination of the wall of the artery near the aneurysm showed advanced atheroma but no evidence of syphilis There was considerable intimal thickening with some calcification, the media remained intact, with no evidence of infiltration Some round celled infiltration of the fatty tissue was noted, and there was a great deal of fibroblastic proliferation in the wall of the aneurysm

COMMENTARY

The case is of interest on account of the unusual site of the aneurysm and the result of its rupture The absence of injury and haematuria excluded the diagnosis of ruptured kidney, which the abdominal findings suggested

A review of the literature of recent years showed two other cases of ruptured aneurysm at this site, both ending fatally, also two cases were found in which the aneurysm had been successfully obliterated by Matas's operation

I am indebted to Dr F E Saxby Willis for his kind suggestions and permission to publish this case, and to Dr E H Creed of King's College Hospital for the microscopical report

J NUTTALL HORNE M B, B Chir
Weir Hospital, S W 12

BIBLIOGRAPHY

Broglio, R (1934) *Gior med Alto Adige* 6, 854
Doolin, W (1932) *Irish J med Sci* 6, 712
Gibbon, J H (1936) *Ann Surg* 103 147
Longo, E (1933) *Wien klin Wschr* 46, 1168
Rienhoff, W F, and Hamman, L (1935) *Ann Surg* 102 905

Recurrent Ectopic Gestation

The following note of a very unusual case appears to be worth placing on record

A married woman aged 38 was admitted into hospital on July 6 1938 with a provisional diagnosis of ectopic gestation She had eight children, varying in ages from 2½ to 17 years the last two being twins No miscarriages were recorded She became pregnant in 1937 and was operated upon on June 10, 1937, following a seven weeks gestation The left Fallopian tube was found to contain an ectopic pregnancy and was removed The patient menstruated normally following the operation until May, 1938, when the periods ceased

The patient was examined on admission on July 6 and found to have a tender mass in the pouch of Douglas extending to the right Laparotomy on July 7 revealed an ectopic gestation in the right Fallopian tube, which was removed

This case was unusual, first because the tubal pregnancy was repeated inside a period of thirteen months, and secondly because the phenomenon manifested itself after approximately the same period of amenorrhoea

D G C WHYTE, M B, B Ch
Folkestone

Reviews

POLITICAL ARITHMETIC

Political Arithmetic A Symposium of Population Studies Edited by Lancelot Hogben F R S (Pp 331 illustrated 30s net) London George Allen and Unwin 1938

This volume opens with an introductory essay by Professor Lancelot Hogben, stated (by the publishers) to be a challenging critique of contemporary economics and an eloquent appeal for realistic research on social institutions The first chapter is a study of the decline of fertility in the civilized world by Dr Kuczynski Chapter II contains arithmetical estimates of the future population of Great Britain on different hypotheses and is the work of Dr Enid Charles In chapter III Dr Charles and Dr Moshinsky examine fertility as correlated with locality and occupation In chapter IV Mr Glass studies changes in fertility in the last eighty years Chapter V by Dr Enid Charles is concerned with the structure of the family in Australia and chapter VI by Mr Glass discusses the relation between marriage frequency and economic fluctuations Chapter VII by Dr Kuczynski is a history of opinions on fertility held between 1660 and 1760 Chapter VIII by Mr Gray and Dr Moshinsky studies the distribution of ability and opportunities of education in a large sample of children The same authors in chapter IX relate ability and educational opportunity to parental occupation In chapter X Messrs Glass and Gray examine the working of the scholarship system at Oxford and Cambridge In chapter XI Dr Charles and Mr Morgan investigate the relation between initial and maximum earnings in skilled and unskilled workers The last chapter by Mr Allison Davis is on the distribution of the blood groups and its bearing on the concept of race

The Lord Deputy Strafford is said to have advised anyone about to read a new book on a serious subject to note down what he knew or thought he knew of the subject already At least two of the contributors to this symposium are such well known authors that it must be difficult to carry out Strafford's prescription We think however that a person so unfortunate as never to have heard of any of the present writers and not even very familiar with the voluminous official literature but who has been a reader of the serious weekly reviews during the last twenty five years might think he knew (1) That owing to the decline in the fertility of marriages and the impossibility of an indefinite continuation of improvement in rates of mortality the population must eventually decline (2) That the fertilities of different groups (racial social economic) varied (3) That even if the proportion of clever children in the upper classes were really greater than in the lower classes a great many clever children had poor parents and many of these 'clever' children had insufficient educational opportunities (4) That in unskilled trades one reached one's maximum earning capacity much earlier in life than in skilled trades (5) That race was a difficult concept to define

When the hypothetical reader has perused the new book the addition to his knowledge will be mainly of detail Under each of the above five headings he will find arithmetical evidence some of it covering the whole population some of it covering numerically important samples, and the evidence is clearly set out Those who are bored by tables may be tempted to skip but there is nothing in the exposition to give any reader a valid excuse to skip on the ground that mathematics are beyond him At least one article that by Dr Kuczynski on the opinions of demographers will charm those who are more interested in opinions than arithmetic

It is possible that the style of some of the essays particularly that of the preface may induce the reader who had no other knowledge than he derived from weeklies to underestimate the scientific importance of work done by mere officials or even by private investigators not associated with the Department of Social Biology of the University of London But as scientific justice is seldom done until all parties to a suit are dead this defect, if it be a defect, is not serious

A SURVEY OF BILE

Bile Its Toxicity and Relation to Disease By O H Horrall M D Ph D F A C S (Pp 434 18s net) Chicago University of Chicago Press London Cambridge University Press 1938

With its unusual title and its icteric wrapper this book seems ill designed to attract the casual medical reader This is unfortunate for it contains much information of value to the general physician and abdominal surgeon as well as to the physiologist and pathologist One cannot pretend that the book is easy to read for Dr Horrall like the disappointed professor in Conan Doyle's story appears to have made a life interest of the study of the bile and has collected here all that has been learnt about it since it was advised for use in enemas in an Egyptian sacerdotal papyrus of 1300 B C After discussing the history of his subject Dr Horrall describes the constituents of the bile its origin and fate and the changes it undergoes in the gall bladder If bile is injected intravenously in sufficient dosage death occurs from stupor or with symptoms of cerebral excitation Bile injected subcutaneously causes tissue necrosis and even a large aseptic abscess and a few cubic centimetres of concentrated bile free in the peritoneal cavity cause a transudation of several hundred cubic centimetres of fluid A distinction is drawn between *bile peritonitis* which is caused by the chemical action of bile on the peritoneum and *biliary peritonitis* which is caused by bacteria in the presence of bile in man In man the leakage of bile into the peritoneal cavity causes a very great risk the mortality rate approximating 50 per cent Bile can also cause acute pancreatitis

Although a vast amount of work has been done—this book has a bibliography with over 2 000 references—we still have not really precise knowledge of the mechanism of the depressing effects of jaundice or the toxicity of the bile Nothing other than the bile salts in whole normal bile has been proved toxic the pigments and constituents such as cholesterol and lecithin appear to be harmless Nevertheless whole bile appears to be more toxic than its known constituents Up to the present time there has been no method of determining bile salts accurately in such small quantities as may occur in the blood stream, and indeed it is not certain that they occur in normal blood Dr Horrall concludes that it is the bile salts that are responsible for the toxic action of the bile and that the discoloration caused by the bile pigment—namely jaundice—is a symptom and not a disease a great number of the symptoms that have been attributed to bile are part of a syndrome and not directly attributable to the action of bile itself The toxicity of the bile has been of great importance to

surgeons ever since the development of operations on the biliary system, and the discovery of the therapeutic action of jaundice on rheumatoid arthritis has now made it a practical issue with physicians Dr Horrall's survey is therefore timely, and subsequent workers will owe him a debt of gratitude for it

A KEY TO BIOLOGICAL LITERATURE

Tabulae Biologicae Edited by W Junk, C Oppenheimer, and W Weisbach Volume XIV, Part 4, Volume XV, Parts 1, 2, and 3 (Volume XIV, pp 93, Volume XV, Parts 1, 2, and 3, pp 288, price of one volume, Fl 35, reduced price for subscribers Fl 30) The Hague Dr W Junk 1938

Tabulae Biologicae is an exceptionally valuable work of reference, and it is satisfactory to note that it has established its position firmly, since the volumes are now appearing more frequently, and an editorial leaflet records promises of a large number of new articles in the near future During the last few months Vol XIV has been completed and three-quarters of Vol XV has appeared The fact that two-thirds of this space is occupied by biochemistry indicates the general trend of development of biological science The following are some of the chief subjects the properties of sex hormones of the sterol group (120 pages of tabular matter), the descriptive and physical chemistry of proteins, the biochemistry of wheat, oats, rye, barley, maize, and rice (from the U S S R) A remarkable article by C B Bridges describes the location of Drosophila genes The description of the four chromosomes occupies seven pages of tabular matter No fewer than 150 genes have been located in the second chromosome alone

The outstanding impression derived from perusal of these volumes is the vast amount of detailed information that has been accumulated in the last two decades by biological research Complete new branches of science, such as the physiological actions of sterol compounds, have developed in a few years, and in such cases the reference list is numbered in thousands rather than in hundreds *Tabulae Biologicae* provides an extremely convenient means for obtaining summarized information regarding important new developments, and the value of the publication is bound to increase as the mass of biological literature becomes more and more unmanageable

MALARIA AND ANKYLOSTOMIASIS IN PREGNANCY

Malaria and Ankylostomiasis in the Pregnant Woman By G A W Wickramasuriya, F R C P Ed F R C S Ed M C O G (Pp 179 11 illustrations, 9 tables 10s 6d net) London Humphrey Milford, Oxford University Press 1937

This is one of the two jointly awarded Katherine Bishop Harman Prize Essays of 1936 prepared for publication in book form The book represents experience gained by the author in Ceylon, more particularly at the De Soysa Lying-in Home during the period of the epidemic, which provided unrivalled opportunities for continuous and detailed observation on a large number of women suffering from malaria of various types and varying degrees of severity Among important effects produced by malaria in the pregnant woman are anaemia, 10-15 per cent haemoglobin values being not uncommon, oedema of renal or in some cases of nutritional type, albuminuria, seen in 50 per cent of the 357 puerperal women in the author's series, and low blood pressure occurring especially in pernicious forms of malaria In the author's experience pernicious manifestations of various kinds are more frequent in pregnancy than in the non-pregnant state, and the resemblance of some of the symptoms to eclampsia may make diagnosis very difficult Further, malaria definitely increases the tendency to eclampsia, pre-eclampsia, and "nephritic" toxaemia The suddenness with which pernicious symptoms may supervene and the danger of too early relaxation in treatment with the reappearance of coma, etc, is emphasized by Dr Wickramasuriya Spontaneous termination of pregnancy before term and death of the foetus are common effects Infection of the foetus was present in three out of six cases of foetal death but death may result without this—for example, from placental infection alone Hookworm infection is a common cause of maternal and foetal mortality in the Island An investigation made to ascertain the cause of foetal death in 648 consecutive cases of stillbirth showed that ankylostomiasis accounted for 3·4 3 per cent

The work is a useful treatise on the subject of malaria and ankylostomiasis in pregnancy, backed by considerable practical experience, and should be very helpful to the practitioner who may have to deal with pregnancy in the Tropics It contains little of interest to the parasitologist

THE SCIENCE OF NUTRITION

Textbook of Nutrition By J A Nixon, M D, F R C P, and Doreen G C Nixon M B B S, M R C S, L R C P (Pp 219, 9 figures 7s 6d net) London Humphrey Milford, Oxford University Press 1938

For some time past the interests and publications of Dr J A Nixon, until recently Professor of Medicine in the University of Bristol, have dealt largely with dietetics and the science of nutrition, so that his *Textbook of Nutrition* compiled with the help of his wife, may be expected to present the facts in an accurate and ordered manner It may be said at once that the book gives an admirable survey of the subject, and will appeal not only to medical men and to biochemists, but also to students of domestic economy and to laymen who require guidance in the problems of feeding children and adults and different classes of the population After a rapid review of the physiology of digestion and absorption of food stuffs, the requirements of the body at different ages are dealt with For public health purposes not only anthropometrical methods but clinical observations are needed to assess the physiological efficiency and to detect early deficiency The authors rightly point out that beyond the ordinary quantitative and balanced food requirements in proteins, fats, carbohydrates, and vitamins, individual absorptive capacity must be considered In some communities the question of availability of foods is a factor of importance, in ours the economic question is outstanding, apparently all except a relatively small fraction of the population are obtaining the full amount of calories they require, but there may be relative shortage of fats proteins, milk, fruit, and vegetables in some classes On the other hand, the deficiency may not be due to poverty or ignorance but sometimes to carelessness or indifference Instruction in housekeeping and methods of cooking must be combined with production of cheaper food or higher incomes It would appear, however, that the standards of food requirements have not yet been finally determined

Chapter VIII, which occupies one quarter of the book, opens with a discussion of the principles underlying the choice of foods in ordering diet, and then gives tables of the food content and constituents of fruits, vegetables, cereals, various sweets, fish, meat, poultry, game, and animal organs These are based on recently published analyses and are useful and accurate A minor discrep-

ance is that the fat content of an egg is given as 4·0 grammes on page 116 and 6·0 grammes on p 105 this depends on the size of the egg but the latter figure is the one usually taken The chemists are not yet satisfied however and these tables though generally accurate may be superseded in detail especially if portions as served at table are considered Again uniformity is difficult to obtain unless one standard of cooking is used In the case of the vitamins already there has appeared in *Nutrition Abstracts and Reviews* April 1938 an excellent series of revised tables of vitamin content of foods which was probably not available to the authors at the time of going to press Besides these tables are rather frightening to practitioners unless they are trained in the details of dietetics The authors thus recognizing that these food tables must not be regarded as possessing the reliability of *Bradshaw's Railway Guide* counsel a rougher reckoning which will often give equally good results and include as well as an abbreviated table of the principal foods a series of menus which may be used in drawing up an ordinary diet The relations of diet to disease prevention and to disease production and infections are important aspects of the science of nutrition which are dealt with in an interesting and satisfactory way and the final chapter on nutrition in disease supplies the principles of diet in fevers anaemia diabetes renal disease and lactation The authors have produced a good book which should have a deservedly wide class of reader

Notes on Books

Written with charm and clarity and recalling some of Arthur Hugh Clough's shorter verses Dr W P S BRANSON'S scholarly thirty eight *Sober Pieces and Songs* (Cambridge printed for the author at the University Press) have a musical meditative and sometimes melancholy touch which attracts without depressing The first item will be familiar to many old Bart's men who admired it as an anonymous poem in the *St Bartholomew's Hospital Journal* more than thirty years ago The printing and style of production form a most suitable setting Inquiries for this book may be addressed to the Printer Mr Walter Lewis at the University Press, Cambridge Price 5s

The fifth volume of the *Animal Year Book* published by ULAWS (The University of London Animal Welfare Society, 2s 6d) contains several articles of exceptional interest Sir Peter Chalmers Mitchell writes on game reserves and national parks Discussing the possibility of their establishment in Great Britain he mentions that in a recent departmental committee under the chairmanship of Dr Addison (now Lord Addison) proposals were considered which envisaged the acquisition of some such region as Snowdonia Cannock Chase or part of the Scottish Highlands for this purpose Sir Peter points out that should this happy eventuality materialize it would be equitable to make concessions in the shape of rest houses for walkers car parking places and roads of access to the large proportion of the public which is not keenly interested in natural history Within the precincts of a large national park smaller and more securely protected sanctuaries could readily be established Other instructive and interesting articles deal with the whaling and sealing industries while Dr Brook writing on tuberculosis in cattle and its control makes it clear that improved conditions and humane treatment of farm animals will go a long way towards providing uninfected milk Following nearly thirty pages of book reviews is an appendix devoted to the current activities of ULAWS which persistently continues its advocacy of cyanide fumigation for rabbit control and its humane campaign against the use of the gin trap Although membership of the society is mainly confined to those associated with the University of London all members of the public who subscribe ten shillings or more are eligible as Fellows ULAWS certainly deserves wide financial support

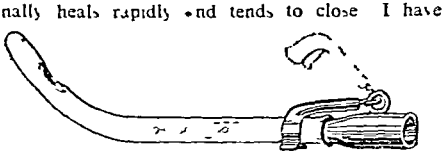
Dr PAUL SCHILDER has written much on medical psychology and his experience in the Bellevue Hospital of New York compels respect for his contribution *Psychotherapy* (Kegan Paul Trench Trubner and Company 10s) He definitely bases his method and theory on Freud's teaching but does not feel bound by all the modifications of the psycho analytic schools The present book seeks to set out the general principles for medical psychological treatment and gives several clinical illustrations which elucidate the argument Many similar books have been written with almost identical contents in the last few years and while this is a good example there is no reason to regard it as in any way outstanding

Preparations and Appliances

ANTRUM CATHETER

Mr C HAMBLEN THOMAS F R C S (London W 1) writes

Following an intranasal antrostomy the opening made occasionally heals rapidly and tends to close I have had

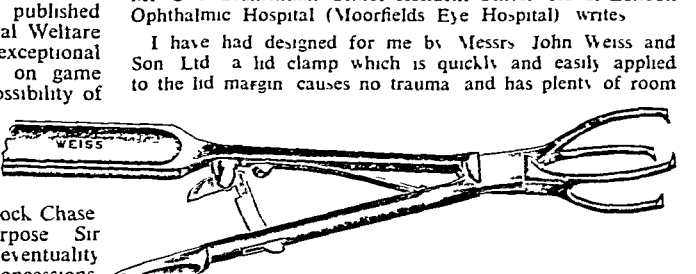


prepared for me a rubber catheter which I slip over a thin antrum cannula and put on the stretch with the attached clip I insert this into the antrum remove the clip and withdraw the cannula The rubber catheter expands stretches the opening and remains in position The instrument is made for me by Messrs John Bell and Croyden Wigmore Street London W 1

CLAMP FOR TARSORRHAPHY AND PLASTIC OPERATIONS ON THE LIDS

Mr C J Blumenthal Senior Resident Officer Royal London Ophthalmic Hospital (Moorfields Eye Hospital) writes

I have had designed for me by Messrs John Weiss and Son Ltd a lid clamp which is quickly and easily applied to the lid margin causes no trauma and has plenty of room



between its limbs for the removal of the posterior lip of the lid margin The handle and catch are the same as in a standard needle holder while the two pairs of teeth are set on four slender curved limbs the two pairs fifteen millimetres apart

The instrument finds a use also in operations on the upper lid where double eversion is necessary and does away with the necessity of retaining sutures

My thanks are due to the honorary surgeons at Moorfields who tried out the instrument and allowed me to use it on their cases

directly on the gonococcus and will kill it *in vitro* in comparatively low concentrations, they appear to produce bacteriostasis, which goes on to bacteriolysis in favourable cases, some patients seem to conjugate the drug in their tissues less efficiently than others, which may be an explanation of some of the failures With a few notable exceptions all those who have had experience are agreed that we now have a very potent remedy for gonorrhoea, but much more experience is necessary before the optimum dosage, the best time to begin treatment, and the general management of a case will be agreed, some give concomitant irrigations, others prefer to omit these In any case it cannot be too strongly stressed that very great care should be exercised in employing the sulphonamides, and still more care in testing for cure, since a considerable proportion of cases relapse and the mere cessation of discharge may lull the patient into a false feeling of security with disastrous results to himself and to others Urethroscopic, prostatic, microscopical, cultural, and serological examinations should be carried out on a number of occasions with negative results before a patient is pronounced cured

SOCIAL SERVICE

There is probably no one better able than Mr J Q Henriques to write *A Citizen's Guide to Social Service*[1] He has a very wide and practical acquaintance with his many-sided subject, he can expound it in a clear, agreeable, and effective style and manner, and his theme is consistently maintained This theme is, broadly, the place and value of voluntary effort in relation to the social services —housing, health, unemployment, public relief, and now occupation and community centres for the use of leisure—established by or under the auspices of central Government departments and local authorities It is very important just now that this theme should be set out and developed, for, though a differing emphasis may be placed upon voluntary activities in this connexion by different schools of thought, nearly all will agree that they have an important, even essential, place, and yet the knowledge of the increasing provision of services publicly organized and financed tends to slacken the effort of voluntary agencies and to limit the number of their unpaid available personnel This timely task of defining and reviewing the relative spheres of voluntary effort and of public social provision is very well done by Mr Henriques He sets out the nature, extent, and advantages of the several public services quite fully and fairly Their effectiveness within their particular statutory fields, especially the strength they derive from communal organization and public financial support, is not questioned, but it is claimed that they suffer from definite disadvantages from which voluntary agencies are free, and that they tend to produce in their beneficiaries an undue and unwholesome dependence and loss of self-reliance which is not manifested when help is given under voluntary auspices On these two propositions the author's arguments are not equally cogent Most people will agree with his conclusions as to the former, but many will not be satisfied that he has demonstrated the latter beyond all doubt

The point of view of the constructive social voluntary worker is contrasted both with that of the public administrator and with that of the indiscriminate almsgiver The charitable impulses of the last group are quite uncontrolled, and their gifts are dispensed without any real justification Yet no individual can properly be treated as a self-contained unit, he has needs and difficulties which are related to his own environment and to the general community It is one of the prime functions of the voluntary worker to discover and to consider these On the other hand, the public administrator as such is governed and limited by Acts of Parliament and regulations, rules, and orders which curb his executive authority and action and render him liable to public criticism both from those who think he has gone too far and from those who think he has not gone far enough He cannot ignore these conditions, and must always tend to consider the clientele of the service he is administering as in the mass or on the average For him experiments and the making of individual exceptions are impossible or dangerous These, however, are not only open to the voluntary social worker but should be his business, and his task—often a hard one—is to adjust his own point of view not so much to public opinion (whether expressed by a Government department, a local committee, or otherwise) as to that of the person who has applied for help It is manifest that there is a field in which the voluntary worker alone can safely and successfully act, and it must be clear also that he can be of very great assistance to the public administrator or authority in the detailed work of their departments The need and the means for such co-operation are adequately dealt with by Mr Henriques

Sir Wyndham Deedes writes in a foreword to the book "Not everyone will agree with all of it, I do not" Such disagreement may very likely be felt with regard to that other of the author's main propositions mentioned above It is not obvious that dependence on voluntary help is necessarily less demoralizing than dependence on public assistance

[1] London George Allen and Unwin, Ltd (10s 6d)

statutorily provided That such is the case is assumed rather than demonstrated by Mr Henriques and this seriously weakens a considerable part of his case Every individual needs help in some form from time to time, and it is the privilege of all at times to give it This should not lead to any loss of pride in independence but if it be true that either voluntary or statutory provision does in fact undermine self respect in an appreciable number of cases it is a disquieting symptom Mr Henriques believes that this is so and his opinion must carry great weight even though his suggested remedy may not be a complete cure

VASOMOTOR CONTROL OF THE CEREBRAL CIRCULATION

Until recently it was generally believed that the cerebral vessels were exempt from the constant control exerted by the autonomic nervous system on the other systemic vessels The persistence of this belief is an interesting example of that undue reliance on physiological demonstrations rather than on morphological facts which has hindered the progress of sympathetic surgery for histological proof of the existence of a nervous network in relation to the cerebral vessels was provided by Gulland[1] and also by Huber[2] at the end of the last century In view of recent attempts to control the factor of vasospasm by surgical means —sympathectomy for disseminated sclerosis has been described in a recent issue of this *Journal* by Koch and de Savitsch and the results of infiltration of the stellate ganglion in selected cases of apoplexy by Mackey and Scott[3]—the complete summary by Schneider[4] of the anatomical and physiological evidence in favour of vasomotor control of the cerebral circulation is of special interest A large amount of anatomical evidence has accumulated during the last ten years Von Stohr[5] in 1928 described the detailed arrangement of the nervous plexus surrounding the vessels of the pia mater and the choroid plexus Clarke[6] in 1929 demonstrated a perivascular network on the vessels of the medulla oblongata and the medulla spinalis Penfield[7] could show the method of termination of nerves on the vessel wall Three methods of physiological examination have been employed to demonstrate the existence of vasomotor nerves direct inspection of the vessels through an airtight glass window fitted in the skull by Forbes[8] in 1928 observations on the flow through the intact carotid artery with the *Stromuhr* by Rein[10] in 1930 perfusion studies on the completely isolated head by Bouckaert and Jourdan in 1936[11] Direct inspection of the cerebral vessels during electrical stimulation of the cervical sympathetic shows a vasoconstriction and section of the sympathetic trunk produces a distinct dilatation extending into the capillary bed Measurements with the *Thermostromuhr* show quite plainly that stimulation of the cervical sympathetic diminishes the circulation through the internal carotid artery and that sympathetic section is followed by an increased flow Experiments with the isolated and perfused head demonstrated clearly that vasoconstriction invariably follows sympathetic stimulation and of course in these experiments any possibility that the constriction might be secondary to vascular changes elsewhere was quite excluded Much work has also been done on the complex relationships which undoubtedly exist between the sensitive region of the carotid sinus and the cerebral circulation but even neglecting this and other complicated aspects of the problem it seems clear that so far as the cerebral vessels are concerned the Monro doctrine of 1783 may now be abandoned Indeed when the very special needs of the cerebral circulation are considered—it has been calculated that 1 000 c cm of blood must circulate per minute to maintain proper oxygenation—and when it is remembered that the nerve cell is the most sensitive of all bodily structures to ischaemia the idea that the cerebral circulation should play a passive part without means of local compensation for any accident which might affect the systemic circulation as a whole is patently absurd

THE NATURE OF VIRUSES

The last ten years have seen a considerable advance in our knowledge of viruses We can now measure them with a fair degree of accuracy and many have been stained and seen with the microscope Means have been devised for isolating them in relative purity and considerable amount many have been cultivated outside the animal body and we know how to preserve them without loss of potency for long periods of time A study of virus immunity has shown that the mechanism of this immunity possesses fundamental similarities with that of bacterial immunity one or two viruses have even been shown to possess an antigenic complexity comparable with that of bacteria Yet with all this knowledge it is still not possible to pronounce with certainty on the nature of these agents Despite the fact that the solution of this question is not material to the study of most virus problems it is of such abiding interest that virus workers continue to search for the answer One of the difficulties in the way of deciding whether viruses are living microorganisms or unorganized chemical auto-catalysts is our inability to define with certainty what we mean by life It is recognized of course that living things exhibit certain properties such as ability to multiply with retention of individuality and the power to adapt themselves to changes in environment all these are possessed by viruses But as Sir Gowland Hopkins has recently pointed out it is possession of an inde

[1] *British Medical Journal* 1898 2 781
[2] *J Comp Neurol* 1899 9 1
[3] *British Medical Journal* 1938 1 1254
[4] Ibid 1938 2 1
[5] *Zbl Neurochir* 1938 3 127 and see *Arch f exp Path and Pharmacol* 1934 175 606
[6] *Z Anat* 1922 63 562
[7] *J Comp Neurol* 1929 48 247
[8] *Arch Neurol Psychiat* Chicago 1932 27 30
[10] Ibid 1928 19 1057
[11] *Z Biol* 1929 89 307

Compt rend Soc de biol 1936 120 783

directly on the gonococcus and will kill it *in vitro* in comparatively low concentrations, they appear to produce bacteriostasis, which goes on to bacteriolysis in favourable cases, some patients seem to conjugate the drug in their tissues less efficiently than others, which may be an explanation of some of the failures With a few notable exceptions all those who have had experience are agreed that we now have a very potent remedy for gonorrhoea, but much more experience is necessary before the optimum dosage, the best time to begin treatment, and the general management of a case will [illegible] agreed, some give concomitant irrigations [illegible] prefer to omit these In any case it can[illegible] strongly stressed that very great care [illegible] exercised in employing the sulphona[illegible] more care in testing for cure, sin[illegible] proportion of cases relapse an[illegible] of discharge may lull the pa[illegible] of security with disastro[illegible] to others Urethrosc[illegible] cultural, and sero[illegible] carried out on a[illegible] results before [illegible]

[illegible] Sir Patrick Laidlaw is [illegible] for he believes that all [illegible] of the same nature And in an [illegible] the apparent conflict in the avail[illegible] he has put forward an hypothesis which [illegible] to reconcile it He points out that there [illegible] evidence to show that parasites lose the power [illegible] making substances essential to them which are to [illegible] found ready made in the cells of their hosts, and he suggests that in the case of parasitic micro-organisms this "fitness" might be pushed to such an extreme that eventually all independent metabolic activity would be lost The parasite would then be living a borrowed life, as Sir Patrick Laidlaw puts it, and would consist merely of specific nucleo protein possessing the power of reproduction outside the susceptible cell it would appear inanimate Is it not possible, Sir Patrick Laidlaw asks, that viruses are micro-organisms committed to an intracellular mode of life which have traversed the road to parasitism to varying degree? The large viruses would thus be those which had lost the ability of synthesizing one or two factors essential to their growth, whilst at the other end of the scale would be those viruses which had lost all auto-synthetic power and possessed only the ability of transmitting the characters of the species, such as the crystallizable plant viruses and possibly the very small animal viruses Between these two extremes would be viruses which had achieved specialization in parasitism to varying degrees progressive loss of enzyme activity being attended with a corresponding decrease in size The view that viruses are micro-organisms degraded through parasitism is not new, but Sir Patrick Laidlaw's hypothesis gives an explanation which embraces all viruses and links them up with free living micro-organisms Whether he is right or not time will show In the meantime he has especially the strength they derive from com[illegible]e organization and public financial supp[illegible]ing field questioned, but it is claimed that [illegible] definite disadvantages from [illegible] agencies are free, and th[illegible] in their beneficiaries [illegible] dependence and [illegible] manifested [illegible] auspices [illegible] argu[illegible]

VITAMIN E

[illegible] nical nature of vitamin E has [illegible] by the lack of an even approx[illegible] [illegible] method of determining the potency [illegible] al material free of the various fractions [illegible] separated from it It is known that in the [illegible] of vitamin E in the diet of rats an implanted [illegible] may still develop for a short time, but that [illegible] sorption occurs and no young are born The condition can be cured by giving adequate doses of wheat germ, wheat-germ oil or concentrates, or other sources of vitamin E In the male rat degeneration of the testes results from the deprivation of vitamin E, and no regeneration of the affected parts can take place, so that if the degeneration is complete the male rat remains sterile for the rest of his life Mason[1] has suggested that "vitamin E plays some very essential role in nuclear activities, being necessary either for maintenance of the normal physico-chemical structure of nuclear chromatin or for some metabolic process or processes concerned with the synthesis of the complex chromatin molecule" Recent work by Bacharach[2] seems to show that vitamin E deficiency leads to a failure even in implantation of fertilized ova Barrie[3] has discovered degenerative changes in the anterior pituitary and hypoplasia of the thyroid The latter observation had also been made by Singer[4] Barrie[3] has also recorded cretinism in young rats born of mothers receiving suboptimal quantities of vitamin E Evans and Burr[5] and later Burr *et al*[6] found a paresis in rats fed on a vitamin-E-deficient diet, and could not cure it, though they could prevent it by giving vitamin E Neither deficiency nor excess of vitamin E has been found to have any influence on experimental or spontaneous sarcomata or carcinomata It is considered "not proven" that vitamin E has any influence on the growth of young rats It may easily be understood how very difficult it would be to use any of these effects of vitamin-E deficiency as criteria for the measurement of vitamin E The best attempt to make measurable an effect of vitamin-E therapy has been made by Bacharach,[8] who has constructed a curve of response relating dosage and response to vitamin E in rats By its use he can make comparisons between different substances, and when a standard of reference becomes available he will be able to express the potency of a substance in terms of the unit of activity adopted In the meantime[9] he has used it to compare the potencies of α- and β-tocopherol and found the mean fertility doses (that is the doses that will cause 50 per cent of implanted animals to bear live litters) to be

[illegible] *Virus Diseases and Viruses* By Sir Patrick P Laidlaw The Rede Lecture 1938 Cambridge University Press (2s 6d)

[1] *Amer J Anat* 1933 52 153
[2] *Biochem J* 1937 31, 2287
[3] *Lancet* 1937 2 251
[4] *J Physiol* 1936 87 287
[5] *Nature* 1937 139 286
[6] *J Biol Chem* 1928 76, 273
[7] *Proc Soc exp Biol Med* N Y, 1937, 36, 7.0
[8] *Chem and Ind* 1938 57, 600
[9] *Nature* 1938, 142, 35

1·2 mg and 1·9 mg respectively A standard of reference may however be adopted in the not too distant future for in spite of all the difficulties attendant in following the fractionation of concentrates it really appears probable that pure vitamin E will shortly be available Many workers[1] as usual have contributed to this discovery and after separating and identifying various inactive compounds it has been accepted that both α and β tocopherol have vitamin E activity though the amount of these separated from wheat germ oil does not account for more than about 5 per cent of the oil's activity The synthesis of tocopherol[2] by different workers seems to indicate that the structure proposed by Fernholz is the correct one—namely that the vitamin has a chroman rather than a coumaran structure with two substituents in the 2-position Evidence of the successful clinical use of vitamin E in cases of habitual abortion is slowly accumulating[3] and Shute[4] suggests that vitamin E and oestrin or a substance much like it exist in a sort of equilibrium during pregnancy If there is too much of the oestrin-like substance the pregnancy is interrupted It is safe to prophesy that when pure vitamin E becomes available clinical trials will make rapid progress

DIAGNOSIS OF SYPHILIS

A pamphlet issued by the U S Public Health Service Washington *The Diagnosis of Syphilis by the General Practitioner* should have a big vogue in America and a not inconsiderable one in this country It is often said that the average general practitioner seldom diagnoses syphilis The reasons for this are three according to Dr J Earle Moore (1) that he does not expect to meet it (2) that he does not realize its prevalence and (3) that very often he does not recognize it when he meets it The essence of this little book lies in thirty figures in which are set out clearly and succinctly diagnostic maxims in early late and latent syphilis and lists of other conditions which may closely simulate each of these The moral to be drawn from it is that in any condition which could possibly be syphilitic or in which the diagnosis is not clear if there is an early surface lesion it should be examined by the dark ground for spirochaetes and in any case the patient's blood should be submitted to Wassermann and flocculation tests Serum tests have a specificity of nearly 100 per cent and a sensitivity of about 80 per cent in untreated cases and are often the only possible means of diagnosing the disease moreover under the venereal diseases scheme in this country they can be carried out free of cost There is no doubt that large numbers of cases of syphilis go undetected simply because a routine blood test is not carried out on every patient who goes to hospital if every pregnant woman had her blood examined congenital syphilis would soon become a thing of the past

1 *J biol Chem* 1936 113 319
Ibid 1937 122 99
2 *Biochem J* 1935 29 456
Ibid 1935 29 2510
Nature 1937 140 361
3 *Chem and Ind* 1937 56 1054
4 *Biochem J* 1937 31 2247
Ibid 1937 31 2257
5 *Helv Chim Acta* 1937 20 424
6 Ibid 1937 20 1422
Ibid 1938 21 520
7 *Nature* 1938 141 1057
Science 1938 88 37
8 Ibid 1938 88 38
9 *Nature* 1938 142 36
10 *J Amer chem Soc* 1938 60 700
Acta Obstet Gynecol scand 1933 13 219
Klin Wschr 1936 15 1883
British Medical Journal 1937 2 1218
Ann Rep Med Off Health Stockton on Tees 1935 50
Canad med Ass J 1936 34 134
Amer J Obstet Gynec 1936 31 252
J Obstet Gynaec Brit Emp 1935 42 1071
Ibid 1935 42 1035
Ibid 1936 43 74
Amer J Obstet Gynec 1937 33 429

RADIOTHERAPY OF CARCINOMA OF THE CERVIX

The second Annual Report on the results of radiotherapy in cancer of the uterine cervix has just been issued by the Health Organization of the League of Nations under the editorship of Professor Heyman As the first report[1] dealt with the results obtained in cases treated in 1930 so this report is concerned with treatments carried out in 1931 Three additional contributors are announced since the publication of the first report Dr Laborde of the Institut du Cancer Paris Dr Healy of the Memorial Hospital New York and Dr Ward of the Women's Hospital in the State of New York During the past year the committee has devoted its attention mainly to the means of securing greater uniformity in the allocation of cervical cancers to their respective grades and to simplification and explanation of the system of grading In order to facilitate the preparation of these records there has been published since the issue of the first report an atlas prepared by Dr Heyman in collaboration with Dr Strandquist the latter of whom has furnished a series of excellent practical diagrams which cannot fail to be of service in classifying the different cases This volume also embodies some modifications in the various definitions and explains certain difficulties which may arise in classification No attention has been given to the varying methods of radiotherapeutic technique used at the different clinics as it is not yet considered practicable to assign differences in cure rates[2] to variations in procedure and the committee feels that it would be inadvisable to attempt any such differentiation at present The reason for this is the existence of other variable circumstances which may affect survival rates quite apart from considerations of the different methods of treatment employed The elimination of these variables is the primary object of the committee at the present time The main body of the report consists of statistical tables giving the results obtained at the collaborating institutions arranged upon a uniform and standardized plan The value of early diagnosis and treatment is again demonstrated but unfortunately the tendency to delay in seeking advice and treatment at the earliest possible moment is only

1 Reviewed in the *British Medical Journal* 1937 2 755
2 Reviewed in the *British Medical Journal* 1935 1 1064

too manifest Of 5,672* patients treated, 1,491 were alive and free from recurrence five years after treatment, while 3,901 died of cancer The reasons for this heavy mortality are abundantly clear from the following table

Results of Treatment Calculated for Each of the Four Stages

	Number of Patients Treated	Alive Without Recurrence	Relative Cure
Stage I	607	335	55 2%
Stage II	1 626	590	36 8%
Stage III	2 417	512	21 2%
Stage IV	1 020	54	5 3%
Unclassified	2	0	0 0%
Totals	5 672	1 491	26 3%

Only about 10 per cent of the patients presented themselves for treatment in the earliest stage, while over 89 per cent were in later and less curable grades To a large extent this is undoubtedly due to reluctance on the part of the patient to submit to proper examination and to fear as to its diagnostic results Again, there is the optimistic note of the earliest symptoms "not being of much consequence," coupled with the hope—one might almost say expectation—that the trouble will right itself soon So much must be admitted, but the fault is not always on the patient's side Frequently patients present themselves at the clinic, having been under "treatment" for some considerable time, but no examination has been made The fact is that as cancer is a very common disease routine and systematic instruction in early signs and symptoms should form part of the education of every medical student Without this it is impossible for any real progress to be achieved, and it is gratifying to note that in New York systematic courses of instruction in neoplastic diseases form an integral part of the curriculum in certain of the university courses The work of the American College of Surgeons in furthering the provision of such educational facilities is an enormous step forward and we should like to see systematic instruction in these diseases placed in a similar position to instruction in infectious diseases by compulsory attendance at special cancer institutes in this country

* This includes *all* cases reported to the committee including some treated as long ago as 1914

ACUTE LARYNGOTRACHEOBRONCHITIS

Under this heading J Brennemann and colleagues[1] in Chicago have recently discussed a comparatively rare but terrifying malady in young children The onset may be sudden or may appear to follow an ordinary upper respiratory tract infection The child is usually in the first two years of life, and by the time medical aid is sought the picture is that of a severe infection of the upper respiratory tract with laryngeal and obstructive expiration as outstanding features The child looks up with free hy the temperature is between 102° and right or not time w spirations are rapid and laboured there is inspiratory stridor and hoarseness, with deep retraction of the suprasternal notch, of the supra clavicular spaces, of the substernal region and, in infants, even of the sides of the thorax An inflamed throat is found on examination, auscultation of the chest reveals a short inspiratory stridor and nearly always an expiratory wheeze, together with coarse rales all over the chest Areas of collapse of the lung appear with startling rapidity, and in fatal cases broncho pneumonia commonly ends the picture Indeed the clinical description would almost fit the suffocating type of bronchopneumonia with evidence of bronchial spasm that is occasionally seen The evidence of bronchoscopy, however and the favourable outcome in energetically treated cases indicate that the lung parenchyma is not involved The idea of bronchoscopy in small children with such an intense inflammation of the respiratory passages may appear revolutionary, but, as Brennemann points out, before the use of this method of treatment the results were unsatisfactory When he and his co-workers "let Nature take her course aided only by steam inhalations and our prayers" the mortality was in the region of 50 per cent The later results with co-operative team-work involving the services of a bronchoscopist reduced this to 25 per cent The bronchoscopic picture is that of an intense inflam mation of the mucosal lining, with thickening of the membrane and obstruction of the airway in the larynx and in the smaller bronchi Associated with this is the formation of large quantities of thick, tenacious secre tion, frequently becoming dry, adherent, crust-like, and causing obstruction of the airways, including the bronchi The treatment now adopted is to admit the child at once to a room at 75° F saturated with vapour In all serious cases direct laryngoscopic and broncho scopic examination and bronchoscopic aspiration are carried out These procedures exclude the possibility of laryngeal or tracheal diphtheria and give immediate relief If the severity of the condition warrants it, a low tracheotomy is done at once with the bronchoscope in position The child is then disturbed as little as possible and abundance of fluid administered—by mouth, if possible or by other routes Any return of the obstructive symptoms calls for prompt expiration through the tracheotomy tube by means of a catheter and a suction pump Blockage of a bronchus may be indicated by sudden changes in the child's condition and especially by displacement of the heart, and calls for further bronchoscopic aspiration Drugs appear to play no part in the treatment of the condition exception being made in favour of sulphanilamide if cultures of aspirated material show the haemolytic streptococcus The course of the illness is many days or even weeks, marked by exacerbations and set-backs occasioned by the recurrence of obstruction of a serious degree Gradually the exudate becomes more liquid and the difficult phase of getting rid of the tracheotomy tube has then to be faced Tabulated reports from other centres show that the pre-bronchoscopic mortality of 50 per cent is general, and the measures successfully adopted to halve this in Chicago will be studied with interest by paediatricians and oto laryngologists

[1] *Virus Diseases as I Vir* *Dis Child* 1938 55 667
Rede Lecture 1938 Cambr

SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

FRACTURE OF THE CARPAL SCAPHOID

BY

H. A. BRITTAIN, M.Ch., F.R.C.S.

Fracture of the scaphoid bone is by far the most common injury of the carpal bones and is also easily the most neglected fracture in the body. It is caused by a fall on the outstretched hand and is sometimes associated with a Colles's fracture. Fractures of the scaphoid bone are classified into three groups: (1) fractures of the waist, (2) fractures of the tuberosity, (3) polar fractures—these are chip fractures of either extremity.

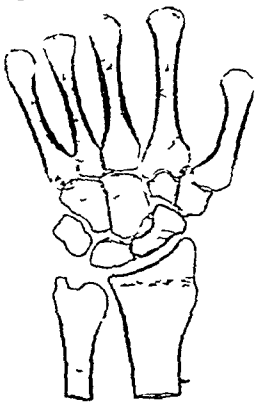


FIG. 1

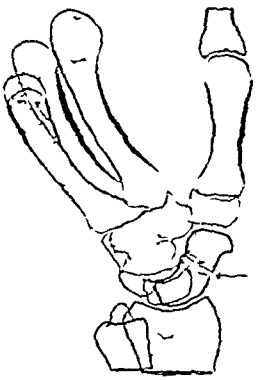


FIG. 2

FIG. 1.—Antero-posterior view. Scaphoid appears intact.
FIG. 2.—Oblique view. Line of fracture of scaphoid evident.

The clinical signs are tenderness over the scaphoid bone, particularly in the anatomical snuff box, which may be obliterated by swelling or deformity. Limitation of the movements of the wrist joint, particularly of dorsiflexion, and weakness of the grip.

X-ray photographs should be taken in three planes. In the antero-posterior view the long axis of the bone is directed towards the plate, and as a result the fracture may not be shown. An oblique view of the wrist will reveal the fracture (Figs. 1 and 2) as here the plate is held parallel to the long axis of the bone. It will be seen therefore how important it is to take an x-ray photograph of the oblique view as well as of the antero-posterior and lateral views as a routine in all injuries of the wrist joint (Figs. 3 and 4). It is sometimes difficult to detect a recent fracture in an x-ray film, but the crack becomes more obvious after the first three weeks.

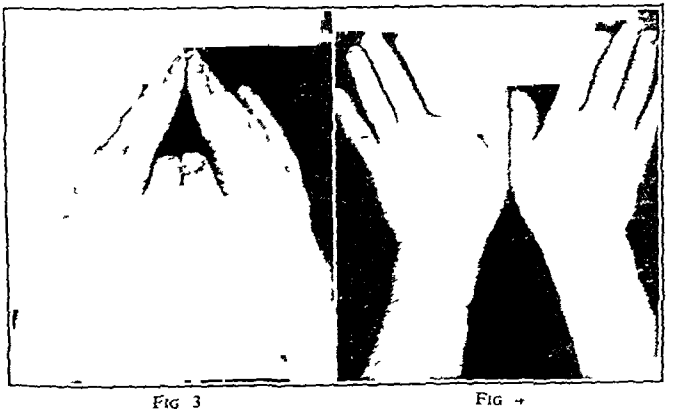
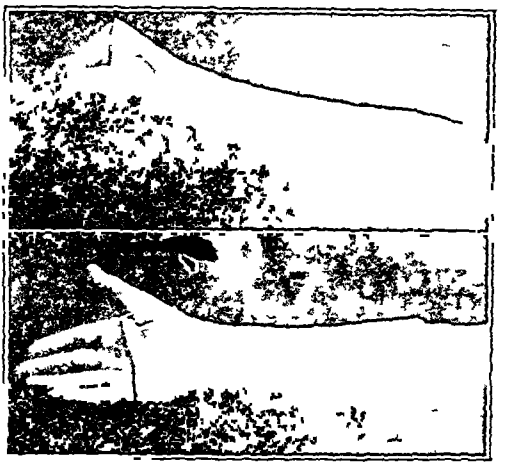


FIG. 3

FIG. 4

FIG. 3.—Position of hands for taking oblique x-ray photograph of the wrist.
FIG. 4.—Position of hands for taking antero-posterior x-ray photograph of the wrist.



FIGS. 5 and 6.—Showing complete plaster for fracture of scaphoid.

Differential Diagnosis

A simple sprain of the wrist may simulate a fractured scaphoid. It consists of tearing of the ligaments of the wrist joint, generally the dorsal ligaments. There is usually an effusion into the joint and limitation of movements, but tenderness is not limited to the scaphoid and the x-ray photographs are negative.

Treatment of Recent Fractures

This consists of immobilization of the wrist in plaster of Paris in a position of slight dorsiflexion and ulnar adduction until union has taken place. There is rarely displacement unless there has been a dislocation of the wrist joint or of other carpal bones, so that reduction is usually unnecessary.

Two forms of splintage may be used. They are the dorsal strip, the complete plaster (Figs. 5 and 6).

THE DORSAL STRIP

This consists of from twelve to sixteen layers of plaster-of-Paris bandage from five to six inches wide. It is first made on a table with a wet plaster bandage and is applied over a layer of stockinet, a small aperture being cut in the latter for the thumb. It should extend from the heads of the metacarpals to the elbow joint, but should be trimmed so that its upper extremity does not impinge

against the biceps tendon when the elbow is flexed The strip is bandaged on smoothly with a wet lint or domette bandage three inches wide After the plaster has set the bandage may be removed and a dry one substituted, but this is not essential The ends of the plaster are smoothed down by turning back the stockinet The hand is secured to the plaster by three strips of strapping, half an inch wide by eight inches long, which pass from the strip over the dorsum of the wrist across the palm of the hand and back again to the strip These can be reinforced by further pieces of strapping if considered necessary

THE COMPLETE PLASTER

Unless constant supervision is available this is to be preferred to the dorsal strip If the strapping is not frequently readjusted it will tend to slip, with resultant inadequate immobilization and possibly non-union To make the complete plaster the dorsal strip is reinforced by an anterior strip three inches in width which is extended on to the palm The palmar limit allows 90 degrees of flexion at the metacarpo-phalangeal joints The proximal limit is the same as for the dorsal strip It is maintained in position by a carefully applied circular plaster-of-Paris bandage A bandage one inch in width is applied around the palm between the thumb and the index finger

BONY UNION

Firm bony union cannot be expected to take place under eight weeks, with the exception of fractures of the tuberosity, which, being extra-articular, unite more rapidly At the end of this time the plaster is removed and the wrist radiographed If union has taken place bony trabeculae will be seen growing across the fracture line It may be necessary to use a lens to determine this with certainty A clinical sign that union has taken place is the return of strength of the grip Before union has occurred firm approximation of the tip of the index finger to the thumb will cause pain even when the plaster is applied This pain disappears after union If this sign is present at the end of two months it is wise to maintain the plaster for another month If after removal of the plaster both the clinical and x-ray signs indicate that the fracture has not united the plaster should be reapplied for another two months If union has not taken place in six months operative procedures such as bone-drilling or bone grafting should be considered From the beginning of treatment active movements of the fingers must be encouraged and, if necessary, supervised by a massage department The patient should also be encouraged to carry out his work as far as possible The function of massage in all injuries of the wrist-joint is to preserve the mobility of the fingers, elbow, and shoulder Full flexion at the metacarpo-phalangeal joints is 90 degrees, at the proximal interphalangeal joints 80 degrees, and at the distal interphalangeal joints 100 degrees Massage of the wrist-joint itself will rarely be essential, but should be given when progress is slow

Manipulation—After the immobilization necessary to get union, particularly if it has been necessary to maintain the plaster cast longer than usual, the wrist may be left stiffer than normal, with restriction of movement and consequent pain Usually time and active movements suffice to mobilize the joint Manipulation should not be attempted while improvement is occurring, but it should be considered when the joint has limitation of movement and is painful three months after the plaster has been removed and the radiograph is normal It can be performed under nitrous oxide anaesthesia and consists in putting the joint through a complete range of movement, at the same time exerting traction The hand should also be rocked laterally and antero-posteriorly on the radius and ulna Further treatment consists of heat, massage, and active movements

Treatment of Sprain of the Wrist-joint

The wrist should be immobilized by a dorsal strip for from one to three weeks, followed by physical treatment If symptoms persist another x-ray photograph should be taken to make certain that a fracture of the scaphoid is not present

Old Fractures of the Scaphoid

Non-union is due to inadequate immobilization In any event union of the fractured scaphoid is slow because the bone is mainly intra-articular and its blood supply is poor In fractures of the waist the vessels have to grow from the distal into the proximal fragment Established non-union is diagnosed clinically by weakness of the grip and pain over the scaphoid, and radiologically by widening of the fracture-line, even to cavity formation There is a marked discrepancy in the texture of the fragments, the proximal fragment becoming much denser

Treatment of Non-union

PLASTER IMMOBILIZATION

In a case of established non-union without arthritis it will be necessary to maintain the plaster cast for from three to six months, or even longer If at the end of six months there is no change in the clinical condition or x-ray appearance operative treatment may be undertaken

OPERATIVE TREATMENT

1 *Drilling of the Fragments*—Under complete aseptic conditions an incision half an inch long is made over the scaphoid parallel to the tendon of the extensor pollicis longus The wrist is placed in ulnar adduction and the distal fragment exposed Two drill-holes are made through the bone, starting from the radial aspect of the distal fragment and drilling through the fracture into the proximal fragment The direction and depth of the drill is determined by the fluoroscope After-treatment consists of immobilization in plaster as before

2 *Bone-grafting*—This is more certain than either of the other two methods, and may be used if these fail or if for economic reasons the patient wishes to obtain union in the shortest possible time A curved incision three inches long is made over the dorsal and radial aspect of the scaphoid, with its concavity towards the ulnar side of the hand The extensor pollicis longus is retracted medially and the abductor pollicis laterally The fracture is exposed and a three-eighth inch electric drill is introduced into the radial aspect of the distal fragment and passed through the fracture into the proximal fragment The wrist must be in ulnar adduction It is wise at this stage to take an x-ray photograph with the drill in position A bone-graft, three eighths of an inch wide and the necessary length as determined by the x-ray photograph, is cut either from the tibia or the lower third of the ulna and inserted, care being taken to see that it does not project from the distal fragment Union should take place in from three to four months

Non-union with Arthritis

Non-union will inevitably lead to arthritis of the wrist-joint, chiefly between the radius and the proximal fragment of the scaphoid This causes gradually increasing pain and disability

Palliative Treatment—A light celluloid splint similar to the dorsal plaster strip may be worn It should be made from a cast by a surgical instrument maker and in limiting the movements of the wrist it will give considerable relief

Operative Treatment—Removal of the scaphoid bone alone gives a poor result as the hand tends to go into radial adduction with consequent stiffness and weakness of the grip If the scaphoid is to be removed it is better to remove the whole proximal row of the carpus This results in a wrist and hand weaker than normal but comparatively painless

Arthrodesis of the Wrist

This is carried out by means of a large bone graft extending from the radius to the base of the third metacarpal Union takes place in four months and results in a strong painless hand but of course with a stiff wrist This is probably the treatment of choice in a comparatively young and active patient with arthritis as a result of non union of the scaphoid

CHILDREN WITH DEFECTIVE HEARING

REPORT OF COMMITTEE OF INQUIRY

The publication of the Report[1] of the Committee of Inquiry into Problems relating to Children with Defective Hearing brings to an end a task of great complexity and difficulty extending over a period of four years The terms of reference assigned to the Committee— To inquire into and report upon the medical educational and social aspects of the problems attending children suffering from defects of hearing not amounting to total deafness —indicate the wide field the committee had to cover

Classification by Grades

The first step undertaken was the classification of children with defective hearing It was considered best that this should be done on an educational basis rather than on grounds of hearing loss or other factors The Committee showed great wisdom in eliminating the familiar but vague and almost meaningless terminology used hitherto Indefinite terms such as hard of hearing partially deaf semi mute semi deaf and so on have always meant one thing to one observer and something different to another and were bound to give rise to confusion In place of these terms a system of grading is recommended in which all children suffering from hearing defects fall within Grades I, II or III, Grade II is also subdivided into Grades IIA and IIB Each grade defines the type of child suitable to come within its embrace It provides a standard for hearing and understanding the conversational voice and for the range of hearing as tested by both the gramophone and pure tone audiometers Other qualifications are given and an estimate of the number per thousand children in average attendance at elementary schools has been made for each grade This is a scientific classification permitting no misunderstanding and should be welcomed by all

Problems of Causation

The second chapter of the report deals with the causation prevention and treatment of defective hearing The various diseases which cause defective hearing most of them in varying degree infectious are set out Tables are given showing the relative numerical importance of these conditions in the production of the defect Table III (p 8), for example shows the greatly reduced incidence of congenital syphilis as a cause of acquired defective hearing In 1919 congenital syphilis was responsible for 9·2 per cent of the total acquired cases among the school children of London, as compared with 1·5 per cent in 1936

The importance of suppurative otitis media as a cause of defects in hearing is stressed The incidence in infants and children under 5 the incidence in children of school age otitis media in public boarding schools the relation between otitis media and the various infectious diseases environmental and dietetic factors in the aetiology of otitis media and other relevant matters are discussed Emphasis is laid on the importance of suppurative otitis media in the early months and years of life its incidence is greatest then and gradually diminishes as age advances Attention is also drawn to the frequency of middle ear catarrh as a cause of defective hearing

Prevention and Treatment

Agencies for the prevention of defective hearing are discussed in detail and classified thus (1) natural immunity to the diseases most usually complicated by infection of the ear (2) artificially acquired immunity (3) general resistance increased by diet good environment, fresh air etc (4) limitation of infection (5) treatment of streptococcal infections by drugs (6) prevention of recurrence of infection of the ear and (7) maintenance of hygienic conditions in the nasopharynx The view is expressed that the use of sulphonamide compounds should greatly reduce the incidence of complications following throat infections (otitis media mastoid disease and septicaemia) especially if the treatment be administered early Experience so far is hardly sufficient to support this view but it seems likely that this opinion will prove correct

In discussing the maintenance of hygienic conditions in the nasopharynx the Committee recommend that nasal hygiene and breathing exercises should be adopted in all schools It suggests as an ideal that the first two minutes of both morning and afternoon sessions should be spent in this way The nose should first be cleared in the correct manner—which need take no longer than about half a minute—and the remainder of the time should be spent in deep breathing *in* and *out* through the nose This is important In the first place it would detect at once children who have difficulty in or are incapable of, clearing the nose or breathing properly such children should forthwith be referred to the otologist Secondly the children would tend to be more alert and capable of greater mental effort with a clear nose and well-ventilated lungs It might be mentioned however that no strain whatever should accompany the breathing exercises and correct posture should be maintained

So far as treatment is concerned in discussing the organization of an aural scheme the need for co-operation between the school medical service and the maternity and child welfare service in the ascertainment and treatment of ear defects is emphasized as is the need for linking up the aural scheme with arrangements for the control and treatment of infectious diseases Various special methods of treatment are referred to including zinc ionization for chronic otorrhoea and diastolization for certain nasal defects and their sequelae both of which have proved of great value

Testing Hearing

Chapter III of the report is concerned with methods of testing hearing The Committee recommends routine group testing of all children in ordinary schools with the gramophone audiometer as being essential to any scheme for the ascertainment and treatment of children with defective hearing The use of the pure tone audiometer, too, is recommended so that the acuity of hearing

[1] *Report of the Committee of Inquiry into Problems Relating to Children with Defective Hearing* H M Stationery Office Price 2s 6d net

minimum of the scale for general trained staff nurses) Furthermore any nurse who is State registered in a supplementary branch of nursing should be allowed to train in one of the council's general hospitals entering at the third year salary rate (£45) and receiving after the first year for the remainder of the period of training the fourth year rate (£50) All such general trained staff who desire to take midwifery training Part I will also be appointed for the requisite period of training normally six months as staff nurse pupil midwives with a salary of £50 a year together with full residential emoluments and payment by the Council for the necessary lectures It is also proposed that of the 2 600 positions on the fixed establishment now graded as staff nurse about 2 100 shall eventually be redesignated deputy sister The commencing pay of general trained deputy sisters is to be fixed at £75 a year, rising after twelve months service to £80 (the present maximum for staff nurses) with an additional £5 a year for staff nurses holding special certificates The salary scale of deputy sisters State registered in fever or children's nursing is to be £65 £5 £80 a year Another proposal is that the present trial period of four months for probationer nurses should be abolished and that their first year's service should be on probation

Control of Puerperal Sepsis

The annual report for 1937 of Queen Charlotte's Maternity Hospital states that the great improvement in results which followed the introduction of treatment by prontosil early in 1936 has happily been maintained during the year under review There can be little doubt now that the whole outlook in the treatment of puerperal sepsis has changed very much for the better It is also suggested that it may be possible to employ these new drugs where there is special risk of infection in the confinement for the prevention as well as the cure of sepsis This possibility is being further investigated in the laboratory During the year under review 441 swabs from doctors, midwives and infected cases were submitted for examination Suitable strains of haemolytic streptococci and the necessary serum were also sent out to laboratories in this and other countries in order to facilitate the adoption of the newer methods of differentiation Queen Charlotte's has thus been able to assist in the establishment of a number of special investigation centres which are essential for the ultimate control of puerperal fever throughout the country Further research work in connexion with prontosil and allied drugs has elicited a number of new facts but the report states that a full understanding of their mode of action has not yet been reached The investigations of the laboratories have, however extended the use of prontosil by hospitals and practitioners in cases of sepsis due to haemolytic streptococcal infections with satisfactory results The report records the award of the William Julius Mickle Fellowship for 1938 to Dr Leonard Colebrook director of the research laboratories and of the Nicholls Fellowship to Dr H Fuller, the hospital's biochemist

The Croydon Obstetric Service

The annual report for 1936 of the Obstetric Service Public Health Department County Borough of Croydon records a maternal death rate for the borough of 3 85 per thousand live births The mortality for booked cases dealt with by the service was 1 6 per thousand The infant death rate for the first twenty one days of life fell from 25 per thousand live births in 1935 to 14 in 1936 An appendix to the report states that the Croydon obstetric service aims at the ideal of complete ante natal natal and post natal medical supervision under the same whole-time medical officer The ante natal clinics are in the charge of a lady assistant medical officer of health for obstetrics Almoners and two health visitors also attend Any abnormal cases are seen by the obstetrician Patients can arrange for their confinements to take place at Mayday Hospital (the Croydon public health general hospital with forty two maternity beds) at St Mary's Maternity Hospital with thirty two beds of which thirty are retained by the borough council or at their own homes under the care of private medical practitioners or midwives All patients attending the ante natal clinics are instructed to attend the post natal clinic six weeks after delivery This is conducted by the obstetrician, whose services are also available for consultation with practitioners in respect of patients who cannot pay the fees of a specialist There were twenty-eight of these consultations during the year

Cancer Research in Yorkshire

The annual report (1937–8) of the Yorkshire Council of the British Empire Cancer Campaign states that since its inception a sum of over £160 000 has been expended a praiseworthy contribution from Yorkshire towards the solution of this problem In the Department of Experimental Pathology and Cancer Research of the University of Leeds studies in experimental carcinogenesis have been continued and the present findings tend to show that carcinogenic substances act not only on the epithelial cells which ultimately supply the tumour cells but also on the deeper tissues It is suggested that this latter effect is of greater importance from the point of view of carcinogenesis If this hypothesis is justified it seems possible that the ultimate neoplastic effect may be attributable to impairment of nutrition of the epithelial cells Such a conclusion is supported by evidence adduced in previous reports showing that functional ischaemia of tissues is an important determining factor in the emergence of tumours With regard to studies concerning glycolysis in muscle it was found in the course of the previous year's work that glycolysis in muscle extracts requires in addition to the already accepted co-enzymes (adenosine triphosphate cozymohexase and cozymase) another co enzyme of so far unknown function It has since been demonstrated that the new co-enzyme factor consists of at least two additional separate co-enzymes The first is hexose diphosphate the mode of action of the second has not yet been proved though it appears probable that a hitherto undescribed co enzyme functions in the conversion of 3 phosphoglyceric acid to 2 phosphoglyceric acid Experiments are being continued with the object of confirming this point and elucidating the chemical nature of the co enzyme

Food Investigation

The Food Investigation Board has just issued its report for 1937 The Board asked the Medical Research Council a question which is constantly arising Is food stored by modern methods as nutritious as fresh food? In a considered reply the Council concludes by saying

The available evidence therefore suggests that modern methods of storing foods cause little depreciation in their nutritive value in fact it may be said that food of good initial quality that has been stored by the best modern methods is likely to be superior in many respects to similar food that, though still technically fresh is in reality stale One substance of important biological significance especially associated with fresh fruit and vegetables—namely vitamin C or ascorbic acid—is well known to be easily destroyed by heat applied either in ordinary cooking or canning to a less extent vitamin B_1 is liable to be similarly affected The past year has been one of great activity on the part of the Board and some of its findings are of more than usual interest The development of rancidity in the fat of herrings during cold storage has been found to be due to certain enzymes and experimental evidence suggests that these are made more active by common salt For this reason herrings that have been frozen in brine need careful washing and glazing before they are stored and there would be a clear advantage if freezing could be carried out satis-

factorily in air so that contact with brine would be avoided. This possibility is being explored. In the case of several varieties of white fish however freezing in brine at a temperature of + 4° F. and storage in the same way at − 22° F. will retain the original texture for up to six months lemon sole were still in a palatable condition after storage in brine at this temperature for two years. Work on the storage of various fruits and on methods for the artificial ripening of imported plums and pears has continued. It has been found that in an atmosphere of 10 per cent. of carbon dioxide 10 per cent. of oxygen and 80 per cent. of nitrogen the growth of fungi rots on strawberries seems to be retarded. The degree of saturation of the fat of the large white pig has been shown to vary greatly and to be influenced by the rate at which the fat is deposited. Pigs on an unrestricted diet have more stearin fat than their litter brothers on a restricted diet and hogs (castrated males) have a more saturated fat than sows (females). The untreated shells of good quality eggs are remarkably resistant to invasion by species of Proteus or of Pseudomonas, as Wilson however readers the shell susceptible to invasion. Other matters which are dealt with in the report are the preservation of peas and asparagus by freezing, the effect of various methods of manuring the changes of sugar content in potatoes the period of curing needed to give a satisfactory colour to bacon and the storage of hothouse grapes broccoli and apples. The report may be obtained from H.M. Stationery Office price 6s. net.

SCOTLAND

Dundee Royal Infirmary's Needs

Speaking at the annual meeting of Dundee Royal Infirmary Mr. Lewis F. Robertson chairman of directors who presided said that the position of the institution was very disquieting and the present state of affairs could not continue. There must be either a substantial increase of revenue or a curtailment of the services provided. The ordinary income had amounted to £45,345 and the expenditure to £56,300 so that with extraordinary expenditure there was a deficit of £8,108. For many years it had been necessary to write off deficits by taking from the reserve fund but at the end of 1937 the sum at credit of reserve amounting to £6,377 had been insufficient to meet these deficits. The year 1938 therefore started with a debit balance of £1,474. More revenue might be obtained from some of the country districts for which the Infirmary provided a constant and much-used service and an organizing collector would be appointed.

Tuberculosis Trust

The fiftieth anniversary of the beginning of the anti-tuberculosis work undertaken by the Royal Victoria Hospital Tuberculosis Trust is recorded in the annual report of this Trust for the year to June 30 1937. The establishment of the tuberculosis dispensary at 13 Bank Street Edinburgh on November 22 1887 gave a new direction to the treatment of tuberculosis shifting it from the cure of the advanced case to the search for and cure of early cases of tuberculous infection. The dispensary was devised to serve as the centre of all other anti-tuberculosis activities. This was accomplished by an accurate system of examination and records followed up by home visitation by a doctor and a staff of specially trained nurses, the dispensary also acting as a clearing house where patients were sorted out for home or sanatorium treatment. A study of the first 1,000 cases indicated the desirability of the notification of tuberculosis to the public authorities. Fourteen years later the second dispensary was established in France and gradually there was a growing realization of the significance of the Edinburgh scheme from which grew the official plan for control of tuberculosis in Great Britain adopted in 1913 [illegible] also the foundation upon which anti-tuberculosis work in the United States was built up. In 1887 four out of every five deaths were due to tuberculosis throughout the West of Scotland while now in Great Britain has been reduced to 28 per cent. and in America to 22 per cent. of all [illegible] deaths. The Trust now maintains Southfield Sanatorium Corstorphine in connection with the Royal Victoria Dispensary and in 1921 established at Greenmount Farm a tuberculosis herd of cattle for the provision of special milk. A number of investigations have been carried out at the Sanatorium Colonies including improved methods for the detection of the tubercle bacilles from [illegible] observations on the seasonal variations in tuberculous [illegible] experimental work on the channels of infection and the [illegible] of tuberculosis. Two nurse commissioners have been appointed for work in the north of Scotland by the Tuberculosis Trust in collaboration with the British Red Cross Society and other bodies and it may be noted that the diminution of the death rate from tuberculosis during the past ten years has been greatly noticeable in the five counties covered by the work of these nurses.

Scottish Mental Hospitals Pathological Board

The annual report for 1937 of the Scottish Mental Hospitals Pathological Board states that the demonstrations provided during the year were well attended by medical officers of contributing hospitals. Dr. A. C. P. Campbell successor to Dr. (now Professor) J. A. Biggart as the Board's pathologist was granted leave of absence in America for a short period. There he visited laboratories in various centres and attended the symposium on the cerebral circulation held by the American Association for Research in Nervous and Mental Disease. With regard to research the following studies are now in progress: the experimental production of spasm of the cerebral vessels; an embryological study of the development of the cerebral capillaries; an experimental study of the quantitative variation of the cerebral capillary bed under different conditions; a review of a series of cases of Wernicke's encephalopathy; and the experimental production of hypo- and hyperthermia by hypothalamic lesions. The report records a further considerable increase in the number of teaching specimens, both microscopic and histological now available and in the collection of lantern slides at the museum. Much of the histological material filed during the year is stated to be of great teaching value.

INDIA

Bengal Housing Conditions

Attention is drawn to the backward state of town planning and housing conditions in Bengal by Lieutenant-Colonel A. C. Chatterji I.M.S., in his report as director of public health in Bengal. He mentions first that in 1936 a lower birth rate was recorded than in all other Provinces excepting the North-West Frontier Province Assam and Sind while the death rate was higher in Bengal than in all other Provinces except Bombay, the Central Provinces, and Orissa. The rate of natural increase was nine per thousand of population as compared with ten in 1935. Seven districts showed improvement and fourteen showed retrogression in their decadent areas during 1936 while in Howrah the position remained unaltered. In five districts no decadent area was notified. Colonel Chatterji remarks that in urban areas, excepting Calcutta proper buildings have been rising in a haphazard manner without any kind of systematic planning, while even in Calcutta the outskirts are full of very insanitary overcrowded dwellings. Of 118 municipalities,

excluding Calcutta only seventeen have framed by laws and promulgated them The urban areas are becoming very congested especially those in process of industrialization and there are large numbers of houses with no adequate ventilation, damp proofing, outlet for kitchen smoke and suitable drainage All these adverse conditions react unfavourably upon the health of the inhabitants more so upon the pregnant mothers and the infants This is further very seriously aggravated by the overcrowding in the individual houses partly due to the low standard of living and partly to the lack of suitable accommodation Not only do two or three families live in houses which are only adequate for single families but two or three generations inhabit the same room creating most unhealthy conditions In the rural areas where more than forty seven million people live the absence of a Village Planning Act and the lack of desire and initiative on the part of the population itself have resulted in the haphazard growth of homesteads with innumerable breeding places for mosquitos caused by excavating the ground indiscriminately all over the villages in order to obtain earth for building the huts Each year about half a million deaths occur from malaria alone tuberculosis is probably also increasing especially in these malaria infested areas Even in the urban areas three million inhabitants live in such different types of buildings as those constructed entirely of bricks partly of bricks and partly of corrugated sheets or tiles entirely of corrugated sheets daub and wattle mud walls with thatched roofing and bamboo walls with thatched roofing It is therefore suggested that all the municipalities should adopt suitable by laws and that Village Planning and the Small Town Planning Acts should be brought into being

The Punjab Epidemiological Bureau

Epidemiological work is prominent in the activities of the public health department of the Punjab In his report on the public health administration Lieutenant Colonel C M Nicol I M S records that five malaria surveys were undertaken in 1936 in different parts of the Province and that these gave valuable information which could be utilized in organizing preventive measures This work requires very specialized knowledge and the accuracy of the observations is an important factor in the degree of success obtained by efforts directed against the development and spreading of malaria in the regions surveyed The collection of data for the preparation of the annual malaria forecast and the analysis of these data is an essential piece of work which devolves upon the Bureau personnel each year In this connexion the results of spleen examination in school children throughout the Province are examined resulting in the compiling of valuable evidence about endemicity The examination of blood films for the presence of the malaria parasite is a routine procedure Advice is also given by the Bureau in respect of sites for proposed new buildings and institutions particularly as regards the possibility of mosquito breeding in the neighbourhoods In connexion with the Provincial hookworm survey material is systematically examined for signs of hookworm infection —no fewer that 7,789 specimens were scrutinized during the year under review The epidemiologist is responsible for the planning of field work for the Provincial survey and for the co ordination of this work with laboratory investigations Outbreaks of epidemic and other disease are investigated and the necessary laboratory procedures are undertaken Since 1932 much work has been done in connexion with the continued prevalence of cerebrospinal fever in the Borstal Jail at Lahore particularly with a view to segregating carriers An outbreak of suspected pneumonic plague was investigated It is noteworthy that plague which has been absent from the Shiapur district for seven years reappeared in 1935—an indication that no false sense of security should be allowed to develop merely because this disease has not appeared for even a comparatively lengthy period of years In 1936 there was a fall in the incidence of plague in the Punjab, the three largest towns Lahore, Amritsar and Multan being entirely free that no marked degree of success attended the campaign against cerebrospinal fever was attributed to the wide distribution of carriers and the impossibility of determining which of them were capable of transmitting the infection A special pamphlet on food was prepared in 1936 and there was a new set of magic lantern slides on tuberculosis This disease continues to lurk unestimated since notification is far from complete and only mortality figures are obtainable on a large scale in the Province generally Colonel Nicol remarks that there is great need for the extension of the campaign against this disease the most hopeful line of attack being the multiplication of tuberculosis clinics A leprosy survey was begun in 1931 and up to December, 1936 5 574 villages with a gross population of 1 719 960 had been examined in 744 of these villages 1 814 cases of leprosy were found At the end of the year there were eighty leprosy clinics serving both as treatment centres and as centres of propaganda work Since 1927 the birth rate per thousand has risen from 42 3 to 46 9 while the death rate has fallen from 167 5 to 1584 thus the greater the success of the public health department the greater is likely to be the pressure of the population on the land This will have to be countered by a steady improvement of agricultural methods such as will increase the output of the land Some relief will be afforded by an extension of irrigation though the field remaining for this is not large and the ultimate problem remains that of devising some means of birth control

Correspondence

Hepatitis after Prophylactic Serum

SIR —A recent outbreak of poliomyelitis has aroused controversy as to the value of convalescent serum In the *Journal* of September 10 (p 588) Mr G R Girdlestone advocates its use and regrets the statement of Drs Donald Paterson and MacDonald Critchley in the *Times* of August 8 that the disease does not yield to any known treatment applied within the first few days of onset

It is not my object in this letter to discuss the efficacy of convalescent serum treatment for poliomyelitis but rather to draw attention to dangers incurred in its use These dangers appear to me to apply equally to the use of convalescent serum for the treatment of any virus disease

Poliomyelitis has recently been epidemic in this area (North East Essex) but I have not used serum treatment for the cases under my care because I have seen alarming and in some cases fatal results apparently follow the administration of measles convalescent serum and I have felt that similar results might well follow the use of serum in poliomyelitis particularly if given as suggested by Mr Girdlestone without antiseptic preservation That evil effects may follow the use of convalescent serum is a statement of sufficiently wide implication to require very full evidence before it is accepted but I consider that the facts which I have observed merit a preliminary communication Full particulars of the cases will be published shortly

On June 1 1937 seven children housed in one block of a large institution for mental defectives were inoculated with convalescent measles serum to protect them from the disease with which they had recently been in contact Each child received 4 5 c cm of the serum which came from the same batch and which was obtained from a well known reputable firm.

After an interval varying between seventy-eight and eighty-three days these seven children developed jaundice and became severely ill. No other child in the institution at that time had jaundice. The disease in its early stages and in its milder forms appeared to be indistinguishable from so-called infective hepatitis (infectious catarrhal jaundice). Four of the seven cases three developed rapidly increasing signs of liver failure terminating in death. Material derived from post-mortem examination of the fatal cases revealed extensive atrophy of the liver. (Photomicrographs of sections of the liver in two of the cases are enclosed.)

Two months after the onset of the jaundice in the seven children who had been inoculated with convalescent measles serum two other children who had been in contact with the cases but who had not been inoculated with serum developed jaundice. Their illness did not appear to differ in any respect from common infective hepatitis.

The majority of the cases were fully investigated. Van den Bergh's test gave a biphasic or direct positive reaction. Blood culture was negative (three cases). Widal agglutination reaction (three cases). Examination of blood, urine, and post-mortem material for the parasite of Weil's disease were negative. Blood count revealed a polymorphonuclear leucocytosis. Throat swabs were taken in four of the cases and in all were haemolytic streptococci on culture. Levulose tolerance tests were carried out on some cases and showed evidence of impaired liver function.

The investigations did not give much clue as to the aetiology of the condition. The fact that all the original cases had had convalescent measles serum attracted our notice, and was at first considered to be a remarkable coincidence, but this view was revised after reading recent articles by Findlay and MacCallum (1937, 1938) on the association of hepatitis with immunization against yellow fever. These authors noted that among 3,100 persons immunized against this disease with virus and immune serum eighty-nine cases of jaundice developed. The average period between the time of inoculation and the development of hepatitis was between two and three months.

The first report of hepatitis associated with immunization against a virus disease is that of Theiler (1919), who refers to it in connexion with immunization of horses against horse sickness. Of 1,148 animals inoculated twenty-seven developed acute necrosis of the liver in most instances after an interval of sixty-two to seventy-eight days. Among Army horses immunized against horse sickness there was a mortality of 4 to 5 per cent. in one group of 1,411 animals and 20 per cent. in a second group of 1,154 animals. An interesting point is that seven non-immunized and apparently healthy horses died from hepatitis in the same area and during the same time as the illness occurred in the same group of 1,154 animals mentioned above.

Marsh (1937) has recorded the development of hepatitis in horses inoculated with immune serum alone or with mixtures of immune serum and virus for the treatment of equine encephalomyelitis. Of 5,933 horses treated symptoms of hepatitis followed inoculation in eighty-one cases after an interval varying between thirty-two and ninety-two days. In addition eight horses that had not been immunized developed similar symptoms.

Findlay and MacCallum also record a communication to them by Dr. W. S. Gordon noting the occurrence of necrosis of the liver following inoculation of serum antitoxic to *Clostridium welchii*.

The possible theories explaining these recorded facts are fully discussed by Findlay and MacCallum who summarize them as follows: (1) a hepatotoxic virus is introduced with the virus inoculum, or (2) two factors combine to induce the hepatitis—(*a*) a hepatotoxic substance present in the sera or tissue extract injected, (*b*) in the case of man and such as in the case of human beings probably the commonest cause of common infective jaundice. The latter theory appears to me to be the most likely after consideration of the present cases. It would explain satisfactorily the occurrence of secondary cases of jaundice in individuals who have not been inoculated with serum.

In conclusion it is perhaps as well to mention that such serum appeared to the eye of immune serum must be rare. I have not been able to find any other cases recorded in the literature of hepatitis associated with convalescent measles serum in human beings.

C. S. V. PROPERT
Rotherham.

Findlay, G. M., and MacCallum, F. O. (1937) *Trans. roy. Soc. trop. Med. Hyg.*, 31, 307.
(1938) *Ibid.*, 31, No. 7, 733.
Macallum, F. O. (1937) *Med. J. Aust.*, 1, 91 (Jan. 23), 133.
Theiler, A. (1919) *Onderstepoort J. vet. Sci. Anim. Ind.*, 5, 371.

Convalescent Serum in Infantile Paralysis

SIR,—I am sorry that Dr. F. M. R. Walshe (*Journal*, September 17, p. 543) is so confirmed an unbeliever in convalescent serum. So far as the negative evidence is valuable it touches me it disproves the efficacy of serum *as it is generally prepared and used*. In some of the reported cases the cases were not fully alternate or truly comparable in severity, the serum was often not from donors recently convalescent from poliomyelitis, the pre-paralytic stage was often not accurately assessed, there was often delay between the diagnosis and the administration, and doses were often small.

Furthermore the evidence is not all negative. I mentioned Macnamara and Morgan, Jackson and Donovan reviewing the 1936 epidemic of poliomyelitis in Manitoba (*Canad. publ. Hlth J.*, August 1937) give the following table:

Final Results of 161 Cases with Positive Spinal Fluid Findings

Result	Serum administered within 3 days of onset of illness	Serum after 3 days, or all paralytic cases not administered
	Cases	Cases
Recovered without paralysis	51 (92·7)	43 (56·6)
Recovered with residual paralysis	3 (5·5)	23 (30·3)
Died	1 (1·8)	9 (11·8)
Total	55 (100·)	76 (100·)

My plea is that convalescent serum has been condemned on insufficient evidence, and that there are grounds for an appeal and for a further trial.

I have been asked how a doctor is to recognize the pre-paralytic stage of poliomyelitis. The period of the year and the existence of a local epidemic may be suggestive. The child has or has recently had a brief feverish illness commonly pharyngitis. All such patients should be taught to give their knees a good morning and good night kiss. During the fever or associated with a secondary rise the patient complains of stiffness in the neck or back, and when asked to carry out the morning and evening kissing of his knees cannot do so. Poliomyelitis is suspected, *the patient is not moved* but with the least possible delay pathologist, serum, and microscope are brought to his bedside, lumbar puncture is carried out and 5 or 10 c.cm. of cerebrospinal fluid withdrawn, and the needle is left *in situ* while the fluid is examined. At this stage the characteristic "polio" finding is a raised cell count (polymorphonuclear and mononuclear) in a clear or slightly opalescent fluid, and

there is usually some increase of pressure. Should there be need to distinguish poliomyelitis from tuberculous meningitis the chlorides will be found unreduced. If the clinical and cerebrospinal fluid pictures agree about 10 or 20 c.cm. of serum at body temperature is slowly injected intrathecally, the main dose being given intramuscularly or intravenously. The dose is related to the size of the patient. In 12 year olds I have used 50 to 100 c.cm. but I now feel that 200 c.cm., or even more if the illness is severe, may be advisable.—I am, etc.

Oxford, Sept. 19 G. R. GIRDLESTONE.

Human Oil from the Omentum

SIR,—Mr. Cecil P. G. Wakeley's method of treating adherent scars with human oil (*Journal*, September 17, p. 618) has given such good results in his hands that it is likely to become a standard method. I am therefore alarmed at the abuse to which the omentum may be subjected as a result of this article.

At the present time our knowledge of what can be done with the omentum is scanty. I have now seen sufficient tragedies from interference with the omentum during operations for acute appendicitis, etc., to convince me that it is an organ which must be given the greatest respect. The devitalized fatty stump which must be left distal to the ligatures when it is amputated is a source of the greatest danger. It is an ideal culture medium for the bacteria which are present in many unperforated abdominal inflammations. Suppuration with abscess formation, or more generalized peritonitis, is likely to follow. If the omentum must be amputated in an operation for acute appendicitis then all the conditions which indicate drainage are produced even though the appendix has not perforated. In addition to this immediate danger to life there is the remote danger from adhesions which so frequently form about omental stumps. In making a necropsy on subjects who have had an abdominal operation I always open away from the scars and make a preliminary survey of the operation area. At present I share the dilemma of Dr. Hugh Auchincloss. Should the omentum be pulled down over the operation site because of its policeman role or should it be rolled well away from the region because of its habit of forming adhesions? Careful case records will eventually solve these problems, but the omentum will always be a structure which requires the greatest care in handling.

It is difficult to believe that oil from the omentum should be any more valuable than oil from the many other fat deposits of the body which can be tapped without any risk to life or health. If, however, there is some special value in omental oil, then it seems to me that the only justifiable source of supply is the hypertrophied omentum found in hernial sacs. Because of its bulk this must frequently be amputated. The stump even here may be a source of danger. Last week I made a necropsy on the body of a middle-aged man who hanged himself about a month after such an operation for a right inguinal hernia. The operation had been technically perfect, the wound was very neat and well healed. The omentum reached down to the pelvis and its stump was an ugly mass of dark necrotic fat and fibrous shreds about which neighbouring structures were becoming adherent. If one of Mr. Wakeley's omental donors should hang himself during convalescence I should like to see the necropsy. I am sure Mr. Wakeley would sooner have adherent scars of the skin than the condition we would see.—I am, etc.

G. R. OSBORN
Derby, Sept. 17 Pathologist, Derbyshire Royal Infirmary

A Strict Vegetarian Diet

SIR,—Sir Leonard Hill's interesting article under this title gives a single day's food consumption of a 9 year old boy as follows: one fairly thick slice of pineapple weighing about 6 oz.; baked spinach and onion pie with a very thin crust made of wholemeal flour, cheese, and milk, about 10 oz. in all; two apples, one orange, and two small tomatoes in all about 12 oz., including the skin of the orange; one small ice. This regimen was said by the subject's father to be typical. It was noted that the boy weighed 59 lb. and was fifty-two inches in height; a measurement of the twenty-four hour urinary output of nitrogen gave 4·43 grammes corresponding to 28 grammes protein consumption, a basal metabolism test showed an oxygen consumption of 215 c.cm. per minute corresponding to 1,486 calories per day. (This was considered due to the circumstances to be a somewhat high figure. It may be noted that the mean value for a normal subject of age, sex, weight, and height given is found to be 1,224 calories per day, calculating from Fig. 20 and Fig. 25 of the latest edition of *Basal Metabolism in Health and Disease* by E. F. DuBois.)

To facilitate the calculation of the calorie value and protein content of the foods listed above these have been considered to be equivalent to 6 oz. pineapple, 4 oz. spinach, 4 oz. onion, 2 oz. wholemeal flour, 4 oz. apple, 4 oz. orange, 2 oz. tomato, and 2 oz. ice cream. Taking calorie values and protein contents of these articles of diet from any standard textbook on nutrition it is found that the calorie value of the whole day's diet is about 650 and the protein content 18 grammes. These are maximal figures obtained by assuming the fruits to contain no inedible portion and accepting the upper figure where a range is given for any item.

As the diet yields only half enough energy to maintain the basal metabolism and two-thirds of the protein necessary to account for the very small observed urinary nitrogen output, it is impossible to escape the conclusion that the regimen described to Sir Leonard was incorrectly described. The subject could not long survive upon the given quantities of the foods described, and the observation that he was in good health leads to the conclusion that he must ordinarily consume much more food than that which is claimed to be typical of a day's diet.—I am, etc.,

Durham, N. Carolina, U.S.A., Sept. 7 W. J. DANN.

SIR,—This letter is apropos the paper on a strict vegetarian diet by Sir Leonard Hill (*Journal*, August 20, p. 417). It is very difficult to reconcile the small number of calories which this boy's diet is alleged to contain with his activities, his excellent state of health, and certain well-known facts of physiology. In the past after subjecting all of the data of such reports to careful analysis the verdict has invariably been "not proven," and as I shall presently show, this appears to be the verdict in this case.

There is no doubt that our food requirements are less than the generally accepted standards indicate. From my experiences with over 6,000 diabetics I have been convinced for a number of years that our dietary standards reflect habits rather than actual caloric needs. Diabetics seem to do very well year in and year out with diets of 2,000 calories a day and less, and their occupations in general, differ very little from those of non-diabetics. None of these diets however, contains the small number of calories (800) reported in the above-mentioned case. That this boy's intake of food is appreciably different,

qualitatively and quantitatively, from that which it is alleged to be is suggested from the following

The rate at which a child grows depends not only upon the protein content of the diet quantitatively (grammes per kilogramme of body weight) but also upon the character of the proteins—that is their amino acid content From many experiences with juvenile diabetics our data clearly show that stunting results when vegetables account for more than 50 per cent of the total protein content of the diet, to prevent retardation of growth at least this proportion of the total protein must be in the form of animal foods—meat eggs, milk etc There are vegetable proteins which have approximately the same growth-promoting value as animal proteins (the soya bean is an example), but according to the description of the diet this boy is not receiving any of these vegetables In isolated cases we have found it possible to prevent stunting with smaller amounts of animal protein In such cases however, this was accomplished only by increasing the number of grammes of protein per kilogramme of body weight In view therefore of (*a*) the very small amount of protein which this boy's diet is alleged to contain, and (*b*) the excellent rate at which he is growing—according to English standards this boy is about three inches taller than the mean height for his age see the Annual Report of the Chief Medical Officer of the Board of Education for 1927—one must conclude that the biological (growth promoting etc) value of these vegetable proteins not only is as high as that of animal proteins but is actually higher This is not in accord with their known amino acid contents Parenthetically it may be observed that this boy is not on 'a strict vegetarian diet' There is at least a small amount of animal protein in the cheese and milk in the food at lunch and in the sour milk and the cake allowed probably contains a little milk The amounts are however too small to account for the discrepancy between the actual and theoretically expected state of the boy's nutrition

It is still more difficult to reconcile the energy content of this boy's diet (800 calories each twenty four hours) with his body weight and expenditure of energy since the law of the conservation of energy holds in the human body as elsewhere The oxygen consumption under conditions of basal metabolism was found to be 215 c.cm per minute This corresponds to an expenditure of approximately 1 500 calories per twenty four hours This is a very large expenditure of energy for a boy of his age height, and weight under these conditions but from the description given—excitement during the test—the conditions were probably not strictly basal Assuming however, a *normal* expenditure for a boy of his age, height, and weight —that is about 1 080 calories per twenty four hours (*Amer J Dis Child* 1938, **55** 455)—there is still a marked disproportion between the theoretically expected and the actual body weight Thus, to the expenditure of energy under basal conditions—1,080 calories—it is necessary to add about fifty calories for the specific dynamic action of the food, and to this total must be added the expenditure of energy during work Assuming that the boy does no other muscular work but walk the five miles a day as described—'to church and back'—and assuming that he walks at the very slow rate of one mile per hour only he expends, in addition to the energy under basal conditions approximately one calorie per kilogramme of body weight per hour or about 135 calories per day (body weight is approximately 27 kilogrammes) The total expenditure of energy is therefore about 1,265 calories Since his diet is alleged to yield about 800 calories only this small amount of muscular activity alone accounts for a deficit of 465 calories per twenty four hours In one year, therefore, this boy should *lose* about 40 lb (465 × 365 − 452 × 9·3) Since he weighs 59 lb he should disappear completely in less than two years Actually his rate of development is excellent

The loss of weight estimated above is conservative, since, as it will be noted it assumes (*a*) a maximum energy value for fat (9·3 calories per gramme) and (*b*) that loss of body weight is confined entirely to fat The objection may be raised that the allowance of 135 calories for the walk of five miles is too liberal It should be observed that assuming the boy did nothing whatever but lie quietly in bed throughout the whole twenty four hours of the day, and assuming that his heat production under basal metabolism conditions is 1 080 calories only there is still a deficit of about 280 calories per day which in one year should result in a loss of about 25 lb —(1080–800) × 365 − 9·3 × 452 The conclusion therefore seems to be that this boy is either eating more food than is shown in the diet or that the law of the conservation of energy does not apply to him

We now come to the laboratory data The statement is made that "confirmatory of his father's claim that the boy lives on a diet much like that given by his parents is the *fact* that the total nitrogen determination was 4·43 grammes in the twenty-four hours urine The urea came out a total of 9·65 grammes in twenty four hours' With regard to the small amount of nitrogen in the urine, it is necessary to observe that the nitrogen content of a child's urine, unlike that in adults, is no indication of the total protein metabolism—the output of nitrogen rarely equals the intake—because children tend to store appreciable amounts of protein for growth Low caloric diets in which carbohydrates dominate also tend towards retention of nitrogen That the nitrogen metabolism in this case requires reinvestigation is clearly shown by the following considerations

Urea has this structure CON_2H_4 Its molecular weight is therefore 60, and for every 60 parts of urea there are 28 parts of nitrogen The *maximum* amount of urea which 4·43 grammes of nitrogen—the amount found in the urine—is capable of yielding is therefore 9·48 grammes only (2·14 × 4·43) Actually the urine is said to have contained 9·65 grammes The difference between the theoretically possible and the actual amount of urea is admittedly small and within the limits of the experimental error of the test It must however also be assumed (*a*) that this boy's urine contained no amino acids, which normally account for 3 to 5 per cent of the total nitrogen, (*b*) that it contained no ammonia which also normally accounts for 3 to 5 per cent of the total nitrogen, (*c*) that it was absolutely free of creatinine, about 37 per cent of which is nitrogen, (*d*) that it was also free of uric acid about 33 per cent of which is nitrogen, and (*e*) that it was also free of the "residual" nitrogenous substances all of which as a rule account for about 20 per cent of the total nitrogen content of normal urine No human urine has ever been found free of these nitrogenous substances The discrepancy is still more marked when consideration is given to the fact that though urea accounts for about 80 to 90 per cent of the total nitrogen in the urine with ordinary diets, it accounts for 60 to 70 per cent only when the diet is low in calories and low in proteins It is obvious therefore that an error occurred either in the determination of the total nitrogen or in the estimation of the urea

With regard to the observation of not having 'come across so low a value for protein metabolism [4·43 grammes of nitrogen] before," may I respectfully draw Sir Leonard Hill's attention to a number of reports of less than 2 grammes of nitrogen a day (*Skand Arch Physiol* 1900, **10**, 91, *Biochem J* 1922, **16**, 131 and *J Biol Chem* 1924, **61**, 355, 1926, **68**, 15, 1926, **76**, 391, and 1932, **95**, 327) and one of my reports of a juvenile diabetic with less than 1 gramme per day (*New Engl J Med* 1931, **204**, 799)—I am, etc,

I M RABINOWITCH

Montreal General Hospital Canada Sept 1

Tannic Acid Dressings in Wounds of the Fingers

SIR—In the treatment of wounds of the fingers and hands tannic acid has certain distinct advantages which do not appear to be widely realized Cases particularly suitable for treatment with tannic acid are (1) those in which the tip of the finger has been cut off as by a guillotine, (2) cases in which an area of skin has been

avulsed so that suture cannot be performed satisfactorily and (3) cases in which a tendon has been exposed It tannic acid is not used in the treatment of the first type of case then either an amputation is performed and a flap obtained by sacrificing the greater part if not all of the terminal phalanx or the wound has to be dressed repeatedly, with considerable discomfort and slow healing and sepsis are practically inevitable It tannic acid is used the freedom from pain is notable there are no unpleasant dressings that stick and have to be soaked off and healing is excellent and more rapid no doubt because sepsis is avoided by leaving the wound once it is dressed undisturbed This method does not give a soundly healed scar quite as rapidly as does a well-performed amputation but it saves the maximum amount of the phalanx Although the gain in time with an amputation may be a source of satisfaction to the employer the loss of a terminal phalanx is a source of considerable grief to the employee especially in the case of a lady

The technique is as follows the wound toilet is undertaken in the usual way under local anaesthesia the part is then soaked in a 1 in 1 000 watery flavine solution for at least fifteen to twenty minutes The part is dried and tannic acid is applied one of the many forms of tannic acid jelly is satisfactory and convenient but if preferred, a tannic acid compress using up to a 40 per cent solution can be employed Later dressings consist merely in replacing the top wool and the bandage The tannic acid is left until it comes off of its own accord —I am etc

London, S W.2 W D PARK.

The Occipito-posterior Case

SIR —Concerning the diagnosis of occipito posterior positions of the vertex the sign on which I have always placed the greatest reliance is not mentioned in Professor Chassar Moir's article (*Journal* September 10 p 555) nor have I ever seen it mentioned in any standard work on midwifery The os uteri in the early stages of parturition is invariably related to the summit of the presenting part of the vertex If in the early stages, when one finger can be admitted, the os uteri approaches the sacrum, the position is occipito-posterior If it approaches the pubis the position is occipito anterior In the later stages when the os admits three fingers the sign does not appear to be so convincing This observation is based on three thousand cases attended in a country district —I am etc

Beccles September 12 H WOOD HILL

SIR,—Since my former note (*Journal* 1921 2 782) there has been much discussion but the occipito posterior presentation remains the bugbear of domestic practice and the associated deflexion of the head is not clearly accounted for All may agree that when the foetal-pelvic fit is easy spontaneous delivery is likely when the fit is close the normal flexion of the foetus is likely to be lost If the flexion persists the occiput will impinge on the pelvic slope and make the long forward rotation of 135 degrees If deflexion occurs the sinciput will impinge on the pelvic slope and rotate forward 45 degrees With long rotation labour at best is prolonged and exhausting with deflexion the passage of the head round the pubic arch is difficult In my note of 1921 two claims were made (1) that it is in most cases possible to make the diagnosis of impending posterior occiput and (2) that in many cases it is possible to avert it by manipulative methods Each of these claims has been justified by experience, and the cases of failure show that there are factors which call for further study In relation to the statement that when the pelvic fit is close the normal flexion of the foetal head is likely to be lost one may point out that the head contour is truly oval—not elliptic —and that it has for space to fit into one of two ovals with its axis in the right or left oblique diameter With the occiput posteriorly the large end of the head oval is at the narrow end of the pelvic oval Entrance into the pelvic brim in this relation brings a deflecting pressure to bear on the occiput May I renew my appeal to practitioners to try to diagnose 'impending posterior occiput and avert it by manipulative methods In every case in which they succeed they will save the patient the delay of a long rotation and perhaps the difficulties and anxieties of a face to-pubis delivery —I am etc,

Dundee Sept 13 R C BUIST M D

Treatment of Malaria

SIR —The article published under this heading in your issue of July 30 (p 227) conveys a poor impression of the atebrin-plasmoquine treatment The statement that the simultaneous administration of atebrin and plasmoquine appears to aggravate the toxicity of each and is not to be advised is so emphatic that it might become a dogma of anti malarial treatment Actually the simultaneous administration method has given me results incomparably better than those that I have received from any other form of treatment so that I venture to suggest that the above statement deserves to be qualified

Any drugs which undertake to eradicate malaria in a five day course must possess a powerful toxicity to administer such drugs in normal dosage to patients already in a toxic condition as the result of acute febrile infection is to invite trouble These drugs should not be administered on any but a full stomach and the acute malarial patient is seldom a hearty eater

In this locality a majority of our cases are of subtertian infection I treat these in the acute stages with large doses of quinine and small doses of plasmochin compound When all symptoms have disappeared with the patient under daily observation and with the assurance that he or she is feeling and feeding well I institute the atabrine-plasmochin co treatment (one tablet of each t d s p c) Patients are usually fit to begin the course within ten days of the onset of fever The course may exceed the prescribed five days I do not use plasmochin simplex The alternative spellings of the names are I believe only of proprietary significance

With the above routine which I have practised since 1933 less than 10 per cent of my patients have developed toxic symptoms and more than 75 per cent have had no recurrence of malaria —I am etc

RYAN MACMAHON
Medical Officer Apex (Trinidad) Oilfields Ltd

Trinidad August 22

Tuberculosis Dispensaries or Chest Clinics?

SIR —With the remarks of Dr Philip Ellman in his letter in your issue of September 10 (p 593) under the above heading and with those of Dr G S Todd at the Annual Meeting of the British Medical Association (Tuberculosis Section), reported in your issue of August 6 (p 312) where they deprecate the use of the term tuberculosis dispensary and suggest the title chest clinic I am in complete agreement

It is the common experience at these centres, as Dr Ellman points out that a very large percentage of patients

prove on investigation to be either free from disease or suffering from some pulmonary disease other than tuberculosis, or frequently from extrapulmonary disease. How often, for example, are bronchiectasis, intrathoracic neoplasm and para-nasal sinus infection with its broncho-pulmonary complications or sequelae diagnosed there? A properly equipped dispensary with its facilities for clinical bacteriological and radiological investigation becomes *ipso facto* a chest clinic. For a practitioner to have to recommend his patient to a "T.B. dispensary" with a request for an opinion solely as to the presence or absence of tuberculosis of the lungs or merely to confirm his suspicion, is not in the best interests of the practice of medicine and is not devoid of harm to the patient who, fearing the worst, is filled with apprehension and anxiety, and through this fear may fail to take his doctor's advice and may go so far as to remove his name from the practitioner's list. If, however, a recommendation was made to have his chest, or, say the cause of his continued 'cold,' etc., investigated at the "chest clinic," there would be less hesitation on his part to attend.

The chest clinic, with its valuable clientele, properly equipped and staffed by the local authority concerned and having as in my own county an appropriate liaison with the local general hospital, could perform a useful function in the training of the medical student and future practitioner: there ample opportunities would be found of acquiring a knowledge of chest disease in general and of tuberculosis in particular, and the future doctor could come to appreciate the proper place of the chest clinic in the scheme of things, and would be only too keen to avail himself of its help in his future difficulties. Again, the chest clinic should play its part, as it does in my area, in the schemes now functioning in certain centres for postgraduate courses for general practitioners under the auspices of the Ministry of Health.

Let us drop the obsolete term 'tuberculosis dispensary" and assume the more appropriate title "chest clinic." Most of our new clients do not suffer from tuberculosis, and we in charge dispense neither medicines nor cod liver oil.—I am, etc.,

Cambridge, September 12 W. PATON PHILIP

SIR,—Dr. Gregory Kayne and I are, I am glad to note, in substantial agreement (*Journal*, September 17, p. 634). Actually in my original letter (September 10, p. 593) I suggested "municipal *or* chest clinic" ('or' being omitted through error) but in my paper to the Tuberculosis Association at the Cambridge meeting (*Medical Officer* 1934, **51**, 236), from which I quoted, I concluded:

The title 'tuberculosis dispensary' should be replaced by the designation 'the chest or municipal clinic,' or be constituted a special department of a general and if possible a teaching, hospital, as already exists in a few cases.

With Dr. Kayne's condemnation of the term "tuberculosis officer" I am in complete agreement. The recognition of the systemic nature of tuberculosis and hence the need for the "tuberculosis physician" having a wide knowledge of medicine in general and diseases of the chest in particular would surely in these days be accepted by all. As Dr. Maurice Davidson so aptly points out, "the study of tuberculosis, like other specialties, suffers not a little from the evils of departmentalism." On the other hand, once a patient is definitely known to be suffering from tuberculosis his education for his 'tuberculous career' must be a complete one, and I agree that there should be no subterfuge. This point, however, is outside the realm of the present discussion.—I am, etc.,

London, W.1, Sept. 16 PHILIP ELLMAN

Fracture of the Neck of the Femur

SIR,—Such a flood of literature on this subject has been let loose in recent months that a two-years ban has been suggested. Yet I cannot resist commenting on Professor E. W. Hey Groves's (*Journal*, September 17, p. 633) claim that 'from the moment that the operation begins with the insertion of the drill guide until that in which the nail is driven home and the skin incision closed need not occupy more than five minutes." This must mean that there is no radiographic confirmation of the position, or of the degree of penetration of the drill guide, for even with modern technique it takes about four minutes to expose and to develop antero-posterior and lateral radiographs. If this is what Professor Hey Groves implies, then one of the most vital steps of the operation has been omitted. If the preliminary tests are considered infallible, which I cannot for a moment accept, then why use a guide at all? In what sense is it a "guide" unless we have *confirmed that it is precisely in the right place*?

I am sure that I am not alone in having seen not one but many cases of nails driven into the femoral neck which have missed the head altogether and which have penetrated the front or the back, the top or the bottom, *in fact anywhere except the middle*. The more we encourage the belief that this is a procedure to be completed in five minutes in the patient's bedroom the more we shall see of these cases. These are the failures. The failures are not coming from surgeons who spend an extra *five minutes in securing radiographic confirmation* of every step. Moreover, patients do not suffer by these precautions. How does quietly standing by for a few moments while films are developed increase the shock?

There is nothing prohibitive about the extra-articular insertion of a nail under spinal or, if necessary, local anæsthesia, whether the activities in the theatre occupy five or thirty-five minutes. The "operating time," used in the strict sense of time occupied in cutting and stitching, is about the same in each case. So is the shock. Then let us insist on accuracy and forget the clock.—I am, etc.,

Liverpool, Sept. 18 R. WATSON JONES

Aural Vertigo

SIR,—I have read with much interest Dr. W. Russell Brain's lucid exposition of the difficult subject of vertigo in the *Journal* of September 17 (p. 605). Since he refers to some recent work of mine on aural vertigo I should be grateful for the opportunity of discussing a few of the points in his paper, as I was unfortunately unable to be in Plymouth for the Annual Meeting of the British Medical Association.

I note that Dr. Brain accepts, in the present state of our knowledge, the hypothesis that the complaint "Meniere's syndrome," or, as I have suggested, "focal labyrinthitis," is a clinical and possibly a pathological entity—that is, a toxi-infective process in the labyrinth resulting from infection usually to be found in the nose, mouth, or throat. He examples, however, two types of case which he finds difficult to fit in with this hypothesis. In the first of these there is an interval of many years between the development of a defect in hearing and the onset of vertigo, while in the second group the attacks of vertigo are spaced at intervals of many years. I agree that such cases occur, and I have several examples in my records. I feel, however, that they will be found to slip into place in the picture provided one accepts the idea that the labyrinthine lesion is a purely secondary

one waxing or waning in accordance with the degree of toxaemia produced by the primary infection I believe that a similar picture can be seen sometimes in the case of the secondary toxi infective changes observed in such conditions as fibrositis or perhaps as presenting a closer analogy iridocyclitis in the case of the eye It it be accepted, as seems probable that the secondary tissue changes are due to circulating toxins and not to the presence of micro organisms such a state of affairs is what one would expect to accompany the accentuation or diminution of the primary infection

I should also like to stress the observation that in the majority of cases (in my last series of seventy four in two thirds) the labyrinthine lesion started as an auditory defect—that is with deafness or tinnitus—and that in this same series the average interval before the onset of vertigo was no less than 7 3 years While this observation does not agree with Dr Brain s statement that in such cases the interval between the auditory symptoms and the onset of vertigo is usually short (tinnitus and deafness precede vertigo by only a few months or at most a year or two) I believe that I am not mistaken but that the discrepancy is to be explained by the fact that while I as an otologist have inquired particularly as to the earliest onset of auditory symptoms Dr Brain s attention as a neurologist has perhaps been rather more concentrated on the vertiginous symptoms The finding that this series of cases also provides—that the time intervals are more or less uniformly spaced over the series from the shortest to the longest—suggests that there is no fundamental distinction between them

Finally since the majority of cases of Menieres syndrome start with a derangement of hearing it is important to recognize and treat such cases in this stage before irreparable labyrinthine damage has been produced I am endeavouring at the moment to define the clinical picture of such a type of nerve deafness and feel that the attempt is likely to be a successful one —I am, etc

Bristol Sept 19 A J WRIGHT

Catarrhal Jaundice

SIR —Dr C E Lakin in his article on toxic and infective jaundice (*Journal* August 27 p 437) discusses the question whether catarrhal jaundice is obstructive or toxic, and finds the reports and observations so conflicting that he considers dividing catarrhal jaundice into two classes In this discussion the data obtained by means of the hippuric acid test for liver function (Quick A J, *Amer J med Sci* 1933, **185** 630 and *Arch int Med* 1936, **57** 544) are interesting and I believe, significant It has been consistently found that the synthesis of hippuric acid is impaired in catarrhal jaundice and that the test becomes normal when the patient has completely recovered Frequently a marked impairment of the liver as determined by the hippuric acid test will still be found after the jaundice has cleared which indicates that hepatic recovery cannot be judged solely by the icterus In toxic hepatitis the test is low and corresponds well quantitatively with the clinical condition of the patient From these findings it appears that in catarrhal jaundice liver injury exists —I am etc

ARMAND J QUICK

Marquette University Medical School
Milwaukee Wisconsin Sept 10

SIR —From the discussion on jaundice at the Plymouth meeting and also from the annotation in the *Journal* of September 10 (p 581) it appears that there is still room for doubt as to whether two types of catarrhal jaundice exist and that anyhow it is almost impossible to distinguish between them This being so it may be worth while mentioning a clinical observation I made in a recent epidemic which seems as if it might be of help in this connexion

The epidemic which began here about fifteen months ago was of a mild type but it must have affected a large proportion of the children in the area between the ages of 9 and 2 in fact in one class of thirty seven children no fewer than fifteen were absent because of it when the school opened in August The most remarkable difference from the usual clinical description was that only once was I able to palpate the liver and that with difficulty while the spleen was never palpable at all All the cases except one while the epidemic was in full swing were of the same type The exception was a girl of 12 (almost the oldest child I saw with jaundice) and her condition corresponded exactly with the usual type of non epidemic catarrhal jaundice—less acute onset longer-lasting jaundice and liver enlarged to three fingerbreadths below the costal margin This case proved most instructive

Ever since Mr D Ligat (*Lancet* 1919 **1** 729) published his account of what is now known as Ligat s reflex—the elicitation of hyperaesthesia of the abdominal wall by gentle pinching of the skin—I have been interested in the areas of hyperaesthesia discovered and have found the sign of great practical value as well as—in measles—of some theoretical interest (*Journal* 1935 **2** 84) (With reference to this earlier observation of mine it may be of interest to mention that the pathology of the appendix in measles has been studied in Germany and that at least one case is on record in America in which an appendix was removed at operation and from it the pathologist gave the correct diagnosis of measles before the rash appeared) I naturally tested for this reflex on these cases of jaundice as I should in any case of vomiting and was not surprised to find it in the appendicular area of every case that had not had the appendix removed I found also that the reflex was active on the opposite side of the mid line which is not unusual in cases of appendicitis However with numbers of cases passing through my hands I noticed that the left sided reflex had a most unusual and exact distribution It began at the level of the umbilicus about half way between the linea alba and the linea semilunaris and it descended vertically nearly half way to Poupart s ligament Very seldom did it rise above the level of the umbilicus and it was definitely a line about ½ to ¾ inch wide and not an oval or circular area I have examined hundreds of abdomens both before and since but I cannot recall ever having found a Ligat s reflex with such a distribution in any but a case of epidemic jaundice In the case of ordinary catarrhal jaundice which I have mentioned both the appendicular and the left sided reflex were significantly absent

Since the epidemic died down I have had several opportunities of seeing sporadic cases of sickness and in the few cases in which this new reflex was present jaundice was either actually present or appeared subsequently One particularly interesting case was a child of 12 whom I saw late one night with a temperature of 102 F and a bilious attack I knew she had a mild chronic appendicitis but this time the new reflex was present also A specimen of urine proved to contain a slight trace of bile and next morning there was an icteric conjunctival tinge In forty eight hours the bile had disappeared from the urine the reflex had gone also and the girl was practically well again I have seen one adult male with the typical symptoms and the two reflexes and fourteen days after I first examined him I saw his sister aged 26 with both reflexes present and she also became a typical case of epidemic jaundice

It these observations are confirmed by the experience of other investigators in other epidemics it would appear that we have here a simple clinical sign which will definitely distinguish between two types of catarrhal jaundice indeed a sign which is probably pathognomonic for the epidemic variety If this is so it should materially aid the investigation of the epidemiology of the disease and

lead to distinguishing as such what might otherwise pass as more or less ordinary 'bilious attacks,' as in the girl I have just mentioned. I do not know what abdominal organ this very circumscribed reflex refers to, but it is clear that its presence does denote an inflammation of some organ which is a constant feature of the disease. In view of the paucity of pathological reports on epidemic jaundice this observation seems of some importance. It is impossible for one observer to be dogmatic about any point, but I think that the left-sided reflex probably develops before the appendicular one and usually disappears before it. It is seldom found for more than a week or so after the jaundice develops. In testing for this reflex I should like to stress that the greatest care and gentleness are necessary. It is easy to get a child into such a condition that no observation is possible, but patience care and a little skill will nearly always enable one to decide definitely on its presence or absence, and in view of the child's known vagueness as to abdominal pain it is astonishing how accurate the localization of the reflex is.—I am, etc.,

Winsford, Cheshire, Sept. 17 W. N. LEAK, M.D.

The Harris Prostatectomy

SIR,—It is but natural that Messrs. Colin Edwards and Richard G. S. Harris of Sydney, New South Wales, should desire to defend the Harry Harris technique for prostatectomy, but I am not aware that Mr. Kenneth Walker has ever attacked it or my modification of it. The operation of reconstruction for the adenomatous prostate will never be successfully assailed, even by transurethral resection, until the surgeon has to exchange his scalpel for a hormone.

Mr. Kenneth Walker has pointed out that pelvic cellulitis is a complication of the Harris technique. This may occur in any case of suprapubic cystotomy, and is no more common in a prostatectomy efficiently carried out than in other bladder operations which require an exposure of the pre-vesical space.—I am, etc.,

London, W.1, Sept. 19 CLIFFORD MORSON.

Faecal Accumulation in the Rectum

SIR,—The article by Mr. Harold Dodd (*Journal*, September 17, p. 624) calls to mind the instructions I received when attending the surgical class of Mr. John Duncan in Edinburgh in the early 1880's. His suggestion for the removal of the impacted mass in the rectum was to aid the finger with "the handle of a tablespoon." On more than one occasion I have been called to attend patients suffering from 'diarrhoea" when examination of the rectum has revealed a large faecal mass. The satisfaction at so ready a discovery of the cause and so obvious a method of treatment—with or without the tablespoon—remains in the memory.—I am, etc.,

W. W. SHRUBSHALL, D.P.H.

Burgess Hill, Sussex, Sept. 17

SIR,—The article by Mr. H. Dodd in the *Journal* of September 17 (p. 624) reminded me of a case that came to my notice some years ago.

The lady in question, who proved to be a primipara, came in early pregnancy for confirmation of her condition. She appeared to be in good health and had no complaints. On examination I found the lumen of the vagina obstructed by a large tumour-like formation rendering passage of the examining finger impossible. The patient assured me that her bowel activity was satisfactory and added that her motions were frequent and watery. Rectal examination revealed a firm faecal mass about the size of a foetal head. I evacuated this mass digitally, leaving the rectum apparently empty. Olive oil enemata were administered later by a nurse, who reported good results. In three days' time I again examined the rectum and found another faecal mass, as firm as the first but not so large. I evacuated this mass digitally. Oil enemata were continued and three days later there was still in the rectum some hard residue which I removed. The enemata were discontinued, and liquid paraffin orally was substituted. During the remainder of her pregnancy there was no recurrence of excessive faecal accumulation.

This case stressed the importance of rectal exploration not only in pregnancy but in the wider fields of medicine, as my later experience proved.—I am, etc.,

Birmingham, Sept. 17 A. W. DOCKAR.

Peritonsillar Abscess

SIR,—I wish to refer to several points raised recently regarding peritonsillar abscess (*Journal*, June 18, p. 1323, July 2, p. 41, July 16, p. 152). It hardly seems reasonable to lay down a hard-and-fast rule as to when a peritonsillar abscess should be opened, but if a patient is in acute distress a well-judged incision will give some relief at least, and probably great relief. Much pain is inflicted on patients by the use of unsuitable instruments. It is certainly injudicious to use a 10 per cent. cocaine spray, but 10 per cent. cocaine applied about the site of incision and nowhere else will be found satisfactory. After painting with cocaine an injection of 1/2 per cent. or 1 per cent. novocain with a minute amount of adrenaline—made slowly into the tissues to be incised and allowed at least five minutes in which to act—is a great boon to the patient. The injection should be made with a very sharp, fine hypodermic needle, firmly fitted on to, say, a long, thin, glass tuberculin syringe. Finally, the knife must be extremely sharp pointed and thin—a new von Graefe's knife is perhaps best. With such a knife a well-placed incision will not give severe pain if the site of incision has been properly prepared. In competent hands it must be rare not to find pus. An ordinary scalpel seems a cruel instrument with which to open such a tender mass, but those who would enlarge an incision by stretching it with sinus forceps ought surely to have the operation done on themselves.—I am, etc.,

Brisbane, Australia, August 12 H. V. FOYTON.

Universities and Colleges

UNIVERSITY OF LONDON

WESTMINSTER HOSPITAL MEDICAL SCHOOL

The inaugural address at Westminster Hospital Medical School will be given by Dr. Robert Hutchison, President of the Royal College of Physicians of London, on Monday, October 3, at 3 p.m. The chair will be taken by Major H. M. Clowes, D.S.O.

LONDON (ROYAL FREE HOSPITAL) MEDICAL SCHOOL FOR WOMEN

The inaugural address of the London (Royal Free Hospital) School of Medicine for Women will be delivered by Lord Horder at the Royal Free Hospital, Gray's Inn Road, W.C.1, on Tuesday, October 4, at 3 p.m.

UNIVERSITY COLLEGE HOSPITAL MEDICAL SCHOOL

A reception will be held at University College Hospital Medical School on Tuesday, October 4. At 3.15 p.m. Sir StClair Thomson will deliver an address on "Lister at University College and Hospital."

Obituary

THOMAS MONCK BURN MURDOCH M B C M Ed F R C P Ed

Consulting Physician Royal Edinburgh Hospital for Sick Children

We regret to announce the death on September 13, after a brief illness of Thomas Monck Burn Murdoch Born in Edinburgh in 1854 the second son of John Burn-Murdoch, Advocate of Gartincaber Doune he was educated at Begbies and the Collegiate Schools He then passed to the University of Edinburgh to study medicine, where he was the pupil of Joseph Lister then Regius Professor of Clinical Surgery this association he often referred to with great pleasure and pride After graduating in 1877 Dr Burn Murdoch was appointed house surgeon in the Old Royal Infirmary to Patrick Heron Watson—later Sir Patrick—and subsequently held a second appointment under the same chief at Chalmers Hospital where he had charge of both medical and surgical patients an experience which proved invaluable to him in his future career as a general practitioner In 1879 Dr Burn Murdoch began practice in the Morningside district of Edinburgh but in the later years of his professional life he lived in Charlotte Square He early gained the confidence and esteem of the public and built up an extensive practice in the city, and his advice was also frequently sought as a consultant As a general practitioner he possessed a sound and thorough knowledge of his profession and keen powers of observation Many a young practitioner has owed his start in his profession and his subsequent success to his kindly help and advice

In 1883 Dr Burn Murdoch became extra physician to the Royal Edinburgh Hospital for Sick Children and physician in 1899 retiring in 1906 he thus gave twenty-three years of useful and loyal service to that institution While on the staff of the hospital he was lecturer in the diseases of children in the University His long association with this hospital stimulated his interest in the health and physical welfare of children and among his other appointments he held that of physician to the Ministers Daughters College for twenty four years and for twenty-eight years that of medical officer to Merchiston Castle School His methods were far ahead of his times and achieved outstanding success In 1898 he was a vice president of the Section of Diseases of Children at the Annual Meeting of the British Medical Association

On the outbreak of the war he gave up much of his time to war work In January 1916 unable to resist the clamant need for doctors he offered his services to his country and was asked to organize the Smithson War Hospital at Greenock where he held the rank of honorary major in the R A M C Later he took command of the Springburn-Woodside Central Hospital Glasgow with its auxiliary establishments and in 1918 became medical officer to Dalmeny House Hospital in which he remained to the end of the war If after the war he could have returned to Edinburgh as a consultant physician for children s diseases he would doubtless have fulfilled his personal desire On the death however of his elder brother in October, 1914, Dr Burn Murdoch had inherited the family property of Gartincaber and regarding it as his duty to accept the responsibilities of a resident laird he reluctantly gave up his professional work to the great regret of his many patients and professional friends

Spare of figure athletic in build and brought up with facilities for outdoor life he developed a fondness for games and always kept himself physically fit It is related that on one occasion he walked in one day from Edinburgh to Gartincaber a distance of forty seven miles thus repeating the remarkable feat previously performed by his father As a student he regularly played Rugby football, gaining his place in the University XV as a three-quarter back As a sprinter he won many events at athletic sports He was the first to introduce into Scotland the method of running between strings and he himself pegged out the lines when they were first employed in the University sports He took an active part in the efforts which were made to secure the athletic field at Craiglockhart The motto of his life was thoroughness, and in all that he attempted he never failed to keep this principle prominently before him

In 1880 he married his cousin Miss A R de Maule Urmston who as his devoted partner for fifty seven years untiringly assisted and encouraged him in his daily work She predeceased him by a few months

KENNETH HAROLD WATKINS M S F R C S

We announce with regret the death after a motor accident in Germany of Mr Kenneth Harold Watkins of Manchester at the age of 34 Kenneth Watkins was the son of Dr H E Watkins medical officer of health for Newton-in-Makerfield Lancashire He began his medical career at the Manchester University Medical School and continued it later at St Thomas s Hospital and in Freiburg He was awarded the Bradley Memorial Scholarship in clinical surgery while still a student in 1926 and a prize in clinical medicine in 1927 when he qualified M B Ch B with second class honours In the same year he took with honours the M B B S of London proceeding to the London degree of M S in 1931 a year after he had obtained the F R C S He had acted as a house surgeon and later as the assistant resident surgical officer of the Manchester Royal Infirmary as house-surgeon of the genito urinary department of the Salford Royal Hospital, and he had been registrar and medical officer of the Christie Hospital In 1932 he was attached to the Brady Urological Institute of the Johns Hopkins Hospital at Baltimore as a Rockefeller Fellow and in 1933 he was one of the Hunterian professors of surgery of the Royal College of Surgeons

On his return to Manchester after twelve months in the United States he specialized in urological surgery and became honorary surgeon for genito urinary diseases to the Manchester Northern Hospital and to the Christie Hospital holding at the same time the post of urological assistant at the Royal Infirmary Manchester In recent years he had contributed several articles to the special surgical and urological journals perhaps the last of them being a paper written in collaboration with Dr Fergus R Ferguson on paralysis of the bladder and associated neurological sequelae of spinal anaesthesia which appeared in the April issue of the *British Journal of Surgery* Kenneth Watkins was recognized as one of the most outstanding of the younger surgeons in Manchester His academic career had been a brilliant one and there seemed no doubt that the same degree of distinction would attend his specialized work in later life His tragic death at the early age of 34 will be deeply regretted by all his colleagues in Manchester and particularly by those who have been associated with him in his work at the Royal Infirmary A memorial service was held at the chapel of the Manchester Royal Infirmary on Tuesday

Mr J B Macalpine writes

The tragic news of the death of Kenneth Watkins comes as a bitter blow to Manchester medical and surgical circles, where Watkins was greatly esteemed and loved It must be long since medicine in this city has had to mourn one for whom the future seemed more bright—even though he was as yet scarcely beyond the threshold of success—or has lost a man who, while relatively young, will be more difficult to replace It was in 1930 that Watkins became my house-surgeon in the urological department of the Salford Royal Hospital, and it was here that I first learned his sterling qualities, his industry and helpfulness, his intelligent handling of his cases, his cheerful acquiescence when called upon to do things lying outside his scheduled duties From then onwards I had followed his career with interest, and perhaps some pride After leaving me he was successful in obtaining the Rockefeller Fellowship which gave him a year in the well-known urological service at the Johns Hopkins Hospital and there his innate energy and enthusiasm enabled him to extract the fullest possible value from the rich opportunities at his disposal During his stay in America he also visited other important clinics in that country Watkins then planned a trip to certain German urological departments, and passed approximately three months on the Continent It was during this visit that he met the lady whom he subsequently married Returning home, Watkins spent a year doing routine general surgery as resident surgical officer to the Manchester Royal Infirmary before finally devoting his whole time to urology On leaving the Infirmary he quickly obtained a number of hospital appointments At the Northern Hospital and at the hospital at Crumpsall he organized urological units, while at the Radium Institute, as registrar and medical officer, he was fortunate in being able to observe closely the irradiation of growths of the urinary tract Watkins selected his life's specialty early, and having done so he pursued his objective unswervingly with exemplary consistency and zest It seems hard that so much forethought and preparation should be wrecked just when they were maturing and becoming available to humanity Wherever he was known it was recognized that Watkins was a man marked out for advancement, and indeed, much of the hope of Manchester surgery lay with him He was universally admired, respected, and beloved He spoke ill of none and none spoke ill of him He made no enemies but many friends His tall lithe figure his cheery laugh, and his thoughtful, purposeful but happy mind will be sadly missed He leaves a widow and two small children, to whom we extend our sincere sympathy

"T M another colleague of his, writes

The profession in Manchester has been shocked by the untimely death of Kenneth Watkins He was a very gifted young surgeon and his skill in his special branch was unsurpassed Greatly as we admired him professionally however, it was as a man we valued him most I was fortunate, coming as a stranger to Manchester eighteen months ago, to be his successor No man could have had a truer friend The kindness he bestowed upon me is beyond description He was always ready to teach specialized urological procedures, and the debt I owe to him can never be expressed During my constant association with him I have never heard him say an ill word of anyone He was completely devoid of malice The very high esteem in which he was held by his colleagues and patients reciprocated in very small part the kindness and consideration he had for his fellows Endowed with all virtues his was a character of the very rarest quality

MR A J STORY

With the death on September 11 of Mr Arthur John Story the deaf have lost a friend and one of their most indefatigable workers The Blind and Deaf Act of 1893 made the education of deaf children compulsory, and the duty of providing suitable education was placed upon the local school boards In 1896 Mr Story became head master of the first residential school to be established under the new Act He continued in this post until 1923, and in 1925 became secretary of the National Institute for the Deaf He was a member of the Council of the Royal Society of Teachers from 1910 to 1925, and chairman of the National College of Teachers of the Deaf in 1910–11 and 1920–21, and served as lecturer and examiner on speech and language to the college He edited *The Teacher of the Deaf* for twenty-one years Since his retirement from the position of head master of the Blind and Deaf School at Stoke on-Trent the whole of his activities have been devoted to establishing the National Institute for the Deaf His one thought seemed to be his work He had no hobbies and no recreations After a day's routine at the Institute he would go home, sink into his chair, and continue in one form or another the work which was so dear to his heart For some years he made a habit of doing a crossword puzzle daily, and apart from this small diversion and reading the daily news his whole thought was given over to his work

As secretary—the first and only secretary so far—to the National Institute for the Deaf he was excellent Having played the dominant part in the formation and development of this institution he was complete master of all details and matters connected therewith, which covered a very wide field He will therefore be a very difficult man to follow, and it can be said that there is no one more knowledgable than he was in the matters with which the Institute has to deal

Under a careless and unkempt exterior there existed a gentle, generous, and soft hearted nature, always ready and willing to give help to anyone requiring and seeking it, not only in the form of advice in any difficulty, but also help of a more material nature A serious man with a keen sense of humour and a good knowledge of men, he was highly successful in the management of his committees—not always an easy task—and he had the respect, affection, and good will of all His loss will be deplored by all who knew him, for he made many friends and few, if any, enemies

THE LATE SIR ROBERT WOODS

Dr H C Drury writes Having known Sir Robert Woods intimately since his student days, through the whole of his professional life, I would like to add something to the bare announcement of his death He looked so strong and so young that it was a severe shock to read in our morning paper that he had left us

One remembers him as a student dissecting over and over again everything connected with the larynx This he made the specialty of his practice in after life, and with what wonderful success we in Ireland know Perhaps few if any surgeons had such a record as his in the removal of the entire larynx for malignant disease Not content with operation, he trained his patients afterwards so that they could live for years in comfort with a certain intelligible voice Skill and thoroughness were the outstanding characteristics of his work, leaving nothing to chance His amazing vitality and conscientiousness enabled him to get through an enormous amount of work His fame increased the number of his patients, so that hospital kept him, on his dispensary days, steadily at work there from 10 a m till after 1 o clock, for he gave to the poor just

as great patience and care as he gave to the more well-to do He was so skilful in his workshop that he made many adaptations of his instruments and appliances His house was a charm everything in it was a delight to one with any appreciation of art As a host he was just Robert Woods—no side, a hearty cheerful welcome and the best of everything

Dr JOHN CORCORAN of Worcester Park Surrey died on August 26 following an operation in a London nursing home John Corcoran was the youngest son of Mr Patrick Corcoran of Ballinadee Bandon Co Cork He qualified L R C P, L R C S Ed L R F P S Glas in 1914 through the old Queen's College Cork—now a constituent college of the National University of Ireland—and the Edinburgh Medical School He first practised in Ireland and was house surgeon at the Mercy Hospital Cork In 1916 he joined the Royal Army Medical Corps with which he served in Ireland and India After the war he entered into practice in Sutton Surrey and also held several hospital appointments in London As the senior member of a partnership in one of the most populous and rapidly growing residential areas of outer London he brought to his professional work skill, experience and the qualities of earnestness and enthusiasm He loved his work for its own sake and his thorough and painstaking methods inspired confidence in his patients and respect from his colleagues In addition to the exacting duties of his general practice he acted as honorary anaesthetist and physician to St Anthony's Hospital Cheam Dr Corcoran upheld the highest traditions of the profession and his characteristic Irish *bonhomie* and charm of manner made him a general favourite It is safe to say that there was no more popular doctor in the district where he lived and worked with such benefit to the community for close on twenty years His loss will be sincerely regretted by his colleagues and particularly by those associated with the work of the Surrey Panel Committee of which he was a member Though professional interests dominated his life he was a keen sportsman and was particularly devoted to shooting and golf in such intervals of leisure as the exigencies of a strenuous working career permitted He had been a member of the British Medical Association since 1923 and he took an active part in the London Irish Medical Golf Society

The following well known foreign medical men have recently died Dr DOMENICO TADDEI professor of clinical surgery in the University of Florence author of textbooks on surgical diagnosis and pathology and editor of *La Clinica Chirurgica* and co editor of *Rassegna internazionale de clinica e terapia* Professor ALFRED LUGER an eminent physician of Vienna aged 58 and Lieutenant-General CARLO GUALDI of Naples formerly inspector of health for Southern Italy, aged 76

LONDON HOSPITALS AND AIR RAIDS

In June the Ministry of Health took over from the Home Office the hospital side of air raid precautions The Ministry has accordingly assumed the responsibility and in consultation with the London County Council and the voluntary hospitals made arrangements for organizing all kinds of hospital accommodation in London (including casualty clearing as well as base hospitals) which might be required for the treatment of civilian air raid casualties To assist in this work the Council has temporarily seconded for work at the Ministry one of its senior medical officers who is acting as hospital officer for the London district and working out detailed plans for the various hospitals In addition the Council has purchased on behalf of the Ministry a large amount of extra equipment and is co operating in every possible way subject to the general advice and direction of the Ministry

Medical News

The Chairman of Council Sir Kaye Le Fleming and Dr J W Bone have been returned unopposed as Direct Representatives of the profession in England and Wales upon the General Medical Council for a period of five years from November 1 1938 Sir Kaye Le Fleming and Dr Bone were selected by the Divisions in England and Wales to receive the support of the British Medical Association

The annual dinner of the Middlesex Hospital Medical School will take place at the Savoy Hotel on Friday September 30 at 7 30 p m with Dr G E S Ward in the chair

The annual dinner of past and present students of University College Hospital Medical School will be held in the library of the medical school University Street W C 1 on Friday October 7 at 7 30 p m with Dr F Clayton in the chair Applications for tickets (price 12s 6d exclusive of wine) accompanied by remittance should be made not later than October 6 to the dinner secretary

The annual dinner of University College Hospital Medical Women's Association will be held at the Langham Hotel Portland Place W 1 on Friday October 7 at 8 p m with the president Miss Gwendoline Smith in the chair Tickets are priced 10s 6d each (exclusive of wine) and members intending to be present should notify the secretary Dr A. L Winner 41 Devonshire Street W 1 not later than October 4

The West London Medico-Chirurgical Society will hold a dinner meeting at the De Vere Hotel Kensington W 9 on Friday October 7 at 7 45 p m The presidential address will be given by Dr Maurice Shaw on Heredity and Medicine at 8 30 p m

The eighth annual dinner of the British College of Obstetricians and Gynaecologists will be held at Claridge's Brook Street W 1 on Friday October 28 at 8 p m The official guests will be Dr Robert Hutchison and Mr Hugh Lett

The annual prize distribution of Charing Cross Hospital Medical School will be held at the hospital on Friday September 30 at 4 p m

The sixth Congress of the Italian Society of Plastic and Aesthetic Surgery will be held in the Policlinico Umberto I Rome next October when the chief subject for discussion will be facial trauma in war surgery Further information can be obtained from Professor Riccardo Galeazzi Via Sistina 4 Rome

The Congress of the German Orthopaedic Society will be held at Giessen from October 3 to 5 under the presidency of Professor Putzler

The sixty second international postgraduate training course of the Vienna Medical Faculty will be held from September 26 to October 8 and the full programme can be obtained from the office of the Vienna Medical Faculty Allgem Krankenhaus Alserstrasse 4 Vienna IX.

A meeting of the Royal Sanitary Institute arranged in conjunction with the Welsh Branch of the Society of Medical Officers of Health and the North Wales Centre of the Sanitary Inspectors Association will be held at the Guildhall Wrexham on Friday September 30 at 5 p.m when discussions will take place on Physical Fitness in Relation to Public Health to be opened by Dr T P Edwards and The Food and Drugs Act, 1938 to be opened by Mr D Thomas Dr Charles Porter will be in the chair

The University of Glasgow announce the opening of the Gardiner Institute of Medicine by Lady Gardiner on Wednesday September 28 at 4 30 p m. when the Right Hon John Colville will give an address

The King has appointed Dr George Leslie Milburn to be a Member of the Executive Council of the Presidency of Saint Christopher and Nevis

No 36

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended September 10, 1938

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for (a) England and Wales (London included) (b) London (administrative county) (c) Scotland (d) Eire (e) Northern Ireland Median values for the last 9 years for (a) and (b)

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for (a) The 126 great towns (124 in 1937) in England and Wales (including London) (b) London (administrative county) (c) The 16 principal towns in Scotland (d) The 13 principal towns in Eire (e) The 10 principal towns in Northern Ireland

A dash — denotes no cases, a blank space denotes disease not notifiable or no return available

Disease	1938					1937 (Corresponding Week)					1929-37 (Median Value Corresponding Weeks)	
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)
Cerebrospinal fever	17	3	6	2	—	15	2	7		—		
Deaths		1	—				2	1				
Diphtheria	1,184	146	165	59	17	1,241	178	168	49	34	941	176
Deaths	18	4	4	2	—	27	3	4	1	—		
Dysentery	33	6	33		—	54	7	20		—		
Deaths				—	—				—	—		
Encephalitis lethargica, acute	5	—	—		—	3	—	1		—		
Deaths		—					1		-			
Enteric (typhoid and paratyphoid) fever	36	2	5	9	1	67	9	7	8	4	79	
Deaths	4	1	—	—	—	1	—	—	—	—		
Erysipelas			56	4	5			55	2	5		
Deaths		—					—					
Infective enteritis or diarrhoea under 2 years												
Deaths	48	9	7	7	3	67	18	20	12	8		
Measles			37		4			17		2		
Deaths	5	—	—	—	—	2	—	—	—	—		
Ophthalmia neonatorum	99	9	20		1	105	15	38		2		
Deaths												
Pneumonia influenzal†	307	26	10		4	375	32	1	1	1	411	32
Deaths (from influenza)	9	2	1	1	—	9	2	1	2	—		
Pneumonia, primary			121	6				109	5			
Deaths		11		—	6		11		10	2		
Polio-encephalitis, acute	3	—				2	—					
Deaths		—					—					
Poliomyelitis, acute	73	6	13		1	60	18	1		—		
Deaths		—					1					
Puerperal fever	2*	2	11	5	1	41	6	12	1	—		
Deaths		—					—					
Puerperal pyrexia	139	14	20		2	139	15	24		—		
Deaths												
Relapsing fever	—	—			—	—	—	—		—		
Deaths												
Scarlet fever	1 625	121	372	65	91	1 668	146	344	79	36	1,666	237
Deaths	7	2	3	—	—	4	1	4	—	—		
Small pox	—	—	—		—	—	—	—		—		
Deaths	—	—		—	—	—	—		—	—		
Typhus fever	—	—	—	—	—	—	—	—	—	—		
Deaths				—	—				—	—		
Whooping cough			232		15		3	84		5		
Deaths	8	1	3	—	—	16		8	2	—		
Deaths (0-1 year)	263	43	146	38	9	277	42	60	27	13		
Infant mortality rate (per 1 000 live births)	43	35				47	35					
Deaths (excluding stillbirths)	3 923	745	597	166	133	3,602	674	515	164	113		
Annual death rate (per 1 000 persons living)	9 6	9 5	12 2	11 2	11 8	8 9	8 5	10 5	11 2	10 0		
Live births	6 261	1 104	883	403	227	6,353	1,168	892	391	231		
Annual rate per 1 000 persons living	15 4	14 1	18 0	27 3	20 1	15 7	14 7	18 2	26 7	20 5		
Stillbirths	247	38				269	39					
Rate per 1 000 total births (including stillborn)	38	33				41	32					

* After October 1 1937 puerperal fever was made notifiable only in the administrative county of London

† Includes primary form in figures for England and Wales, London (administrative county) and Northern Ireland

EPIDEMIOLOGICAL NOTES*

Acute Poliomyelitis

In England and Wales 73 cases of acute poliomyelitis were notified during the week under review the same as in the previous week while for London the figure of 6 showed an increase of one over last week Notifications of two or more cases were received from Braintree and Bocking (urban) 2, Church 2 East Elloe 2 Ipswich 2 Kenilworth 2 Lewisham 2 Middlesbrough 3 Reading 3 Rochdale 2 Shrewsbury 2, Swansea 2 The occurrence of 3 cases (of which one patient has died) at Middlesbrough where no cases have hitherto been notified in the present year indicates a further extension of acute poliomyelitis in the North At the time of going to press 2 further cases have been reported in this town Notifications in Scotland dropped from 14 to 13 during the week under review the chief centres being Edinburgh 4 (3) Ayr 2 (0) Glasgow 2 (3) During the week ended August 27 319 cases were notified in Germany compared with 165 cases in the previous week the districts chiefly affected were Baden 17 Bavaria 18 Cologne 89 Frankfort 13 Saxony 19 Wiesbaden 13 Wurtemburg 55 During the same week 34 cases were notified in Austria of which 11 were in Vienna During the week ended September 3 notifications in Holland rose from 54 to 67 of which 37 were in the province of South Holland (30 in the previous week) Of the 37 cases 7 occurred in the commune of Alphen and 6 each in Rotterdam and The Hague In Sweden during the first fortnight of August notifications rose from 36 to 101 (including 11 non paralytic cases) the districts chiefly affected were province of Jamtlands 49 Kristianstads Province 16

Typhoid Fever

Of the 36 cases of typhoid fever notified in England and Wales during the week in only four centres was more than one case notified—London 2 Barking 2 Farnworth 2 Southampton 2 the London cases were reported from Paddington and Hampstead (in the latter case the disease was contracted in the South of France)

Diphtheria and Scarlet Fever

There was a slight increase in the notifications of diphtheria in England and Wales and in London during the week under review—1 184 (1 130) and 146 (127) respectively The chief centres in which increases were noted are Gateshead 14 (5) Easington 18 (8) Leyton 10 (4) Walthamstow (Essex) 6 (0) Bristol 12 (7) Bolton 12 (6) Liverpool 58 (52) Leicester 15 (5) Lambeth 13 (7) Lewisham 18 (7) St Pancras 10 (3) Norwich 11 (3) Esher 5 (0) Coventry 10 (3) Leeds 13 (5) Sheffield 29 (14) Swansea 5 (2) Deaths from diphtheria fell in the 126 Great Towns from 19 to 18 during the week under review and in London from 7 to 4 A considerable rise was noted in the incidence of scarlet fever in England and Wales during the week the numbers notified being 1 625 compared with 1 391 in the previous week in London a corresponding increase was recorded—121 (97) The chief increases were in Slough 5 (0) Stockport 16 (8) Gateshead 6 (2) Ilford 9 (2) Gillingham (Kent) 6 (0) Liverpool 47 (28) Bolton 6 (0) Battersea 6 (1) Bethnal Green 5 (0) Hampstead 5 (0) Islington 11 (7) Ealing 7 (3) Tynemouth 7 (0) Croydon 6 (2) Birmingham 40 (32) Kingston upon Hull 20 (10) Leeds 32 (18) City of York 8 (4) There were 7 (1) deaths in the 126 Great Towns during the week—2 in London and 1 each in Eastbourne Portsmouth Barrow in Furness Nottingham and Stoke on Trent

Measles and Whooping cough

Five deaths from measles were recorded in the 126 Great Towns of England and Wales during the week—2 in Leeds and 1 each in Bradford Kingston upon Hull Birmingham

* Except where otherwise mentioned figures in parentheses refer to the week preceding the one under review

The average daily admissions to the LCC fever hospitals were 2 (3) In the metropolitan boroughs in which measles is notifiable the numbers rose in five—Bermondsey 4 (0) Fulham 3 (0) Hampstead 3 (0) St Pancras 6 (2) and Stepney 2 (1)—and were *nil* in Battersea and Greenwich In Scotland notifications rose from 21 to 37 during the week under review Increases were noted in Glasgow 12 (1) Dundee 6 (1) Edinburgh 4 (0) Dunfermline 3 (1) In the 126 Great Towns of England and Wales 8 (6) deaths from whooping-cough were recorded 1 each in London Kingston upon Hull Liverpool Salford Stockton on Tees Warrington Gloucester and Poole In Scotland 232 (171) cases of whooping cough were notified of which 196 (141) occurred in Glasgow and 23 (15) in Paisley and 3 deaths—2 (2) in Glasgow and 1 (0) in Paisley

Cholera

During the week ended September 10 the number of cases of cholera in Shanghai fell from 421 to 245 (120 deaths) and in Hong Kong from 19 to 12 (10 deaths) In British India the incidence of cholera declined in the Central Provinces during the week—5 486 cases and 2 361 deaths compared with 8 884 cases and 3 566 deaths in the previous week there were 452 cases and 213 deaths in Bombay (Presidency) 219 cases and 77 deaths in Madras (Presidency) 215 cases and 100 deaths in the United Provinces 32 cases and 19 deaths in the North West Frontier Province

Births and Deaths for the Second Quarter

The Registrar General's return of births deaths and marriages in the thirteen weeks ended July 2 records that 164 257 live births were registered in the second quarter of this year which is 480 more than the number registered in the second quarter of 1937 and corresponds to an annual rate of 16 1 per thousand of the estimated mid year population for 1937 The number now reported is more than 6 000 above the average figure (157 901) for the second quarter during the preceding five years Of the total 7 256 were illegitimate Male births numbered 84 166 and female births 80 091 giving a proportion of 1 051 males to 1 000 females The stillbirths registered during the quarter were 6 632—13 more than the number recorded in the second quarter of last year and corresponding to an annual rate of 39 per cent. of the total births registered

Deaths (excluding stillbirths) numbered 119 177 and were 18 749 fewer than in the preceding quarter but 652 more than in the corresponding quarter of 1937 The total deaths correspond to an annual rate of 11 7 per 1 000 of the population The mortality of infants under one year of age was equal to 48 per thousand registered live births being 9 per 1 000 below the average of the ten preceding second quarters

The highest death rates from certain epidemic diseases in the 126 Great Towns (Table V) during the quarter were as follows

From *measles* 0 57 in Barnsley 0 53 in West Hartlepool 0 41 in Bury 0 28 in Gateshead 0 26 in Kingston upon Hull and 0 24 in Gillingham from *whooping cough* 0 29 in Keighley 0 23 in Great Yarmouth 0 16 in Birmingham and 0 14 in Gateshead and in Salford from *diphtheria* 0 63 in South Shields 0 52 in Newcastle under Lyme 0 38 in Great Yarmouth 0 37 in Keighley and 0 35 in Wigan from *influenza* 0 75 in West Bromwich 0 60 in Dudley 0 57 in Hastings 0 39 in Lincoln and 0 38 in Walsall

The highest death rates per 1 000 live births from *diarrhoea and enteritis* among children under two years of age were 18 7 in Brighton 16 7 in Sunderland 13 7 in Birkenhead 13 6 in Enfield 13 3 in Newport (Mon) and 13 0 in Northampton

CORRIGENDUM

In the issue of July 2 the figures given for cholera at Shanghai and Hong Kong during the week ended June 18 were repeated erroneously under the heading "Plague", there were no cases of plague in these towns during the week in question

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to THE EDITOR BRITISH MEDICAL JOURNAL B M A HOUSE TAVISTOCK SQUARE W C 1

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone, unless the contrary be stated Correspondents who wish notice to be taken of their communications should authenticate them with their names, not necessarily for publication

Authors desiring REPRINTS of their articles published in the *British Medical Journal* must communicate with the Secretary, B M A House Tavistock Square W C 1, on receipt of proofs Authors overseas should indicate on MSS if reprints are required, as proofs are not sent abroad

All communications with reference to ADVERTISEMENTS should be addressed to the Advertisement Manager Orders for copies of the *Journal* and communications with reference to subscriptions should be addressed to the Secretary, B M A House, Tavistock Square W C 1

The TELEPHONE NUMBER of the British Medical Association and the *British Medical Journal* is EUSTON 2111

The TELEGRAPHIC ADDRESSES are

EDITOR OF THE *BRITISH MEDICAL JOURNAL* *Articulate Westcent London*

SECRETARY, *Medisecra Westcent London*

The address of the B M A Scottish Office is 7, Drumsheugh Gardens, Edinburgh (telegrams *Associate Edinburgh* telephone 24361 Edinburgh) and of the Office of the Cumann Docturi na h Eireann (I M A and B M A), 18 Kildare Street, Dublin (telegrams *Bacillus Dublin* telephone 62550 Dublin)

QUERIES AND ANSWERS

Cleaning Slides for Blood Films

Dr A C EVANS (Denbigh), in reply to J S M' (*Journal* August 27 p 480) writes Rub both sides and the ends of the slides well with monkey brand cake slightly wetted with water wash under tap water and dry with a clean non-starched smooth towel Then wash with alcohol and again dry flame both sides of the slides well in a Bunsen flame in order to burn away any grease After cleaning, handle the slide by the side edges and avoid touching the surfaces or ends The washing with alcohol can often be omitted Cleaning with monkey brand' is not recommended if the slides are subsequently to be used for the examination of sputa etc, for tubercle bacilli it tends to scratch the slides so that with reflected light artefacts appear

DR A C COLES (Bournemouth) also writes I have found the following by far the best method for cleaning new or used slides In the case of used slides it is necessary to remove the balsam or immersion oil with methylated spirit Then prepare a paste of pulv cretae prep whiting, and water in a clean ointment pot, rub a little of this over the surfaces of the slide with an old shaving or tooth brush, or a piece of cloth but not with the finger Wash in water and polish with an absolutely clean cloth In most cases this is all that is necessary but if one is going to prepare the slides for staining flagella—or in fact for any aqueous or saline material in which there is little or no albumin—it is advisable to smear the surface of the slides with either a piece of soap or the cut surface of a raw potato (as motorists prepare their wind screens), and then polish with a clean cloth One can easily test the result by placing a drop of water on the slide and spreading this out with the end of another slide or a needle If the water spreads evenly and remains so the slide has been cleaned satisfactorily It should be noted, however, that it is quite impossible to attain this result in a small proportion of slides probably owing to some peculiarity in the glass itself I used to clean new cover glasses by dropping them one by one into sulphuric or nitric acid or a mixture of sulphuric acid and potassium bichromate but now find that all that is necessary is to keep them in a wide mouthed bottle of methylated spirit In a paper on the staining and microscopical demonstration of filterable viruses in the *Journal of the Royal Microscopical Society* (1935 55 249) I have fully described the methods of cleaning slides etc and an easy method of packing films for postage which displaces that abomination—the racked microscopical slide box

Income Tax

Sale of General Practice—Book Debts

"A's practice consisted up to December 31, 1937, of several public appointments eye specialist work, and a general practice The last-mentioned was sold as from that date and the outstanding book debts were sold with it, say a nominal amount of £x debts for £y in cash A's professional accounts were made on a cash basis up to December 31 yearly, but for convenience and thinking it more correct he proposes that the first account for the reduced practice shall be made up as for the year to April 5 1939, ignoring the quarter to April 5, 1938 The inspector of taxes claims to include in the account for the year to December 31, 1937, the £x received on sale of the practice and requires an account for the subsequent period which shall include the quarter to April 5, 1938

*** In our view there is no liability on "A" to bring in the £x as income of the year 1937, or indeed of any other period In dealing with questions arising on cash accounts it is important to remember that in the early years of a practice the Revenue will not accept the cash basis, holding quite correctly that it is only after three or four years that the amount of the cash receipts is a fair index of the gross income of the practice They therefore claim in such circumstances to bring in any increase in the value of the book debts to raise the cash receipts to the correct amount The obvious corollary is that in the final year of a practice the cash receipts are an adequate measure of the gross income and if the value of the book debts at the end of proprietorship be added, the result must be to inflate the gross income unduly Or looking at the same point from a different angle, if the realized value of the book debts at December 31 1937 be included as professional receipts then the corresponding value of the debts as at December 31 1936, must be deducted If the inspector of taxes adheres to his contention our correspondent would be well advised to place the facts before the Secretary, the Board of Inland Revenue Somerset House W C 2 and ask for an official ruling on the matter With regard to the subsequent account, it really seems to make little difference whether an account is prepared for the year to December 31 1938, or for the fifteen months to March 31 1939—in which case the assessment would be on one fifth of the result for the quarter to April 5, 1938 and on four fifths for the year to April 5, 1939 But an account covering the quarter to March 31, 1937, will be necessary either as a separate account or as part of an account for a longer period "A" should of course see that the assessment for the year to April 5, 1938, is reduced by excluding the "general' practice as for the last quarter of that year

LETTERS, NOTES, ETC.

Uterine Swabs in Puerperal Pyrexia

Dr C S THOMSON jun, writes from the Royal Maternity Hospital, Belfast It was surprising to read in Dr R M Fry's article in the *Journal* of August 13, page 342, that preliminary cervical and intra uterine swabs are unnecessary in the diagnosis of puerperal pyrexia The finding of streptococci in a vaginal swab will surely necessitate further uterine ones, both for purposes of prognosis and for medico legal protection Again without uterine swabs, how may we be sure that *B coli* staphylococci, etc are not being found merely as vaginal commensals? In view of the extra time danger and expense of a second bacteriological investigation one must question this advocacy of the preliminary vaginal swab

Effect of Oestrogens on Ovum

Dr LOUISE E FRASER (Aberdeen) writes It is comfortably assumed by most people that a spermatozoon which escapes a spermaticide will produce a healthy foetus on uniting with a healthy ovum Whether this assumption is correct has not I think, been definitely proved Within the next two years however we are likely to have an easily administered abortifacient of some form of oestrogen which will act directly on the ovum What is likely to be the result of a sub-lethal dose on a foetus? It will surely be interesting to investigate this point on rabbits and rats, and to compare the nutrition of mature or premature but viable young from treated animals with the young of untreated animals

KEY TO CURRENT MEDICAL LITERATURE

GENERAL JOURNALS

Deutsche Medizinische Wochenschrift

Berlin vol 64 July 8 1938

Relation of Endocrine and Vegetative Systems to Daily Cycle—A Jores
Therapeutic Significance of Human Rhythm—J M Jerusalem
Clinical Significance of Human Rhythm—M Arbeiter
Origin of Rhythm from Human Standpoint—A Jores
Rhythm of Life and Psychotherapy—J H Schultz
Plant Studies II Contribution to Problem of Keeping Soil Healthy with Plants—G Madaus
Experiences of Lumbar Anaesthesia in Gynaecology and Obstetrics with Dry Dekanone (Bayer)—R Heimann
Significance of Ectopic Decidua in Resorption and Maintenance of Pregnancy—H Wilder
Endocrine-determined Constitutional Tendency to Haemorrhage in Women and its Treatment—J v Kup
Secretion of Gastric Juice and Number of Erythrocytes in Hyperthyroidism—C Reiner and F Rényi Vamos
"Cracker" Bread in Daily Menu and in Campaign against Disease—G v Wendt
High Court Medico-legal Judgments in 1937—P Cohn and Trembur
New Land Tax Decree—J Wolf
Development of Cancer Mortality in Ten Large German Towns—H Haubold
Early Pulmonary Tuberculosis in Adults—H Assmann

Indian Medical Gazette

Calcutta vol 73 June 1938

Treatment of Schizophrenia by Cardiazol—J E Dhunjibhoy
Treatment of Ascariasis—P A Mapstone and A K Mukerji
Clinical Investigation on Value of Proseptasine as Prophylactic in Puerperal Infection—S N Hayes and A. Sami
Necessity of Teaching the Frequency of Rheumatic Infection in Young Indians—H Stott
Post anaphenamine Blood Dyscrasias—R V Rao and R B Tampi
Simple Method of obtaining Hyperextension for Application of Plaster of Paris Jacket in Fracture of Thoracic and Lumbar Vertebrae—F R W Khan and I Basu
Premedication in Sodium Evipan Anaesthesia—E S Chellappa
Control of *Stegomyia fasciata* Mosquitos by Mosquito-proof Metal Cup for Drinking water Receptacles—F D Bana
Berhella studeri Natural Tapeworm Parasite of Monkeys in Hindu Child—S C Roy
Hydrogen-ion Concentration of Cholera Stools—C L Pancha D N Chatterjee and K S Malik
Unusual Case of Abortion treated by Curetting—D R Lewis
Simple Fractures and Dislocations of Astragalus—M G Kini and P Kesavasami
Unusual Abscess—C L Damania
Eroot Problem and the Practitioner—B Mukerji

Treatment of Schizophrenia—Forty two cases of schizophrenia were treated with cardiazol with encouraging results The author finds that the treatment is free from dangerous complications and does not require such constant medical and nursing attention as in the case of insulin shock therapy

Proseptasine in Puerperal Infections—Hayes and Sami record a reduction of approximately 5 per cent in their maternal morbidity rate following the routine administration of proseptasine to all emergency maternity cases The medical and nursing staffs were impressed with the smooth clinical course run by many abnormal cases in which experience led them to expect complications

Journal of the American Medical Association

Chicago vol 111 July 9 1938

Some Unsolved Problems of Tuberculosis—J Miller
Concentrations of Chloride Sodium and Potassium in Urine and Blood—H Cutler M Power and R Wilder
Fatal Toxic Reactions associated with Tribromethanol Anaesthesia—H Beecher
Concentrated Human Blood Serum as Diuretic in Treatment of Nephrosis—C Aldrich J Stokes W Killingsworth and A McGuinness
Factors in Neo-natal Deaths—H Bundesen W Fishbein O Dahms E Potter and W Polke
Significance of Positive Kline Exclusion Test—R Myers and C Perry
Pharmacology and Therapeutics of Vitamin A—S Clausen

Klinische Wochenschrift

Berlin vol 17 July 9 1938

Fundamental Problems of Pulmonary Circulation—R Wagner
Effect of Ephedrine and Allied Substances on Heart—M Kiese R Garan and A Krautwald
Decreased Oxygen Pressure in Kidneys as Cause of Reversible Uraemic Acidosis—W Kempner
Movement of Coronary Vessels in Man—F Kuhlmann
Seasonal Variations of Ascorbic Acid in Blood Serum—E Trier
Influence of Sympatol on Carbohydrate and Gaseous Metabolism in Man—C Brentano and E Pflug
Follicular Hormone as Cardiovascular Stimulant—I v Zardaby
Diagnostic Value of Quantitative Determination of Tryptophan in Cerebrospinal Fluid—K Mezey and M Kraus
Vitamin E Its Effect on Lactation and Growth—G Gedke and C Bennholdt Thomsen.

Tryptophan in Cerebrospinal Fluid—A positive tryptophan test is not specific either for tuberculous meningitis or for neurosyphilis The quantitative estimation of tryptophan is however of diagnostic value in neurosyphilis in so far as it indicates the extent of the destructive process The test can be carried out with small quantities of cerebrospinal fluid

Vitamin E—The addition of vitamin E to the normal diet seems to have no effect on either lactation or growth of the young

Lancet

London vol 2 July 9 1938

Seven Gifts—R Hutchison
Diabetes Mellitus Survey of Changes in Treatment during Last Fifteen Years II—G Graham
Modern Classified Treatment of Varicose Veins—P Clarkson
Irritable Bladder of Chronic Cervicitis—J Young and A J Cunningham
Antibacterial Action *in vitro* of 2-*p*-aminobenzenesulphonamidopyridine on Pneumococci and Streptococci—A Fleming
Thrombosis of Central Vein of Retina successfully treated with Heparin—C G Bostrom and L Widham-Olsson
Sulphonamides in Malaria—R Pakenham Walsh and A T Rennie
Effect of Testosterone Propionate on Blood Pressure—R Greene

Medizinische Klinik

Berlin vol 34 July 8 1938

Endocrine Allergy—W Berger
Treatment of Adnexal Inflammation—F C Geller
Influence of Operative Interferences on Pregnancy—Streckenbach
Injuries following Intragluteal Injections—W Birkenfeld
Contribution to Lumbar Anaesthesia—O Koenen
Vitamin C Therapy of Haemorrhagic Diatheses—H Winkelmann
Raw Fruit Juice Cures—E Heun
Diseases of Skin—H Wilde
New Therapeutic Procedures in Psychiatry—M Mikorey

Medizinische Welt

Berlin vol 12 July 9 1938

Causes Treatment and Prophylaxis of Difficulties connected with Delivery of Shoulders in Head Presentations—C Hotermann
Dosage of Light and *X* Rays—P W Schmidt.
Angina Pectoris and Coronary Infarction after Thoracic Trauma—W Schrade
Modern Suture Therapy and its Indications—R Katz.
Vitamin C Treatment of Erythema Multiforme and its Differentiation from Human Foot and-mouth Disease—D Hagermann
Important Advance in Treatment of Human and Animal Helminthic Diseases—A Hagena

Erythema Multiforme—When this condition is associated with lesions of the buccal mucous membrane it is apt to be mistaken for human foot and mouth disease especially when the patient comes from an infected area If the plantar aspect of the metatarsal in a guinea pig is inoculated with the contents of a suspected blister foot and mouth disease develops within

twenty four to forty eight hours in the latter condition the test is of course negative in erythema multiforme The administration of large doses of *l* ascorbic acid for three days —200 mg intravenously and 100 mg intramuscularly daily— followed for three days by 6 grains of aspirin thrice daily, produced a rapid cure in five of Hagemann's cases of erythema multiforme

Munchener Medizinische Wochenschrift

Munich vol 85 July 8 1938

Evaluation of Right and Left Deviation Type in Electrocardiogram —H v Pein P Papageorgiou and L Tolken
Dangers of Intravenous Cholecystography —W Lutz and H Seyfried
Shorter Management of Third Stage of Labour which reduces Loss of Blood — G Lehmann
Hormone Therapy —F Bernhart
Thallium Poisoning —G Brumm
Hernias of Pouch of Douglas —M Kohler
Bismuth Treatment of Sore Throats —F Imhof
Clinical Results with Alkaloid Ergometrin —K Schmidt
Oral Administration of Serum in Treatment of Peptic Ulcer —R Speck
Athermic Action of Short Waves —E Hasche
Compression Bandages —D S Romich
Estimation of Value of Diphtheria Immunization —K Hofmeier
Practical Hints on Prescription Writing —K Koch

Nature

London vol 141 July 9 1938

Vaccination of Cattle against Foot and mouth Disease
Heat labile Isomer of Vitamin A in Cod liver Oils —D C Garratt
Mechanism of Fructose Resorption in Intestine and Kidney —H Kalckar
Nicotinic Acid and Fermentation of Dextrose by Colon typhoid Group of Bacteria —I J Kligler and N Grosowitch
Phytohormones and Seed Disinfection —N H Grace

New England Journal of Medicine

Boston vol 219 July 7 1938

Massive Haemorrhage from Peptic Ulcer —I R Jankelson and M S Segal
*Granulocytopenia associated with Sulphanilamide Therapy —J G Allen and C L Short
Reappraisal of Vitamin D Milks —J W M Bunker and R S Harris

Granulocytopenia —A case of severe granulocytopenia following the administration of sulphanilamide in a girl of 18 is reported The drug was given in moderate doses for a presumed gonococcal infection Spontaneous recovery occurred This is the eighth case recorded in the literature These cases are probably due to idiosyncrasy rather than to cumulative toxicity The importance of frequent blood examinations during the administration of sulphanilamide is stressed

Nordisk Medicinsk Tidskrift

Stockholm vol 16 July 9 1938

Silicosis in Norwegian Steel Foundry —K Evang
*Outbreak of Paratyphoid Fever in Hospital —N Faxen
Study Tour of Germany in Autumn 1937 —G Hagblom

Paratyphoid —This outbreak of paratyphoid B in a maternity hospital in Gothenburg was traced to one of the mothers, who was found to be a chronic carrier There were altogether thirty nine cases only one of which (meningitis in a baby) proved fatal

Policlinico

Rome vol 45 June 27 1938 (Sez Prat)

Clinical Value of Certain Serodiagnostic Reactions for Syphilis —C D Ignazio and C Calabrese
Tabes in Congenital Syphilis —V Challiol

Rome vol 45 July 4 1938 (Sez Prat)

* Electro shock —U Cerletti and L Bini
Familial Poisoning by Mercurial Vapour —G Ricci

Electro shock —This is a summary of a preliminary report made to a medical society concerning good results from treatment of schizophrenia The passage of an alternating current through the head for about 0 6 second induced loss of consciousness and epileptiform attacks Preliminary tests had been made in dogs The advantages to the patient (and the diminished calls on the treating personnel) with this treatment as compared with "shock treatment" by insulin or cardiazol are described

Presse Medicale

Paris vol 46 July 6 1938

*Non pulmonary Form of Haemoptysis Tracheal Haemorrhage —V Cordier and P L Mounier Kuhn
*Radial Palsy after Serum Therapy —C Angelesco A N Popovici and I Balutza

Tracheal Haemorrhage —The authors point out the importance of diagnosing this condition not so much from the point of view of treatment, which is on the whole somewhat unsatisfactory, but in order to avoid labelling and treating these cases as though they were tuberculous

Serum Palsy —The authors describe an unusual case (believed to be the fifth in the literature) of a man of 25 who sustained an open fracture of the right leg He was given anti tetanic serum and anti gas gangrene serum He subsequently developed a radial palsy of the left arm with marked wasting, but without pain or sensory disturbances He recovered in seven months after massage, active movements and strychnine injections

Paris vol 46 July 9 1938

Deficiency Osteopathies Development of Osteoses and Periostoses due to Chronic C Avitaminosis —G Mouriquand and M Dauvergne
Circulation of Blood in Suprarenals Its Presumed Mechanism Contribution to Study of Blood Reservoirs General and Therapeutic Inferences — M G Caussade
Syphilitic Chancres of Cervix accompanied by Enlarged Palpable Pelvi Glands —Cl Simon
Diagnosis of Pott's Disease by Tomography —L Lamy P Bourgeois and H Thiel
*Intracranio-spinal Migration of Bullet from Vault of Skull to Sacral Canal — A C d Abreu and A Saldanha
*Pulmonary Digraphy Radiographic Method for Observation of Organs in Motion applied to Study of Respiratory Movements —G Pollitzer
Treatment of Congenital Coxa Vara —F Pouzet

Migration of Bullet —The authors describe what is believed to be a unique case of a man who after several ineffectual attempts at suicide fired a revolver at point-blank range under his chin Not only did he not damage any important structures but he is now in much better health than he was before The bullet which had stopped short of the under surface of the left parietal bone, migrated in just over six weeks from its original site to a position in the spinal canal level with the first sacral vertebra A series of radiographs is included showing various stages in the bullet's journey

Digraphy —G Pollitzer describes an ingenious apparatus by means of which two views can be taken on the same film —for example showing the lungs in expiration and inspiration These may subsequently be viewed in such a way as to produce a cinematographic effect and reproduce the appearance of the respiratory movements

Schweizerische Medizinische Wochenschrift

Basle vol 68 July 9 1938

Pemphigus Problem considered Clinically —C Du Bois
Pathogenesis and Aetiology of Pemphigus —Lutz
Retrospective Observations in Eczematous Patients —Mischer
Cement Eczema —W Burckhardt
Folliculitis in Skin and Venereal Diseases —E Ramel and Sorba
Clinical Investigation of C Hypovitaminosis —J Damow
Haematological Variations due to Arsenobenzenes —C Mean

Science

New York vol 88 July 8 1938

Recent Contributions to Theory of Protoplasmic Structure—W Seifriz
New Coenzyme Reaction of Vitamin B (Thiamin)—H W Raybin
New Dietary Water Soluble Factor required by Chicks—E L R Stokstad and P D V Manning
Chemistry of Vitamin E I Structure and Synthesis of Alpha tocopherol—L I Smith H E Ungnade and W W Prichard
Chemistry of Vitamin E II Biological Assay of Various Synthetic Compounds—H M Evans G A Emerson and O H Emerson
Chemistry of Vitamin E III Formulation and Oxidation of Alpha tocopherol—O H Emerson

Ugeskrift for Laeger

Copenhagen vol 100 July 7 1938

Case of Hand Schuller-Christian Disease—E Warburg
Three Cases of Monocytic Leukaemia (Reticulo-endotheliosis)—P Plum and S Thomsen
Solitary Non-parasitic Liver Cysts—I Baumgarten
Heerfordt's Syndrome (Febris Uveo-parotidea) Manifestation of Boeck's Sarcoid—M Jersild
Examinations of Species of Children with Intact Teeth—K A Knudsen

Wiener Klinische Wochenschrift

Vienna vol 51 July 8 1938

Signs Symptoms and Therapy of Hyper and Hypo-thyrotoxicosis—V Jagic
Lowering of Gastric Hydrochloric Acid by Local Vasoconstriction—W Raab and V Klare
Biological Factors in Mud Baths—V Cimoca and N Munteanu
Diagnosis and Treatment of Thoracic Pain—J Meller and K Tschofen
Laws relating to Epidemics—L Hirszfeld
Small and Apparently Healthy-looking Tonsils which are Seat of Severe Focal Infection—K Kofler
Gestation and Upper Urinary Tract.—H Kamnitzer
Occurrence of Epithelial Inclusion Bodies in Female Urethral Epithelium and their Relation to Female Gonorrhoea—E Mühlbard and S N Skamnakis

Wiener Medizinische Wochenschrift

Vienna vol 88 July 11 1938

Remote Effects of Gastric Function in Human Organism under Physiological and Pathological Conditions—G Hoher
Blood Disease and the Eye—W Kreibig
Some Ideas on Treatment of Constipation—Seiffert
Plastic Operations on Ear Lobe—E Ettner
Acute Adrenal Insufficiency and its Treatment by Adrenal Extracts—J Horak
Gastric Ulcer from Viewpoint of Whole Human Body—A Jelenek

SPECIAL JOURNALS

† Acta Psychiatrica et Neurologica

Copenhagen vol 13 1938 Fasc 2

Bror Gadelius (Eng)—V Wretlind
Innervation of Intracranial Blood Vessels (Eng)—E Busch
Insulin Shock Treatment in Chronic Schizophrenic Psychoses (Ger)—H Froshaug and H Thomsted
Trigeminal Neuralgia and its Causes Particularly its Relation to Affections of Teeth and Jaw (Ger)—M Melchior
Seventh Scandinavian Congress of Psychiatry (Eng)

Insulin Treatment—The authors find insulin shock treatment in chronic schizophrenia of considerable value though not attaining the results obtained with fresh cases

Trigeminal Neuralgia—Melchior underlines the importance of symptomatic trigeminal neuralgia and the need for its differentiation from the idiopathic type Dental neuralgias may arise from the sites of teeth long extracted they do not always take a trigeminal distribution Once correctly diagnosed a satisfactory local treatment may be carried out

American Journal of Cancer

Lancaster Pa vol 33 July 1938

Carcinosarcoma—O Saphir and A Vass
Significance of Cell Type in Cervical Cancer—D G Morton
Unusual Occurrence of High Incidence of Spontaneous Mammary Tumours in Albany Strain of Rats—W R Bryan G H Klink jun and J M Wolfe
Two Spontaneous Uterine Tumours in Rabbit Hormonal Investigation—J T Witherspoon
Neoplasm Studies IV Clasmatosis in Melanoblast—C G Grand
Distribution of Lead in Cat after Intravenous Injection of Colloidal Lead *Preparation and Effect of Irradiation on this Distribution*—B L Crawford H L Stewart C F Willoughby and F L Smith
Anterior Pituitary Gland in Tumour bearing Rats—J Heiman
Culpability for Delay in Treatment of Cancer—G T Pack and J S Gallo

Delay in Treatment of Cancer—An analysis of 1 000 cases taken at random from the records of the Memorial Hospital New York and the Paterson General Hospital New Jersey was made to determine the responsibility for undue delay in the treatment of cancer A doctor was consulted sooner or later by 940 patients and was blamed for the delay in 350 of them Wrong treatment was given to 161 and no treatment and no advice to 104 the remaining errors were wrong advice tardy diagnosis and delayed treatment The patients who received neither advice nor treatment were least harmed since they usually went elsewhere The causes and results of delayed treatment are analysed in detail and it is concluded that campaigns to educate the public should be accompanied by efforts to train practitioners in early diagnosis

† Eng means that the article referred to is printed in English Fr in French Ger in German

American Journal of Diseases of Children

Chicago vol 55 June 1938

Hypochromic Anaemia of Infants Comparison of Efficacy of Ferric and Ferrous Iron—R Stephenson
Addition of Vegetable Soup and Strained Vegetables to Diet of Artificially Fed Infants—M W Poole B M Hamil T B Cooley and I G May
Insensible Perspiration in Children IV Influence of Salt—G J Ginandes and A Topper
Zinc Sulphate and Experimental Poliomyelitis Effect of Nasal Sprays after Intravenous Injection of Virus—J A Toomey and W S Tillett
Hypothyroidism as Cause of Disease of Hip—B Benjamin and P R Miller
Urinary Output of Vitamin C of Normal and of Sick Children with Laboratory Test for its Estimation—T S Bumbalo
One hour Two-dose Dextrose Tolerance Test.—M Cooperstock and J M Galloway
Growth Norms from Birth to Age of 5 Years Study of Children reared with Optimal Paediatric and Home Care—J G Peatman and R A Higgons
Evidences of Disturbed Prenatal and Neo-natal Growth in Bones of Infants aged 1 Month—L W Sontag
Protection Phenomenon in Measles Debyes Phenomenon or Auspharmomen—W R Phillips
Poliomyelitis Antiserum obtained from Horses II Neutralizing Effect against Various Strains of Virus—J A Toomey

Anaemia in Infants—The author finds that ferrous iron produces a maximum effect with much smaller doses than ferric iron and that it causes no gastro intestinal disturbance Supplementary iron appears to be needed up to the age of 2 years to maintain the haemoglobin at the normal level

American Journal of Ophthalmology

Missouri vol 21 July 1938

Agent of Endophthalmitis—J S Friedenwald and C W McKee
Effects of Sulphanilamide on Rabbits Eyes—V C Rambo
Irradiation of Eye—M Cutler H L Jaffe and G Grossman
Water Content and Solids of Human Lens—P W Sallit
Sulphanilamide in Gonorrhoeal Ophthalmia—L J and R Fernandez
Retinal Changes in Hypertensive Toxaemia of Pregnancy—J F Schultz and C S O Brien
Contact Lenses—F Nelson
Removal of Large Foreign Body from Vitreous—C Rainey
Cyanosis Retinae—T M Shapira
Stereoscopic Cards in Colour for Children—C Berens

Gonorrhoeal Ophthalmia—Sulphanilamide is very successful in treatment where the disease does not follow a genital

infection The authors used it with and without local treatment the results being the same in all cases, and recovery was complete in less than the usual time

Annales de Dermatologie et de Syphiligraphie

Paris vol 9 July 1938

Angiomata Evolutionary Tumours —A Tournine and Duperrat
Experimental Researches into Alteration of Cutaneous Reactivity in Course of Repeated Irritation of Skin —L Torok

Annales d'Oto-laryngologie

Paris vol 8 May 1938

Tomography in Cancer of Larynx —G Canuyt and Gunsett
Cholesteatoma of External Auditory Meatus and Pathogenesis of Reflex Tracheal Cough —van Caneghem
Study of Post rotatory Sensibility of Semicircular Canals by Method of Small Primary Stimulations using Buys Rylant Chair —A Allard
*Dysphagia caused by Abnormal Styloid Process —L Abramowicz
Delayed Subarachnoid Haemorrhage following Injury in Mastoid Region —Piquet and Decoulx
Treatment by Sulphanilamide Derivatives in Infections of Ear Nose and Throat and in Septic Meningitis —A Gaston

Styloid Dysphagia —The author describes a rare case of dysphagia caused by an elongated styloid process The patient had complained of discomfort in the throat and a sensation of a foreign body on one side for two years The condition is very seldom found in children or young adults it is most common after the age of 40 and is due to an ossification of the stylohyoid ligament

Paris vol 8 June 1938

Physiological and Physical Principles in Construction of Aids to Hearing —P Chavassé and R Caussé
Neurofibromatosis in Cervical Region and Paralysis of Dilators of Larynx —M Jacod
Diffuse Syphiloma of Naso frontal Region —M Péri
Osteoma of Fronto ethmoido maxillary Region —van den Wildenberg
*Relations between Mikulicz's Disease and Various Forms of Subacute and Chronic Parotitis —H Proby
Sign of Induration of Cerebral Substance in Diagnosis of Brain Abscess —J Piquet
Two Important Signs of Cerebellar Syndrome in Diagnosis of Cerebellar Abscess Speech Disturbances and Ocular Paralyses —H de Stella

Mikulicz's Disease and Parotitis —The author attempts to explain why parotitis, Mikulicz's disease, and other forms of inflammations of the salivary glands are usually bilateral Septic teeth appear to be the most important factor in the aetiology When the general health is impaired secretion of saliva becomes diminished and invasion of the salivary ducts by micro organisms from the mouth cavity is possible Under such conditions a bilateral invasion may be expected In certain abdominal conditions—for example, gastric ulcer—the strict dieting almost suppresses salivary secretion and bilateral parotitis may occur

Annals of Otology, Rhinology, and Laryngology

St Louis vol 47 June 1938

Base of Skull with Particular Reference to Fractures —W J Mellinger
Treatment of Tuberculosis of Trachea and Bronchi —J D Kerhan
Mixed Tumours of Hard Palate —F T Hill
Further Study of Pathology of Acute Laryngo tracheo bronchitis in Children —L Richards
Histopathology of Peripheral Auditory Mechanism in Drug injected Animals —W P Covell
*Analysis of Seventy five Cases of Bronchiectasis from Viewpoint of Sinus Infection —R L Goodale
Clinical Experiments with Reference to Influence of Water Metabolism on Ear —S H Mygind and D Dederding
Primary Bilateral Serous Orbital Cellulitis —A Fine
Mastoiditis caused by Friedlander's Bacillus —H J Profant
Clinical Application of Galvanic Falling Reaction —E J Blonder
*Congenital Anterior Herniations of Brain —G F Mood
Sinus Thrombosis II Longitudinal Sinus Thrombosis III Cavernous Sinus Thrombosis —C W Irish
Reconstruction Surgery of Nose —G W Pierce and G B O Connor
Laryngectomy One Stage —W F Zinn
Parenteral Administration of Certain Substances in Upper Respiratory Infections —G M Coates W B Davis and W Gordon
Modern Concepts of Laryngeal Tuberculosis —J P Dworetzky
Calcium Cevitamate in Treatment of Acute Rhinitis —S L Ruskin
Malignancies of Nose and Throat —R C Martin
Virus of Vocal Cord —J M Robb
Prolonged Post operative Anaesthesia in Tonsillectomy —A F Laszlo and R F Hauck
Studies on Intracranial Preventive Treatment of Poliomyelitis —M C Myerson

Bronchiectasis and Sinus Infection —The author's statistical investigation shows that there is a high incidence of sinus infection in patients with bronchiectasis But bronchiectasis cannot be attributed solely to a preceding upper respiratory infection, other diseases can be the cause, pneumonia being the most important Once a patient has acquired a chronic sinusitis the chance of further damage to the lung is increased

Herniations of Brain —The author gives a summary of the theories which have been advanced to explain the occurrence of encephaloceles, and briefly reviews twenty previously reported cases He then describes the case of a baby aged 2 with an anterior naso ethmoidal encephalocele that was successfully dealt with by operation Although there was a free flow of cerebrospinal fluid after removal of the tumour the flow persisting for eighteen days, meningitis was avoided

Archiv fur Ophthalmologie

Berlin vol 138 1938 Heft 6

Portraits of Albrecht von Graefe —R Greeff
Fibroma of Sclera —J Schmidt
*Culture Experiments with Viruses of Trachoma and Paratrachoma —I Jahn and F A Hamburger
Colour Changes of Cornea in Jaundice —J Bock
*Calcification and Thrombosis of Internal Carotid Artery as Cause of Ocular Symptoms —P Siegert
Nerve Supply of Ciliary Body —H Krümmel
Correlation of Hereditary Ocular Lesions —A Catsch
Present Position as regards measuring Blood Pressure in Intraocular Arteries —H Serr

Trachoma Virus —A comprehensive survey is given of the different methods that are employed in culturing trachoma and paratrachoma virus The authors believe that the viruses of the two affections, though very similar are distinct

Calcification of Carotid Artery and Ocular Symptoms —A series of cases together with a review of the relevant literature is advanced to illustrate the frequency of changes of the carotid arteries in association with ocular symptoms that are generally ascribed to chiasmal lesions The importance of radiography is stressed

Berlin vol 139 1938 Heft 1

Operative Closure of Wound in Perforation of Cornea —E Hertel
*Bitot Spots in Affections other than Xerophthalmia —Sie Boen Lian
Unusual Case of Bands in Vitreous —M Wilczek
*Cholesterinosis Bulbi —P M Georgantou
Cholesterin Content of Normal and Opaque Human Lenses —E Bunge
Measurement of Pressure of Intraocular Blood Vessels —K Ascher
Significance of Visual Phenomena —R de Cori
Observations on Physiological Optics and on Psychology of Vision —W Scheidt
*Investigation of Capillaries of Nail bed in Cases of Ocular Disease —F K Leydhecker
Significance of Photoptic Darkness —J Van Essen
Histological Studies in Experimental Herpes of Cornea —K A Reiser
Observations on Near Vision of Myopes —E di Bari

Bitot Spots —Attention is drawn to the occurrence of Bitot spots in Java in conditions of no grave prognostic significance There is a discussion on nineteen such cases observed by the author

Cholesterinosis Bulbi —A distinction is made between a localized lipoid degeneration of the cornea or iris and the invasion of the globe by cholesterin crystals This latter process is held to depend upon an increase of colloids and it is to these appearances that the designation of cholesterinosis should be limited

Investigation of Capillaries —The different methods of studying changes in capillaries are described, together with their application to ophthalmological cases It is concluded that while there is some relationship, the present methods of study are not sufficiently refined to lead to any definite conclusions

Archives of Disease in Childhood

London vol 13 June 1938

Intracranial Haemorrhage in Newborn—W S Crai
Vitamin C Excretion in Children with Particular Reference to Rheumatic Fever—J D Keith and E M H Kmans
Otitis Media and Mastoiditis in Infancy—G McConkey and E C R Cooper
Radiology in Diagnosis of Hypertrophic Pyloric Stenosis—L Findlay
Blood Phosphorus in Egyptian Infants—I A Sabri and M A Abbord
Osteopetrosis—A M Nussey
Coeliac Syndrome in English Child—E G L Bywaters

Intracranial Haemorrhage—A series of 126 infants in whom intracranial haemorrhage was found post mortem are described together with clinical observations during life It is suggested that the health of the mother during pregnancy has an important bearing on intracranial haemorrhage and that the risk of haemorrhage is increased with forceps delivery and when there has been manual interference such as turning The importance of skilled nursing and the dangers of ill considered handling are pointed out Removal to hospital of those infants born at home should be avoided

Hypertrophic Pyloric Stenosis—The findings after a barium meal in cases of hypertrophic pyloric stenosis and in normal children are described The result of this inquiry shows how both vary and thus render the radiographic findings of little value in the diagnosis of hypertrophic pyloric stenosis

Archives of Internal Medicine

Chicago vol 61 June 1938

Experimental Renal Insufficiency produced by Partial Nephrectomy IX Blood Plasma Protein Values for Control and Partially Nephrectomized Rats fed Diets containing Dried Extracted Beef Muscle X Blood Plasma Cholesterol and Phospholipid Phosphorus Values for Control and Partially Nephrectomized Rats fed Diets containing Dried Extracted Liver—S Ludewig and A Chanutin
Size and Shape of Heart in Hyperthyroidism Teleroent enographic Study of 200 Cases—H Gotta
Exophthalmic Goitre Relation between Blood Iodine Level and Duration of Symptoms in 305 Cases—H J Perkin and F H Lahey
Papilloedema associated with Subarachnoid Haemorrhage Experimental and Clinical Study—J Q Griffith jun W A Jeffers and W E Fry
Coexistence of Bronchiectasis and Sinusitis—T W Walsh and O O Meyer
Aneurysm of Innominate Artery—H Parks
Dark Adaptation of Eye and Vitamin A Storage in Young Adults—C Schuck and W O Miller
Bilateral Sporotrichosis of Breast Case Report—J L Wade and A R K Matthews
Blood Review of Recent Literature—F H Bethell R Isaacs S M Goldhamer and C C Sturgis

Papilloedema and Subarachnoid Haemorrhage—Papilloedema is infrequently associated with subarachnoid haemorrhage although the duration of a raised cerebrospinal fluid pressure warrants its appearance Experimentally the development of papilloedema can be prevented by blocking the perineural spaces of the optic nerves and it is inferred that in cases of subarachnoid haemorrhage blood in the cerebrospinal fluid causes such a blocking In a few cases the block is incomplete and papilloedema may occur

Bronchiectasis and Sinusitis—Two thirds of 217 patients with bronchiectasis were found to have associated sinusitis the symptoms of which were unobtrusive The authors show that a few hours after the introduction of iodized oil into the anterior nares of a sleeping person this oil can be demonstrated in the lungs radiographically, and they claim that infected matter from the sinuses reaches the bronchi similarly thus maintaining a bronchitis

Archives d'Ophtalmologie

Paris vol 2 June 1938

Case of Bernier Boeck's Disease or Schaumann's Benign Lymphogranulomatosis with Ocular Manifestations—H Coppez and B Dujardin
Carbolization of Spheno-palatine Ganglion in Ophthalmology—R Thurel
New Observations in Contemporary Experimental Work on Trachoma—M Poleff

Spheno palatine Ganglion—The author describes a method of carbolizing this ganglion via the posterior palatine canal and finds this treatment of use in sympathalgias certain types of keratitis episcleritis subacute and chronic glaucoma ocular vasomotor and secretory crises retinal spasms and optic neuritis

Archives of Otolaryngology

Chicago vol 27 June 1938

Treatment of Pharyngeal Cancer—H E Martin
Intracranial Complications of Infections of Nasal Cavities and Accessory Sinuses—C B Courville and L K Rosenvold
Thrombopenic Purpura as a Complication—B Welt and J Kalnetz
Congenital Arteriovenous Fistula of Middle Ear and External Auditory Canal—B T Horton and B E Hempstead
*Meningitis of Otitic Origin—O R Kline
Rhinosporidium seeberi—J G Pasternack and C S Alexander
Schwannoma—A M Gnassi and M Borrone

Pharyngeal Cancer—The author discusses the technique used in the treatment of pharyngeal cancer The best results are obtained by the protracted roentgen ray method supplemented in a considerable proportion of cases by the use of interstitial irradiation with radon seeds

Meningitis of Otitic Origin—Two cases of recovery from meningitis following mastoiditis are reported In each case the spinal fluid yielded a pure culture of *Str haemolyticus* In the first case the infection was comparatively mild and there was prompt improvement after one transfusion of convalescent blood The second case was looked upon as desperate the infection having reached the meninges along the line of a former fracture However complete recovery occurred after the administration of sulphanilamide It appears that the recovery of more than 100 patients with haemolytic streptococcal meningitis following the use of sulphanilamide and its derivatives has already been reported

British Journal of Venereal Diseases

London vol 14 July 1938

Relationship of Gonococcal Complement fixation Test to Diagnosis and Treatment of Gonorrhoea—I N O Price and T E Osmond
Chronic Cervicitis—A Bourne
Some Problems in Histopathology of General Paralysis of the Insane—A J Galbraith
Influence of Artificially Induced Fever upon Syphilitic Infection of Mice—A Beck
Gumma of Muscle—S M. Laird

Complement fixation Test—There seems to be a pretty general agreement that this test is very valuable in the management of gonorrhoea both for diagnosis and for test of cure With a suitable technique the reaction is highly specific and sensitive much depends on obtaining a suitable antigen Cross fixation with other Neisseria appears to be rare if it occurs at all Opinions differ as to the interpretation of a positive reaction persisting many months or years after clinical cure but a negative reaction or series of negatives following clinical cure is strong presumptive evidence of bacteriological cure The test is particularly valuable in the differential diagnosis of obscure cases of arthritis epididymitis and salpingitis

Bulletin de l'Association Française pour l Etude du Cancer

Paris vol 27 May 1938

Reaction of Mice belonging to Strains exempt from Mammary Adenocarcinoma to Different Carcinogenic Agents—N Dobrovolskaia Zawadskaia and N Adamova
Researches on Lactic acid Content of Blood of Cancer Patients—L Bugnard H Colombies and J Roncoroni
Cancer of Floor of Mouth—J Ducuing and P Negre
Mummified or Calcified Epitheliomas of Skin—M Feyr R Huguenin and V Paiz
Diagnosis of Bronchial Stenosis by Tomography—R Huguenin and J Delarue
Adamantinoma of Tibia—C Oberling E Verrnes and J Chevereau
Prostatic Hypertrophy and Frequency of Cancer Development—E Chauvin and M Mosinger

Two Cases of Lipoid Tumour of Ovary Tumour of Luteinoma Type and Tumour of Thecal Type —J Delarue and P Isidor
Theeal Reaction of Stroma in Tumours of Ovarian Granulosa —J Virankot
Dendritic Tumour of Breast —R Gouverneur and Poumeau Delille
Ependymoma of Myelencephalon with Cervical Syringomyelia (Anatomo-clinical Study) —J Dagnelie and J Ansay
Cure Epizootics of Cancer among Mice —I Gheorghiu

Action of Carcinogenic Agents on Mice exempt from Mammary Carcinoma —Tar, 1 2 5 6 dibenzanthracene and radon produced squamous epitheliomas or sarcomas in mice of several strains exempt from spontaneous mammary carcinoma The carcinogenic agents were incapable of producing glandular cancer in animals not constitutionally predisposed to it None of the strains of mice now known can be considered completely non-cancerous since all develop malignant tumours in response to exogenous factors

Canadian Public Health Journal

Special Issue devoted to Milk Studies

Toronto vol 29 June 1938

Bovine Tuberculosis in Children —R M Price
Survey of Certain Milk borne Diseases in Canada —R D Defries
Bovine Tuberculosis in Canada —A E Cameron
Infectious Abortion of Cattle in Canada —W H Marriott
Changing Methods for Quantitative Estimation of Bacteria in Milk —H R Thornton
Controlling Contamination of Raw Milk —C Ellinger
Coliform Test in Pasteurized Milk —A B Moffat and J Mackay
Use of Phosphatase Test in Control of Pasteurization —M D Smith
Nutritional Value of Raw and Pasteurized Milk —E W McHenry
Producer and Safe Milk —E H Clarke
Milk-control Legislation in Canada —A E Berry
Survey of Milk Control in Cities and Towns in Canada —A E Berry
Cleansing and Disinfecting Operations in Small Dairy —G A H Burn
Engineering Defects in Dairies —A E Berry

Gynecologie

Paris vol 37 April 1938

Persistence of Omphalo mesenteric Duct in Infant —J P Lamare J Courtois and P Isidor
Labour Pains —J Hartemann

Paris vol 37 May 1938

Pregnancy following Interposition Operation —R Keller
Cutaneous Metastasis in Cancer of Female Genital Organs —P Meyer
Lipoma of Uterus —P Burger
Hydramnios and Twin Pregnancy —L Vandiest

Gynecologie et Obstetrique

Paris vol 37 May 1938

Systematic Employment of Pituitrin during Labour —J Snoeck and J Bernard
Treatment of Eclampsia —J L Woden
Biological and Clinical Study of Practical Use of Prolan —R Bourg
Post hypophysis and Pre eclampsia —G Lambert
*Experimental and Clinical Study of Uterine Hypertonia during Labour —R De Guchtenecre and P La Haye
Clinical and Therapeutic Study of Glandular Hypertrophy of Endometrium —M Rochmans

Uterine Hypercontraction —Uterine hypercontraction varies in degree, and usually arises from disproportion due to either pelvis or child, though occasionally the myometrium itself is pathological Good results were obtained by the use of papaverine in very small doses

International Journal of Psycho-analysis

London vol 19 July 1938

Moses an Egyptian —Sigm Freud
Development of Awareness of Transference in a Markedly Detached Personality —C Thompson
Mode of Operation of Psycho analytic Therapy —M Schmideberg
Pseudo-identification —L Eidelberg
Contribution to Pathopsychology of Phenomena associated with Falling Asleep —O Isakower

Journal of Bone and Joint Surgery

Boston vol 20 July 1938

First Stages of Coxa Plana —H Waldenstrom
*Results of Postural Reduction of Fractures of Spine —R Watson Jones
Healing of Fractures of Atrophic Bones —J Goldman and E L Compere
Arthroplastic Procedure for Congenital Dislocation in Children —P C Colonna
Recurrent Deformities in Stabilized Paralytic Feet —C H Crego and H R McCarroll
Non union and Bone Grafts —N T Kirk
Transplantation of Fibula in Same Leg —W B Carrell
Bone Grafts in Ununited Fractures —M S Henderson
Use of Multiple Small Bone Transplants in Treatment of Pseudarthrosis of Tibia of Congenital Origin or following Osteotomy for Correction of Congenital Deformity —H Hallock
Myositis Ossificans —C Geschickter and I H Maseritz
Diagnosis and Treatment of Sacro iliac Conditions by Injection of Novocain —K O Haldeman and R Soto-Hall
Sciatic Nerve and Pyriformis Muscle Their Interrelation a Possible Cause of Coccygodynia —L E Beaton and B J Anson
Cord Injury during Reduction of Thoracic and Lumbar Vertebral Body Fractures and Dislocations —W A Rogers
Treatment of Injuries of Cervical Spine —W G Crutchfield
Operation for Correction of Hallux Varus —S L Haas
Ossification in Ligaments of Elbow joint —St J D Buxton
Operation for Correction of Hammer Toe and Claw Toe —C S Young
Isolated Paralysis of Serratus Anterior (Magnus) Muscle —M T Horwitz and L M Tocantins
Tarsal Wedge Arthrodesis —E M Bick
Haemangiomata of Lower Extremities with Special Reference to those of Knee joint Capsule and Phenomenon of Spontaneous Obliteration —J B Weaver
Posterior Dislocation of Elbow joint complicated by Fracture of Medial Epicondyle and Ulnar nerve Injury —T Outland and C R Hanlon
Curare Therapy for Release of Muscle Spasm and Rigidity in Spastic Paralysis and Dystonia Musculorum Deformans —M S Burman
Arachnodactyly Report of Eight Cases —J R Norcross
Changes simulating Legg Perthes's Disease (Osteochondritis Deformans Juvenilis) due to Juvenile Myxoedema Case Report —F Albright
Traumatic Dislocation of Hip followed by Perthes's Disease —R R. Goldenberg
Bilateral Congenital Talo navicular Fusion Case Report —P W Lapidus
Treatment of Birth Fracture of Femur —W H Robinson
Cap to Protect Ends of Steinmann Pins —R Mazet
Leg Holder for Hip Nailing —R C Robertson
Orthopaedic Surgeon's Utility and Plaster Cart —V Mooney
Pin and Stirrup for Finger and Toe Traction —E N Reed

Postural Reduction of Spinal Fractures —A series of 252 fractures of the spine is analysed Of these two thirds were simple wedge fractures, less than one third were fracture dislocations, and only 13 per cent were comminuted fractures The aetiology of the three types is discussed and the technique of reduction and immobilization is outlined Of sixty seven personally treated cases 80 per cent returned to their original occupation, and only 12 per cent remained totally incapacitated Common errors in the management of these cases are briefly indicated

Journal of Clinical Investigation

Lancaster vol 17 July 1938

Simple Method for Estimation of Total Protein Content of Plasma and Serum I Falling-drop Method for Determination of Specific Gravity II Estimation of Total Protein Content of Human Plasma and Serum by Use of Falling-drop Method —B M Kagan
Chemical Composition of Voluntary Muscle in Muscle Disease Comparison of Progressive Muscular Dystrophy with Other Diseases together with a Study of Effects of Glycine and Creatine Therapy —J G Reinhold and G R Kingsley
Late Effects of Bilateral Carotid Sinus Denervation in Man Report of Two Cases with Studies of Vascular Reflexes —R B Capps and G J Takáts
Renal Factor in Arterial Hypertension with Coarctation of Aorta —D A Rytand
Effects on Cardiovascular System of Fluids administered Intravenously in Man II Dynamics of the Circulation —M D Altschule and D R Gilligan
Changes in Blood and Interstitial Fluid resulting from Surgical Operation and Ether Anaesthesia —J D Stewart and G M Rourke
*Observations on Blood of Workmen exposed to High Temperatures —P L McLain and E S Montgomery
*Nature of Lowered Resistance to Infection in Diabetes Mellitus —A Marie H J White and A T Fernald
Actions of Crystalline Vitamin D (Calciferol) in Chronic Parathyroid Tetany —G Klatskin
Cyanosis without Sulph or Methaemoglobinaemia in Patients receiving Sulphanilamide Treatment —L C Chesley

Studies I Circulation in Presence of Abnormal Cardiac Rhythms Part I Rhythms associated with Rapid Ventricular Rate Part II Rhythms associated with Slow Ventricular Rate—H J Stott J E Deitrick N F Crane and W P Thompson

Study of Some of the Physiological Effects of Sulphanilamide I Changes in Acid-base Balance—V E Hartmann V M Percy and H L Barnett

Acid Phosphatase occurring in Serum of Patients with Metastasizing Carcinoma of Prostate Gland—S B Gutman and E B Gutman

Reactions of Human Subjects to Intradermal Purified Type Specific Pneumococcus Polysaccharides—M Heidelberger and J W Brown

Tissue Pressure (Intramuscular Subcutaneous and Intramuscular) as related to Venous Pressure Capillary Filtration and Other Factors—H S Wells J B Youmans and D G Miller jun

Blood of Workmen exposed to High Temperatures—A series of patients presenting symptoms attributable to such exposure was compared with a series of symptom-free workmen exposed to high temperature. The results of the various blood examinations indicated dehydration and decrease of blood sugar over the work period in a majority of controls. In heat sickness the most definite alterations were (*a*) in heat cramps—tendency to blood concentration and decrease of serum chloride (*b*) in heat exhaustion—tendency to blood concentration decrease in blood sugar and lowering of alkali reserve (*c*) in heat retention—consistently high normal serum chloride.

Lowered Resistance to Infection in Diabetes—The blood of diabetic patients was found to possess essentially the same phagocytic bacteriostatic and bactericidal power against selected strains of streptococci as blood from normal controls. Results obtained in individual cases could not be correlated with the duration severity or state of control of the diabetes.

Journal of Industrial Hygiene and Toxicology

Baltimore vol 20 June 1938

Experimental Study of Heat Collapse—J S Weiner

Ventilation of Wire-impregnating Tanks using Chlorinated Hydrocarbons—C P Yaglou F W Sands and P Drinker

Studies on Phenothiazine VI General Toxicity and Blood Changes—J O Thomas J B deNavarre and F De Eds

Toxicity of Isopropranol—H J Morris and H D Lubitsky

Experimental Investigations concerning Liability to Silicosis among Workmen in Iron Mines—C Naeslund

Heat Collapse—Heat collapse can be induced in most persons by prolonged standing in a still hot humid atmosphere. The cause is excessive peripheral vasodilatation causing a fall of blood pressure slowing of the heart and consequent anaemia of the brain. In certain individuals there is a compensatory acceleration of the heart beat. Adequate movement of air as a preventive is discussed.

Experimental Silicosis—Animal experiments for the production of silicosis are described. Iron ores (Swedish) containing up to 5 per cent silica gave negative results. With highly siliceous ores—for example leptite (60 per cent silica)—silicosis occurred but not so readily as with pure quartz dust. Granitic not ferric particles constitute the chief danger to iron miners.

Journal of Pharmacology and Experimental Therapeutics

Baltimore vol. 63 July 1938

Irritability of Cardiac Vagus Nerves as influenced by Intravenous Injection of Barbiturates Thiobarbiturates and Picrotoxin—C M Gruber C M Gruber jun and N A Colesi

Depressant and Paralytic Actions of Barbiturates on Terrapin Cardiac Vagus Nerve—C M Gruber V G Haury and C M Gruber jun

Point of Action of Barbiturates in depressing Cardiac Vagus Nerves—C M Gruber V G Haury and C M Gruber jun

Some Tetrahydroisoquinolines II Their Action on Blood Pressure, Respiration and Smooth Muscle—D W Fassett and A M Hort

Relation of Blood Pressure to Plasma Potassium Level—G Brewer and P S Larson

Pharmacological Properties of Some 2-n Trialkylethanols—D J Macht H F Bryan and M L Grumbein

Effect of Apomorphine on Movements of Small Intestine in Unanaesthetized Dogs—D Slaughter and E G Gross

Effects of Bismuth Sodium Tartrate on Blood and Haematopoietic Organs—J W Brown S P Lucia and E S Mills

Effect of Parenteral Injection of Purines Methylated Purines and Various Drugs upon Creatine-Creatinine Metabolism—H H Beard and P Pezzolato

Pharmacological Properties of dl Alpha-coturine—L Waterman and A G Oosterhuis

Pharmacological Actions of Corlumine—H V Rees

Reported Anaemia producing Qualities of 1-methyl-5-allyl-5-cyclohexenyl-methyl barbituric Acid (Evipan Evipal)—H K Beecher

Further Evidences on Nature of Vasomotor Actions of Ethylnorepinephrine—W M Carleton L J Whitsell J M Crismon and M L Tainter

Klinische Monatsblätter für Augenheilkunde

Stuttgart vol 100 June 1938

Influence of Periarterial Sympathectomy of Carotid Arteries with Excision of Carotid Body on Degenerative Processes of Retina and on Atrophy of Optic Nerve—Z Nizetic R Spasovevic and S Bozikov

Hitherto Unrecognized Hereditary Lesion of Eye (Degeneratio Hyaloideo-retinalis Hereditaria)—H Wagner

Bilateral Ocular Changes in Fracture of Skull—R Tertsch

Changes simulating Foster Kennedy Syndrome in Arteriosclerosis—F Gloss

Keratitis Nummularis—L Jess

Primary Band-shaped Degeneration of Cornea—E Salzer

Concerning Polycoria—K Lisch

Operative Treatment of Traumatic Iridodialysis—Z Nizetic

Perforating Injuries of Ciliary Body—E Ochs

Studies of Visual Field with Lumineux Perimeter—B v Herrath and L Németh

Periarterial Sympathectomy—Drawing upon the teachings of Leriche and its ophthalmological applications by Magitot the authors have performed sympathectomy with excision of the carotid body in a series of cases. The results obtained towards the end of their series showed that the circulation of the retina can be influenced by this operation. The changes are however transient. More promising results may be obtained if in addition to this operation the tension in the eye is also reduced.

Degeneratio Hyaloideo-retinalis Hereditaria—A familial group is reported which showed an optically empty vitreous containing some strands and fundus changes notably white bands on the periphery extending along the terminal arteries.

Stuttgart vol 101 July 1938

Penetrating Transplantation of Cornea—R Friede

Corneal Transplantations in an Infant with Cornea damaged by Ophthalmia Neonatorum—Z Nizetic

Terson Lines in Keratoconus—M Schmidt

Eye Symptoms in Tumours of Epipharynx—E Custodis

Spasm of Upper Lid—V Adda

Familial Ptosis and Ophthalmoplegia of Supranuclear Type—J Scharf

Dissociated Squint and Other Ocular Dissimilarities in Uniovular Twins—G Jancke

Corneal Transplantations—A detailed account is given of the technique and difficulties experienced in seventy-eight corneal transplantations done by the author since 1921. It is emphasized that the operation requires no greater dexterity than other intraocular procedures and in the author's series since 1930 52 per cent of transplantations were clear and 19 per cent semi-transparent in 29 per cent the graft became opaque.

Eye Symptoms in Tumours of Epipharynx—On the basis of three cases the author draws attention to the fact that atypical symptoms involving the motor sensory and sympathetic fibres of the eye may find their origin in tumours of the epipharynx.

Medicine

Baltimore vol 17 May 1938

Mammalian Blood Platelets in Health and Disease—L M Tocantins

Blood Platelets—The physico-chemical properties production distribution utilization and destruction of blood platelets are reviewed. In each section the physiology is first considered and then the possible ways in which aberration of these normal processes may give rise to disease is discussed in the light of known information. The review is exhaustive and will appeal mainly to those who have already special knowledge of this field.

Monatsschrift fur Geburtshulfe und Gynakologie

Leipzig vol 108 June 1938

Stillbirth and its *Prevention* —R T von Jaschke
Clinical and Experimental Observations with Vitamin C during Menstrual Cycle —H Winkler and W Seebach
Sterility through Tubal Occlusion —H Ganssbauer
Mechanism of Action of Female Sexual Hormones —F Kovacs

Nourrisson

Paris vol 4 July 1938

Clinical Study Cause and Treatment of Mongolism —Lereboullet
X Rays in Diagnosis and Treatment of Pyloric Stenosis —M G Mouriquand and L Weill
Deformity of Thorax associated with Paralysis —L Ridaderau Dumas and J Chabrun

Policlinico

Rome vol 45 July 15 1938 (Sez Chir)

Process of Fracture Repair after Functional Exclusion of One Kidney and the Blood Calcium in Connexion with the Two Conditions —F De Victorius Medori
Torsion of Spermatic Cord in Inguinal Retention of Testicle —L Giornelli

Quarterly Bulletin of Sea View Hospital

Staten Island N Y vol 3 July 1938

Planigraphic Examination of Thorax in Tuberculous Individuals —H K Taylor
Pulmonary Survey of Two Protectorates in Borough of Richmond —M Kovnat
New Studies in Sulphanilamide Therapy —F Meyer
General Surgery in Tuberculosis Hospital —R M Shields
*Roentgen Studies of Jejunum in Pulmonary Tuberculosis —S Fineman
Standard Sputum Requirements —I D Bortowitz and J L Leon
Tubercle Bacillus Part IV —S A Petroff

Jejunum in Pulmonary Tuberculosis —Jejunal pattern abnormalities were found in 6 per cent of the seventy-five cases examined The author does not consider that these were due to tuberculous ulcerations of the jejunum or to tuberculous peritonitis He suggests that vitamin and mineral deficiency may be a factor in the production of these appearances

Quarterly Journal of Experimental Physiology

London vol 28 July 1938

Effect of Pontine Transection on Blood sugar Level of Decerebrated Fasting Cat —H R Nolte
Reticulocytogenic Agent for Guinea pigs present in Certain Gastro intestinal Secretions —J Goodfriend E Chain and H W Florey
Action of Iodoacetate and Fluoride on Isolated Rabbit s Auricle —I Chang
Some Observations on Blood Clotting —G A Clark R T Gaunt and W A Timperley
Hydrolysis of Acetylcholine by Tissues —A J Clark and J Raventos
Release of Acetylcholine by Vagal Stimulation —A J Clark and J Raventós
Mechanism of Oestrus Inhibition in Mouse during Pregnancy —J M Robson

Revue Française de Gynecologie et d'Obstetrique

Paris vol 33 July 1938

Uterus considered as One of Body Cavities —P Delmas
Placental Lesions in Hyperemesis Gravidarum —J C de Carrera and H L Guilbert
Vaginal Atresia and Puerperium —L Deveze
Generalized Oedema of Foetus —P Henriet
Prognosis in Vomiting of Pregnancy —R Battle
Local Vaccine Therapy in Obstetrics —J C de Kerleau
Departmental Maternity Home —E Gaujoux

Revue de la Tuberculose

Paris vol 4 June 1938

Opening or Exacerbation of Tuberculosis in Course of Pulmonary and Pleural Suppurations (Study of Sixteen New Cases) —E Sergent and M Fourestier
Tuberculous *Zonites* Concerning Topographical Problem of Pulmonary Tuberculous Triangular Radiological Appearances seen in Course of Several Cases of Pulmonary Tuberculosis —R Pierret P Coulcouma X Breton and L Devos
*Recent Therapeutic Applications of Pneumoperitoneum —B Besta and J Dutrent
*A Few New Notions in Phthisiology —P Ruttgers

Pneumoperitoneum —A comprehensive but concise review with extensive bibliography, many of the references in which are however, given second hand

New Notions —A useful review, particularly for its discussion of the methods adopted in testing the functions of the lungs

Tubercle

London vol 19 June 1938

*Old Tuberculin and Purified Tuberculin I —K A Jensen G Bindslev S Moller A Hansen and P Lind
Bacillaemia in Experimental Tuberculosis —A Beck
Tuberculosis in British Guiana I —E Cochrane

London vol 19 July 1938

*Old Tuberculin and Purified Tuberculin II —K A Jensen G Bindslev S Moller A Hansen and P Lind
Experimental Studies on Treatment of Pleural Affections by Counter irritants —S Puder
Tuberculosis in British Guiana II —E Cochrane
Preparation of Tuberculin Ointment of Constant Strength —K A Jensen
Carbon Dioxide Inhalation in Pulmonary Tuberculosis —A L Banyai

Old Tuberculin and Purified Tuberculin —This is an extensive study of the standardization and preparation of stable dilutions of these two products By diluting old tuberculin in a buffer solution of *p*H 7 38, and adding 0 01 per cent quinosol a dilution containing 1/100 mg per 0 1 c cm keeps well for about two months A description is given of the preparation of a purified tuberculin that dissolves in a clear solution of *p*H 7 38 In contrast to other preparations of purified tuberculin, including P P D this solution gives no precipitate when quinosol is added as antiseptic Standardization of purified tuberculin in relation to the international standard tuberculin is not practicable by means of the intracutaneous method usually employed A comparison of the standard tuberculin with the purified tuberculin on the principles followed by American investigators has shown that in Denmark it is practicable to use two doses of purified tuberculin for the performance of the Mantoux test—namely, 1/50,000 mg and 1/500 mg Dilutions suitable for these two doses can be prepared so as to remain stable for one month

Zeitschrift fur Geburtshulfe und Gynakologie

Stuttgart vol 117 July 5 1938

Clinical Research on Therapeutic Value of Sex Hormones —H Buschbeck
Spontaneous Movements of Human Vagina —H Kolbow
Case of So-called Mixed Tumour of Right Ovary —K Markl
Hypernephroidal Growths of Uterus —E Hochgesand
Clinical Study of Dwarfs —S Mallow
Concerning So-called False Pelvis —H Sternberg
Problem of Prolonged Evipan Anaesthesia —H Winkler and E Klees

Zeitschrift fur Orthopadie

Stuttgart vol 68 July 26 1938

Origin of Exogenous Malformations of Extremities —E Westhoff
Innervation of Synovial Membrane and its Changes in Heine Medin s Disease —K Daubenspeck
Bone and Joint Tuberculosis in Freiburg i Br District —W Schröder
Importance of Movements of Metacarpal Bones of Fingers with Thre Phalanges —H Korvin
Flexion Contracture of Thumb occurring in Small Children A Typical Syndrome —E Ruschenberg
Significance of Growth Disturbances of Epiphysis of Femoral Head for Functional Capacity of Hip-joint —M Hackenbroch
*Origin and Nature of Deformation of Femoral Head after Reduction of Congenital Dislocation of Hip —S Nagura

Femoral Head Deformity after Reduction of Congenital Dislocation —According to the author the deformity of the femoral head observed after reduction in cases of congenital dislocation of the hip is due to mechanical trauma His experimental and clinical observations lead him to the conclusion that the condition is identical with Perthes s disease

WHY AGAROL BRAND COMPOUND FOR CONSTIPATION ?

Among the curative measures advocated for overcoming constipation, none has proved more consistently successful than AGAROL — the original emulsion of mineral oil and agar-agar with phenolphthalein

Agarol renders the fæcal mass plastic and pliable with unabsorbable moisture It lubricates the intestinal tract and gently stimulates peristalsis, ensuring an easy and complete evacuation

Used over a reasonable period, Agarol gradually restores muscular tone and functional activity of the bowel, with the gratifying assurance that natural evacuation will follow without the need for further medication

Supplied in 4½ oz 7½ oz and 17 oz bottles

Agarol is not advertised to the public

Trial supplies to Members of the Medical Profession on request

WILLIAM R WARNER & CO LTD, POWER ROAD, CHISWICK, LONDON, W 4

NURSING PROFESSION'S GREAT WELCOME FOR NEW WEEKLY

Success of "Nursing Illustrated" exceeds all expectations

THE REASON WHY

CREDIT for the gratifying success of "Nursing Illustrated" is not wholly the publishers' Much of the credit goes to the Doctors, Surgeons, Matrons, Sisters and Nurses who helped frame its policy

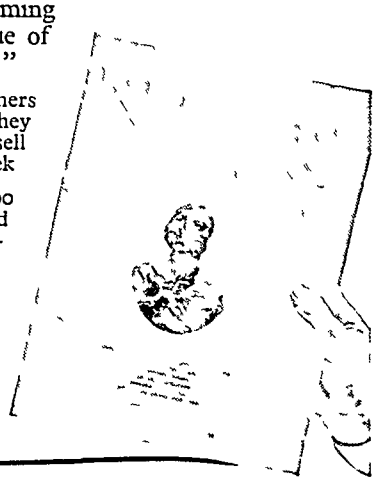
"Nursing Illustrated" is a *planned*, not an accidental, success

Before the first Table of Contents was drafted, representatives from every branch of the medical profession were called together

Their ideas were solicited and compiled, and from the best of them a first issue was produced

But this issue was never sold It was tried out on the staff of a big hospital That staff said fully and freely what they thought

This experiment made it clear that what nurses wanted was a paper with information about new treatments, how new ideas in medicine and surgery will affect nurses' work Special articles by famous authorities—simply written, generously illustrated—latest news on clothes, beauty care, films, physical fitness, books and all off-duty activities It was given them, brimming over, in the first issue of "Nursing Illustrated"



Naturally the publishers expected a success They hoped before long to sell 40,000 copies a week

They sold over 40,000 *copies the first issue*, and thousands more succeeding issues And the demand is still growing

Have you yet seen a copy? The September 23rd issue will be on the newsstands on Friday

Features of Forthcoming Issues

Hospital in a Medicine Chest—Obstetric History of the Wives of Henry VIII—The Surgical Knife—Midwifery and Other Customs in West Africa—The Case of Mary Blandy — Thoracic Surgery, Hugh Reid — Trigeminal Neuralgia—Pneumonia (Nursing)—Osteomyelitis X-ray—Biography (Liston and Hugh Owen Thomas)—Anatomy Accessory Organs of digestion—Bandage Series

OUT EVERY FRIDAY — 2D

NOW BEING MANUFACTURED AND USED IN ENGLAND

A REASONABLY PRICED

RESPIRATOR
Iron Lung

This respirator was developed in Australia during the recent poliomyelitis epidemic, and met with marked success, saving many lives

SOME OF THE MAIN FEATURES —

1 PRICE **£98.10.0.**
2 TRANSPORTABILITY
3 SUITABLE FOR ALL SIZES OF PATIENT
4 EASE AND SIMPLICITY OF OPERATION
5 RELIABILITY

Enquiries to
E. T. BOTH, c/o D & J FOWLER LTD,
11, QUEEN VICTORIA STREET, EC4
City 6126

This cookery book is based on the latest scientific standards Medical practitioners can particularly recommend it to those of their patients who have to get a full pennyworth of food value from every penny of their outlay

THE DOCTORS' COOKERY BOOK

21 Menus and 82 Recipes for Family Meals

21 PAGES OF PHOTOGRAPHS

PUBLISHED BY THE BRITISH MEDICAL ASSOCIATION

Obtainable from all booksellers, news agents Smith's bookstalls and Co operative Societies ● All inquiries to the B M A, Tavistock Square, London W C 1

PRICE 4D

Medical Men supervised the design of the Linia Belt

The Belt for correction of Ptosis Obesity, Faulty Posture and for post operation wear

It was on the advice of medical men that the Linia Belt was evolved Frequent tests by doctors were carried out before it was made available for sale That is why it is the recognised belt for men's wear

Made to measure for every case the Linia Belt is prescribed for obesity, for various ptotic conditions, for post-operation wear, for wear by the older man during golf and so on The front is of thin non elastic tricot, the back of strong elastic It is fully adjustable by means of slide buckles



YOU CAN ORDER BY POST

Perfect fitting guaranteed or money refunded in full We make a reduction of 2/ in the £ on purchases for personal use to members of the Medical Profession May we send you a fully explanatory booklet?

PRICES

Linia Belt including a Linia Jock Strap Popular Model 3½ gns (Black 4 gns) De Luxe Model in pure silk extra light quality 6 gns (Black 7 gns) Standard Model 2 gns. C O D 1/ extra

★ *We shall be pleased to forward a specimen Linia Belt for your examination on approval*

The Linia Belt is on Sale Only at

J Roussel, Ltd (Dept ME), 177, Regent Street, London, W 1

Telephone Regent 7370

And at 43 Cheapside E C 2 and five other London branches

Also at **Belfast** 18 Arthur Street **Birmingham** 14 New Street **Bournemouth** Hamphire House **Bristol** 53 Park Street **Edinburgh** 1 Frederick Street **Glasgow** 345 Sauchiehall Street **Hove** 76 Western Road **Leicester** Granby Building 2 Pilgrim Street **Liverpool** 6 South John Street **Manchester** 12 King Street **Nottingham** 29a Milton Street **Southport** 114 Lord Street

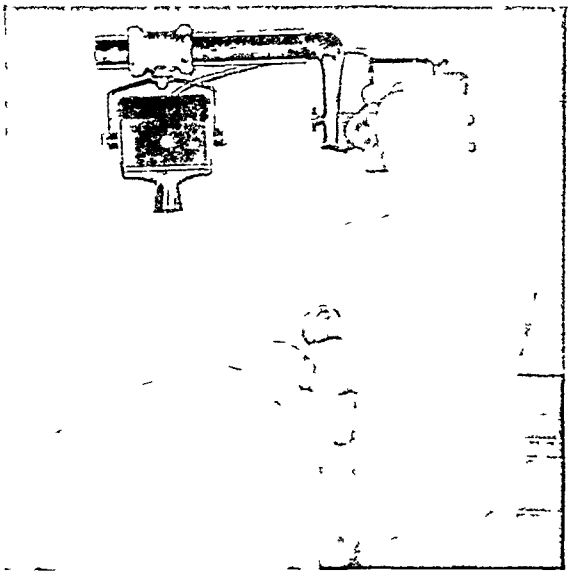
J Roussel Ltd (Dept. ME) 177 Regent Street London W 1

★ Please send me a Linia Belt price including the Linia Jock Strap My maximum measurement round body is inches

I enclose cheque (less 10%) *OR* please send on approval

★ Please send me a free copy of The Linia Method booklet fully describing the Linia Belt

My name and full address are attached ML10



The new Victor F-3 X-ray Unit

220% MORE POWER, BUT NO INCREASE IN PRICE

Now with 220% more radiographic power and the same extremely fine detail which the original Victor Model F gave in both radiography and screening the new Victor F 3 is more than ever the greatest value in limited range X Ray equipment For not only has there been no increase in the model's price but there is now the added facility of interchangeable use as either portable or mobile *equipment*

STUDY THESE FEATURES

Portable *and* mobile * Wide range * Shockproof * Climate Proof * Easy to use * Operable from any plug point * Highly flexible and adaptable * Compact case only 21 x 14 x 8 inches * Weighs only 45 lbs * Complete technique charts * Long life, genuine Victor Coolidge tube * Accurate timer * Foot switch for screening * Convenient terms if desired *

For a demonstration without obligation or the free descriptive booklet simply fill up and post the convenient coupon

WITHOUT OBLIGATION

VICTOR X-RAY CORPORATION, Ltd

35 39 CAVENDISH PLACE LONDON W 1

☐ Please send the free booklet on the new Victor F 3 X Ray Unit

☐ Please have a representative arrange for a working demonstration of the F 3 Unit at my convenience

NAME

ADDRESS

TOWN

MW 3

EYSTON

again

relied on

LODGE

PLUGS

for his amazing new

World's Land Speed Record

of

357·5 m.p.h.

(subject to official confirmation)

Lodge Plugs are obtainable of all garages and motor accessory dealers from 5/- each They are made completely in England by Lodge Plugs Ltd Rugby

Awarded Gold Medals and Diplomas for . .



QUALITY PURITY ABSORBENCY DURABILITY

FORD S Gold Medal Ab sorbent Blotting paper has obtained highest awards all over the World It is the most economical Blotting made because one sheet of Ford s will outlast two sheets of any other make Soft velvety finish—unrivalled for ab sorbency and durability

23 DELIGHTFUL COLOURS

White Cadet Blue Purple Mauve Antique Mauve Pale Blue Blue Scarlet Brown Mottled Grey Buff Deep Green Dark Green Mo Green Pure Green Orange Brick Red Salmon Deep Pink Pink Golden Yellow

Write for free samples to —

T B FORD, LTD (Dept 6), Snakeley Paper Mill Loudwater, High Wycombe, BUCKS

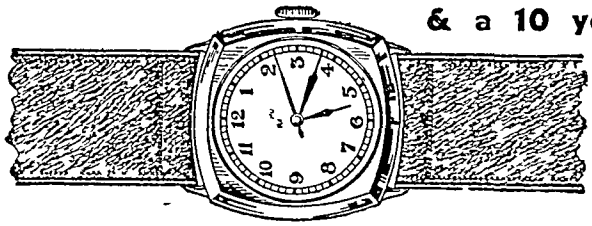
FORD'S

Gold Medal Absorbent

BLOTTING PAPER

OUR 50 YEARS' REPUTATION

& a 10 years' guarantee



stand behind these watches Offered to Doctors and Nurses for immediate possession without displacement of capital they represent the highest possible value and perfection of work manship and are made especially for your professional needs

FRANKLAND S VITAL PULSE WATCH (Regd)
(For Doctors) Fully jewelled lever movement
Silver chrome 60/ or 13 payments of 5/ Gold £5 17 6 or 16/ down and 11 payments of 10/ 10 YEARS GUARANTEE

Visit our showrooms or Selections sent on Approval

DEPARTMENTS—Furs Fur Coats Jewellery Plate Cutlery Furniture etc
Write for Catalogue

PROTECTIVE MONTHLY PAYMENT TERMS

E J FRANKLAND & Co , Ltd (Dept M) 42 57 Imperial Buildings, Ludgate Circus, London E C 4
Estab 1885 *Phone Central* 2188

FINANCE

for the acquisition by

PAYMENTS OUT-OF-INCOME

of

Surgery and Other Furniture
Surgical Instruments
Medical Text Books
X-Ray Apparatus
Laboratory Equipment

The above list is illustrative only Under its Equipment Purchase Plan the Company is prepared to assist doctors to acquire ANY article and spread the cost over a period

BRITISH MEDICAL FINANCE LTD.

Tavistock House South, Tavistock Square, London, W C 1

BMF

℞

UNG. DERMASIL

(REEVE)

Prescribed by the Medical Profession in the treatment of all SKIN DISEASES

7/6 per lb

Sample sent on request without charge

Orders to wholesalers or to REEVES REMEDIES LTD Manufacturing Chemists Birmingham

OSTEOLOGY

ANATOMICAL MODELS

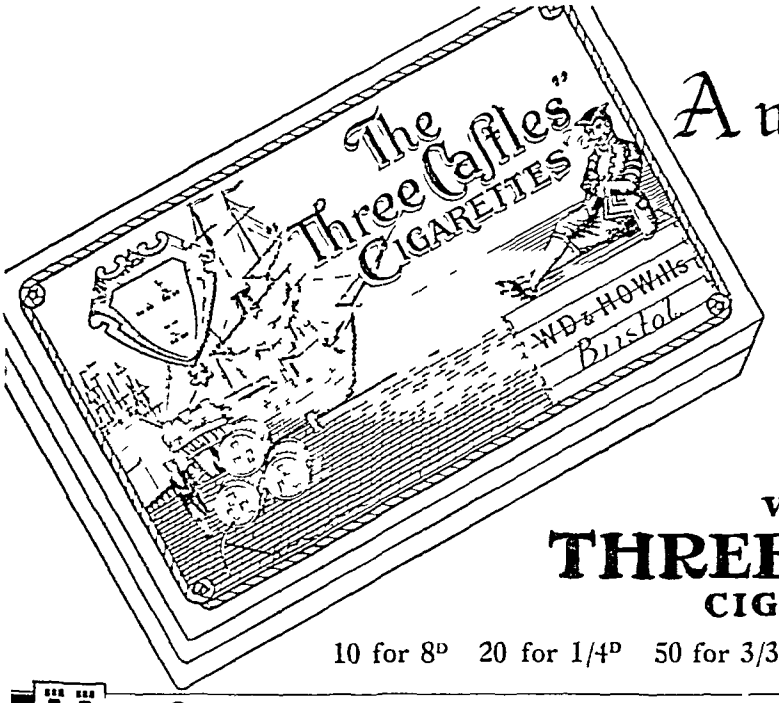
DIAGRAMS & CHARTS

FOR LECTURES

H K LEWIS & Co Ltd

136 GOWER ST , LONDON W C 1

EUSton 4282 (5 lines)



A new flat box

Specially convenient for pocket or handbag

1/- for 15

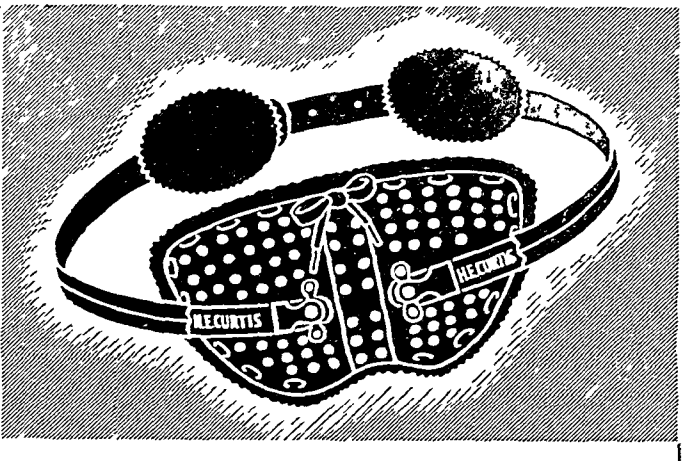
WILLS'S
THREE CASTLES
CIGARETTES

10 for 8D 20 for 1/4D 50 for 3/3D Handmade –20 for 1/6

One expects to pay a little more for cigarette of such excellent quality.

Issued by The Imperial Tobacco Co (of Great Britain and Ireland) Ltd ITL/3

Unhesitatingly prescribed....



For 25 years, Medical Authority throughout the world has recognized the Curtis Abdominal Support No 1 as the most efficient support for all forms of Abdominal Ptosis The even anterior-posterior pressure without undue constriction of the abdomen has been found by far the most satisfactory, and with this Curtis has combined a lightness in weight and a freedom for bodily movement which is gratefully acknowledged by thousands of wearers

CURTIS RTM

Abdominal Support No 1

Specialists in Abdominal Appliances
Sole Makers of CURTIS APPLIANCES
ABDOMINAL BELTS and CORSETS ELASTIC
HOSIERY TRUSSES COLOSTOMY
APPLIANCES ETC

H E Curtis & Son, Ltd, 7, Mandeville Place, Wigmore Street, London, W 1

Telegrams Curtis Welbeck 2921 Telephone Welbeck 2921

OBSTINATE PSORIASIS RELIEVED★

Often, in spite of correcting faults of diet and clothing, psoriasis proves obstinate In such cases local treatment is indicated Sphagnol Ointment (which contains soothing healing distillates of peat) will be found to be of assistance It deals with the scaly eruptions and helps the growth of new and normal skin Sphagnol Ointment too will be found to be useful in the treatment of haemorrhoids and eczema

In case you have had no personal experience of Sphagnol we shall be pleased to send you a clinical size sample for testing if you will write to Peat Products (Sphagnol) Ltd, Dept BMJ 14, 21 Bush Lane, London, E C 4

CONTAINS DISTILLATES OF PEAT

★ **Sphagnol**

MEDICAL SOAPS OINTMENT SUPPOSITORIES, ETC

Toxæmias of Faulty Metabolism

SALVITAE enables the physician to control elimination and alkalinization, thus dealing fundamentally and effectively with the Toxæmias of Faulty Metabolism

SALVITAE

SALVITAE increases the alkalinity of the blood and tissues, prevents the over-production of nitrogenized materials improves oxidation and stimulates the natural activity of the eliminative organs

Professional samples and literature gladly sent on request



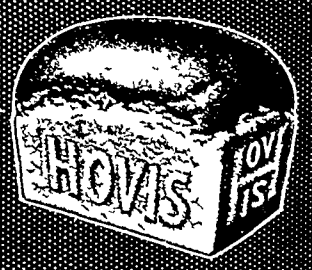
COATES & COOPER LTD, 94 CLERKENWELL RD, LONDON, E C 1

HOVIS TRADE MARK *in Convalescence*

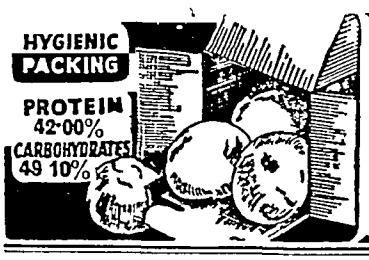
Low starch content renders HoVIS very digestible especially with patients whose vitality is low

25% ADDED WHEAT GERM · RICH IN FATS · VITAMIN B

Best Bakers Bake It



Macclesfield



—ERGO—

HEALTH BREAD, ROLLS AND CRACKNELS

Widely Used in Diets for Diabetes, Gastric Ulcer, Indigestion, Obesity

Free Sample Diet Plans and Analysis sent post free on request

POLLEY & COMPANY LTD (Dept B) Plymouth Road, London E 16

ERGO

Regd Trade Mark

ALUZYME●

NON-AUTOLYSED YEAST

Professional samples descriptive matter and prices on request

ALUZYME PRODUCTS, PARK ROYAL ROAD LONDON N W 10

TOTAL VITAMIN B ACTION

In Vitamin B deficiency conditions, the best results may be anticipated from administration of the *entire* B Complex as each factor contributes to the corrective action This stabilised non autolysed yeast supplies *all* the members of the B Complex in the fully active state Guarantees of efficacy B_1 Potency 1140 International Units per ounce Glutathione test brilliant magenta Active response to tests for nicotinic acid and flavin Indications Avitaminosis B and resulting conditions anaemias furunculosis and many nervous and skin affections

THE CLINICAL JOURNAL

2/6 *An Illustrated Monthly Record of CLINICAL MEDICINE AND SURGERY* **2/6**

Including a Section on MEDICAL PROGRESS dealing concisely with the most important advances

my perusal of the Clinical Journal was a very important factor in my medical education —*LORD HORDER*

Special Leaflet with List of articles Letter Journal can be applied at ANNUAL SUBSCRIPTION (commencing at any date) **25s** post free

London: H. K LEWIS & Co Ltd, 136 Gower Street, W C 1

SECOND-HAND MICROSCOPES FOR SALE, OR WANTED FOR CASH

ZEISS £32/10/-
ZEISS 20/-/-
LEITZ 15/15/-
BECK 15/10/-

1/12 OIL IMM OBJECTIVES FROM **£3/10/-**.

EXCHANGES AND REPAIRS

BROADHURST, CLARKSON & CO, LTD, 63, FARRINGDON ROAD, LONDON, E C 1

Note Name and Address (3 minutes from Farringdon Street Metro Station) *Over 100 years' reputation*

X-RAY CAR SERVICE

PORTABLE X RAYS LTD

POWER ROAD CHISWICK
TELEPHONE CHISWICK 4006

ANY HOUR ANY DAY ANY NIGHT ANYWHERE

For 100% Glucose Barley Sugar

and other confections including the incorporation of HALIBUT LIVER OIL physiologically standardised

INSIST ON Simpkin's

From 6d per packet FROM CHEMISTS ONLY

ADVANCE NEWS

VITA-GLUCOSE GLUCOSE POWDER

In compressed Tablets Delightfully flavoured per 6d packet.

Samples gladly sent on request.

Write A. L. SIMPKIN & CO LTD
Barley Sugar Works (Dept. B M J) Hunter Rd. Sheffield 6.

BROCHURE SKETCHES & ESTIMATES FREE
CANonbury 3077

NAMEPLATES
BRONZE STAINLESS STEEL BRASS

COOKE S (FINSBURY) LTD
FINSBURY PAVEMENT HOUSE
MOORGATE, LONDON E.C.2
Est 1877

NAME PLATES in Bronze and Enamel
Stainless Steel Brass or Chromium
Actual Makers Quick Delivery Low Price
The WHITE BRONZE Co 1 OLondon Rd CROYDON

FREQUENT MICTURITION

"YBWET ABSORBENT BAGS
Male day pattern 3s
New Model Female day pattern 4

DUPLEX BAGS
Male or Female day and night 6

"SANITUBE"
For helpless bedridden patients 6

Our bags catch all leakage easing mind and body Invisible under clothing and easily emptied New worn world wide Special patterns for motorists and aviators

Diarrhoea etc on request from
HILLIARD 123 Douglas Street Glasgow C 2

ATHEENIC Soft Wool UNDERWEAR
From Factory to Wearer BY POST

Pure Wool Silk and Wool and Silk Garments in all sizes weights and styles for MEN WOMEN and CHILDREN are Guaranteed Unshrinkable Excellent wearing properties Also Real Scotch OUTERWEAR in latest styles HOMESPUNS in checks and mixtures Catalogue with patterns Post Free

Dept 3 ATHEENIC MILLS HAWICK Scotland

NAMEPLATES Brass Bronze Stainless Steel
REDUCED PRICES
Send for List 10 to the Actual Make
F OSBORNE & Co, Ltd Tel Euston 4824
117 Gower Street London W C 1

NAMEPLATES of character in Brass & Bronze
Send for Illustrated Brochure and Price List
F B HALL & CO 445 New Cross Rd S E.14 TIDeway 3818

COVERS FOR BINDING

Covers for Binding the BRITISH MEDICAL JOURNAL can be had price 2s 6d by parcel post 2s 10d each

Orders with appropriate remittance should be addressed to

THE SECRETARY
BRITISH MEDICAL JOURNAL
B M A HOUSE TAVISTOCK SQ
LONDON W C 1

A GENTLEMAN ALWAYS LOOKS WELL DRESSED IN SAVILE ROW CLOTHES



NEW OVERCOATS LOUNGE DRESS SPORTS SUITS etc by all eminent tailors viz Scholte, Lesley & Roberts Kilgour etc.

OUR PRICES 3 to 8 Gns.

Alterations on Premises

REGENT DRESS CO
2nd Floor Piccadilly Mansions 17 Shaftesbury Av Piccadilly Circus, W 1 (Next Cafe Monico) GER 7180
LADIES' DEPT on 1st FLOOR

NAME.....
IN BRONZE ENAMEL OR BRASS
Phone Clerkenwell 3441
Free Sketch and Booklet will be sent on receipt of details
S J & A. Herd, 30 Clerkenwell Rd., E.C.1
.....PLATES

HOME FOR EPILEPTICS
MAGHULL (near LIVERPOOL)
FARMING and OPEN AIR OCCUPATION for PATIENTS

A few vacancies now for 1st and 2nd Class House FEES 1st Class (men only) from £3 p w upwards 2nd Class (men and women) 32 p w

For further particulars apply

C EDGAR GRISEWOOD, A.C.A., Secretary 20 Exchange Street East Liverpool 2

THE GRANGE,
near ROTHERHAM.

A HOUSE licensed for the reception of a limited number of Ladies suffering from Nervous and Mental Disorders Both certified and voluntary patients received Approved for temporary Patients This is a large country house with beautiful grounds and park, five miles from Sheffield Tel No 4040 Ecclesfield Res Phys GILBERT E MOULD L R C P M R C S *Station.* Grange Lane L & N E Rly

Tel and Telegrams Haynes Brentwood 45
LITTLETON HALL, BRENTWOOD ESSEX.
Large grounds 400 ft. above sea. HOME for ladies Mentally afflicted Voluntary Boarders received Stations Brentwood and Shenfield 1 mile. Liverpool St 26 min. Apply Dr HAYNES

LONDON CORA HOTEL,
Upper Woburn Place near B M A. Headquarters Accommodates 135 Visitors Modern Comforts Excellent table. A A and R A C recommended Room Bath and Breakfast from 8/6

HERMOSA, TEIGNMOUTH, S DEVON PAYING GUESTS
Highly recommended Restful home Good garden tennis courts Hot and cold in bedrooms South aspect. Terms from 3 guineas weekly Phone 24

CHEADLE ROYAL HOSPITAL

CHEADLE, CHESHIRE

This REGISTERED HOSPITAL with a SEASIDE BRANCH at Colwyn Bay N Wales is for the treatment and care of those of the Upper and Middle Classes suffering from MENTAL and NERVOUS DISEASES
The Hospital is governed by a Committee appointed by the TRUSTEES of the Manchester Royal Infirmary
In addition to the Main Building there are separate villas Extensive grounds Hard and grass tennis courts cricket and croquet grounds and a court for badminton There are also wireless installations Golf may be had within easy distance Occupational therapy
VOLUNTARY TEMPORARY and CERTIFIED PATIENTS received
The Hospital is nine miles from Manchester 50 minutes by rail from Liverpool and 3½ hours from London
For terms and further particulars apply to the Medical Superintendent who may be seen in MANCHESTER by APPOINTMENT
Telephon GATLEY 2231 (3 lines)

THE OLD MANOR SALISBURY

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS

Extensive grounds Detached Villas Chapel Garden and dairy produce from own farm Terms very moderate

CONVALESCENT HOME at BOURNEMOUTH

Detached Villas standing in 12 acres of ornamental grounds with tennis courts etc which Voluntary Temporary or Certified Patients may visit by arrangement for long or short periods

Illustrated Brochure on application to the Medical Superintendent, The Old Manor, Salisbury 'Phone Salisbury 2251

CALDECOTE HALL

NUNEATON

WARWICKSHIRE

(Phone Nuneaton 241)

Residential treatment of
FUNCTIONAL NERVOUS DISORDERS
Including Alcoholism and other Addictions
(Certifiable Cases are not received)

This beautiful mansion situated in the heart of the country (less than two hours from London by L M S R) and surrounded by charming pleasure grounds in which games and outdoor occupational therapy are available is devoted to the treatment of Functional Nervous Disorders by psychotherapeutic and ancillary methods

Illustrated brochure and particulars obtainable from A F CARTER M D , D P M , Resident Medical Superintendent

CAMBERWELL HOUSE, 33, Peckham Road, London, S.E.5.

Telegrams PSYCHOLIA LONDON — *Telephone* RODNEY 4742 (2 lines)

FOR THE TREATMENT OF MENTAL DISORDERS

Also completely detached villas for mild cases, with private suites if desired Voluntary patients received Twenty acres of grounds Hard and Grass Tennis Courts, Putting Greens, Bowls, Croquet Squash Rackets Recreation Hall with Badminton Court, and all indoor amusements, including Wireless and other Concerts, Occupational Therapy, Callisthenics, and Dancing Classes X ray and Actino therapy Prolonged Immersion Baths, Operating Theatre, Pathological Laboratory, Dental Surgery, and Ophthalmic Dept Chapel Senior Physician Dr HUBERT JAMES NORMAN assisted by three Medical Officers, also resident, and visiting Consultants
An illustrated Prospectus giving fees which are strictly moderate may be obtained upon application to the Secretary

The Convalescent Branch is HOVE VILLA, BRIGHTON, and is 200 feet above sea level

PECKHAM HOUSE, 112, Peckham Road, London, S.E.15.

Telegrams "Alleviated, London" — **Telephone Rodney 2641-2642**

The above House is for the care and treatment of persons suffering from mental diseases and nervous disorders Certified voluntary and temporary patients are received Separate houses for treatment and accommodation of special cases adjoin the Institution Occupational therapy, physical drill, and other forms of modern treatment There is a seaside branch Kearsney Court, near Dover, to which patients may be sent for treatment or on holiday Motor drives are arranged when required Tennis courts Entertainments, dances, and indoor amusements held throughout the year Terms from £3 3s per week Illustrated prospectus and further particulars can be obtained from the **Medical Superintendent**

LAVERSTOCK HOUSE

SALISBURY WILTS

PRIVATE MENTAL HOME FOR LADIES AND GENTLEMEN

Completely up to date Lovely house and grounds (18 acres) Certified and uncertified cases taken Facilities for going to the seaside

ESTABLISHED OVER 200 YEARS

Apply to Med Supt for illustrated brochure Tel SALISBURY 2612

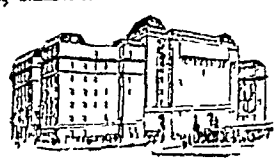
THE CLINIC

20 Devonshire Place London, W.1

Tel Welbeck 1444 (20 lines)

A NURSING HOME FOR SURGICAL, MEDICAL AND MATERNITY CASES

Fees 10 gns to 18 gns per week (Average—14 gns)
8 Operating Theatres
150 State Registered Nurses
2 Resident Medical Officers (for emergencies)
Patients only received under the supervision of their own Medical Practitioner
Drugs and Dressings free (other than Proprietary Articles)
Illustrated Brochure on application to Secretary



THE ROYAL EARLSWOOD INSTITUTION

FOR MENTAL DEFECTIVES REDHILL, SURREY
(Formerly the EARLSWOOD ASYLUM)
PATRON H M THE KING

FOR THOSE REQUIRING CONTROL with EXPERT SUPERVISION and needing SPECIAL TRAINING in useful occupations *SCHOOLS FARMING and various TRADE WORKSHOPS*
Inclusive fees from £110 p a *THOSE UNABLE TO PAY FULL FEES* admitted by votes of subscribers with part payment towards cost
RECREATIONS Outdoor games MALE STAFF BAND for Concerts Dancing etc
Apply THE MEDICAL SUPERINTENDENT Earlswood Redhill Surrey *Phone* REDHILL 344
or to the Secretary Mr H STEPHENS 14 16 Ludgate Hill E C 4 *Phone* CITY 4697

WYE HOUSE, BUXTON, AND CLINIC,

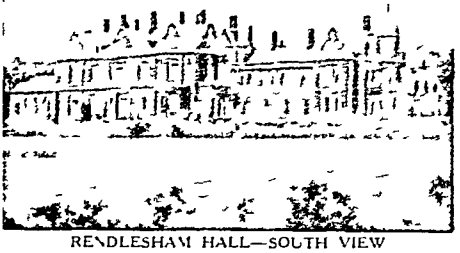
for the PREVENTION and TREATMENT of NERVOUS and MENTAL DISORDERS in both sexes Large country house beautifully situated in its own grounds Croquet lawns hard tennis court billiards wireless installation throughout Every facility for specialised modern treatment including psychotherapy occupational therapy ultra violet light, diathermy Private rooms with special nurses if required Voluntary Temporary and Certified patients received—For terms apply to the Medical Superintendent HELEN S E MURRAY M D
Nat Tel 130

THE RESIDENTIAL TREATMENT OF ALCOHOLIC & DRUG ADDICTION

RENDLESHAM HALL

(Postal Address) — **WOODBRIDGE, SUFFOLK**

Rendlesham Hall, which is open to receive patients, is essentially a Sanatorium Its daily life and routine are that of an ordinary comfortable holiday or health resort, or of a large country house Each patient has all the privileges of a guest consistent with the prescribed medical treatment



RENDLESHAM HALL—SOUTH VIEW

Rendlesham Hall has 45 bedrooms and about 450 acres of gardens and park It has also a private nine-hole golf course, tennis and croquet lawns, and bowling green

Illustrated booklet giving particulars as to terms etc can be had on application to the

RESIDENT MEDICAL SUPERINTENDENT

Telegrams and Telephone *WICKHAM MARKET* 216 (*Toll Call from London*)

Proprietor The Norwood Sanatorium Limited

RUTHIN CASTLE, NORTH WALES

A Private Hospital or Clinic for the diagnosis and treatment of Internal Diseases (except Mental or Infectious Diseases) The Clinic is provided with a full staff of doctors bacteriologists chemists radiologists dietists nurses masseurs and masseuses

The surroundings are beautiful The climate is mild There is central heating throughout The annual rainfall is 30 5 inches that is less than the average for England

The inclusive weekly fees are from 15 guineas a week according to the room occupied rooms with bathroom are from 21 guineas The charges include all chemical bacteriological X ray or other examination advised by the doctors and all the usual forms of treatment in addition to board and lodging. There are no extra charges except for alcohol (when ordered) and laundry An examination and consultation fee of 15 guineas is charged on the first visit.

Address THE SECRETARY Ruthin Castle North Wales *Telegrams* Castle Ruthin *Telephone* Ruthin 66

CRICHTON ROYAL, DUMFRIES

FOR

NERVOUS AND MENTAL DISORDERS

This Hospital has every facility for complete investigation of the above conditions and provides all forms of modern treatment including psychotherapy physiotherapy occupational and recreational therapy Cases of alcoholism and drug addiction are admitted The Physiotherapy Department has separate units fully equipped for X ray work heliotherapy short wave therapy electro-therapy and hydrotherapy (swimming bath prolonged baths Scotch and Vichy douches Plombières treatment electric and Turkish bath cabinets etc) There is a fully equipped gymnasium under qualified instructors Facilities are provided under special recreational therapists for all indoor and outdoor games including golf course cricket football and hockey grounds lawn tennis and squash courts croquet and bowling green

The Hospital has its own Cinema Library and Hairdressing Saloon Terms include regular motor drives

Private rooms suites or villas are available and special nurses can be provided

The Hospital grounds extending to nearly 1 600 acres are situated in delightful country and include an extensive farm (T T herd) gardens and orchard

As the Hospital is well endowed terms are exceptionally moderate *e g* First Department 25 to 30 guineas per week Second Department 2 and 2½ guineas per week Voluntary and certified patients are received Medical Certificates given anywhere in the British Isles are valid for admission of patients For prospectus necessary form and further information apply to

Physician Superintendent P K McCOWAN J P M D F R C P D P M Barrister at Law
July 1st Tel Dumfries 1119

SUNFIELD

CHILDREN'S HOME

Clent Grove, Clent, Stourbridge, Worcestershire

PRIVATE APPROVED HOME for backward and retarded children of both sexes up to 12 years of age Curative educational treatment on RUDOLF STEINERS Methods Home like surroundings individual attention House and grounds uniquely situated on Clent Hills Illustrated prospectus terms etc from the Secretary

Phone Hagley 253

ST. ANDREW'S HOSPITAL

FOR MENTAL DISORDERS

NORTHAMPTON

FOR THE UPPER AND MIDDLE CLASSES ONLY

President THE MOST HON THE MARQUESS OF EXETER C M G A D C

Medical Superintendent THOMAS TENNENT M D M R C P D P H D P M

This Registered Hospital is situated in 120 acres of park and pleasure grounds Voluntary patients who are suffering from incipient mental disorders or wish to prevent recurrent attacks of mental trouble tempora y patients and certified patients of both sexes are received for treatment Careful clinical biochemical bacteriological and patholog cal examinations Private rooms with special nurses male or female in the Hospital or in one of the numerous villas in the grounds of the various branches can be provided

WANTAGE HOUSE

This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted It is equipped with all the apparatus for the mo t modern treatment of Mental and Nervous Disorders It contains special departments for hydrotherapy by various methods including Turkish and Russian baths the prolonged immersion bath Vichy Douche Scotch Douche Electrical bath Plombières treatment etc There is an Operating Theatre a Dental Surgery and X ray room an Ultra Violet Apparatus and a Department for Diathermy and High Frequency treatment It also contains Laboratories for biochemical bacteriological and pathological research

MOULTON PARK

Two miles from the Main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres Milk meat fruit and vegetables are supplied to the Hospital from the farm gardens and orchards of Moulton Park Occupation Therapy is a feature of this branch and patients are given every facility for occupying themselves in farming gardening and fruit growing

BRYN-Y-NEUADD HALL

The seaside house of St Andrew s Hospital is beautifully situated in a Park of 330 acres Llanfairfechan amidst the finest scenery in North Wales On the North West side of the Estate a mile of sea coast forms the boundary Patients may visit this Branch for a short seaside change or for longer periods The Hospital has its own private bathing house on the seashore There is trout fishing in the park

At all the branches of the Hospital there are cricket grounds football and hockey grounds lawn tennis courts (grass and hard courts) croquet grounds golf courses and bowling greens Ladies and gentlemen have their own gardens and facilities are provided for handicrafts such as carpentry etc

For terms and further particulars apply to the Medical Superintendent (Telephone No 2356 and 2357 Northampton) who can be seen in London by appointment

NORTHUMBERLAND HOUSE,

GREEN LANES, FINSBURY PARK, N 4

A PRIVATE HOSPITAL for the treatment of mental and nervous illnesses Conveniently situated and easy of access from all parts Six acres of ground highly situated facing Finsbury Park Voluntary and Temporary Patients received without certification Occupational Therapy Psychotherapy, and other modern forms of treatment

Telephone STAMFORD HILL 2688 Telegrams SUBSIDIARY LONDON

Convalescent Home KEARSNEY COURT DOVER For further particulars apply to the Medical Sup

COURT HALL, KENTON, near EXETER,

for the treatment of eight Ladies, voluntary, temporary, or certified patients Large gardens and own dairy

CLIFFDEN TEIGNMOUTH for early and convalescent cases A well appointed house with spacious balconies and extensive views of the South Devon coast Sub-tropical gardens own dairy in 25 acres Private road to beach

		Telephones
Resident Physicians	BERTHA M MULES M D, B S	Starcross 59
	ANNE S MULES M R C S L R C P	Teignmouth 289

THE COPPICE, NOTTINGHAM

HOSPITAL FOR MENTAL DISEASES

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes of the Upper and Middle Classes at moderate rates of payment It is beautifully situated in its own grounds on an eminence a short distance from Notting ham and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted Occupational Therapy Voluntary and Temporary Patients received

Tel 64117 *For terms etc apply to the Medical Superintendent*

HAYDOCK LODGE

NEWTON-LE-WILLOWS, LANCASHIRE

Teleg Street Ashton in Makerfield *Phone* Ashton in Makerfield 7311

For the reception and treatment of PRIVATE PATIENTS of both sexes of the UPPER AND MIDDLE CLASSES suffering from mental and nervous diseases either voluntarily temporarily or under Certificate Patients are classified in separate buildings according to their mental condition

Situated in park and grounds of 400 acres Self supported by its own farm and gardens in which patients are encouraged to occupy themselves Every facility for indoor and outdoor recreation For terms pro pectus etc apply MEDICAL SUPERINTENDENT

STRETTON HOUSE,

Church Stretton, Shropshire

A PRIVATE HOME for the treatment of Gentlemen suffering from Mental and Nervous Illness including the allied disorders of Alcoholism and the Drug Habit All types of early Mental and Nervous cases are received without certificates as Voluntary Patients under he provisions of the Mental Treatment Act 1930 Bracing hill country (See *Medical Directory* p 2328) Apply to the Medical Superintendent Phone 10 P O Church Stretton

FENSTANTON,

CHRISTCHURCH ROAD, Streatham Hill, S W 2

A Private Home for the Care and Treatment of a limited number of Ladies with Mental and Nervous Disorders Certified Voluntary and Temporary Patients received Large Mansion with 12 acres of grounds (See *Medical Directory* p 2312) Apply Resident Physician *Telephone* Tulse Hill 7181

BAILBROOK HOUSE, BATH

For sufferers from Nervous and Mental Dis orders with or without certificates

The house is gloriously situated in wooded grounds of 20 acres with magnificent views of the City and the Avon Valley (See *Medical Directory* page 2322)

For terms apply A GUIRDHAM M A D M B Ch D P M Resident Phy ician

Telephone Batheaston 8189

HEIGHAM HALL, NORWICH

A PRIVATE MENTAL HOME situated in 11 acres of well wooded grounds For Ladies and Gentlemen suffering from Nervous or Mental Illness Voluntary Patients Temporary Pati nts and Patients under Certificate are admitted for treatment Fees from 4 guineas a week upwards according to requirements A few vacancies exist for Ladies and Gentlemen at reduced fees on the recommendation of the Patient s own Physician Apply to Dr J A SMALL Telephone 80 Norwich

Telegrams Small 80 Norwich

TYKEFORD ABBEY,

NEWPORT PAGNELL, BUCKS

FUNCTIONAL NERVOUS DISORDERS MEDICAL AND CONVALESCENT CASES

The Home is a Mansion of Historical interest standing in 15 acres of garden and grounds and is situated 14 miles from Northampton and 12 miles from Bedford on the main London to Northampton Road fifty miles from London Both sexes are accommodated Psycho-thera peutic Treatment is used extensively in suitable cases Radiant Heat X ray and Ultra Violet Light Diathermy and Foam Baths Billiards Tennis etc

Apply Dr D E M DOUGLAS MORRIS

Telephone Newport Pagnell 171

HILL END HOSPITAL AND CLINIC

FOR THE PREVENTION AND TREATMENT OF MENTAL AND NERVOUS DISORDERS

(20 miles from London)

Ladies suffering from all forms of MENTAL ILLNESS are received for treatment on modern lines as Voluntary Temporary or Certified Private Patients at the Hill End Hospital Convalescent or mild cases can be treated in a delightful country mansion with extensive grounds known as

HIGHFIELD HALL

situate about a mile away from the Hospital FEES TWO TO THREE GUINEAS PER WEEK

For further particulars apply to the Medical Supt W J T KIMBER L R C P D P M

ST ALBANS, HERTS

CHISWICK HOUSE, PINNER, MIDDLESEX

Telephone PINNER 234

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes

A modern country house 12 miles from Marble Arch in beautiful secluded grounds

Fees from 10 guineas per week inclusive Cases under Certificate Voluntary and Temporary patients received for treatment

Douglas Macaulay, M D D P M

BARNWOOD HOUSE
GLOUCESTER

A REGISTERED HOSPITAL for the CARE and TREATMENT OF LADIES and GENTLEMEN suffering from NERVOUS and MENTAL DISORDERS Within two miles of the G W and L M & S Railway Stations at Gloucester the Hospital is easily accessible by rail from London and all other parts of the United Kingdom It is beautifully situated at the foot of the Cotswold Hills and stands in its own grounds of over 300 acres Voluntary Patients of both sexes also are received for treatment Special accommodation is also provided at five villa residences all of which stand in their own grounds and are entirely separate from the main hospital For particulars as to terms etc apply to G W T H FLEMING M R C S L R C P D P M Physician Superintendent.
Telephone No 6 07 Gloucester

THE
HOTEL GREAT CENTRAL
Marylebone Road N W 1

The Hotel Great Central is within a few minutes walk of the London Clinic and Harley Street
Special terms for friends visiting Nursing Homes in vicinity
Apply Manager Telephone Paddington 1220

GARTH HILL HOUSE
NORTH QUEENSFERRY
near EDINBURGH

A SMALL PRIVATE HOME FOR TREATMENT OF NEURASTHENIC CASES

Magnificent situation overlooking Firth of Forth Stress laid on re-education of will and intelligent readaptation to environment
For particulars apply ARTHUR J BROCK M D Resident Medical Superintendent
Telephone Inverkeithing 179

RUSSELLS
HEMEL HEMPSTEAD RD., WATFORD
Telephone WATFORD 5917

A convalescent home for the care and treatment of mild and recoverable nervous conditions in both sexes The house is situated high up in 40 acres of grounds 17 miles from London at the termination of the Watford by pass One Medical Officer is in residence and two others are in daily attendance Fees from ten guineas a week inclusive
Apply RESIDENT MEDICAL OFFICER

SPRINGFIELD HOUSE
Near BEDFORD (Phone 3117)

For Mental Disorders with or without Certificates
Resident Physician CEDRIC W BOWER
Ordinary Terms Five Guineas per week (Including Separate Bedrooms where suitable)
Interviews in London by Appointment

'ECCLESFIELD' Staplehurst Kent
(Removed from Ashford Middlesex)

PRIVATE HOME for the CARE and CURE of ALCOHOLIC PATIENTS (Ladies) Large mansion beautifully situated in 100 acres of parkland Extensive views Home farm R C Chapel Under the management of the Sisters of the Good Shepherd Apply Rev Mother Tel Staplehurst 61

THE GROVE HOUSE
CHURCH STRETTON SHROPSHIRE

A private Home for the care of and treatment of a limited number of Ladies mentally afflicted
Voluntary and Temporary Patients received under the new Mental Treatment Act 1930
Medical Superintendent Dr McCLINTOCK.

CITY OF LONDON MENTAL HOSPITAL,
DARTFORD KENT

Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of TWO GUINEAS and upwards

BISHOPSTONE HOUSE BEDFORD

A select Private Mental Home for Ladies Certified and Voluntary with separate Houses and Gardens for Voluntary Boarders Under personal supervision of a Resident Mental Specialist and Psychiatrist — Medical Supt Dr J LANGHAM MACALLAY Tel Bedford 4708



Full range of Hydropathic Treatments in Connection with Baths Turkish Russian Brine Aix Vichy Douches Massage Physiotherapy Electric Light Artificial Daylight Natural Medical Purposes
Certified Medical Orchestra special provision for Invalids Nurses Attendants etc
Terms 13/ to 18/6 per day inclusive board
Illustrated Brochure MJ on request.
Resident Physicians
G C R HARBINSON M B B Ch B A O (R U I) R MacLELLAND M D C M.
Phone No 17 Grams Smedleys Matlock

HOSPITAL FOR CONSUMPTION
AND DISEASES OF THE CHEST, BROMPTON,
and FRIMLEY SANATORIUM

PAYING PATIENTS RECEIVED
BOTH MEDICAL and SURGICAL CASES
5 to 8 guineas per week at the Hospital 3 to 4 guineas per week at the Sanatorium.
APPLY TO THE SECRETARY —BROMPTON HOSPITAL S W 3

MONTANA HALL, Montana, Switzerland
OPEN ALL THE YEAR
THE ONLY SANATORIUM IN SWITZERLAND UNDER BRITISH OWNERSHIP AND CONTROL AND WITH A DAY AND NIGHT STAFF OF BRITISH TRAINED NURSING SISTERS
INCLUSIVE TERMS—from 7 guineas (sterling) per week
Med Supt HILARY ROCHE M D (Melb) M R C P (Lond) Tuberculous Dis Dip (Wales)

A SPA UNDER ONE ROOF
In Rockside are combined all the amenities of a modern spa including treatment rest and entertainment
SHELTERED SITUATION SPACIOUS GROUNDS HIGHLY QUALIFIED STAFF
The Baths and Treatment Rooms occupy a special wing accessible by lift from all floors and are fully equipped for every form of physical treatment including the most modern hydrological and electrical methods massage and remedial exercises dietetic and occupational therapy Terms £4 4s 0d to £6 6s 0d
Inclusive terms for consultation fees treatment board residence and attendance from £6 6s
Write for Tariff to the Secretary
Consulting Physician
C R L ESTRANGE
ORME M B B Ch
(Camb) M R C P (Lond)



TORQUAY
GRESHAM COURT HOTEL

RECENTLY OPENED A small luxury Hotel 2 mins Sea almost on level Luxurious comfort combined with an earnest desire to please
The resident proprietors will be pleased to quote special terms to members of the Medical profession on receipt of request for Illustrated Brochure M TEL 3658

HALLIFORD HOUSE, UPPER HALLIFORD SHEPPERTON *Established in 1841*

This handsome secluded residence standing in a park of 36 acres situated 16 miles from London is licensed for the reception of a limited number of Patients of the upper and middle classes suffering from nervous and mental affections
Voluntary or certified cases received Terms moderate Patients are under the constant personal care of the Resident Medical Superintendent Dr R A Stewart from whom full particulars can be obtained Tel Sunbury-on-Thames 70

THE MAUDSLEY HOSPITAL,
DENMARK HILL, S E.5
Telephone RODney 3841

A CLINIC instituted by the London County Council for treatment of Nervous and Curable Mental Disorders Voluntary patients only received
New Out patients —MEN Mondays and Thursdays 2 p m WOMEN Tuesdays and Fridays 2 p m CHILDREN Mondays and Fridays 10 a m In-patients (a) 235 beds (both sexes) in wards or separate rooms including 35 beds in a ward of King's College Hospital which is in use as a temporary annexe of the Maudsley Hospital (b) a special ward (including some private rooms) for those patients of each sex who are paying the full cost and are otherwise suitable TERMS £5 a week *but in case of patients with a legal settlement* in the County of London a less sum may be charged according to means
Terms include (with rare exceptions) all forms of treatment for which there are exceptional facilities as there is a staff of Consultant Specialists and the Central Laboratory of London County Mental Hospitals is attached to the hospital Inquiries of EDWARD MAPOTHER M D F R C P F R C S Medical Superintendent

PRIVATE NERVOUS AND MENTAL PATIENTS

LONDON COUNTY COUNCIL Accommodation for Male patients suffering from Nervous and Mental disorder (voluntary temporary or certified) is provided in the private section of CLAYBURY HOSPITAL Woodford Bridge Essex Terms exclusive of clothing and special luxuries 49 a week for London cases 53/1 a week for others
For particulars apply to the Medical Superintendent at the Hospital or to the Chief Officer Mental Hospitals Department Shell Mex House Strand W C 2

NORMANSFIELD
For Mental Defectives of either sex
Under private management
Apply to Dr Langdon Down
Normansfield Teddington

THE HARROGATE SPA MEDICAL JOURNAL

A TWICE-YEARLY publication devoted to Spa Research and Treatment The appearance of the first number, containing a Foreword by Lord Horder, created great interest amongst members of the Medical Profession who are concerned with Spa Treatment in its various implications The second number has just been published Articles include —

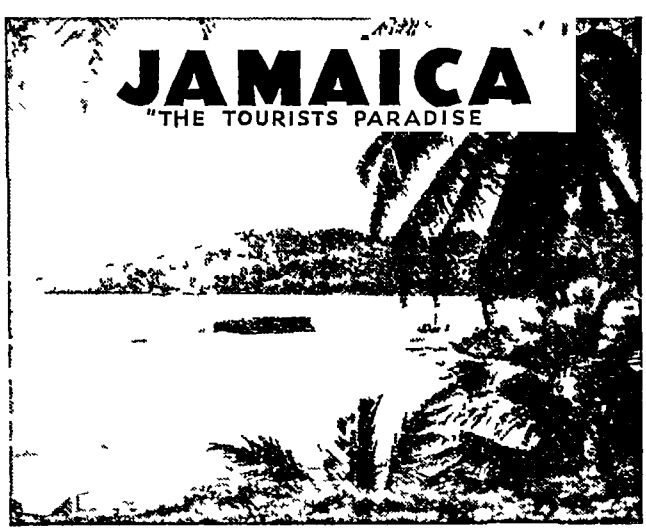
"ON THE PRESCRIBING OF BATHS"
"OBSERVATIONS ON THE SEDIMENTATION RATE IN CASES OF RHEUMATOID ARTHRITIS UNDER TREATMENT"
"METABOLISM IN ARTHRITIS AND ALLIED CONDITIONS"
"SOME EXPERIMENTS ON GASTRIC BEHAVIOUR TOWARDS A NATURAL MEDICINAL WATER"

If you are not already on the mailing list, and would like to receive copies of the first two, and succeeding numbers of the Journal, send your name and address to the Spa Manager, Royal Baths, Harrogate

HARROGATE FOR HEALTH

Visit the Harrogate Stand — No 152 — at the London Medical Exhibition, October 17th to 21st

Whether going to Harrogate for Cure or Holiday or to London for the Medical Exhibition, remember **"IT'S QUICKER BY RAIL."** *Cheap Monthly Returns Any Train, Any Day, from Anywhere*

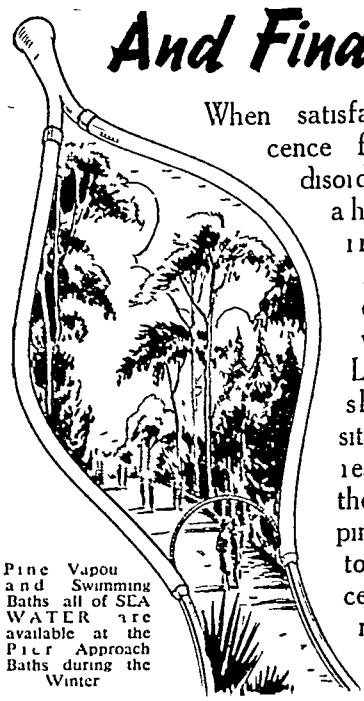


JAMAICA—jewel of the West Indies—offers you a holiday that you will cherish throughout your lifetime Here, in unsurpassed beauty, you can regain your health in the shortest possible time

Magnificent coastal mountain and river scenery a perfect climate with sunshine every day superb ocean bathing and sports and games of every description splendid modern hotels shops and clubs Only 14 days voyage from the United Kingdom

Write for
FREE DESCRIPTIVE BOOKLET
Dept J M J The West India Committee 14 Trinity Square
London E C 3
Telephone ROYAL 1188

And Finally . . .



When satisfactory convalescence from pulmonary disorders depends on a healthy, invigorating atmosphere, Bournemouth offers the ideal winter residence Long hours of sunshine, sheltered situation, and the resinous perfume of the thousands of pine trees combine to expedite the successful recovery of normal health and strength

Pine Vapour and Swimming Baths all of SEA WATER are available at the Pier Approach Baths during the Winter

BOURNEMOUTH

For Health & Sunshine

Write for the Book of Bournemouth and any other information to the Publicity Manager Room 109a Town Hall Bournemouth

The MUNDESLEY SANATORIUM

The central building makes the Mundesley Sanatorium the best equipped building in England for the cure of Tuberculosis All the bed rooms have hot and cold running water electric light and wireless headphones The public rooms are spacious and comfortable

Resident Physicians
S VERE PEARSON
M D (Cantab) M R C P (Lond)
E C WYNNE EDWARDS
M B (Cantab) F R C S (Edin)
GEORGE H DAY
M D (Cantab)

For all information apply
The Secretary
THE SANATORIUM MUNDESLEY
NORFOLK
Telephone Mundesley 94 and 95
(2 lines)

The buildings face S S W and are sheltered from the sea by a pine clad ridge The sunshine record and dry air complete a perfect site The medical equipment is of the latest kind and there is a day and night nursing staff

TERMS FROM 7½ GUINEAS WEEKLY

HOLLOWAY SANATORIUM VIRGINIA WATER

A Registered Hospital for the Treatment of MENTAL DISORDERS of the EDUCATED CLASSES Founded by THOMAS HOLLOWAY in 1885

This Institution is situated in a beautiful and healthy locality within easy reach of London It is fitted with every comfort Patients can have Private Bedrooms and Special Nurses as well as the use of General Sitting Rooms at moderate rates of payment Voluntary Patients can be admitted

There is a Branch Establishment at CANFORD CLIFFS BOURNEMOUTH where Patients can be sent for a change and be provided with all the comforts of a well appointed home

For Terms apply to

The Resident Medical Superintendent, St Ann's Heath, Virginia Water, Surrey

THE CORNISH RIVIERA SANATORIUM

ROSEHILL PENZANCE.

For the treatment of patients suffering from tuberculosis

The Sanatorium stands in its own grounds of 13 acres of garden lawn and woodland and is well sheltered from cold winds. The climate is mild in winter cool in summer Artificial pneumothorax and other modern forms of treatment are available Day and night nursing staff Electric light Wireless in all rooms

Medical Supt **Francis Chown** M B Lond D P H Consulting Physician (late Med Supt) Cornwall County Sanatorium
Terms 5 to 7 guineas weekly **Phone Penzance 598**

THE COTSWOLD SANATORIUM

First opened in 1898 and rebuilt in 1925 On the Cotswold Hills seven miles from Cheltenham for the treatment of Pulmonary and all other forms of Tuberculosis Aspect S.S W sheltered from North and East elevation 800 feet. Pure bracing air **Special Treatment by Artificial Pneumothorax** (X ray controlled) **Tuberculins and Ultra-violet Rays** are available when necessary without extra charge X ray plant Fully equipped Dental Department Electric light Radiators hot and cold basins and Wireless in all rooms Up to date main drainage

Full day and night Nursing Staff *Terms 5 gns to 7 gns a week inclusive*

Med Supt GEOFFREY A HOFFMAN B A M B I C Dub *Asst Phys* MARGARET A HARRISON M B B S Lond *Pathologist* EDGAR V DAVEY M B B Ch *Consult Laryngologist* G V BARKER F R C S Edin D L O *Consulting Dental Surg* GEORGE V SAUNDERS L D S R C S Lond Apply Secretary The Cotswold Sanatorium Cranham Gloucester *Tel* 81 and 82 WITCOMBE *Grams* HOFFMAN BIRDLIP

THE TAVISTOCK CLINIC

(The Institute of Medical Psychology)
MALET PLACE W C 1

A Systematic Course of Lectures on PSYCHOTHERAPEUTIC THEORY AND METHOD extending over three terms, begins on October 6th 1938

Lectures will be given on Mondays and Thursdays at 3 15 4 30 and 5 45 p m for the first six weeks and subsequently at 4 30 p m only

The first term s lectures form a complete Course for those desiring only an introduction to the study of psychotherapy

Fee for the Course £8 8s

For the first term only £5 5s

For detailed Syllabus apply to the Educational Secretary at the Clinic

CITY OF LONDON MATERNITY HOSPITAL

(Incorporated by Royal Charter)
CITY ROAD E C 1

The Hospital offers facilities to POSTGRADUATES for observing the work of its Antenatal Postnatal and Dental Clinics and to male MEDICAL STUDENTS (and Practitioners desiring a Refresher Course) a two or four weeks Midwifery Course (Residential) Nearly 2,000 patients annually

RALPH B CANNINGS Secretary

QUEEN CHARLOTTE'S MATERNITY HOSPITAL

MARYLEBONE ROAD N W 1

Medical Students and Qualified Practitioners admitted to the Practice of this Hospital. Unusual opportunities are afforded of seeing Obstetrical Complications and Operative Midwifery (about one-half of the total admissions being primiparous cases) Over 2,700 patients are admitted to the Wards annually and in the Antenatal department there are over 20,000 attendances per annum. Clinical demonstrations are given by the Staff daily

For rules, fees etc apply H B STOKES Secretary Superintendent.

POST-GRADUATION SCHOOL

CENTRAL LONDON THROAT, NOSE & EAR HOSPITAL

GRAY'S INN ROAD, W C 1

COURSES FOR THE D L O EXAMINATION

Two weeks' Course in Anatomy and Physiology for Part I commences on October 3rd Two weeks' Clinical Course for Part II commences on October 17th The latter course includes Peroral Endoscopy and Pathology and Bacteriology Classes Revision Class for Part II Students commences on November 14th

Full Syllabus of these Courses and of the routine clinical teaching, which meets all the requirements of Students for the D L O Examinations, may be obtained from C GILL-CAREY F R C S Ed Dean

THE HOSPITAL FOR DISEASES OF THE SKIN

(Established 1841)

71, BLACKFRIARS ROAD, LONDON, S E 1

Telephone WATerloo 6001

New patients can be seen at 2 o'clock from Monday to Friday, both inclusive, also from 5 30 to 6 30 on Tuesday and Friday evenings Necessitous cases admitted free, others on payment of a small contribution

LIGHT THERAPY TREATMENT X RAY DEPARTMENT

Classes held twice a year for post graduates by arrangement with the Fellowship of Medicine

All enquiries should be addressed to The Secretary

MEDICAL CORRESPONDENCE COLLEGE,

19, Welbeck Street, London, W 1

M.B.B.S. LONDON

Candidates entering for Part I in November, 1938, or for Parts II and III in May, 1939, under the New Regulations should write for full details of new courses of postal preparation conforming to the new requirements of the syllabus

Highly qualified Tutors with accurate knowledge of the special features of these examinations

Write at once for booklet The Problem of the Final M B B S London Sent free on application

Address The Secretary,

MEDICAL CORRESPONDENCE COLLEGE,

19 Welbeck Street, London, W 1

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE

INCORPORATING THE ROSS INSTITUTE

POSTS OVERSEAS FOR MEDICAL MEN

A register is kept in the School of medical men who are prepared to be considered for posts overseas, and the School is frequently asked to advise plantation and mining companies when such posts fall vacant

The salaries offered are attractive, conditions of service are governed by standardised forms of contract, and many of the posts offer to medical men a most interesting field in which to practise their profession

It is desirable that candidates for posts overseas should hold a diploma in tropical medicine and hygiene The course provided by the London School for the Conjoint Board's Diploma lasts six months and the tuition fee is £40 The course may be taken from October to March or from January to June There are generally more vacancies in the course commencing in January

The Director of the Ross Institute is always glad to interview medical men who would like information regarding the possibilities of a career overseas if they will be good enough to make an appointment to call on him Enquiries may be addressed to

The Director

Ross Institute of Tropical Hygiene

London School of Hygiene & Tropical Medicine

KEPPEL STREET GOWER STREET W C 1

POST-GRADUATE COURSE IN VENEREAL DISEASES

LONDON COUNTY COUNCIL (WHITECHAPEL) CLINIC TURNER STREET E 1 (ADJOINING THE LONDON HOSPITAL)

A THREE MONTHS COURSE OF INSTRUCTION in MODERN METHODS in the DIAGNOSIS and TREATMENT of VENEREAL DISEASES will be given by Lieut Colonel E T Burke D S O M B Ch B the Director of the Clinic during October November and December 1938

Attendance at this course will qualify subject to the other conditions in the Regulations of the Ministry of Health for the Certificate enabling the possessor to hold the post of a Venereal Diseases Officer under the Council of a County or County Borough The course will consist of twenty five systematic lectures accompanied by lantern demonstrations on Mondays and Thursdays at 2 30 p m beginning on October 3rd and ending on December 22nd Every Wednesday at 2 p m cases will be demonstrated Those taking the course will also attend the practice of the Clinic in order to obtain tuition in intravenous injections etc During the three months 130 hours of attendance must be put in

Those intending to take the course must send their names to the Director on or before September 24th 1938 Fee 10 10s

GUY'S HOSPITAL MEDICAL SCHOOL.

DIPLOMA IN ANAESTHETICS

A COURSE OF INSTRUCTION in preparation for the November Examination for the Diploma in Anaesthetics of the Conjoint Examining Board in England will commence on Monday October 17th provided that there is a minimum number of seven entrants The Course will cover a period of three weeks and will include lectures in Physiology Anatomy Pharmacology Clinical Investigations in Anaesthetics

The Course will be open to men and women graduates The fee for the Course will be £15 15s

Further information may be obtained from the Dean Guy's Hospital Medical School London Bridge S E 1

UNIVERSITY EXAMINATION POSTAL INSTITUTION

17 RED LION SQ LONDON W C 1

FOUNDED IN 1887

by E S WEATHERHEAD (MAIL tuition)

POSTAL OR ORAL PREPARATION FOR ALL MEDICAL EXAMINATIONS

SOME SUCCESSES

M D (Lond)	1 of 37 (11 Gold Medallists during 1933-3)	413
M S (Lond)	1901 37 (including 4 Gold Medallists)	24
M B B S (Lond)	*Final* 1935-37 (Completed Exam)	255
F R C S (Eng)	*Primary*	199
1919-37	*Final*	192
M R C P (Lond)	1933-37	286
D P H	(Various) 1936-37 (Completed Exam)	348
F R C S (Edin)	1936-37	65
M R C S L R C P	*Final* 1919-3 (Completed Exam)	606

M D Various By Thesis Many successes

Preparation for the above and for Medical Preliminary and all examinations leading up to M R C S L R C P or M B of various Universities also for M R C P (Edin) D P M D O M S D T M & H D L O D C H D A D M R E M M S A L M S S A D C O G and some exams of Dominions Universities

ORAL CLASSES

M R C P M D Primary and Final F R C S F R C S (Edin) also Final M B B S and M R C S L R C P Museum and Microscope Work Also Private Tuition

MEDICAL PROSPECTUS (47 pp)

CONTENTS The method and the cost of entering the Medical Profession *Particulars of all Medical Examinations* Postal Courses and Oral Classes Suggestions for the Higher Medical Examinations Suggestions for the Higher Surgical Examinations Suggestions for the Special Diploma Examinations Refresher Courses Openings for Women Hints for writing theses

Medical Prospectus gratis along with list of Tutors etc on application to the Principal 17 Red Lion Sq London W C 1 (Telephone Holborn 6313)

LONDON HOSPITAL MEDICAL COLLEGE

(University of London)

SCHORSTEIN MEMORIAL LECTURE.

The above lecture will be delivered by PROFESSOR [illegible] Professor of Birmingham at 4.30 p.m. in the ANATOMICAL THEATRE.

Subject *The Haemolytic Anaemias of Childhood*

Members of the profession are cordially invited to attend

A E CLARK KENNEDY M D F R C P
Dean

Turner Street London E 1

41st ANNUAL EDITION

PATON'S LIST OF SCHOOLS

An aid to parents in the selection of Schools and Tutors

Crown 8vo 588 pages Price 5/ postage 6d

Contains particulars with illustrations of Preparatory Private and Public Schools for Boys and Girls Tutors Co-educational Schools Domestic Science Secretarial Training and Physical Training Colleges etc Schools on the Continent

J & J PATON Educational Agents
143 Cannon Street London E.C 4

ADVICE ALSO GIVEN FREE OF CHARGE.

F R C S (Edin)

EDINBURGH POSTAL COURSES

Full detail of above and Oral Classes—H C ORRIN F R C S Surgeon's Hall Edinburgh

F.R.C.S. ENGLAND
F.R.C.S. EDINBURGH
F.R.C.S. IRELAND
M.S. LONDON M.C. CANTAB

and all Higher Surgical Examinations

For particulars of short Intensive Postal and Oral Revision Courses apply SECRETARY Medical Correspondence College 19 Wellbeck Street W 1

DIPLOMA IN PUBLIC HEALTH

The Royal Institute of Public Health and Hygiene

The Course of Instruction can be commenced at any time Special provision is made for students who can give only part time to the work

A prospectus and further particulars can be obtained from the Secretary

Telephone Langham 7311
3 Portland Place London W 1

STAMMERING SPEECH DEFECTS

BEHNKE METHOD Established 1900 Cases non resident treated at 19 Earl's Court Sq S W 5 and in residence in the Summer holidays at Mrs. BEHNKE's house on the Chilterns Prospectus of cases treated and treatise on stammering and other speech defects —"Times." The results only physiological principles —"Lancet." The method is scientifically correct and perfectly effective — Guy's Hospital Gazette.

Stammering Cleft Palate Speech Lisping

Sole Address Miss BEHNKE 19 Earl's Court Sq. S.W.5

Preliminary Examinations

The COLLEGE OF PRECEPTORS holds Preliminary Examinations for Medical and Dental Students in London and at Provincial Centres in March June September and December For Regulations apply to the Secretary College of Preceptors Bloomsbury Square London W C 1

KING'S COLLEGE NEWCASTLE UPON TYNE
(University of Durham)

DEPARTMENT OF BACTERIOLOGY

Applications are invited for the vacant post of DEMONSTRATOR IN BACTERIOLOGY The salary offered is £300 per annum and the successful applicant will be expected to take up his duties as soon as possible

The demonstratorship which is a whole time appointment is tenable for the period to September 30th 1939 and does not lead to appointment on the permanent staff of the Department. In special circumstances however a demonstrator may be reappointed for a second or at most a third year

Applications stating age qualifications and experience and giving the names of two persons to whom reference may be made should be forwarded with the undersigned not later than Saturday October 1st, 1938

King's College W G B OLIVER
Newcastle-upon-Tyne 2. Registrar
September 1938.

THE URBAN DISTRICT COUNCIL OF CWMBRAN

APPOINTMENT OF MEDICAL OFFICER OF HEALTH

Applications are invited from Registered Practitioners for the appointment (part time) of a Medical Officer of Health

The appointment is subject to the conditions of Article 14 of the Sanitary Officers (Outside London) Regulations 1935

Candidates must possess either of the following qualifications the Diploma in Sanitary Science Public Health or State Medicine

The salary will be at the rate of £160 per annum

The Officer appointed will be required to reside within the Urban District of Cwmbran

Applications in plain envelopes endorsed Medical Officer of Health must be addressed to the undersigned and received on or before Monday October 3rd 1938

Dated this 14th day of September 1938

KENNETH G S GUNN
Clerk of the Council

Council Offices Cwmbran Mon

NORTHAMPTONSHIRE COUNTY COUNCIL

TEMPORARY ASSISTANT COUNTY MEDICAL OFFICER wanted Salary at rate of £450 per annum and travelling and subsistence allowance on county scale Possession of D P H essential

Apply to Dr C M SMITH County Medical Officer of Health County Hall Northampton

UNIVERSITY OF LEEDS

DEPARTMENT OF PHYSIOLOGY

The Council are prepared to make early date a PART TIME LECTURER to give COURSES in PHYSIOLOGY and HYGIENE for students Candidates must have a medical qualification The post includes facilities for further study and research Salary £400 a year Further particular from the Registrar The University Leeds.

Applications (six copies) to be submitted not later than October 7th

HULL CORPORATION HEALTH DEPARTMENT

AMENDED ADVERTISEMENT

ANLABY ROAD INSTITUTION (HOSPITAL) (250 Beds)

ASSISTANT MEDICAL OFFICER

Applications are invited from registered Medical Practitioners of either sex under the age of 40 years for the above appointment for a period of one year

Salary £300 per annum together with emolument at the rate of £150 per annum for board and residence outside the hospital

The hospital is equipped with modern X Ray and Radium departments

Application forms etc may be obtained from and should be returned to the undersigned not later than 10 a.m. on Monday October 3rd 1938

NICOLAS GEBBIE M D
Medical Officer of Health

Health Department
Guildhall Hull
September 19th 1938

HULL CORPORATION HEALTH DEPARTMENT

HULL MUNICIPAL MATERNITY HOME AND INFANTS' HOSPITAL (116 Beds)

JUNIOR RESIDENT MEDICAL OFFICER (Woman)

Applications are invited from unmarried or widowed Women Medical Practitioners for the appointment of Junior Resident Medical Officer at the above Institution Salary £100 per annum together with board washing and residence at the Maternity Home The appointment will be for six months with a possible extension for a further period of six months

Applications on forms to be obtained from the undersigned are returnable not later than Saturday October 1st. 1938

NICOLAS GEBBIE, M D
Health Department. Medical Officer of Health
Guildhall Hull
September 1938

NOTTINGHAM CITY HOSPITAL

The Health Committee invites applications from duly qualified medical practitioners for a position as *ASSISTANT MEDICAL OFFICER* at the above Hospital.

The hospital contains 1 000 beds for the treatment of all classes of sick persons. It is a recognised training school for nurses and is equipped with all modern requirements

Candidates must have held the post of House Physician or House Surgeon in a general hospital and preference will be given to those having had experience in a similar institution. Experience in the administration of anaesthetics is also desirable.

The salary will be £3 0 per annum rising by annual increments of £10 to £400 with rations and furnished apartments. Quarters for married men are not available.

The successful candidate will be required to pass a medical examination and to contribute to the Corporation Superannuation Fund. The appointment is terminable by one months notice on either side.

Forms of application, to either with particulars of duties may be had from the undersigned to whom applications, with copies of not more than three recent testimonials and endorsed "Medical Officer" should be forwarded not later than October 1st 1938

Guildhall J E RICHARDS.
Nottingham. Town Clerk
September 14th 1938

STOCKTON AND THORNABY HOSPITAL, Stockton-on-Tees
(140 Beds—3 Residents)

JUNIOR HOUSE SURGEON required for a period of at least six months to commence on or about October 16th 1938 Salary £140 per annum with board, residence and laundry Candidates must be duly qualified and unmarried

Applications stating date of birth and any experience together with copies of three testimonials to be sent to the undersigned

J WILKINSON
Secretary

ROYAL NAVAL MEDICAL SERVICE

Vacancies exist for Medical Officers in the Royal Navy, and applications are invited for entry in January, 1939

Candidates below the age of 28 years are preferred, and they must be registered under the Medical Acts No examination in professional subjects will be held, but candidates will be required to attend for interview by a Selection Board

Selected candidates will be entered for Service for a period of three years, which if desired is usually extended to five years at the discretion of the Admiralty

Officers who leave the Service at the end of the initial period of three years will be eligible for a gratuity of £400, and those who leave at the end of five years for a gratuity of £1,000

At the end of five years' Short Service, permanent commissions will be given to selected officers who wish to make the Naval Medical Service their permanent career Officers transferred to the permanent list will receive a gratuity of £1,000 (less Income Tax)

Full opportunities exist for transfer to the permanent list, and periods of unemployed or half pay are very rare The assistance of private income is not necessary for the purpose of supplementing official pay and allowances

Opportunities are available for officers on the permanent list for postgraduate study, to specialise, to take higher examinations, and to obtain further qualifications

Copies of the regulations for entry and conditions of service, including rates of pay, allowances and retired pay, may be obtained from the Medical Director-General of the Navy, Admiralty, S W 1, and from the Deans of all Medical Schools

Applications for entry from intending candidates must be received not later than November 21st, 1938

ROYAL ARMY MEDICAL CORPS

Applications are invited from medical men for appointment to commissions in the Royal Army Medical Corps

Candidates will, for the present, be selected for commissions without competitive examination, and will be required to present themselves in London for physical examination and interview on, or about, 21st October, 1938 They must be registered under the Medical Acts, and normally must not be over the age of 28 years

Successful candidates will, in the first instance, be given short service commissions for five years *During the 4th year of this period* they will be given the opportunity of applying for permanent commissions in either the Royal Army Medical Corps or the Indian Medical Service Those not selected will retire on completion of five years' service with a gratuity of £1,000

Candidates who are successful will, unless they are seconded to complete a hospital appointment, assemble at the Royal Army Medical College, London, on 1st November, 1938

Particulars of the Conditions of Service in the Royal Army Medical Corps, pay and allowances, and forms of application, may be obtained on application, either in writing, or personally, to the Assistant Director General, Army Medical Services, The War Office, London, S W 1.

INDIAN MEDICAL SERVICE

RECRUITMENT OF EUROPEAN OFFICERS

Applications are invited from Medical Men for Permanent Commissions in His Majesty's Indian Medical Service The terms offered include a gratuity of £1 000 on retirement after six years service or of £2,500 after 12 years service together with free return passages for those who no longer desire to remain in the Service In other respects the terms will be as detailed below

British subjects of pure European descent who are under 32 years of age who are registered under the Medical Acts in force in Great Britain and Northern Ireland are eligible to apply

CAREERS

The Indian Medical Service offers a permanent career with wide opportunities of medical experience including clinical preventive specialist and research work At the beginning of his career an officer is employed on the military side which has medical charge of the Indian Army Promotion is on a time scale up to the rank of Lieutenant Colonel and by selection to the ranks of Colonel and Major General An officer may apply after one year's Indian Service to have his name registered for transfer to the civil side from which appointments are made to Civil Surgeoncies which are established at the principal civil centres to provide for the medical needs of Civil Officials and for general medical administrative purposes to specialist (for example public health and bacteriological) services to research posts and to professorships at the Medical Schools

RATES OF PAY

Years of Service	Rank	Basic Pay Rs per mensem	Overseas Pay £ per month	Total £ per annum
1	Lieutenant	450	15	585
2	Captain	500	25	710
3	"	550	25	795
4	"	550	25	795
5	"	600	25	840
6	"	600	30	900
7	"	600	30	990
8	"	700	30	990
9	"	700	35	1050
10	"	700	35	1050
11	Major	800	35	1140
12	"	800	40	1200
13	"	800	40	1200
14	"	800	40	1200
15	"	800	40	1200
16	"	950	40	1335
17	"	950	40	1335
18	"	950	40	1335
19	"	1100	40	1470
20	"	1100	40	1470
21	Lieut Col	1350	40	1695
22	"	1350	40	1695
23	"	1350	40	1695
24	"	1500	40	1830
25	"	1500	40	1830

Note—(1) The rupee is at present stabilized at a rate equivalent to 1s 6d

(2) An officer promoted to the rank of Lieut-Colonel before completion of 9 years service will receive pay at the rate of Rs 1,250 per mensem (basic) plus £40 per month overseas pay

Extras—In addition to the above rates various allowances are admissible for a large number of special appointments on both the military and the civil side which may be held by members of the Indian Medical Service Special high rates of pay are also attached to the numerous administrative appointments open to officers in both branches of the Service

ANTEDATES IN COMMISSION

Candidates possessing certain higher medical qualifications or holding the Diploma in Public Health may be granted an antedate in their commissions Past service in certain hospital appointments may also render candidates eligible for an antedate Persons holding or about to hold resident posts at recognized hospitals may be seconded in those posts for a period The maximum period of antedate secondment or antedate and secondment combined admissible under this paragraph is limited to 18 months

OUTFIT ALLOWANCE.

Officers on appointment will receive an allowance of £75 towards the cost of outfit.

PRIVATE PRACTICE.

With the exception of Administrative Officers military or civil and officers holding certain special appointments officers are not debarred from taking private practice so long as it does not interfere with their proper duties

LEAVE.

Leave can be taken at reasonable intervals and adequate rates of leave pay are provided Extra leave (known as study leave) which may not exceed twelve months in all during an officer's service may be granted to officers desirous of pursuing special courses of study of a postgraduate nature During such leave study allowance at present fixed at the rate of 12s a day in the United Kingdom £1 a day on the Continent of Europe and £1 10s a day in the United States of America and Canada is granted to an officer in addition to ordinary rates of leave pay

PENSIONS

The rates of pensions are as follows —	Per annum
After 17 years service for pension	£372 0s
18 " "	£400 0s.
19 " "	£428 0s
20 " "	£465 0s
" 21 " "	£502 0s
" 22 " " "	£539 10s
" 23 " "	£576 10s
24 " "	£614 0s
" 25 "	£651 0s
" 26 " "	£697 10s
" 27 " " "	£744 0s

There are additional pensions ranging from £65 to £300 per annum for officers who have held administrative appointments

PASSAGES

An officer on appointment is provided with free passage to India The families of officers who are married prior to the date of the officers embarkation on first appointment will also be provided with free passage to India subject to the payment of messing charges Officers and their families are also eligible for passage concessions under which they are granted a certain number of return passages home at Government expense during their service

INSTRUCTION PRIOR TO EMBARKATION

Officers are required to undergo courses of instruction at the Royal Army Medical College and at Aldershot lasting approximately three months prior to their embarkation for India on first appointment Information as to the rates of pay admissible during this period and subsequently up to arrival in India is contained in the memorandum referred to below

A memorandum giving full details regarding these appointments and forms of application may be obtained from the UNDER SECRETARY OF STATE FOR INDIA MILITARY DEPARTMENT INDIA OFFICE LONDON S W 1 The Selection Committee will meet at the India Office on 11th October 1938 next and the selected candidates unless seconded for hospital appointment will be required to join a course of instruction commencing on 1st November prior to sailing for India in February 1939 Applications should reach the India Office as soon as possible

INDIA OFFICE SEPTEMBER 1938



Appointments for Medical Officers in the ROYAL AIR FORCE

Medical men are invited to apply for Short Service Commissions in the Royal Air Force. Candidates must be registered under the Medical Acts and be not more than 31 years of age on entry.

The period of service is 3 years—extendible to 5 years. A gratuity of £400 or £1,000 is payable at the termination of 3 or 5 years respectively. Permanent commissions are awarded in a number of cases. These offer a pensionable career with the opportunity of extra leave on full pay for specialised study. Applicants who hold—or are likely to hold—post graduate appointments in civil hospitals may, on joining the Royal Air Force, be seconded until the termination of their appointments (for a period not exceeding one year). An interval of commission up to twelve months is allowed for appointments held at approved hospitals.

Fuller information can be obtained from The Director of Medical Services, Air Ministry, Kingsway, London.

NEW ZEALAND

DEPARTMENT OF HEALTH WELLINGTON

APPOINTMENT OF SCHOOL MEDICAL OFFICERS

Applications are invited from duly qualified and registered medical practitioners (women) for the above appointments. Candidates must possess a registrable qualification in New Zealand and should have had at least two years experience in the practice of their profession. They should be under 40 years of age. Salary scale £515 per annum and thereafter by annual increments of £50 to £665 per annum with prospects of an ultimate maximum of £715 per annum. The commencing salary may be at any point within the scale according to age and experience.

The duties include the routine medical inspection of school children, addresses to the children and periodic lectures to teachers, parents and the general public, and the inspection and report on school buildings in regard to overcrowding, cleanliness, sanitation, lighting and ventilation.

Successful applicants will require to commence duty in New Zealand in February 1939. Reasonable costs of transport to New Zealand will be paid.

Applications close on October 15th 1938 with the High Commissioner for New Zealand, 415 Strand, London, W.C.2, from whom printed particulars giving the terms of appointment may be obtained.

WEST SUFFOLK GENERAL HOSPITAL

Bury St. Edmunds
(112 Beds.)

Applications are invited for the following posts:—

HOUSE SURGEON. Duties include the charge of the Surgical Beds. Salary £180 per annum with board, lodging and laundry. Vacancy end of September.

HOUSE PHYSICIAN. Duties include charge of the Medical Beds, Maternity Ward and Casualty and Administration of Anaesthetics. Salary £150 per annum with board, lodging and laundry. Vacancy end of September.

Applicants for both posts must be registered practitioners. Application, stating age, experience and nationality, with copies of three recent testimonials to be sent to the Secretary. Both appointments are for six months.

September 12th 1938.

IRAQ GOVERNMENT

APPOINTMENT OF EAR, NOSE AND THROAT SPECIALIST

The Iraq Government invite applications from British Specialists for the above appointment of which the following are the particulars:

Duties.—To be LECTURER on Ear, Nose and Throat diseases in the Royal College of Medicine, Baghdad, and CHIEF of one of the Units for these diseases at the ROYAL HOSPITAL, BAGHDAD.

Salary.—Iraq Dinars 150 per mensem.

Age must not exceed 45 years. The successful candidate will be required to enter into contract for a period of five years. Consultant practice is allowed provided that it does not interfere with the performance of official duties. The teaching at the Medical College is in the English language.

One Iraq dinar is equivalent to one pound sterling. *Salary will be subject to Iraq income-tax* which is 150 dinars exempt, the next 150 dinars subject to 6 per cent. tax and the remainder of the income 9 per cent.

Forms of application and copies of the form of contract can be obtained from the Iraq Minister, Royal Iraq Legation, 22 Queen's Gate, London, S.W.7. Particulars as to the Provident Fund, leave and passage allowance are given in the form of contract. No application can be considered unless received on the prescribed form.

COUNTY MENTAL HOSPITAL

Whittingham, near Preston

The Joint Committees of Lancaster and Whittingham Mental Hospitals invite applications for the post of DENTAL SURGEON. The appointment is a whole time one, the salary £500 per annum rising by annual increments of £25 to £600 per annum. The appointment may be terminated by one month's notice on either side.

Annual leave three weeks.

The appointment is subject to the provisions of the Asylums Officers' Superannuation Act 1909.

The duties to be performed under the direction of the Medical Superintendents of the respective hospitals and the place of residence to be approved by the committees. Third-class travelling expenses between the two Hospitals is allowed or motor-car allowance in lieu.

The successful candidate will be required to pass a medical examination.

Applications should be addressed to the Medical Superintendent, County Mental Hospital, Whittingham, near Preston, and should be delivered not later than Saturday, October 1st 1938.

WELLINGTON HOSPITAL BOARD NEW ZEALAND

SURGICAL REGISTRAR

Applications addressed to the undersigned and endorsed Surgical Registrar are invited up to 9 a.m. on Monday, October 17th 1938, for the position of Surgical Registrar to the Wellington Hospital.

Salary £500 per annum, resident or living-out allowance in lieu of quarters. Applicants to state the earliest date on which they can commence duty. Appointment to be for one year, subject to renewal. Preference will be given to the holder of a postgraduate qualification.

Applicants are requested to state age and experience and enclose copies of references.

J. B. I. COOK,
Secretary.

WELLINGTON HOSPITAL BOARD NEW ZEALAND

MEDICAL REGISTRAR

Applications addressed to the undersigned and endorsed Medical Registrar are invited up to 9 a.m. on Monday, October 17th 1938, for the position of Medical Registrar to the Wellington Hospital.

Salary £500 per annum, resident or living-out allowance in lieu of quarters. Duties to commence on January 1st 1939. Appointment to be for one year, subject to renewal. Preference will be given to the holder of a postgraduate qualification.

Applicants are requested to state age and experience and enclose copies of references.

J. B. I. COOK,
Secretary.

COUNTY BOROUGH OF PRESTON

SHAROE GREEN HOSPITAL (250 Beds)

JUNIOR ASSISTANT RESIDENT MEDICAL OFFICER (Female)

Applications are invited from fully qualified and registered practitioners for the above appointment. Salary at the rate of £100 per annum with board and residence. The appointment will be for a period of six months and can be renewed for a period not exceeding six months.

Applications, stating age, qualifications and experience together with copies of three recent testimonials, should reach the Medical Superintendent not later than first post on October 1st 1938.

CITY OF BIRMINGHAM MENTAL HOSPITAL

WINSON GREEN DIVISION

JUNIOR LADY ASSISTANT MEDICAL OFFICER

The Committee of Visitors invite applications from single ladies who are duly qualified and registered Medical Practitioners for the position of Junior Lady Assistant Medical Officer. The successful candidate will be required to reside in the Hospital.

The commencing salary will be £150 per annum plus the usual residential emoluments of board, lodging, laundry and attendance. An increase of £10 will be granted on completion of twelve months' satisfactory service and thereafter increases of £5 per annum up to a maximum salary of £200 per annum. An additional £50 per annum will be paid to a holder of the D.P.M. qualification or to a person obtaining the D.P.M. after appointment. All fees received in connection with panel work will be required to be paid into the Borough Funds but for making insurance reports, reports on compensation cases and Coroner's inquests the fees can be retained.

A person who has held for at least six months a medical or surgical residential post in a General Hospital will be regarded as having an additional qualification. Previous mental hospital experience is not essential but experience in the administration of anaesthetics is desired.

The candidate appointed will be required to pass a medical examination and will be placed on the permanent staff after one year's satisfactory service when she will be required to contribute under the Asylums Officers Superannuation Act, 1909. She will be required to serve in such institution belonging to the Mental Hospitals Committee as they may from time to time direct. The appointment is subject to one month's notice on either side.

Applications stating full particulars of qualifications, experience and appointments held, accompanied by copies of three recent testimonials, must be addressed to the undersigned so as to be received not later than September 24th, 1938. Canvassing either directly or indirectly will be a disqualification.

Town Clerk's Office, Council House, Birmingham 1. F. H. C. WILTSHIRE, Clerk to the Committee of Visitors.

CITY OF BIRMINGHAM MENTAL HOSPITAL

WINSON GREEN DIVISION

DEPUTY MEDICAL SUPERINTENDENT

The Committee of Visitors invite applications from duly qualified medical men for the position of Deputy Medical Superintendent of the Winson Green Division at a commencing salary of £625 per annum, plus residential emoluments consisting of unfurnished quarters, coal, light and laundry valued for superannuation purposes at £110 per annum. The above emoluments are for a married man, but if a single man is appointed they will consist of board, lodging and laundry.

Applicants must have had several years' experience in Mental Hospital practice and must possess the Diploma in Psychological Medicine. A person who has held for at least six months a medical or surgical residential post in a General Hospital will be regarded as having an additional qualification. The successful candidate must be a good Anaesthetist.

The candidate appointed will be required to pass a medical examination and to contribute under the Asylums Superannuation Act, 1909. He must also devote the whole of his time to the duties of the office and will not be permitted to engage in any other work.

All fees received in connexion with panel work will be required to be paid into the Borough Funds but for making insurance reports, reports on compensation cases and Coroner's inquests the fees can be retained.

The appointment is subject to one month's notice on either side, and the successful candidate will be required to serve in such Institution belonging to the Mental Hospitals Committee as they may from time to time direct.

Applications endorsed "Deputy Medical Superintendent, Winson Green," stating age, full particulars and qualifications, experience and appointments held, accompanied by copies of three recent testimonials, must be addressed to the undersigned so as to be received not later than September 28th, 1938. Canvassing either directly or indirectly will be a disqualification.

Town Clerk's Office, Council House, Birmingham 1. F. H. C. WILTSHIRE, Clerk to the Committee of Visitors.

DARLINGTON MEMORIAL HOSPITAL

The Committee invite applications for the post of HONORARY ANAESTHETIST. Every candidate for the office of Honorary Anaesthetist must be on the Medical Register and be a Graduate in Medicine of a University of the United Kingdom or a Fellow or Member of one of the Royal Colleges of Surgeons of the United Kingdom.

Particulars of the appointment may be obtained from—ARTHUR RIDDLE, M.C.I.S., Memorial Hospital, Darlington.

COUNTY OF SOMERSET

APPOINTMENTS OF MEDICAL OFFICER OF HEALTH FOR THE URBAN DISTRICTS OF FROME AND KEYNSHAM AND THE RURAL DISTRICTS OF FROME AND BATHAVON AND ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from duly qualified Medical Practitioners who are registered in the Medical Register as holders of diplomas in Sanitary Science or Public Health or State Medicine for the above appointments which it is intended shall be held by the same person.

The duties as Assistant County Medical Officer will include school medical inspection and venereal disease work.

The officer appointed will be required to devote his whole time to the duties of the above mentioned appointments and will be restricted from engaging in private practice.

He will be required to perform all the duties prescribed by statute or otherwise and such other duties as may from time to time be assigned to him by the County Council.

The area to commencing salary will be £[illegible] rising by annual increments of £5 to £[illegible] a year.

Travelling allowance for the use of the officer's motor-car will be paid in accordance with the County Scale and office accommodation and clerical assistance will be provided.

The successful candidate who must pass satisfactorily a medical examination will be required to reside in or near the City of Bath.

Applications stating age, qualifications, diplomas and experience must be accompanied by copies of not more than three recent testimonials and must be sent to the Clerk of the County Council, County Hall, Taunton, so as to reach him not later than October 10th, 1938, in envelopes endorsed "District Medical Officer."

Further particulars and condition of appointment may be obtained from the Clerk of the County Council on receipt of a stamped addressed foolscap envelope.

Canvassing directly or indirectly will be deemed a disqualification.

HAROLD KING, Clerk of the Somerset County Council.
H. J. ALLARD, Clerk to the Frome Urban District Council.
W. B. KENT, Clerk to the Frome Rural District Council.
GEORGE R. ASHTON, Clerk to the Keynsham Urban District Council.
R. H. WHITTINGTON, Clerk to the Bathavon Rural District Council.

September 22nd, 1938.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.

PUBLIC HEALTH LABORATORY

ASSISTANT BACTERIOLOGIST

The County Council of the West Riding of Yorkshire invite applications for the appointment of Assistant Bacteriologist.

Applicants must be registered Medical Practitioners with experience of Public Health Bacteriology and Clinical Pathology.

The salary will be £600 per annum rising by annual increments of £5 to £700 per annum.

The appointment will be subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1922.

Further particulars and form of application may be had from the undersigned, by whom all applications to either with copies of not more than three recent testimonials must be received not later than Monday, October 3rd, 1938.

J. CHARLES McGRATH, Clerk of the County Council.

County Hall, Wakefield. September, 1938.

HERTFORDSHIRE COUNTY COUNCIL PUBLIC ASSISTANCE

COUNTY INSTITUTION, OSTER HOUSE, ST. ALBANS

HOUSE SURGEON

Applications are invited for the post of House Surgeon, single (either sex), at the above Institution which comprises general, medical and surgical wards with separate Maternity and Children's Units.

Salary will be at the rate of £175 per annum with furnished quarters, rations, laundry and attendance. The appointment will be limited to one year and not renewable.

Candidates must be duly qualified and registered. Applications stating age, qualifications and experience with copies of not more than three recent testimonials should be sent to the Clerk of the St. Albans Guardians Committee, Oster House, St. Albans (from whom any further details may be obtained), as soon as possible.

Hertford, Herts. ELTON LONGMORE, Clerk of the County Council.

September 21st, 1938.

LONDON COUNTY COUNCIL

Applications invited from Medical Practitioners of at least one year's standing to undertake the following position. Candidates must have held resident appointment in a general hospital for at least six months. Married quarters not available.

ASSISTANT MEDICAL OFFICERS (Grade II)—Salary £300–£450 with board, lodging and washing.

(a) LAMBETH HOSPITAL, Brook Drive, Kennington Road, S.E.11.—Medical duties; experience in diseases of children and anaesthetics desirable.

(b) ST. GILES' HOSPITAL, St. Giles Road, Camberwell, S.E.5.—General duties; surgical experience desirable.

*(c) ST. NICHOLAS HOSPITAL, Plumstead, S.E.18.—Duties mainly medical; experience in tuberculosis and obstetrics desirable.

ASSISTANT MEDICAL OFFICERS (Grade II)—Salary £300 a year to either with board, lodging and washing. Appointment for one year only in first instance (renewable for a second year under certain conditions).

(d) ARCHWAY HOSPITAL, Archway Road, Highgate, N.19.—Duties mainly medical.

(e) FULHAM HOSPITAL, St. Dunstan's Road, Hammersmith, W.6.

(f) HIGHGATE HOSPITAL, Dartmouth Park Hill, N.19.—(Two positions.)

(g) MILE END HOSPITAL, Bancroft Road, Mile End, E.1.

(h) ST. ALFEGE'S HOSPITAL, Wanstead, Shrubbery Hill, Greenwich, S.E.10.

Duties of the above positions are medical experience in anaesthetics and obstetrics desirable.

(i) ST. MARY ISLINGTON HOSPITAL, High Gate Hill, N.19.—Duties maternity and gynaecological; obstetrical experience essential.

(j) ST. OLAVE'S HOSPITAL, Lower Road, Rotherhithe, S.E.16.—General medical duties; experience in anaesthetics and obstetrics desirable.

(k) ST. STEPHEN'S HOSPITAL, 69 Fulham Road, S.W.10.—Duties mainly medical and anaesthetic.

Separate accommodation for a woman.

Appointee may be required to be non-resident.

Application forms obtainable (stamped addressed foolscap envelope necessary) from Medical Officer of Health, Staff Division, County Hall, S.E.1, returnable by October 3rd.

Canvassing disqualifies.

CITY OF LIVERPOOL

MILL ROAD INFIRMARY

DEPUTY MEDICAL SUPERINTENDENT AND SENIOR OBSTETRICAL AND GYNAECOLOGICAL OFFICER

Applications are invited for the appointment of a full time Resident Deputy Medical Superintendent and Senior Obstetrical and Gynaecological Officer for the Mill Road Infirmary (779 beds) at a salary of £400 rising by two annual increments of £25 to £500 per annum, to either with the usual residential allowance.

The main duties of the Officer appointed would be in connexion with the obstetrical and gynaecological departments (1,600 deliveries take place annually in the Maternity Department).

Applicants must be single, possessing one of the higher qualifications in medicine or surgery, and have had considerable experience since qualification.

The person appointed will be required to assist the Medical Superintendent in the administration of the Hospital, training of nurses etc., and will deputise for the Medical Superintendent when required.

Any fees received in connexion with the appointment to be handed over to the City Council.

Applications upon forms obtainable from the Medical Officer of Health, Hospitals Department, Municipal Annexe, Liverpool, to be endorsed "Deputy Medical Superintendent," and returned to the undersigned so as to be received not later than Wednesday, October 5th, 1938.

Canvassing members of the City Council will be regarded as a disqualification.

Municipal Buildings, Liverpool. W. H. BAINES, Town Clerk.

September, 1938.

DORSET COUNTY HOSPITAL
Dorchester

APPOINTMENT OF HOUSE SURGEON

The Committee of Management are open to receive application for the position of House Surgeon (male only) to take up his duties about the middle of November, 1938.

Every candidate must be unmarried and possess a registered qualification to practise medicine and surgery from some recognized body in Great Britain or Ireland. Salary £110 per annum with board and lodging. The appointment is for a period of six months. All applications accompanied by copies of three recent testimonials should be sent to the Secretary, Dorset County Hospital, by October 2nd, 1938.

Candidates must be of British birth and nationality.

MIDDLESEX COUNTY COUNCIL

APPOINTMENT OF MEDICAL STAFF

1 RESIDENT ASSISTANT MEDICAL OFFICERS

Salary £400 p a rising annually by £25 to £475 p a with board lodging and laundry valued at £100 p a The appointments are for period of four years only but in special cases the Council may decide to retain an officer on established staff with a maximum salary of £500 p a Contribution to superannuation fund compulsory subject to medical examination

Required at—

(a) CENTRAL MIDDLESEX COUNTY HOSPITAL Willesden N W 10

Previous resident medical appointments in general hospital and Diploma in Psychological Medicine are necessary

(b) WEST MIDDLESEX COUNTY HOSPITAL Isleworth

Previous resident appointments in general hospitals and experience in clinical medicine are necessary

(c) COUNTY SANATORIUM CLARE HALL Barnet

Candidates must be single men with previous resident hospital appointments Practical experience in diagnosis and treatment of tuberculosis desirable

2 RESIDENT CASUALTY MEDICAL OFFICER required at REDHILL COUNTY HOSPITAL Edgware to deal with casualties and admissions to the Hospital

Considerable all round experience necessary in cluding previous posts as House Physician and House Surgeon in general hospitals

Salary £350 p a with board lodging and laundry valued at £100 p a The appointment is for six months in first instance and may be extended further six months Contributions to superannuation fund may be necessary

3 TWO JUNIOR RESIDENT ASSISTANT MEDICAL OFFICERS having held resident medical and/or surgical appointments in a general hospital required at REDHILL COUNTY HOSPITAL Edgware

Salary £250 p a with board lodging and laundry valued at £100 p a Appointment for six months in first instance and may be extended further six months Contribution to superannuation fund may be necessary

Conditions of Service—Successful candidates will work under supervision of their respective Medical Superintendent Whole time official duties including such duties as County Council may from time to time direct Salaries inclusive—any fees received must be paid over to Council Appointments subject to medical examination and held during pleasure of Council terminable by one month's notice on either side

Applications stating age qualifications and experience with copies of not more than three recent testimonials should reach the undersigned by October 1st 1938 in envelopes endorsed with name of institution and post applied for Relationship to any member or officer of Council to be disclosed and canvassing direct or indirect disqualifies No application forms

C W RADCLIFFE Z
Clerk of the County Council

Middlesex Guildhall
Westminster S W 1
September 8th 1938

SEVERALLS MENTAL HOSPITAL COLCHESTER

Required TWO JUNIOR ASSISTANT MEDICAL OFFICERS (either sex) not over 35 years of age Must be registered under the Medical Act Psychiatric experience not necessary Previous resident appointment in a general hospital desirable

Salary £510 per annum rising by four annual increments to a maximum of £610 per annum Possession of the Diploma of Psychological Medicine carries £50 per annum additional to the scale

A charge of £109 4s 0d per annum will be made in respect of board residence attendance and washing

The appointments are subject to the provisions of the Asylums Officers Superannuation Act 1909

Applications stating full particulars of qualifications age etc to be addressed to the Medical Superintendent

BRITISH POSTGRADUATE MEDICAL SCHOOL

UNIVERSITY OF LONDON

ASSISTANTSHIP IN MORBID ANATOMY

Applications are invited for the post of Assistant in Morbid Anatomy in the Department of Pathology

The stipend offered is £300 per anum rising by annual increments of £ 0 to £500 The successful candidate will be required to join the Federated Superannuation System for Universities

Further information can be obtained from he Professor of Pathology

Applications with copies of not more than three testimonials should be submitted to the Dean British Postgraduate Medical School Ducane Road London W 12 to arrive not later than the first post on Monday October 17th 1938

METROPOLITAN BOROUGH OF GREENWICH

JUNIOR ASSISTANT MATERNITY AND CHILD WELFARE MEDICAL OFFICER

The Council of the Metropolitan Borough of Greenwich is prepared to receive applications from registered Medical Practitioners for the appointment of Junior Assistant Maternity and Child Welfare Medical Officer in the Borough of Greenwich

Applicants must have had experience in connexion with Maternity and Child Welfare work generally must be a registered Medical Practitioner who prior to April 1st 1930 had held the appointment of Medical Officer of an Ante Natal Clinic with the approval of the Minister of Health or who subsequent to qualification has had at least three years experience in the practice of his or her profession and special experience of practical midwifery and Ante Natal work The possession of the Diploma in Public Health and resident Obstetric experience will be considered additional qualifications

The person to be appointed will act generally under the direction and supervision of the Medical Officer of Health who is the Administrative Medical Officer of the Maternity and Child Welfare Services

The salary will be at the rate of £500 per annum rising by annual increments of £25 to a maximum of £700 per annum

The successful candidate will be required to reside in the neighbourhood of the Borough Council's Maternity Home to devote the whole of his or her time to the service of the Council and not to engage in private practice

The appointment will be subject to the provisions of the Council's Superannuation Acts and will be terminable by three months notice in writing on either side

Applications must be made on forms to be obtained from the undersigned stating age qualifications and experience and accompanied by copies of not more than three recent testimonials and must be sealed up and endorsed Junior Assistant Maternity Medical Officer and reach me not later than 12 o clock noon on Wednesday October 5th 1938

Canvassing members of the Council either directly or indirectly will be a disqualification

Stamped addressed foolscap envelope must accompany application for form

D J REASON
Town Clerk

Town Hall
Greenwich S E 10
September 23rd 1938

LANCASHIRE COUNTY COUNCIL

PUBLIC ASSISTANCE COMMITTEE

LAKE HOSPITAL ASHTON UNDER LYNE Near Manchester

APPOINTMENT OF RESIDENT OBSTETRICAL OFFICER

Applications are invited for the appointment of Resident Obstetrical Officer at the Lake Hospital Ashton under Lyne near Manchester (300 beds—approximately 600 births per year)

Applicants must hold the Diploma of the College of Obstetricians and Gynaecologists or a Diploma of similar standing and preference will be given to applicants who have held a responsible appointment at a Maternity Hospital

The salary is at the rate of £350 per annum rising by annual increments of £25 to £400 per annum together with the usual residential emoluments

The appointment is for a period of one year in the first instance but may be renewed for a further period of one year

Forms of application may be obtained from the County Medical Officer of Health Hospital and Medical Department County Offices Preston to whom all applications accompanied by copies of recent testimonials must be forwarded not later than Monday October 10th 1938

GEORGE ETHERTON
Clerk of the County Council

County Offices Preston
September 19th 1938

KENT COUNTY MENTAL HOSPITAL Maidstone

ASSISTANT MEDICAL OFFICER (male) required Commencing salary inclusive of emoluments £509 per annum rising by annual increments of £25 to £659 per annum Excellent facilities for working for higher examinations and for attending lectures fo the Diploma in Psychological Medicine for which Diploma an additional £50 per annum is paid

Previous experience is not essential

The appointment is pensionable under the Asylum Officers Superannuation Act 1909

Candidates must be fully qualified registered single and not more than 35 years of age

Applications giving full particulars with copies of three recent testimonials and endorsed A M O on envelope should be sent to the Medical Superintendent of the Hospital at an early date

Applications for locum tenens would also be considered at the same time

CITY OF LIVERPOOL

RESIDENT ASSISTANT MEDICAL OFFICERS

Fazakerley Sanatorium—(309 Beds)
Broadgreen Sanatorium—(353 Beds)

MALE AND FEMALE PULMONARY AND SURGICAL TUBERCULOSIS

Applications are invited for the above appointments for a period of one year at a salary of £250 per annum together with usual residential allowances

Candidates must possess a registered medical and surgical qualification and preference will be given to candidates with previous hospital experience

The posts are suitable for a candidate working for the M D

The Sanatoria are within easy reach of centre of City University and large General Hospital

Canvassing will be deemed a disqualification

Applications to be made on forms obtainable from the Medical Officer of Health Hospitals Department Municipal Annexe Dale Street Liverpool to be endorsed Resident Assistant Medical Officer and returned to the undersigned so as to be received not later than Monday October 3rd 1938

W H BAINES
Town Clerk

Municipal Buildings
Dale Street Liverpool 2
September 1938

COUNTY BOROUGH OF HALIFAX

THE HALIFAX GENERAL HOSPITAL (405 Beds)

JUNIOR RESIDENT MEDICAL OFFICERS (Male)

Applications are invited from duly qualified registered Medical Practitioners for the above appointments Two are required one for obstetrical and one for medical duties

Salary £250 per annum or more according to experience together with board residence and laundry The appointments are for a term not exceeding twelve months and are not renewable

Forms of application and conditions of appointment can be obtained from the Medical Officer of Health Powell Street Halifax

Completed applications together with copies of not more than three recent testimonials endorsed Junior Resident Medical Officers must be forwarded to the undersigned as early as possible

Canvassing either directly or indirectly will be a disqualification

The Council has not adopted a superannuation scheme

PERCY SAUNDERS
Town Clerk

The Town Hall
Halifax
September 20th 1938

ESSEX COUNTY COUNCIL

JUNIOR RESIDENT MEDICAL OFFICERS

The County Council of the Administrative County of Essex invite applications for the appointment of two Junior Resident Medical Officers at the Old church County Hospital Romford Each appointment is for a period of one year and the salary will be at the rate of £250 per annum together with the usual indoor emoluments valued at £160 per annum Experience in the Maternity Department of a hospital will be considered an additional qualification in respect of one of the appointments The successful candidates will be required to pass a medical examination and will be subject to the Council's Sick Pay Rules and Regulations a copy of which will be forwarded on application Applications on the prescribed form obtainable from the undersigned should be addressed to me and delivered at the County Hall Chelmsford not later than 10 a m on Tuesday October 11th 1938

E S HOLCROFT
Clerk of the County Council

County Hall
Chelmsford
September 20th 1938

CITY OF MANCHESTER

Monsall Hospital for Infectious Diseases (600 beds)

The Public Health Committee invites applications from registered medical men for the post of SECOND RESIDENT ASSISTANT MEDICAL OFFICER at the above named hospital

Preference will be given to applicants who have held resident surgical and medical posts in a general hospital and have special experience in bacteriology

Salary £350 rising by £25 annually to £450 per annum with board residence and laundry in addition subject to the Manchester Corporation conditions of service

Full information and forms of application may be obtained from the Medical Officer of Health Town Hall Manchester 2 and applications for the post must be received by him not later than October 8th 1938

F E WARBRECK HOWELL Town Clerk

Town Hall Manchester 2
September 20th 1938

DREADNOUGHT HOSPITAL GREENWICH S.E.10
(257 Beds)

MEDICAL SUPERINTENDENT

The Committee of Management of the Seamen's Hospital Society invite applications for this post falling vacant on November 1st 1938.

The appointment will be for one year in the first instance at the commencing salary of £200 per annum with board residence and laundry.

Previous surgical experience is required and candidates must be male and unmarried.

Applications stating age and previous experience with copies of not more than three recent testimonials to be sent in immediately to the undersigned from whom further particulars may be obtained.

F. A. LYON
Secretary

THE QUEEN'S HOSPITAL FOR CHILDREN
Hackney Road E.2
(104 Beds)

The Board of Management invite applications for the post of EAR NOSE AND THROAT SURGEON. Candidates must be Fellows of the Royal College of Surgeons of England or of another recognized College. Attendance required two half-days weekly. The appointed candidate will have charge of beds.

An honorarium to cover travelling expenses will be paid.

Further information may be obtained from the undersigned to whom applications with copies of three recent testimonials should be sent not later than October 14th 1938.

CHARLES H. BESSELL
September 19th 1938. Secretary.

DREADNOUGHT HOSPITAL GREENWICH S.E.10 (257 Beds.)
(Seamen's Hospital Society)

HOUSE SURGEON required for six months as from October 1st. Salary £110 per annum and a proportion of fees with board residence and laundry. V.D. Certificate obtainable. Candidates must be male and single.

Application with copies of three testimonial to be sent immediately to the undersigned.

F. A. LYON
Secretary.

HOSPITAL OF ST. JOHN AND ST. ELIZABETH
60 Grove End Road N.W.8

Applications are invited for the post of RESIDENT HOUSE SURGEON (male). The post is recognized for the degree of M.S. London University. The appointment will be for six months from November 1st 1938. Salary at the rate of £75 per annum with full board.

Applications to other with copies of three testimonials should reach the undersigned on or before September 30th.

Applicants will be required to attend a meeting of the Medical Committee at 8.30 p.m. on October 4th at the Hospital.

F. DUDLEY HOBBS, B.A.
Secretary.

CENTRAL LONDON THROAT NOSE AND EAR HOSPITAL
Gray's Inn Road W.C.1

RESIDENT HOUSE SURGEON (Male)

There will be a vacancy for a Third Resident House Surgeon to enter on duty on October 1st. The appointment will be for a period of nine months three months as Third House Surgeon three months as Second House Surgeon and three months as First House Surgeon. Remuneration at the rate of £75 per annum.

Applications accompanied by copies of not more than three testimonials should be sent to the undersigned immediately.

JOHN H. YOUNG
Secretary Superintendent.

BRITISH RED CROSS SOCIETY CLINIC FOR RHEUMATISM
Peto Place Marylebone Road N.W.1

The British Red Cross Society invite applications for the following Honorary appointments to the Clinic for Rheumatism Peto Place, Marylebone Road N.W.1

HONORARY DERMATOLOGIST
HONORARY NEUROLOGIST

Applications stating qualifications and present appointment should be sent in not later than October 8th 1938 addressed to —

The Secretary of the Medical Board
Clinic for Rheumatism
British Red Cross Society
14 Grosvenor Crescent S.W.1

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST
Brompton S.W.3

The Committee of Management invite applications for the following posts

RESIDENT SURGICAL OFFICER. Candidates must have held a resident hospital appointment for not less than six months. Salary £100 per annum with board and residence and an additional £5 per annum for services in connexion with pay-bed patients. The appointment is for twelve months commencing November 1st.

ASSISTANT RESIDENT MEDICAL OFFICER. Candidates must have held a resident hospital appointment for not less than six months. Experience in Artificial Pneumothorax essential and in Ear Nose and Throat work desirable. Salary £150 per annum with board and residence. The appointment is for six months commencing November 1st.

HOUSE PHYSICIANS. There are three vacancies. The duties include work in the Out-Patient Department and in the Wards. One of the selected candidates will be appointed Assistant to the Tuberculosis Officer for the Local Tuberculosis Dispensary at the Hospital. The appointments are for six months commencing November 1st with an honorarium of £40.

HOUSE PHYSICIAN (male) at the SANATORIUM at Frimley. The appointment is for six months commencing November 1st with an honorarium of £50.

Applications with copies of testimonial must reach the undersigned not later than Saturday October 8th.

Brompton, September 19 1938. F. G. ROUVRAY, Secretary.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART
Westmoreland Street Marylebone W.1

OUT-PATIENT MEDICAL OFFICER

Applications are invited for the post of Out-patient Medical Officer (non-resident male). The appointment is for a period of six months from November 1st but may be renewed for a further period not exceeding six months.

Salary at the rate of £125 per annum.

Candidates who must be duly registered Medical Practitioners will not be expected to call on the Hon. Medical Staff but should send their applications with copies of three recent testimonial to me at the Hospital not later than Thursday October 6th.

The Out-patient Medical Officer will be required to assist the Hon. Medical Staff on five afternoons weekly or four afternoons and one morning as may be arranged.

ROBERT G. E. WHITNEY
Secretary.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART
Westmoreland Street Marylebone W.1

RESIDENT MEDICAL OFFICER

Applications are invited for the post of Resident Medical Officer (male). The appointment is for a period of six months from November 1st but may be renewed for a further period not exceeding six months.

Salary at the rate of £150 per annum with board residence and washing.

Candidates who must be duly registered Medical Practitioners will not be expected to call on the Hon. Medical Staff but should send their applications with copies of three recent testimonial to me at the Hospital not later than Thursday October 6th.

ROBERT G. E. WHITNEY
Secretary.

QUEEN MARY'S HOSPITAL FOR THE EAST END E.15

HONORARY SURGEON

There is a vacancy on the staff of this Hospital for an Honorary Surgeon in charge of the Genito-Urinary Department.

Applications accompanied by copies of three recent testimonials from male candidates only who must be Fellows of the Royal College of Surgeons of England should be sent to the undersigned not later than Monday October 3rd 1938.

RAPHAEL JACKSON (Major)
Secretary.

LONDON CHEST HOSPITAL
Victoria Park E.2
(Bus Tram and Rail L.N.E.R. Cambridge Heath Station)

The Committee of Management invite applications for the post of ASSISTANT SURGEON. An Honorarium is attached to the post.

Applications should be forwarded to the undersigned on or before October 31st 1938.

THOMAS BROWN
Secretary.

PADDINGTON GREEN CHILDREN'S HOSPITAL
(Incorporated) London W.2.

HOUSE PHYSICIAN
HOUSE SURGEON

These appointments will become vacant on November 1st 1938. Gentlemen (unmarried) are invited to send in their applications with copies of three testimonials to the undersigned not later than Friday October 14th 1938. Salary of each at the rate of £100 per annum with board and residence.

Candidates who have held a responsible Resident Hospital appointment are preferred. The appointments are for a period of six months.

JAMES A. HAMLIN
Secretary.

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St. Quintin Avenue North Kensington W.10
(Ladbroke 0133)

The Board of Management invite applications for the post of HONORARY ASSISTANT PHYSICIAN with beds. Applicants must be graduates of a University and must hold the M.R.C.P. (London) and the successful candidate will be required to see Out-patients.

Applications accompanied by copies of three testimonials should be sent to the undersigned at the Hospital from whom any further information can be obtained and should reach him not later than October 1st, 1938.

H. J. ELEY
Secretary.

NATIONAL HOSPITAL QUEEN SQUARE W.C.1

ASSISTANT REGISTRAR. Applications are invited for the post of Assistant Registrar who will be required to attend the Hospital each afternoon in the Out-patient Department. The salary is £200 a year.

Applications with recent testimonial should reach the undersigned from whom any further particulars may be obtained on or before Saturday October 8th 1938.

GODFREY H. HAMILTON
Secretary.

NATIONAL HOSPITAL QUEEN SQUARE W.C.1

RESIDENT MEDICAL OFFICER

Applications are invited for the post of Resident Medical Officer and should be sent to the undersigned accompanied by three recent testimonials not later than Saturday October 8th. The salary is £100 per annum with board and lodging.

Applicant should state if they are willing to accept a post of House Physician (salary £60).

GODFREY H. HAMILTON
Secretary.

ST. MARK'S HOSPITAL FOR CANCER FISTULA AND OTHER DISEASES OF THE RECTUM
City Road E.C.1

Applications are invited for a CLINICAL ASSISTANTSHIP in the Out-Patients Department on Wednesday evenings. The appointment is for six months commencing November and next in the first instance and a fee of three guineas is payable on appointment.

Applications to reach the Secretary (from whom further particulars may be obtained) at the Hospital by Thursday October 13th 1938.

SAINT MARY'S HOSPITAL FOR WOMEN AND CHILDREN
Plaistow E.13

Applications are invited for the posts of HONORARY ANAESTHETISTS on Friday mornings (Gynaecological) Monday and Thursday mornings (Dental). Candidates must be duly qualified and registered. Applications with copies of three testimonial to be sent as soon as possible to the undersigned.

By Order of the Committee
A. ERNEST WILKES
Secretary.

KING EDWARD MEMORIAL HOSPITAL
Ealing (145 Beds)

Applications are invited for the appointment of CONSULTING PHYSICIAN FOR DISEASES OF CHILDREN.

Particulars may be obtained from the undersigned.

R. A. MICHELWRIGHT
House Governor.

LIVERPOOL HEART HOSPITAL

Applications are invited for the position of HONORARY ASSISTANT PHYSICIAN to the above Hospital The Institute for the Prevention of Disease is the Research Department of the Hospital There is a vacancy for a RESEARCH FELLOW at the Institute (£250 per annum) although separate applications for either position will be considered these two positions may be held by the same gentleman There are available at the Institute unique laboratory facilities including those for animal experimentation Candidates from outside Liverpool will receive the same consideration as local men Applications to MISS LEWIS Secretary not later than Monday October 3rd

BIRMINGHAM AND MIDLAND EYE HOSPITAL (114 Beds)

Applications are invited from duly qualified Medical Practitioners for the post of HOUSE SURGEON at the above Hospital

Salary £130 per annum (rising to £150 at the end of six months satisfactory service) and £10 laundry allowance

The Resident Staff consists of a Resident Surgical Officer and three House Surgeons

Applications with testimonials and evidence of registration should be forwarded immediately to the undersigned

J W PEARCE
House Governor

Church Street Birmingham 3

NORFOLK AND NORWICH HOSPITAL
Norwich (417 Beds)

Applications are invited for the post of HOUSE SURGEON Salary £120 per annum with board residence and laundry

Candidates (male) must be unmarried and must possess registered qualifications

Applications stating age and nationality etc *together with copies of testimonials should be forwarded* to the undersigned not later than Tuesday September 27th

FRANK INCH
House Governor and Secretary

September 14th 1938

MANCHESTER NORTHERN HOSPITAL
(General Hospital 113 Beds)
Cheetham Hill Road Manchester 8

Applications are invited for the post of RESIDENT SURGICAL OFFICER Salary £200 per annum with board and residence The appointment is for six months to commence duty at an early date

Applications stating age qualifications and nationality with copies of not less than three recent testimonials to be sent to the Secretary Mr JAMES C DANIELS 38 Barton Arcade Manchester 3 as soon as possible

LANCASHIRE HOSPITAL MANCHESTER 4

RADIOLOGICAL OFFICER lady or gentleman Whole time appointment non resident no private work allowed Salary £400 per annum with luncheon and tea *The appointment is for* twelve months and is renewable Candidates must hold the D M R E Diploma

Applications stating age and particulars of qualifications and experience to be forwarded to the undersigned on or before October 12th together with copies of three recent testimonials

By Order of the Board
HERBERT J DAFFORNE
General Supt and Secretary

INVERNESS DISTRICT ASYLUM

JUNIOR ASSISTANT MEDICAL OFFICER (male) required Recent graduate with some general hospital experience preferred Salary £350 per annum with board lodging and laundry

Appointment is subject to terms of Asylums Officers Superannuation Act 1909

Applications stating age and qualifications with copies of testimonials to be sent to the Medical *Superintendent*

YORK COUNTY HOSPITAL
(204 Beds)

Applications are invited for the post of HOUSE SURGEON Salary £130 per annum with board residence and laundry

Applications stating age and previous experience together with copies of not more than three recent testimonials to be sent to the undersigned not later than 9 a m on Saturday October 1st 1938

J R MACKRILL
Secretary

BEDFORD COUNTY HOSPITAL

FIRST HOUSE SURG required male Salary £155 per annum commence duties October 1st For partic apply Secretary

PORTSMOUTH AND SOUTHERN COUNTIES EYE AND EAR HOSPITAL
Portsmouth

HONORARY ASSISTANT OPHTHALMIC SURGEON

In the event of the present holder of the above post being elected Honorary Ophthalmic Surgeon the Committee will proceed at once to fill the vacancy thus caused and applications for the post are invited

Applications (15 copies) stating age experience and nationality together with copies of recent testimonials must reach the Chairman of Committee not later than October 15th

Candidates must hold special qualifications particulars of which may be obtained from the undersigned

C G F WEBB
September 20th 1938 Secretary

PORTSMOUTH AND SOUTHERN COUNTIES EYE AND EAR HOSPITAL
Portsmouth

HONORARY OPHTHALMIC SURGEON

The above post will shortly become vacant and applications should reach the Chairman of the *Committee not later than October 15th* with particulars of age experience nationality and copies of recent testimonials

The present Honorary Assistant Ophthalmic Surgeon is a candidate for the post

C G F WEBB
Secretary

ROYAL EYE HOSPITAL
Pevensey Road Eastbourne

NON RESIDENT HOUSE SURGEON required to commence duty at once The appointment will be *for six months in the first instance*

Salary £100 per annum and allowance in lieu of board residence £175 per annum

Applications stating age qualifications and ophthalmic experience together with recent testimonials should reach the undersigned as soon as possible

Before engagement candidates have to be interviewed by the Hon Surgeon from whom further particulars could be obtained in person

H BYGRAVE Hon Secretary

ROYAL SURREY COUNTY HOSPITAL
Guildford (216 Beds)

PHYSIO THERAPY DEPARTMENT

A vacancy exists for an HONORARY PHYSICIAN in charge of the Physio-Therapy Department Duties will commence November 1st 1938

Further particulars may be obtained from the Secretary Superintendent to whom applications with copies of not more than three testimonials should be sent not later than October 9th 1938

ROYAL *SURREY COUNTY HOSPITAL*
Guildford (216 Beds)

HONORARY ASSISTANT RADIOLOGIST

A vacancy exists for an Honorary Assistant Radiologist to carry out X ray diagnosis and treatment

Duties will commence November 1st 1938

Further particulars may be obtained from the Secretary Superintendent to whom applications with copies of not more than three testimonials should be sent not later than October 9th 1938

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL CHEETHAM
(Non Sectarian) (102 Beds)

The Board of Management invite applications for the post of HONORARY ASSISTANT PHYSICIAN to the above Hospital

Applications must be submitted in duplicate and be accompanied by copies of three recent testimonials and forwarded to the undersigned not later than October 10th 1938

K C HARDING
Assistant Secretary

REDLANDS HOSPITAL FOR WOMEN

Applications are invited from qualified Medical Women for the TWO POSTS OF RESIDENT to the above Hospital Appointment is for six months from October 10th (three months Medical and Gynaecological three months Surgical) Salary at the rate of £50 p a

Applications together with three copy testimonials should be lodged not later than October 7th with the Medical Secretary Redlands Hospital for Women Kelvinside Glasgow W 2

WESTERN INFIRMARY OF GLASGOW
(Incorporated)

The Managers invite applications for a
FULL TIME ASSISTANT RADIOLOGIST

The Salary is £400 per annum and candidates are requested to lodge with the subscriber on or before October 8th fifteen applications with copies of at least two testimonials with each application

Canvassing not permitted

J MATHESON JOHNSTON
Secretary and Treasurer

87 Union Street Glasgow
September 24th 1938

THE CHESTER ROYAL INFIRMARY
(225 Beds)

Applications are invited for the post of HOUSE SURGEON (male) to take up duty November 1st 1938 Salary £150 per annum with board lodging and laundry

The appointment is approved in connexion with the M S (London University) and F R C S (Eng) examinations

Application list closes October 13th 1938 Application forms may be obtained from —

W H GRACE M D M R C P
Hon Sec Medical Committee

September 16th 1938

THE CHESTER ROYAL INFIRMARY
(225 Beds)

Applications are invited for the post of HOUSE PHYSICIAN (male) to take up duty November 1st 1938 Salary £150 per annum with board *lodging* and laundry

The appointment is approved for the purposes of the M D examinations of the University of London

Application list closes October 13th 1938 Application forms may be obtained from —

W H GRACE M D M R C P
Hon Sec Medical Committee

September 16th 1938

THE CHILDREN'S HOSPITAL SHEFFIELD
(157 Beds)

Applications are invited for the post of *HOUSE* SURGEON vacant October 1st 1938

The appointment is for six months Salary £100 per annum, with board residence and laundry Candidates (male and unmarried) who must possess registered qualifications should forward applications stating age nationality etc together with copies of three recent *testimonials* to the undersigned

T H G GARTLAND
Superintendent and Secretary

VICTORIA HOSPITAL DEAL
(50 Beds)

Applications are invited for the post of RESIDENT MEDICAL OFFICER (male) British nationality unmarried The appointment to commence immediately for six months Salary £150 p a with board lodging and laundry Special knowledge of anaesthetics is desirable

Applications stating age and *qualifications* together with copies of three recent testimonials to be sent to the Secretary Medical Board Victoria Hospital Deal Kent

THE CASSEL HOSPITAL FOR FUNCTIONAL *NERVOUS DISORDERS*
Swaylands Penshurst Kent

RESIDENT MEDICAL OFFICER (male unmarried) required to commence duties about November 1st Previous experience in psychotherapy essential

Salary £400 p a with board residence and laundry

Applications to be sent to the Medical Director enclosing testimonials not later than October 10th

ST ALBANS AND MID-HERTS HOSPITAL
Church Crescent St Albans

Applications are invited for the post of RESIDENT MEDICAL OFFICER Salary £150 per annum with board residence and laundry

The post will become vacant on October 17th next

Applications to be sent to the Secretary St Albans and Mid Herts Hospital Church Crescent St Albans Telephone No 4516

THE GENERAL HOSPITAL BIRMINGHAM

Applications are invited for the post of RESIDENT GYNAECOLOGICAL HOUSE SURGEON for six months from *October 1st* Salary £ 0 per annum

Applications giving full details of qualifications should reach the undersigned as soon as possible

A H LEANEY
House Governor

September 14th 1938

APPOINTMENTS—Important Notice

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Secretary to the British Medical Association, B M A House, Tavistock Square, W C 1 (in the case of Scottish appointments, with the Scottish Secretary, 7, Drumsheugh Gardens, Edinburgh)

(a) British Islands

Town or District	Town or District	Town or District
CONTRACT PRACTICE	CONTRACT PRACTICE—*(contd)*	**PUBLIC HEALTH**
ABERTYSSWG MEDICAL AID SOCIETY *(Medical Officer)*	MID-RHONDDA MEDICAL AID SOCIETY *(Assistant Medical Officer)*	MIDDLESBROUGH EDUCATION COMMITTEE *(Senior Assistant School Medical Officer)*
BLAENAVON MEDICAL SOCIETY *(Chief Medical Officer)*	NEATH AND DISTRICT *(Medical Aid Association)*	COUNTY OF ROXBURGH *(Assistant Medical Officer of Health)*
GILFACH GOCH GLAMORGAN *(Workmen's Medical Scheme)*	OGMORE VALLEY GLAMORGAN *(Wynnham Colliery Medical Aid Society) (Workmen's Medical Scheme)*	**DISPENSARY APPOINTMENTS**
LLWYNYPIA CLYDACH VALE, PENYGRAIG GLAMORGAN *(Workmen's Medical Scheme)*	OAKDALE MON *(Medical Officer for Medical Aid Association)*	LIMERICK CITY *(Whole time Dispensary Medical Officers)*

(b) Overseas

Medical practitioners are requested **not to apply** for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Division or Branch named in the second column or with the Secretary to the British Medical Association, B M.A. House, Tavistock Square, W C 1

Town or District	Hon Sec of Division or Branch	Town or District	Hon. Sec of Division or Branch	Town or District	Hon. Sec of Division or Branch
NEW SOUTH WALES *(All Friendly Society Appointments)*	The Medical Secretary New South Wales Branch 135 Macquarie Street Sydney N S W	**VICTORIA** *(All Institute or Medical Dispensaries)*	The Honorary Secretary Victorian Branch British Medical Association Medical Society Hall Albert St East Melbourne Victoria.	**WESTERN AUSTRALIA** *(Contract and Lodge Practices)*	The Hon. Sec Western Australian Branch British Medical Association Shell House, 205 St. George's Terrace Perth Western Australia.
QUEENSLAND *(Brisbane Associate Friendly Societies Institute)*	The Hon Sec Queensland Branch British Medical Association B M A House 225 Wickham Terrace Brisbane B 17				

September 21 1938 By Order of the Council G C ANDERSON, *Secretary*

ANCOATS HOSPITAL MANCHESTER 4

SURGICAL REGISTRAR REQUIRED

Applications are invited from duly qualified Medical Practitioners Duties To assist the Hon Surgeon in the Out patient Department Surgical Clinics on Tuesday and Friday mornings Honorarium £.0 per annum Appointment for twelve months and is renewable

Applications stating age qualifications experience and full particulars to be forwarded to the undersigned on or before October 5th to ether with copies of three recent testimonials

By Order of the Board
HERBERT J DAFFORNE
Gen. Supt and Secretary

DERBYSHIRE HOSPITAL FOR SICK CHILDREN (84 Beds)

Wanted (October 3rd 1938) A RESIDENT HOUSE SURGEON (Lady) Salary £130 p a The appointment is for six months but may be extended by mutual arrangement Applicants must be fully qualified Applications with three testimonials to be sent to the undersigned forthwith

The Hospital is recognized by the Conjoint Board for the purpose of the Diploma in Child Health

ARTHUR N WHISTON
Secretary
.5 St Mary's Gate Derby

HARLOW WOOD ORTHOPAEDIC HOSPITAL near Mansfield Notts (155 Beds Two Residents)

Applications are invited for the posts of TWO HOUSE SURGEONS (male) Salary is at the rate of £ 00 p.a. with board residence nd laundry Duties commence on November 1st the appointments being for six months in the first instance

Applications stating age qualifications nd experience with copies of testimonials should be received by the Secretary not later than September 30th

---

ADDENBROOKE'S HOSPITAL CAMBRIDGE.

Applications are invited for the following posts —

(a) HOUSE PHYSICIAN ant on November 1st 1938

(b) HOUSE SURGEON to the Special Departments with care of beds for ear nose and throat eye gynaecological and maternity cases vacant on November 1 t 1938

Each appointment is tenable for a period of six months but is terminable at an earlier date by one month's written notice on either side

The salary of each officer will be at the rate of £130 per annum with board residence and laundry

Candidates (male) who must be unmarried and duly registered, are requested to forward their applications stating age qualifications etc together with copies of not more than four testimonials to the undersigned on or before Wednesday September 5th 19 8

J A BEARDSALL
Secretary Superintendent

MONTROSE MATERNITY HOSPITAL Govan Glasgow

RESIDENT (female) DOCTOR required either permanent or at least ix month commencing November Forty bed Practical experience in ob tetrics essential Salary £1 0 and board etc

Apply stating a e when available qualifications and experience with three copies of testimonials to IAN M GRANT Secretary 113 St Vincent Street Glasgow

---

LOWESTOFT & NORTH SUFFOLK HOSPITAL

JUNIOR HOUSE SURGEON (male) required Salary at the rate of £1.0 per annum with board residence and laundry Medical and Surgical qualifications required Eligible for Senior post at £1 0 per annum after a period of satisfactory service.

Applications together with copies of three recent testimonia.. to be sent to the Honorary Medical Superintendent.

MONTAGU HOSPITAL MEXBOROUGH. (11.. Bed 3 Residents.)

Applications are invited for the post of RESIDENT HOUSE SURGEON (male) commencing salary £75 per annum with the usual residential emoluments. Previous Hospital experience essential

The appointment commences November 1st, and is for six months and is subject to renewal This post offers excellent general experience and the duties include work in the Orthopaedic Dept. and Fracture Clinic.

Applications stating age nationality qualification and experience accompanied with copy testimonial to be sent to the undersigned

JOHN N DRAKE
Secretary Superintendent.

THE ROYAL INFIRMARY BRADFORD

TWO HOUSE PHYSICIANS (male) and FIVE HOUSE SURGEONS (male) wanted for November 1st Six months appointments Candidates must be single and legally qualified

Salary 1 0 per annum with board residence and washing

There are two beds and 10 Resident Officers

Applications stating age qualification and previous experience with copies of recent testimonials should be sent to the undersigned by October 1 t

H TRUSSON
House Governor and Secretary
September 9th 193a

WHITEHAVEN AND WEST CUMBERLAND HOSPITAL.

HOUSE SURGEON required for end of September Ninety bed Two House Surgeons in residence. Six months appointment. Salary at the rate of £1 0 per annum board residence and Laundry

Applications with copies of three recent testimonials to be sent to the Secretary

(Appointments continued on p 59)

TO ADVERTISERS

The BRITISH MEDICAL JOURNAL has a larger circulation than that of all other British weekly medical *periodicals combined*

CIRCULATION OF THIS ISSUE—41,750

TERMS FOR ADVERTISING

SMALL PREPAID ADVERTISEMENTS

The MINIMUM charge is 9s which covers up to 30 words Extra words are charged 1s 6d for 5 or less *e g* 33 words would be charged as for 35 Name and address should be included when counting words for cost

If BOX NUMBER is used it should be reckoned as 5 words in the total Advertisements, accompanied by remittance, should reach this office not later than NOON TUESDAY, for insertion in ensuing number

DISPLAYED ADVERTISEMENTS

Whole Page, £24 and *pro rata* to one eighth page

Special positions dates and rates on application

EVERY EFFORT IS MADE TO ENSURE THE ACCURACY OF ADVERTISEMENTS APPEARING IN THE JOURNAL NO RECOMMENDATION IS IMPLIED BY ACCEPTANCE AND THE BRITISH MEDICAL ASSOCIATION RESERVES THE RIGHT TO REFUSE OR INTERRUPT THE INSERTION OF ANY ADVERTISEMENT

ADVERTISEMENT MANAGER
BRITISH MEDICAL JOURNAL
B M A House, Tavistock Square
London, W C 1
Telephone EUSton 2111

NOT CLASSIFIED

CIGARS (ENDCUT) ALL HAVANA

TOBACCO GOOD SMOKES at a low price quality guaranteed Box of 50 for 25/- post free —Sole Manufacturer J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"BIZIM" CIGARETTES

THESE luxurious deliciously satisfying smokes 50 s or 100 at 6 3 per 100 58/6 per 1 000 post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

"SOLACE CIRCLES" TOBACCO

THE finest combination ever discovered of Choice Natural Tobaccos Every pipeful an indescribable pleasure 12/6 per ¼ lb tin post free —Sole Manufacturers J J FREEMAN & Co LTD 90 Piccadilly London W 1 (GRO 1529)

NATIONAL ADOPTION SOCIETY 4 BAKER STREET W 1 Telephone Welbeck 7211 OFFERS ASSISTANCE in the legal adoption of illegitimate and orphan babies into suitable family life Chairman THE LADY GWENETH CAVENDISH

NEAR NORTH YORKSHIRE MOORS—Charming district doctor would RECEIVE RESIDENT PATIENT or PG requiring healthy outdoor life Large sunny house on agricultural estate modern conveniences 5 acres grounds Tennis golf hunting shooting fishing —Address No 8935 B M A House Tavistock Square W C 1

REQUIRED HOME FOR RETIRED DOCTOR in rooms breakdown slight supervision preferably district house Moderate terms —Address No 8927 B M A House Tavistock Square W C 1

TYPEWRITING—SPECIALISTS IN TYPING Medical and scientific papers lectures theses and books Shorthand typists always available Proof reading indexing —MARGARET WATSON LTD 16 Palace Chambers Bridge Street S W 1 WHitehall 3838

TYPEWRITING DUPLICATING TRANSLATIONS—Experts in Medical work TESTIMONIALS THESES etc accurately copied in style that commands attention —WOBURN BUREAU Drayton House Gordon Street London W C 1 (close B M A House) EUSton 1775

WHEN YOU COME TO LONDON STAY AT THE HAMPDEN RESIDENTIAL CLUB FOR GENTLEMEN Hampden Street N W 1 Close Kings Cross and Euston 300 bedrooms 15/- to 22/6 p w includ baths attend and boot cleaning All meals a la carte in dining room Mod tariff Large club rms reading rm tudy for students Illus pros Sec EUSton 2244/5

YOUNG LADY REQUIRES POST AS NURSE SECRETARY Experienced Highest references —Address No 8926 B M A House Tavistock Square W C 1

ASSISTANCIES

WANTED IMMEDIATELY ASSISTANT TO live at branch surgery unmarried Salary £350 all found plus car allowance £60 plus bonus Young energetic principal Midlands —Address No 8928 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY MARRIED ASSISTANT for South Yorkshire practice with early view Salary £400 with car allowance free unfurnished house Teetotaller Scots graduate preferred —Address No 8911 B M A House Tavistock Square W C 1

WANTED OCTOBER 1ST MALE ASSISTANT married ex H S H P Scot preferred Branch practice panel private Essex 12 miles Charing Cross Salary £400 per annum plus £50 car allowance Modern house free Prospects suitable man —Address No 8845 B M A House Tavistock Square W C 1

WANTED OCTOBER 1ST OUTDOOR MALE ASSISTANT British Mixed general practice South Coast resort Salary £400 car allowance £52 garage Full personal particulars essential Photo returnable —Address No 8630 B M A House Tavistock Square W C 1

WANTED FOR OCTOBER 1ST 1938 YOUNG unmarried male Indoor ASSISTANT for large panel practice near Newcastle on Tyne Salary £325 per annum with car allowance of £50 per annum Applicant to furnish at least two recent testimonials and state nationality —Address No 8907 B M A House Tavistock Square W C 1

WANTED OCTOBER 1ST APPROX OUTdoor male ASSISTANT (Scotch or English) for large mixed practice in better class Manchester suburb Salary £500 p a which includes allowance for own car State age nationality religion and experience Partnership later to suitable applicant —Address No 8951 B M A House Tavistock Square W C 1

WANTED OCTOBER OUTDOOR MALE ASSISTANT British unmarried Mixed practice in North little midwifery or night work Salary £400 Car allowance £52 Applicant to furnish three testimonials and photograph —Address No 8819 B M A House Tavistock Square W C 1

WANTED MID OCTOBER MALE ASSISTANT British for mixed practice Seaside town Co Durham Commencing salary £360 with rooms board and attendance Usual bond —Address No 8934 B M A House Tavistock Square W C 1

WANTED FOR EARLY OCTOBER MALE indoor ASSISTANT in large mixed practice in South Yorkshire town Previous experience not essential British preferred salary £300-£350 p a all found with use of car or an allowance —Address No 8923 B M A House Tavistock Square W C 1

WANTED (OCTOBER) OUTDOOR ASSISTANT for residential town and country practice in Yorkshire Rooms attendance and car provided Salary £400 —Address No 8921 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY INDOOR AND Outdoor ASSISTANTS for Town and Country Practices with and without view to Partnership Good salaries offered State full particulars —BRITISH MEDICAL BUREAU 33 Cross Street Manchester 2.

WANTED ASSISTANT MALE SCOT Lancashire-Cheshire border Own rooms £350 per annum all found —Address No 8937 B M A House Tavistock Square W C 1

WANTED AT EARLY DATE YOUNG single male outdoor ASSISTANT English or Scottish and recently qualified preferred for mixed practice in Essex 30 miles from London Salary £480 including car allowance Own car essential References —Address No 8956 B M A House Tavistock Square W C 1

WANTED INDOOR ASSISTANT FOR LATE Sept aged under 30 Compact panel and police practice Work light Midlands State experience and essential particulars References required —Address No 8957 B M A House Tavistock Square W C 1

WANTED MALE ASSISTANT IMMEDIately Experience unnecessary Good salary and allowances including free house at branch surgery Married or single but married preferred State when free —Address No 8929 B M A House Tavistock Square W C 1

WANTED ASSISTANT POST GRADUATE or retired Light night duties only and be on the premises Sundays Free boarding and lodging any nationality —Address No 8913 B M A House Tavistock Square W C 1

WANTED —ASSISTANT (MIDLANDS) IRISH or Scot preferred Salary £400 indoor Car provided Excellent prospect for steady worker Testimonial and recent photograph with application —Address No 8808 B M A House Tavistock Square W C 1

WANTED AN ASSISTANT WITH VIEW TO Partnership in a well established practice in residential seaside town in Lancashire —Address No 8962 B M A House Tavistock Square W C 1

WANTED INDOOR ASSISTANT SINGLE for good-class mixed practice in University Town in Yorkshire No clubs no midwifery Time for postgraduate work Salary £300 per annum Sign usual bond —Address No 8637 B M A House Tavistock Square W C 1

WANTED ASSISTANT WEST WALES view to Partnership £350 with house £50 car allowance Good opportunity for keen man Hospital practice available —Address No 8547 B M A House Tavistock Square W C 1

WANTED ASSISTANT WITH VIEW TO PARTNERSHIP Previous experience of General Practice and married man preferred Suitable house available Large increasing practice small panel on outskirts of West Country City —Address No 8812 B M A House Tavistock Square W C 1

WANTED MIDLANDS INDOOR ASSISTANT male Scotch or English with some experience of G P preferred but not essential Salary £325 all found plus car allowance References with photo if possible to—Address No 8966 B M A House Tavistock Square W C 1

WANTED PART TIME ASSISTANT NEAR Leeds Morning and evening surgeries at branch Suit postgraduate —Address No 8811 B M A House Tavistock Square W C 1

WANTED PART TIME ASSISTANTSHIP IN London by postgraduate (M D) student with some years experience of private and panel practice —Address No 8916 B M A House Tavistock Square W C 1

WANTED —PART TIME ASSISTANT FOR panel and private practice in London Live in Would suit postgraduate worker Particulars on application —Address No 8967 B M A House Tavistock Square W C 1

ASSISTANT WANTED BRITISH MALE Salary £400 plus £50 car allowance Mixed urban and rural practice Midlands Five partners —Address No 8735 B M A House Tavistock Square W C 1

ASSISTANT REQUIRED MALE SCOTTISH or English unmarried young some experience general practice preferred Own rooms branch London Kent border £340 per annum all found £50 car allowance and garage —Address No 8953 B M A House Tavistock Square W C 1

B S C M B CHB EDIN SCOTTISH EX ASSISTANTSHIP H P ex H S wishes South of England with a view to PARTNERSHIP —Address No 8901 B M A House Tavistock Square W C 1

DOCTOR (AGED 37) UNIVERSITY BRITISH requires outdoor ASSISTANTSHIP or MANAGE BRANCH Ex Hospital experienced panel London or southern counties preferred Excellent abstainer drives car—Address No 8919 B M A House Tavistock Square W C 1

INDOOR MALE ASSISTANT REQUIRED FOR London mixed practice English or Scotch preferred commencing salary £1 0 p a—Address No 8968 B M A House Tavistock Square W C 1

NORTH WEST LANCS NEAR COAST—ASSISTANT wanted with view to junior partnership (in six months time) in old-established practice in pleasant district—Address No 8972 B M A House Tavistock Square W C 1

OUTDOOR ASSISTANTSHIP WANTED BY Irish Graduate R C S with or without view end October Yorkshire or South England Hospital and G P experience—Address No 8816 B M A House Tavistock Square W C 1

POSTGRADUATE ST THOMAS'S MAN would join in reduced PART TIME ASSISTANCY in W or S W London Three years experience G P own car good references—Address No 8924 B M A House Tavistock Square W C 1

PART TIME MAN REQUIRED IN LIVERpool State time free and available for duty references and other essential particulars—Address No 8965 B M A House Tavistock Square W C 1

LOCUMS

LOCUM TENENS WANTED MILD SEA side hospitality and expenses very little work—Address No 8914 B M A House Tavistock Square W C 1

LADY DOCTOR L R C P AND S L M D P H. access to car use and dispensing experienced desires LOCUMS in London area free October 3rd—Phone Ladbroke 1163 (before 11 a m) or address No 8937 B M A House Tavistock Square W C 1

MEDICAL POSTS DISPENSERS

A LADY DISPENSER BOOKKEEPER SUPplied immediately on request qualified and with practical experience in private practice and dispensary work also trained in Bacteriological Laboratories of the LONDON COLLEGE OF PHARMACY FOR WOMEN Preparations for Examinations—Write wire or phone (Bayswater 0769) Secretary 7 Westbourne Park Road W 2

A COURSE OF TRAINING IN DISPENSING and Pharmacy is given at GORDON HALL SCHOOL OF PHARMACY and Secretary Dispensers can be supplied to Doctors Sessions January April and September—Apply Principal School of Pharmacy Drayton House Gordon Street W C 1 Phone Euston 3930

CHIEF ASSISTANT TO THE ORTHOPAEDIC DEPARTMENT ST THOMAS'S HOSPITAL Renewable yearly up to four years No salary Private practice allowed Application with full details of academic career and copies of testimonials must be sent to the Clerk to the Governors not later than October 7th 1938

DISPENSER 35 (HALL) SEEKS POST IN Hospital or with Doctor keep accounts collect debts and make himself generally useful Moderate salary Well recommended—Address No 8601 B M A House Tavistock Square W C 1

DISPENSING CAREER FOR YOUNG LADIES. FULL TRAINING for Apothecaries Hall Certificate. Enrolments every three months—Apply The Principal Central School of Pharmacy 28 Moreton Street London S W 1 Telephone Victoria 1641

DOCTORS REQUIRING QUALIFIED Dispensers Nurse Dispensers Secretary Dispensers or Chauffeuse Dispensers are invited to write wire or phone Temple Bar 4648 THE DISPENSERS BUREAU 3 Lindsay House 171 Shaftesbury Avenue London W C 2

DOCTOR L R C P ETC 48 RECOVERED long illness desires LIGHT WORK assisting preferably clinic welfare etc Excellent experience Home and abroad Amount salary not primary importance—Address No 8903 B M A House Tavistock Square W C 1

ROYAL SOCIETY OF MEDICINE requires whole time ASSISTANT EDITOR of PROCEEDINGS Applicants whether male or female must hold medical qualifications Initial salary according to experience but not less than £3 0 per annum Knowledge of languages and editorial or parallel experience desirable Applications stating age and experience should be received before Thursday September 29th by the Secretary Royal Society of Medicine 1 Wimpole Street W 1

THE ROYAL ARMY MEDICAL CORPS ASSOCIATION 26 Eccleston Square S W 1 (Telephone Victoria 2161) supplies qualified Dispensers Bookkeeper—Laboratory Assistant Sanitary Assistants Male Nurses Mental and Special Treatment Orderlies Dental Clerk Orderlies Porters Caretaker etc without charge to prospective employers

YOUNG LADY 6 SEEKS POST AS NURSE RECEPTIONIST Bookkeeping typing and general duties experience London or suburbs—Address No 9065 B M A House Tavistock Square W C 1

PROFESSIONAL AND PERSONAL REQUIREMENTS MAY OFTEN BE SATISFIED THROUGH THE ADVERTISEMENTS IN THE BRITISH MEDICAL JOURNAL

PARTNERSHIPS

BERKS — PARTNERSHIP ONE THIRD share (valued about £900 p a) in mixed general practice about £2 000 p a Married man with previous G P experience preferred House available Good educational facilities Two years premium Three months introductory assistantship—Address No 8904 B M A House Tavistock Square W C 1

JUNIOR PARTNER WANTED FOR PRACTICE in Northumberland seaside resort Married man 30–35 preferred SHARE about £1 000 and house on rental available Excellent prospects for energetic man Small panel—Address No 8838 B M A House Tavistock Square W C 1

LANCS TOWN WITHIN EASY REACH SEA and very beautiful country ONE THIRD SHARE increasing later Very old-established mixed practice panel 3 600 receipts approx £4 000 Certified two years purchase Desirable house garden garage for sale—Address No 8963 B M A House Tavistock Square W C 1

PARTNERSHIP IN CORNISH TOWN £1 500 at two years purchase Partner should be young married with good medical degree experienced G P Good house garden garage—Address No 8910 B M A House Tavistock Square W C 1

SOUTH WEST ENGLAND — MEDICAL PARTNER wanted in good-class practice Hospital appointment All sports Panel 450 QUARTER SHARE of £4 600 at two years purchase increasing later—Address No 8830 B M A House Tavistock Square W C 1

THIRD PARTNER REQUIRED FOR increasing practice in first-rate county town 35 miles town well qualified married Quarter share approx £1 600 at 2½ years purchase Small house with future choice—Address No 8916 B M A House Tavistock Square W C 1

THIRD SHARE IN OLD-ESTABLISHED Midland PRACTICE. Branch surgery on new estate with unlimited scope for young energetic man preferably married Share producing £1 400 per year Part 1 600 Public Medical Service 1 600 Books audited—Address No 9301 B M A House Tavistock Square W C 1

WEST OF ENGLAND—PARTNERSHIP IN well-established increasing practice in suburb of large city Receipts past year exceed £3 000 Part 1 exceeds £1 000 Modern detached house and garden One third share for sale at first Price £2 500 to include drugs Please state age experience and financial position Photograph if possible—Address No 9 B M A House Tavistock Square W C 1

PRACTICES

WANTED IMMEDIATELY PRACTICE IN London In area £1 000 to £2 000 upwards with a fairly large panel Immediate cash available—Reply in strict confidence to Address No 8940 B M A House Tavistock Square W C 1

WANTED IMMEDIATELY OR NEAR future London Environs or South mixed PRACTICE good panel £1 000 up less if scope Private adjoiner ample capital Reply strictest confidence—Address No 8960 B M A House Tavistock Square W C 1

A NUMBER OF SMALL PRACTICES AT low premiums Excellent opportunities for practitioners wishing to get a practice with scope—Apply PEACOCK AND HADLEY LTD 6–8 Chandos Place Strand W C 2

BUCKS (HALF HOUR WATERLOO)—UNopposed PRACTICE old established Receipt about £1 000 p a panel 900 increasing Charming house rent £150 Premium £2 000—PEACOCK AND HADLEY LTD 6–8 Chandos Place Strand W C 2

EXPERIENCED G P AGED 35 WIDE HOSpital and general practice experience desires PRACTICE or ASSISTANTSHIP with a view to succession or partnership in Yarmouth or Lowestoft districts—Write REYNOLDS AND BRANSON LTD 13 Briggate Leeds

FASHIONABLE RESORT S COAST—Middle-class PRACTICE, 600 panel established 10 years £6 000 Two years purchase. Beautifully situated house (6 bedrooms) excellent repair garden garage £2,000 freehold Must purchase Suit semi-retired doctor with some family or younger man willing take private patient while working up—Address No 6600 B M A House Tavistock Square W C 1

FOR SALE SURREY EASILY WORKED PRACTICE doing about £1 000 increasing panel about 600 increasing Rapidly growing district premium two years purchase Attractive new accommodation rented—Address No 8931 B M A House Tavistock Square W C 1

FIRST OFFER OVER £100 SECURES PROmising NUCLEUS near Exeter Excellent house on rental Suitable for resident patients Fine opportunity for young practitioner Vendor going abroad—Address No 8961 B M A House Tavistock Square, W C 1

KENT RAPIDLY EXPANDING DISTRICT near London.—Well-established and Middle class PRACTICE Good house and garden garage Premium £5 0 or near offer—Address No 8919 B M A. House Tavistock Square W C 1

LARGE TOWN NEAR BRADFORD CASH receipts £1 600 (panel 1 500) Accountants figures last 13 years Good house (3 public 6 bedrooms) garage sell or lease. BRANCH SURGERY Good reason sale Premium 2 years (or nearest offer) State name qualifications—Address No 8914 B M A House Tavistock Square W C 1

LONDON KENTISH BORDER—MIDDLE class PRACTICE Est 4 years Growing area Receipts last two years £1 021 £1 027 panel 310 increasing Corner house freehold Rent £65 rates £17 or purchase £850 Premium £1 400 —Address No 8933 B M A House Tavistock Square W C 1

NUCLEUS OFFERED (ABOUT £200) TO BE worked in partnership South Coast Rapidly growing district excellent scope for energetic WOMAN Scotch graduate preferred Reasonable premium—Address No 8906 B M A House Tavistock Square W C 1

NEAR HOLLOWAY N—OLD ESTABLISHED PRACTICE Receipts average £500 including increasing panel Nice house garden rent £96 Premium moderate Good scope—PEACOCK AND HADLEY LTD 67 68 Chandos Place Strand W C 2

NEAR LONDON—VERY SOUND PRACTICE for sale averaging about £2 000 Panel about 1 500 Freehold house for sale or rent No agents —Address No 8938 B M A House Tavistock Square W C 1

NORTHERN ENGLAND — BETTER CLASS work no panel suit physician Income £1 100 Attractive house facing south garden garage Excellent professional suite Educational facilities Seaside Offers invited—Address No 8936 B M A House Tavistock Square W C 1

NEAR BLACKFRIARS S E — OLD ESTABlished PRACTICE Receipts average about £1 650 p a panel 2 800 Nice house rent £100 p a Premium £3 750—Apply PEACOCK AND HADLEY LTD 67 68 Chandos Place Strand W C 2

OLD ESTABLISHED PRACTICE RESIDENtial district South east London Average £900 per annum panel £200 transferable appointment £50 Price £2 000 or near offer Excellent freehold house for sale £1 600—Address No 8220 B M A House Tavistock Square W C 1

OPHTHALMIC PRACTICE PRODUCING AT the rate of about £600 p a in important residential and industrial town in south west Ample scope suit F R C S or D O M S—Address No 8935 B M A House Tavistock Square W C 1

PRACTICE OR PARTNERSHIP OR ASSISTANTSHIP in residential district of Bradford Experienced man English Capital available Confidential replies—Address No 8837 B M A House Tavistock Square W C 1

REQUIRED IN NORTH OR NORTH WEST London or suburbs SOUND PRACTICE with substantial panel Willing to pay good price Particulars treated in confidence—Address No 8909 B M A House Tavistock Square W C 1

SCOTTISH PRACTITIONER (AGED 38 F R C S surgical experience) wishes hear of substantial PRACTICE or PARTNERSHIP to purchase—Particulars in confidence to CRAWFORD HERRON AND CAMERON Solicitors 257 West George Street Glasgow C 2

S.W. ENGLAND—COUNTRY PRACTICE of over £700 p a at 1½ years purchase Excellent house for sale 6 bedrooms main electric central heating 1 acre Near good town station For Sale—Address No 8905 B M A House Tavistock Square W C 1

S W. SUBURB—INCREASING PRACTICE established 4 years Income £700 panel 500 appointment £76 Detached house 4 bed 2 rec Excellent surgery garden Premium £1 150—Address No 8932 B M A House Tavistock Square W C 1

SEMI RETIRED M D F R C S D P H requires medium sized country RESIDENCE preferably on or near S W coast with small PRACTICE Possession in a few months—Address No 8964 B M A House Tavistock Square W C 1

WOMAN S PRACTICE SHOWING INcrease 10 miles east of Charing Cross Good house and garden garage Panel 193 Last year s receipts £625 Premium £850—57 Belle Grove Road Welling Kent

WEST LANCS NEAR COAST COUNTRY PRACTICE Receipts average over £ 000 Pan l 930 Modern house garden freehold for sale Premium £4 000 to include d bts drugs and surgery furniture No agents—Address No 8925 B M A House Tavistock Square W C 1

HOUSES, CONSULTING ROOMS

For available

CONSULTING ROOMS, PROFESSIONAL HOUSES & FLATS

in Harley Street and the medical area generally including Mayfair

LEY CLARK & PARTNERS

AUCTIONEERS SURVEYORS & VALUERS
3a Wimpole Street Cavendish Square W 1
Telephone Langham 1095 6-7
Represented at Cannes Nice and Monte Carlo

DEVONSHIRE STREET TWO DOORS FROM Harley Street an excellent CONSULTING SUITE of three good rooms in one of the finest professional houses Rent only £250 p a or single rooms may be had at £100 p a with plate on the door and all services Vacant Sept 29th 1938—Address No 7610 B M A House Tavistock Square W C 1

DOCTOR S WIDOW OFFERS WELL FURNISHED ROOMS in quiet home (Maida Vale) Meals as required Every convenience Healthy district Refs exchanged Phone Abercorn 3541 or write—Address No 8915 B M A House Tavistock Square W C 1

GEORGIAN HOUSE EXETER EXCELLENT condition Main rooms large and lofty Near general hospital Pleasant walled garden Private sale Price £2 450—RIGBY CLAREMONT Long Causeway Exmouth

The Names and Addresses of Advertisers using

BOX NUMBERS

are held by us in strict confidence and may not be disclosed

Applications should be separately enclosed and clearly addressed,

Address No
B M A House
Tavistock Square W C 1

All communications are forwarded to advertisers under plain cover

HARLEY STREET AND MEDICAL DISTRICT

For all types of available accommodation

BERTRAM & CO., Surveyors and Estate Agents
59 Connaught Street, W 2 Paddington 1642 3

QUEEN ANNE STREET—ONLY £40 P A secures exceptionally fine CONSULTING ROOM for use when required with attendance and all services Residential accommodation available —Address No 6355 B M A House Tavistock Square W C 1

QUEEN ANNE STREET W 1—SURGEON wishes to SHARE his CONSULTING SUITE of two rooms—one fitted as an examination room Suit Urologist Gynaecologist or other specialist Plate on door available Low rent—Address No 8908 B M A House Tavistock Square W C 1

HARLEY STREET AND DISTRICT—A NUMber of excellent CONSULTING ROOMS are available for full and part time use at moderate rents Particulars on application—ELGOOD AND Co 10 Henrietta Place Cavendish Square W 1 Lang 2601

LOCK UP SURGERY TO BE LET furnished in Leytonstone E 11 Inclusive rent 12s 6d weekly No premium required—Address No 8924 B M A House Tavistock Square W C 1

PARK LANE—ADVERTISER WISHES TO meet Consultant with view to LETTING ROOM Use of waiting and ladies room also small X rays References—Address No 8953 B M A House Tavistock Square W C 1

TO LET—2 ROOMS ON GROUND FLOOR Wandsworth district in main road adjoining shop specially suitable position opposite Post Office one minute from Southfields Railway Station recommended—Putney 7694

MISCELLANEOUS SALES, etc.

IMPORTANT

to MEMBERS of the MEDICAL PROFESSION

CLOTHES OF DISTINCTION for GENTLEMEN of DISCRIMINATING TASTE Specially Cut Fitted and Moulded to each individual figure made from finest Quality Materials and in the Best Possible Style cost no more than mass production ready made clothes

The invaluable Practical Experience and Advice of our 14 Expert West End Cutters and Fitters is always at your disposal

ALL HALLZONE productions are HAND FINISHED IN EVERY ESSENTIAL DETAIL.

SPECIAL OFFER

JACKET & VEST (in black or grey)	£4 4s
Lined best quality Art Satin Art Silk or Alpaca	
SOLID FANCY WORSTED TROUSERS	£2 2s
The ideal Suit for Professional or Business wear	
LOUNGE SUITS to measure from	£6 6s
OVERCOATS " "	£5 5s
DINNER SUITS	£8 8s
DRESS SUITS from	£10 10s
PLUS FOUR SUITS from	£6 6s
THE IDEAL Suit for Country and Sporting Wear	
COLD MEDAL RIDING BREECHES from	£2 2s
RIDING HABITS	£8 8s
RIDING BOOTS	£3 3s
COSTUMES & LONG COATS	£6 6s

UNSOLICITED APPRECIATION

I strongly advise all medical men who wish to have satisfaction to patronise Harry Hall Ltd as all the clothes I have had from them during 35 years have been perfect in Fit Cut and Finish
(Signed) S J A MA MB F R C P S

PATTERNS POST FREE

Perfect Fit Guaranteed from Simple Self measurement Form or Pattern Garments
Visitors to London can order and fit same day Special Patterns would then be cut and Perfect Fitting Clothes supplied after without trying on

HARRY HALL, LTD.

Governing Director Harry Hall
THE Coat, Breeches Habit and Costume Specialists
181, OXFORD ST W 1 119, CHEAPSIDE, E C—
Telephones
GERrard 4905 4906 and 4907 NATional 8696/7
Makers of Finest Quality Bespoke Civil Sporting and Hunting Clothes for Ladies and Gentlemen
Highest Awards 12 Gold Medals
Est over 40 years

INCOME TAX

YOUR burden is OUR business
Tax Specialists to the Medical Profession

HARDY & HARDY
49, CHANCERY LANE LONDON W C 2
Telephone Holborn 6639
Write for free copy of Advice on Income Tax

OSTEOLOGY DEMONSTRATOR S COMPLETE SET OF BONES exceptionally fine including skull (and mandible) and vertebral column Articulated foot additional to disarticulated components Would accept five guineas—Address No 8917 B M A House Tavistock Square W C 1

APPOINTMENTS—Contd

ROYAL HAMPSHIRE COUNTY HOSPITAL Winchester
(187 beds 5 Resident Officers)
Hospital recognised by the Royal College of Surgeons England

HOUSE SURGEON

Applications are invited from fully qualified men for the above post to take up duties early October Six months appointment
Salary £100 per annum with board residence and laundry Candidates who must be of British nationality to make application to the undersigned enclosing copies of three testimonials.
HERBERT MASLEN Secretary
September 19th 1938

TILBURY HOSPITAL ESSEX (Seamen s Hospital Society) (92 Beds)

HOUSE SURGEON (male) required for six months as from October 1st Salary £140 per annum with board residence and laundry Applications with copies of three testimonials to be sent immediately to the undersigned
F A LYON Secretary
Seamen Hospital Society
Greenwich S E 10

COUNTY COUNCIL OF DURHAM

EDUCATION DEPARTMENT

ASSISTANT SCHOOL MEDICAL OFFICERS

The County Education Committee invite applications for the posts of Two Assistant School Medical Officers (women) to act under the School Medical Officer in connexion with the inspection of school children and such other duties as may be required by the Education Committee

Commencing salary in each case £400 per annum (provided the candidate has had not less than three years' postgraduate experience) rising by annual increments of £25 to £500 per annum together with travelling expenses according to the County Scale. The successful candidates will be required to devote their whole time to the duties of the office and reside in or near the districts to which they will be attached at places to be approved by the Education Committee. The appointments will be subject to three calendar months' notice on either side expiring on the last day of any calendar month

Applicants must have had experience in the work of school medical inspection and preference will be given to candidates who

(a) have had experience in the work of School Clinics,

(b) have been accustomed to make special reports on Mentally Defective Physically Defective Epileptic and other Defective Children

The possession of a Diploma in Public Health is desirable though not essential

Canvassing directly or indirectly is prohibited and will disqualify

A deduction of 5 per cent will be made from the salary in each case in accordance with the Local Government and Other Officers' Superannuation Act 1922 and the appointments will be subject to the candidates passing the medical examination in connexion therewith

Form of application to be returned not later than Saturday October 8th 1938 will be supplied by the Director of Education Shire Hall Durham on receipt of a stamped addressed foolscap envelope

Shire Hall, Durham
September 19th 1938

THOS B TILLEY
Director of Education

THE ROYAL GWENT HOSPITAL
Newport Mon
(110 Beds Six Residents Two of these posts are recognized by the Royal College of Surgeons for the final Fellowship)

CASUALTY OFFICER required previous experience essential From September 6th next to April 30th 1939 Salary at the rate of £1 0 per annum with board residence and laundry

Applications stating age nationality and experience to other with copies of three testimonials should be forwarded to the undersigned as early as possible.

ALAN RUDDLE
Secretary Superintendent
(Newport 1 1/2 hours by train from London)

WORCESTER ROYAL INFIRMARY
(165 Beds)

Applications are invited for the post of
SENIOR HOUSE SURGEON
Salary at the rate of £150 per annum with board residence and laundry

The Hospital is approved by the Royal College of Surgeons for candidates for the Fellowship

Applications stating full particulars as to age whether married or single qualifications etc and accompanied by copies of three recent testimonials should be sent to the undersigned by September 5th 1938

H J CLOUT Secretary

LEEDS PUBLIC DISPENSARY AND HOSPITAL

Applications are invited for the posts of —
1 OPHTHALMIC AND AURAL HOUSE SURGEON (male)
3 HOUSE PHYSICIANS (male)
Appointments for six months
Salary at the rate of £150 per annum with board residence and laundry

Applications with copies of three recent testimonials to be sent to the undersigned Leeds Public Dispensary and Hospital North Street Leeds 2 on or before Monday October 10th 1938

CHARLES F J MAURY
Secretary and Superintendent

THE PRINCESS BEATRICE HOSPITAL
Earl's Court London S W 5
(General Hospital—81 beds)

RESIDENT SURGICAL OFFICER (male required for a period of six months in the first place from October 1st 1938 eligible for re-election

Salary at the rate of £100 per annum with board residence and laundry (together with £25 to cover all duties during the six months relating to private patients)

Previous resident experience and FRCS essential

Applications to be received by the Secretary Manager with three recent testimonials by 9 a m September 26th 1938

KING GEORGE HOSPITAL ILFORD
(near London) (607 Beds)

HOUSE SURGEON (male) required for six months from November 1st Salary at the rate of £100 p a

Forms of application may be obtained from the undersigned to whom they should be returned duly completed not later than October 15th

G AUSTIN HEPWORTH
Secretary and Superintendent

KING GEORGE HOSPITAL ILFORD
(near London) (607 Beds)

ASSISTANT CASUALTY OFFICER AND HOUSE SURGEON TO SPECIAL DEPARTMENTS (male) required for six months from October 1st Salary at the rate of £100 p a

Forms of application may be obtained from the undersigned to whom they should be returned duly completed as soon as possible

G AUSTIN HEPWORTH
Secretary and Superintendent

KING GEORGE HOSPITAL ILFORD

The Board of Management invite applications for the post of HONORARY SURGEON to the Hospital a vacancy occurring on January 1st next.

Applications which may be typewritten should be addressed to the undersigned by whom they should be received not later than October 31st Further particulars available upon request.

G AUSTIN HEPWORTH
Secretary and Superintendent

A SPECIALIST PUBLICATION OF THE BRITISH MEDICAL ASSOCIATION

ARCHIVES of DISEASE in CHILDHOOD

Edited by

CHARLES HARRIS, M D, F R C P, and ALAN MONCRIEFF, M D, F R C P

SEPTEMBER, 1938

CONTENTS

Wilms' embryoma By Ruby O Stern, M D, and G H Newns, M D M R C P
Oesophagitis in infancy By J H Ebbs M D D C H
Symmetrical degeneration of the neostriatum in Chinese infants By W J C Verhaart
Clinical ascariasis in children By Cicely D Williams, D M M R C P, D T M & H
Precocious puberty, with a report on a case of pineal syndrome By A V Neale M D M R C P
Congenital pyloric stenosis in first and second cousins By E A Cockayne D M F R C P
Nutritional oedema in children in Egypt By H Shukry, M R C P M A Mahdi, M Sc, B Pharm, and A A El Gholmy, M D
Spontaneous subarachnoid haemorrhage in children By H G Miller, M B
Congenital haemolytic anaemia with normal fragility of the red blood cells By E Schiff M D
Case reports
Hydatid cyst of the spinal canal successfully treated by operation By J S Y Rogers D S O, M B C M, and G R Tudhope, M D, Ph D D P H
Tetany in the new born By O Lloyd M B B S
Cranio-carpo tarsal dystrophy By E A Freeman F R C S, and J H Sheldon M D F R C P
British Paediatric Association Proceedings of the Eleventh Annual General Meeting

Published March, June, September and December

Yearly subscription (4 numbers), 25/ To members, 20/ Single Number, 7/6

Applications with remittance should be addressed to

Archives of Disease in Childhood, B M A House, Tavistock Square, London, W.C 1

WEST LONDON HOSPITAL HAMMERSMITH W 6 (239 Beds)

An additional HONORARY REGISTRAR is required for the Throat Nose and Ear Department The appointment is for one year from November 1st next and subject to annual re election may be extended for a period of not longer than three years

Applicants must be duly qualified registered Medical Practitioners with previous experience in oto laryngology

Applications accompanied by copies of testimonials must reach me not later than Thursday October 20th first post Candidates must attend a meeting of the Medical Council at 4 30 p m on Friday October 21st and prior to that date call upon and send copies of their applications and testimonials to each member thereof They must not canvass members of the Board but nevertheless must send copies of their application and testimonials to each member thereof and if so notified be in attendance at a meeting of the Board at 5 p m on Tuesday October 25th when the appointment will be made

H A MADGE
Secretary

THE LONDON CHEST HOSPITAL
Victoria Park E 2
(Bus Tram and Rail Cambridge Heath L and N E Railway)

A vacancy for a HOUSE PHYSICIAN (male) will occur on November 1st Six months appointment Salary at the rate of £100 per annum Board residence and laundry provided

Applications with copies of three testimonials should be sent to the undersigned on or before Saturday October 1st 1938

THOMAS BROWN
Secretary

METROPOLITAN HOSPITAL
London E 8

SURGICAL REGISTRAR

Applications are invited for the above non resident post to which an honorarium of £120 is attached Applicants who must be Fellows of the College of Surgeons England or Master of Surgery in an English University should apply to the undersigned for full particulars Closing date October 14th 1938

FRANK JENNINGS
House Governor and Secretary

WEST LONDON HOSPITAL HAMMERSMITH W 6 (239 Beds)

There is a vacancy for the newly created post of HONORARY PHYSICIAN for PSYCHOLOGICAL MEDICINE Candidates who may be men or women should be Members or Fellows of the Royal College of Physicians London and should have had some experience in Child Psychiatry A Diploma in Psychological Medicine is desirable The candidate appointed would be expected to undertake at least one Out Patient Session per week and such teaching as may be required by the Medical School The appointment does not carry with it the charge of any Hospital beds

Applications accompanied by copies of testimonials must reach me by first post on Thursday October 20th Candidates must attend a meeting of the Medical Council at 4 30 p m on Friday October 21st and prior to that date call upon and send copies of their application and testimonials to each member thereof They must not canvass members of the Board but nevertheless must send copies of their application and testimonials to each member thereof and if so notified be in attendance at a meeting of the Board at 5 p m on Tuesday October 25th when the appointment will be made

H A MADGE Secretary

THE NATIONAL TEMPERANCE HOSPITAL
Hampstead Road London N W 1

Applications are invited for the following posts

RESIDENT MEDICAL OFFICER with surgical duties Salary £175 per annum board residence and laundry allowance

CASUALTY OFFICER salary £1-0 per annum board residence and laundry allowance

HOUSE SURGEON salary £100 p a board residence and laundry allowance

The appointment is for a period of six months in each case as from October 1st Preference will be given to those who have held resident posts Candidates must submit applications stating qualifications age etc with copies of not more than three testimonials by Monday September 26th addressed to the Secretary

WOMEN S HOSPITAL MELBOURNE

With reference to the advertisement in the issue of August 20th relating to the post of PATHOLOGIST applications should be sent by September 30th to the Secretary of the Universities Bureau of the British Empire 58a Gower Street London W C 1 and not to Melbourne

THE CENTURY INSURANCE COMPANY LTD

7, LEADENHALL STREET, LONDON, E C 3

18, CHARLOTTE SQUARE EDINBURGH

ASSISTS DOCTORS TO PURCHASE A PRACTICE OR PARTNERSHIP

NO GUARANTORS REQUIRED REPAYMENTS ARRANGED BY EQUAL QUARTERLY INSTALMENTS, WHICH DO NOT VARY WITH FLUCTUATIONS IN THE BANK RATE

PLEASE WRITE FOR PARTICULARS, STATING AGE NEXT BIRTHDAY

MENTION B M J

SMALL ADVERTISEMENT FOR INSERTION IN BRITISH MEDICAL JOURNAL.

The MINIMUM charge is 9s, which covers up to 30 words Extra words are charged 1s 6d for 5 or less Example 33 words would be charged as for 35 Name and address should be included when counting words for cost

If BOX NUMBER is used, it should be reckoned as 5 words in the total

PLEASE WRITE CLEARLY—ONE WORD IN EACH SPACE

1						
2						
3						
4						
5						
6					(30 words)	9/
7						10/6
8						12/
9						13/6
10						15/

To the Advertisement Manager BRITISH MEDICAL JOURNAL B M A House, Tavistock Square, London, W C 1

Please insert my advertisement in issues dated..

Name
Address

I enclose remittance value £

Date

PERCIVAL TURNER
LTD
MEDICAL AGENCY
ESTABLISHED 60 YEARS
23, MAIDEN LANE, STRAND W.C.2
(Corner of Bedford Street).
Telegrams Fpomian London"
Phones: Temple Bar 3011 (3 lines)
After office hours Walton-on-Thames 1785
Assistants and Locums Provided without fee to Principals. Practices investigated. Book keeping. Debt Collection etc.
MAXIMUM INCLUSIVE COMMISSION FOR SOLE AGENCY ON SALE OF PRACTICE OR SHARE EXCLUSIVE OF HOUSE PROPERTY £50 FULL TERMS ON REQUEST

FOR DISPOSAL.

LONDON S.E.—AVERAGE ABOUT £1,600. Panel 1,300. Suitable premises on long lease at £100 p.a. Premium £3,750.—1
PECKHAM AREA — £1000 P.A. Panel nearly 1,400 increasing. Visits 2/6 up. Scope. Premium £1,000. House to rent.—2
NORTHANTS TOWN — AVERAGE £640 p.a. Panel 750. Premium 1½ years purchase. Desirable house to rent.—3
CONTINENTAL PRACTICE—POPULAR French resort. Old established M.D. essential.—4
WILTS—COUNTRY PRACTICE old estd. unopposed £9,000 p.a. Panel 700. Excellent house for sale. Premium about 2 years purchase.—5
KENT COAST—PARTNERSHIP ½ or ¼ share of nearly £3,000. Panel over 2,000. Nice house for sale or rental. Premium 2 yrs. purchase.—6
LONDON E.—PARTNERSHIP two fifths share, with succession later, about £1,400 p.a. Panel 2,300. Ample accommodation on rental. Premium 2 years purchase.—7
NEAR HYDE PARK—HIGH CLASS income about £1,400. Ample accommodation. Rent £100 p.a. Premium for lease £9,000. Practice £1,000.—8
WEST END AND CITY PRACTICE.—PARTNERSHIP ½ SHARE of approx. £3,000 p.a. Premium £3,000. Would consider assistant with view.—9
SUSSEX COAST — £1,360 P.A. INCREASING. Non-panel non-dispg. Fees 7/6 up. Premium 2 years purch. Good house (5 bed) tennis etc. Sell or let.—10
LONDON S.E.—ABOUT £2,600 P.A. Panel 1,800. Half share for disposal at £2,750.—11
OUTER LONDON SUBURB S.E.—Res dential. Over £1,000 increasing. Panel 300. Good fees. Nice corner house to rent or sell.—12
HANTS COAST—NON PANEL NON DISPENSING. Over £1,000 p.a. Better class. Scope panel. Vendor specialising. Excellent house 5 bed etc. Premium only £1,000.—13
BUCKS — WELL ESTABLISHED £9/1,000 p.a. Panel 750. House 2 recep. 4 bed etc. Would sell or let.—14
SURREY—NEAR LONDON £800 P.A. rapidly increasing. Panel now 600. Small house £78 p.a. Premium £1,200.—15
LONDON S.W.—LOCK UP LADYS PRACTICE £485 p.a. Panel 300 (approx.). Premium £600.—16
NEAR PROSPEROUS MIDLAND TOWN—Country PRACTICE about £750 p.a. good class select panel increasing and scope. Choice of house. Premium 1½ years purchase.—17
MIDDLESEX — HALF SHARE OF £1,000 p.a. with scope. Panel 700. Appts. over £100 p.a. Premium £600. Nice house to rent.—18
LONDON W.5—ABOUT £550 P.A. Panel 860. Visits 3/6 to 5/. Premium 2 years purchase. House 4 bed etc. to rent.—19
LONDON N.W.—ONE FIFTH SHARE of over £5,000 p.a. Panel 6,000. Appts. over £160. Fees 2/6 to 10/6. Prem. 2 years purch. Small maisonette to let.—20
MIDDLESEX—SUBURB £1,030 P.A. Panel 600 increasing. P.M.S. £100. Premium 2 years purch. Comfy house (4 bed) sell or let.—21
SURREY SUBURB—HALF SHARE of £3,000 p.a. Old-est. increasing modern house garden and garage to let. Premium £3,000.—22
LANCS TOWN—OLD EST. INCREASING £1,100 p.a. Select panel of 1,000. Nice house ample accommodation. Premium £1,500 incl. drugs and surgery furniture.—23
SOUTH COAST—OLD EST. NEARLY £1,400 p.a. increasing. Fair panel mixed middle and better class. Detached house garden and garage for sale or might let. Premium £2,500.—24

NO CHARGE TO PURCHASERS
FINANCIAL ASSISTANCE ARRANGED

ASSISTANTS — VACANCIES IN Town and Country. Indoor and Outdoor. List on application.

THE MEDICAL AGENCY, Ltd.
DUDLEY HOUSE 36-38 SOUTHAMPTON ST. STRAND W.C.2
Telephones—Temple Bar 1034-1054 Established in 1892 by J. V. REASBE

SURREY.—Well-established mixed G.P. Small house to rent. Receipts approx. £1,600. Part nearly 600. Fees 3/6 up. Prem. £1,850.
LONDON N.E.—Middle-class G.P. residential locality. House to rent. Separate Surgery. Receipts approx. £1,000. Panel over 1,000. Prem. 2 years purchase.
ESSEX.—Well-established mixed G.P. Excellent house separate Surgery. Receipts nearly £1,900. Panel over 2,500. Prem. 2½ years purchase or offer.
SOUTH AFRICA.—Well-established G.P. situated in Cape Town non-dispensing. Suitable house available if desired. Receipts over £1,400. Fees 7 6 up. 1 App. transferable. Premium 1,000 gns.
LONDON W. (within 10 mins. West End).—Mixed G.P. Residential locality. House to rent. Receipts £2,400. Panel over 1,400. Fees 3 6 up. Premium £4,000 or near offer.
LONDON S.E. (under 10 mins. London Bridge).—Receipts over £2,700. Panel 3,000. House to rent. Premium 2½ years purchase or near offer.
COUNTY DURHAM.—Mixed G.P. Receipts (approximately) £2,000. Panel over 2,000. Club and 1 Appointment. Premium £4,000 or near offer to include Book Debts, Drugs etc.
LONDON.—PARTNERSHIP in growing Suburban G.P. Suitable house available. Receipts nearly £5,000. Part (approximately) 4,000. Premium *for share worth £1,000 p.a. with view to larger* share 2 years purchase. Excellent scope.
HOME COUNTIES.—PARTNERSHIP in better class G.P. situated in growing locality. Suitable for Surgeon. Share worth about £1,300 2 year purchase. House to rent or sale. Many other available details on request.
LONDON S.E.—PARTNERSHIP old-established mixed middle and working-class. Mostly cash and panel. House to rent. Receipts £2,600. Panel 1,800. Fees 2 6 up. Half-share £2,750. Practice expanding.

MANY OTHERS FOR SALE. DETAILS ON REQUEST

THE WESTERN MEDICAL AGENCY
LONDON and BRISTOL.
Dr. K. H. BENNETT and Dr. W. J. PARAMORE, who give personal attention to every client.
Financial Assistance for Purchase of and all Classes of Medical Insurance arranged.
LOCUMS AND ASSISTANTS SUPPLIED WITHOUT CHARGE TO PRINCIPALS
For exclusive A.M.A. maximum commission is £5, which includes everything sold except house property.

1 EAST ANGLIA.—Unopposed country PRACTICE personally known to us. Situated in pleasant woody and undulating district. Very old-established. Panel about 1,100. Receipts about £2,000 p.a. Full details on application.
2. NORTHANTS.—Unopposed country PRACTICE in good part. Good school and all sports. Low expenses. Panel 900. Receipts £1,600 p.a. 2 years purchase or near offer. House for sale or rent.
3 SOMERSET COAST — PARTNERSHIP in country town. Panel over 1,100. Average £3,200 p.a. increasing. Third share to commence. 2 years purchase. House rent.
4 BRISTOL.—Woman's PRACTICE with excellent scope. *Vendor returning.* Work certainly refused. Small panel can be increased if desired. Over £300 p.a. Offers considered.
5 DORSET COAST — Country PRACTICE. Average £1,000 p.a. Panel about 700. Old established. Premium 1½ years purchase. House rent.
6 MIDLAND CITY — PARTNERSHIP in pleasant part. Panel 2,500 — £2,700 last year. Half share at £3,000 or near offer. Choice of house.
7 MIDDLESEX.—Recently established PRACTICE offering good scope. Panel 300. Receipts £990 last year. Will sell whole Practice at £1,800 or half share at £1,100.
8 LONDON S.W.—Working class. Panel 1,400. Receipts £1,200. Rapidly increasing. Premium £1 years.
9 S. DEVON COAST.—Good NUCLEUS with some ophthalmic work. Vendor returning. Excellent scope. Receipts about £200 p.a. Offers considered. House sale or rent.

22 CLARE STREET BRISTOL, 1.
Telegrams Medgen Bristol" *Telephone* Bristol 24689
15 BEDFORD ST., STRAND W.C.2
Telephone Temple Bar 4532

ESTABLISHED 1863
PEACOCK & HADLEY, Ltd,
MEDICAL TRANSFER AGENCY
67-68 Chandos Place Bedford St. Strand W.C.2
Telegrams Herbaria, Lesquare London.
Telephone Temple Bar 5[illegible]
This old-established Agency negotiates the Sale of PRACTICES and PARTNERSHIPS on reasonable terms which can be obtained on application. LOCUM TENENS and ASSISTANTS supplied free of charge to principals.

CAVENDISH NURSES
★ MALE AND FEMALE
Head Office
54 BEAUMONT STREET LONDON W.1
Branches. MANCHESTER 176 *Oxford Road GLASGOW* 48 *Windsor Terrace DUBLIN* 3 *Upper Baggot St.*
Telephones London 1477 Welbeck (5 lines) Manchester 3155 Ardwick Dublin 6006 Glas 4477 Douglas
Telegrams Tactear London Surgical, Glasgow Tactear Manchester Tactear Dublin

ESTABLISHED 1877
LEE & MARTIN, LTD.
The Birmingham Medical Agency
71, TEMPLE ROW BIRMINGHAM
Telegrams Locum Birmingham" *Telephone* 5473 B'ham

TRANSFER OF PRACTICES AND PARTNERSHIPS ARRANGED
MAXIMUM FEE £10 if exclusively entrusted to us.
ACCOUNTS INVESTIGATED AND INCOME TAX RETURNS PREPARED
RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORT NOTICE. Also ASSISTANTS

WANTED TO PURCHASE
1 BIRMINGHAM (or within 10 miles thereof).—Good Mixed PRACTICE with a Panel of 1,600 over and receipts of from £1,600-£3,000 and good house. URGENTLY REQUIRED. CAPITAL AVAILABLE.
2. NORTH WEST MIDLANDS — Good Mixed PRACTICE wanted immediately. Receipts should be from £1,600 upwards and must have substantial Part 1 and good house. CAPITAL AVAILABLE.

FOR DISPOSAL
1 NORTHANTS — Old-established unopposed country PRACTICE. Receipts £1,600 p.a. Panel 900. Excellent house which can be rented.
2. MIDLANDS.—Rapidly increasing mixed private and panel PRACTICE. Receipts av. £1,600 p.a. Panel 1,100. Good house to rent, and ample scope to increase.
3 GLOUCESTERSHIRE.—Well-established middle and working-class PRACTICE. Receipts av. £1,200 p.a. Panel 1,200. Excellent house with all services.
4 SOUTH WALES.—Well-established middle and working-class PRACTICE. Receipts £2,200 p.a. Panel 2,100 with scope to increase, and good house.
5 MIDLANDS — Old-established industrial and working-class PRACTICE. Receipts average £1,068 p.a. Panel 960. Scope to increase and good house.
6 STAFFS.—Rapidly increasing mixed private and panel PRACTICE. Receipts last year £1,000 and panel over 1,200. Excellent house with all services.

FINANCIAL ASSISTANCE afforded to approved applicants for the purchase of Practices or Partnerships on very reasonable terms. Full particulars on application.
RELIABLE AND EFFICIENT LOCUMS SUPPLIED AT SHORTEST NOTICE.

Telephone Welbeck 2[illegible]
Telegrams ASSISTIAMO LONDON
NURSES
MALE OR FEMALE
TRAINED NURSES FOR MENTAL MEDICAL SURGICAL AND FEVER CASES
Nurses reside on the premises and are available for urgent calls Day and Night.
THE NURSES ASSOCIATION
(In connection with the LALE NURSES ASSOCIATION)
29 York St., Baker St., London, W.1
Mrs. MILLICENT HICKS *Sister* W. J. HICKS *Secretary*

British Medical Bureau

(THE SCHOLASTIC, CLERICAL & MEDICAL ASSOCIATION LTD)
(FOUNDED 1880)

Tele Address
Triform, Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1

Telephone Euston 1644 1645

The Association has long been favourably known to the members of the Medical Profession as a thoroughly trustworthy and successful agency for the transaction of every description of Medical, Scholastic, and Accountancy business, and the BRITISH MEDICAL ASSOCIATION has every confidence in recommending its members to consult The Manager in all transactions requiring the services of a Medical Agent
Members of the British Medical Association may take advantage of a reduced scale of charges applicable to them

REDUCTION IN FEES

In cases where the Bureau are sole Agents the commission in respect of any sale of goodwill book debts, furniture, drugs, fittings and other effects (excluding sales of any freehold or leasehold property, or of practices effects, etc, outside Great Britain) is limited to a maximum fee of Fifty Pounds

FULL TERMS ON APPLICATION

Practices and Partnerships for Disposal — **Full Particulars sent free**

1 S E COAST—PARTNERSHIP with early succession in non dispensing Practice about £2,000 p a Very small panel Attractive house for sale or rent Premium 7/10ths share two years purchase Hospital and possible vacancy for physician in two or three years

2 E ANGLIA—PRACTICE averaging £1,340 p a, in flourishing town Clubs and panel about 1 700 Good house for sale Scope Premium £2 700

3 LONDON, S W—PRACTICE averaging over £1 250 p a Panel 1 000 and P M S Good house with large garage and exceptionally nice garden for sale Good scope Premium £2 500 to include drugs etc

4 S MIDLANDS—PARTNERSHIP after Assistantship in middle class Practice, about £2 700 p a, in first rate town Good appointments and panel 1 300 House available One third share at two years purchase

5 KENSINGTON—PARTNERSHIP in upper middle class non dispensing Practice about £1,900 p a Small panel Fees 10s 6d to £1 1s Premium one third share two years purchase

6 N E COAST TOWN—Residential seaside district Old established non panel PRACTICE Receipts over £1 100 Immediate scope for panel Commodious house, garage and garden Vendor retiring Premium £750 or near offer

7 LONDON, S E—PRACTICE doing about £600 p a in outlying residential suburb Panel 1 000 Good house (5 bedrooms) garage and nice garden, for sale Scope Premium £1 200

8 LONDON, N W—Non-dispensing PRACTICE, doing about £1,000 carried on by medical woman Panel 798 Good house Rent £130 p a Suit either man or woman Premium £2 000

9 LONDON, WEST—Good-class non-dispensing PRACTICE, averaging £2 200 in one of the best residential parts No panel Attractive house in quiet district to rent Premium one and three quarter years purchase

10 HOME COUNTY—Medical Woman's PRACTICE over £1 600 p a, in country town Panel 250 Well-situated house for sale Capable considerable development Suitable for two medical women or medical man whose wife is also qualified Premium £3 000 to include drugs

11 LONDON, N—Middle-class PRACTICE, about £3,000 p a in residential district Panel about 1 150 increasing Good well situated residence to rent Premium one and three quarter years purchase

12 LONDON (Belgravia)—Good class non-dispensing PRACTICE Receipts past year £1 180 No panel Fees 10s 6d to £1 1s Conveniently situated house Price for lease £950 Unlimited scope Premium £1 500

13 HOME COUNTY—PARTNERSHIP in Practice, averaging £3 500 p a in beautifully situated country town Panel about 1 350 Choice of house Incoming partner must be experienced and aged about 35-40 Premium one half share two years purchase Hospital

14 LONDON N 7—PRACTICE, about £2 000 p a, including valuable appointments and panel 1 200 Small house, garage and garden for sale or rent Premium £4 400 or near offer

15 LONDON S E 20—PRACTICE, averaging £1 750 p a in suburban district (appointments returning about £350 p a) Panel 966 Modernized house with garage and garden Rent £100 p a Premium 1½ years purchase

16 SOUTH OF ENGLAND—PARTNERSHIP in non dispensing Practice £7 800 p a, in residential watering place Panel 2 000 Good house to be purchased One seventh share Premium two years purchase Partner should be aged 28 35 and possess M D or M R C P

17 LONDON, S W—PARTNERSHIP in mixed class Practice, £4,360 p a in residential suburb Panel 2 500 Very nice house with good garden for sale Two fifths share at first at one and three quarter years purchase

18 SOUTH COAST—PARTNERSHIP in steadily increasing Practice of £2,000 a year in growing district Panel 1 000 One third share at first at two years purchase Preliminary Assistantship

19 LANCS—Mixed PRACTICE, over £1,000 p a, in large town Panel over 1 000 Pleasantly situated house for sale Scope Premium £1 800 to include drugs etc

20 EASTERN COUNTIES—Middle and working class town PRACTICE Cash receipts past 12 months £3 600 Panel 2,500 House (5 bedrooms etc), to rent on lease Premium two years purchase or near offer

21 S W OF ENGLAND—Non-dispensing general and surgical PRACTICE, averaging £1,636 p a, in favourite watering place Small panel House for sale or rent Good hospital Premium £2 800

22 KENT—PARTNERSHIP in Practice in industrial town Cash receipts last year £3,646 Panel about 1 400 House with 6 bedrooms and dressing rooms, to rent Share of about £1 200 p a, two years' purchase

23 HERTS—PRACTICE about £750 p a in growing residential district Panel 540 Nice house, garage and garden, price £1,600 Purchaser should be English or Scottish and under 35 years of age Premium £1 400

24 MIDLANDS—PRACTICE in very attractive village about 70 miles from London Receipts past year nearly £750 Panel 535 Detached modern house for sale or rent Premium 1½ years' purchase to include stock of drugs

25 SUSSEX—NUCLEUS, near coast Receipts past year £270 Panel about 200 Charming house and garden for sale Alternative house to rent if desired Premium £450

26 EASTERN COUNTIES—PARTNERSHIP in old established middle and working class practice £3 600 in country town Panel 2 500 House available to rent Premium one third share two years purchase

27 S COAST—Non-dispensing PRACTICE of £1 250 p a in health resort No panel but ample scope Commodious well built residence with garage and garden for sale Premium £1 000

28 S MIDLANDS—PARTNERSHIP in Practice £4 400 p a in progressive town Panel 2,000 House for sale or rent One fourth share two years purchase Graduate of Oxford Cambridge or London preferred

29 EAST ANGLIA—A Medical Woman's PRACTICE in a nice town Cash receipts year ended April 5th 1938 £454 Panel 300 Semi detached house (6 bedrooms) and half an acre of garden Premium £750

30 MIDDLESEX—Old-established PRACTICE of £1,000 p a in developing town Panel 880 Corner house with garage and garden, for sale Premium two years purchase

31 LONDON W—Well established non dispensing non panel PRACTICE of £1 000 p a in nice suburb Flat with garage and small garden for sale Premium £1 000

British Medical Bureau

(THE SCHOLASTIC CLERICAL & MEDICAL ASSOCIATION LTD)

(FOUNDED 1890)

Tele Address Triform Westcent—London

TAVISTOCK HOUSE SOUTH
TAVISTOCK SQUARE, W C 1

Telephone Euston 1644 1645

Practices and Partnerships for Disposal (continued)

32 S MIDLANDS—Well established PRACTICE about £700 p.a. in good town. Panel 758. Detached corner house with garage and garden to rent. Premium £350.

33 KENT—Steadily increasing Medical Woman's PRACTICE within 10 miles of Charing Cross. Receipts this year over £600. Panel 193. Detached house with garage and garden to rent. Premium £850 or near offer.

34 S WALES—Old established PRACTICE over £800 p.a. in small town. Panel 600. Detached house (4 bedrooms) for sale. Premium 1½ years purchase.

35 S E COAST—Easily worked middle class PRACTICE over £650 p.a. in summer resort. House (6 bedrooms etc.) in best part with small garden and garage for sale. Branch surgery rented at 10s. weekly. Panel 200. Scope. Prem. £1 200.

36 LONDON W 12—Old established PRACTICE about £800 p.a. in suburban district. Panel 900. Good house (4 bedrooms etc.). Freehold for sale. Prem. two years purchase.

37 SURREY—PARTNERSHIP (after a preliminary Assistantship) in growing residential district about 10 miles from London. Cash receipts average about £2 350 p.a. Panel 1 050. A three-eighths share is for disposal at two years purchase.

38 SURREY—PARTNERSHIP in Practice of about £3 000 p.a. in residential district. Panel 630. Modern house (4 bedrooms) garage garden. To rent. Preference would be given to an F.R.C.S. One half share £3 000.

39 E ANGLIA—Old established country PRACTICE of about £2,200 p.a. within easy distance of coast. Panel 1 300. Well built house to rent. Premium two years purchase.

40 S WALES COUNTY TOWN—PARTNERSHIP in Practice £2 800 p.a. Panel over 1 000. One half share on reasonable terms. Partner must hold F.R.C.S. Eng. Hospital and excellent opportunity for surgical scope and appointment on staff. Preliminary Assistantship.

41 S E COAST—PARTNERSHIP in non dispensing Practice about £4 500 p.a. Panel 1 400. One fifth or one fourth share at two years purchase. Preliminary Assistantship. Scotsman preferred.

42 LONDON N 12—Middle class increasing PRACTICE in growing district. Receipts past year £436. Panel 163. Modern labour saving house for sale or rent. Premium £630.

43 S WALES—Contract and small private panel PRACTICE over £1 900 p.a. in industrial district. Panel over 2 100. House with surgery premises to rent. Prospect of appointment. Premium £3 500.

44 S COAST HEALTH RESORT—OPHTHALMIC PRACTICE. Receipts 1938 £1 600. House to rent. Unlimited scope. Premium one years purchase.

45 LONDON SW—ELECTRO-THERAPEUTICAL PRACTICE. Receipts 1937 £1 727. Large consulting room and treatment room to rent. Premium £1 600 plus apparatus valued about £750.

46 LONDON N—LOCK UP PRACTICE £398 p.a. run by medical woman. Panel 327. Rent at surgery 25s. weekly. Good scope. Premium £550.

47 N WALES—Popular seaside resort—Good class chiefly non dispensing PRACTICE averaging £870 p.a. No panel. Excellently situated detached residence for sale. Good scope. Premium £1 400.

48 LONDON E—Cash and panel PRACTICE averaging £2 900 p.a. Panel 4 300. House (5 bedrooms) Rent £156 p.a. Scope. Premium two and a half years purchase to include drugs etc.

49 W MIDLANDS—PARTNERSHIP in Practice averaging £6 000 p.a. in market town. Panel 3 500. One sixth share at first at two years purchase. Incoming partner should be aged 28/30 and able to do general surgery and minor E.N. and T. work. Hospital Preliminary Assistant ship.

50 N MIDLANDS—PRACTICE in residential district near progressive town. Receipts 1937 £770. Panel about 100. House for sale. Good scope. Premium £900.

51 S OF ENGLAND—Well established SANATORIUM for the open air treatment. Receipts at present at rate of about £3 000 p.a. Prem. £1 000 include furniture etc.

52 FRENCH RIVIERA—Old established PRACTICE. M.D. essential. Vendor at present in England.

53 S W ENGLAND—Country PRACTICE over £1 400 in beautiful part. Panel about 1 100. Exceptionally nice modern house standing in own grounds for sale. Hunting and shooting. Scope. Premium two years purchase.

54 Consulting Ear Nose and Throat PRACTICE in industrial city. Receipts average £1 350 p.a. (in addition appointments worth about £850 p.a.). Centrally situated house to rent. Purchaser should hold F.R.C.S. and have specialist experience. Premium two years purchase.

55 MIDDLESEX—PARTNERSHIP in steadily increasing town Practice about £2,000 p.a. Panel 1 900. House to rent. Premium one half share two years purchase. Applicant should be English or Scottish.

56 S COAST—PARTNERSHIP in Practice over £5 000 p.a. in seaside resort. Panel about 2 000. Semi-detached house (5 bedrooms) for sale or rent. Premium one half share £3 000. Excellent hospital and scope for surgery.

57 N E ENGLAND—PARTNERSHIP in non panel Practice doing about £6 000 in one of the chief towns. House available. One sixth share at two years purchase. Partner should be surgically inclined.

58 MIDLAND SPA—PARTNERSHIP in Practice about £1 900 p.a. Panel 1 200. Excellent house for sale. Premium one half share £1 200.

59 WEST END OF LONDON—Good-class non dispensing PRACTICE about £1 150. No panel. Large house to rent. Premium lease and practice £3 000.

COLONIES—A few Colonial PRACTICES. Incomes range from about £750 p.a. upwards.

Purchasers can raise additional capital for the purchase of approved practices or shares. Particulars will be forwarded on application.

All communications to be addressed to The Manager

Manager W. M. SCOBIE.

SCOTTISH BRANCH, 21, Alva Street, Edinburgh, 2

Telephone Edinburgh 3561

FOR DISPOSAL.

A S OF SCOTLAND—Country PRACTICE in lovely district. Receipts approximately £1 000. Panel 760. Exceptionally convenient house. Price £2 000. Premium for practice one and a half years purchase.

B SCOTLAND—Old established City PRACTICE. Receipts approximately £2 400. Panel 2 500. House price £900. Premium two years purchase or near offer.

C YORKSHIRE—Country PRACTICE. Receipts £1 400. Panel 500. Excellent house with garage. Price £1 200 freehold. Premium one and three quarter years purchase.

D E OF SCOTLAND—Country town. Receipts last year £685 (appointments £11, panel 565). Excellent house with garage and garden. Price £1 450. Premium £1 000.

E N OF SCOTLAND—Country PRACTICE. Long established. Receipts approximately £1 000. Panel 275.

F EDINBURGH—PRACTICE doing £450. House must be bought. Premium practice and house £1 650.

G CENTRAL SCOTLAND—Country town PARTNERSHIP by partner retiring. Suitable for two or one with assistant. Receipts average £2 357. Panel 1,343. Excellent houses, prices £1 000 and £1 250. Premium for practice two years purchase.

For further details apply The Manager 21 Alva Street Edinburgh.

Terms on which the business of the Branch is transacted will be submitted on application to the Branch Manager to whom all communications should be addressed.

RELIABLE LOCUMS and ASSISTANTS are URGENTLY REQUIRED by ALL OFFICES of the BUREAU

BRITISH MEDICAL BUREAU

(The Scholastic, Clerical and Medical Association Ltd)

(*FOUNDED* 1880)

NORTHERN BRANCH

33, CROSS ST., MANCHESTER, 2.

Telephones {Manchester - Blackfriars 3925 / Manchester - Rusholme 2549 (*Night Calls*)

Tel grams "Locum, Manchester"

Branch Offices at Leeds and Belfast

Recommended with every confidence to the profession by the BRITISH MEDICAL ASSOCIATION as a thoroughly trustworthy medium for the transaction of all Medical Agency business

TRANSFER OF PRACTICES AND PARTNERSHIPS INTRODUCTION OF RELIABLE ASSISTANTS AND LOCUM TENENS at Short Notice VALUATION and INVESTIGATION OF PRACTICES, Etc

Practices and Partnerships wanted Large list of bona fide purchasers with ample capital available *Enquiries invited from* prospective vendors All information treated in strict confidence

FOR DISPOSAL

Full particulars free on request

CHESHIRE TOWN near Manchester —DEATH VACANCY —Old established mixed Panel and Private PRACTICE Cash receipts last year £3 646 Panel 2 138 Good detached house with ample accommodation garage and garden For sale at valuation Premium—1 year's purchase for quick sale —No 1136

YORKSHIRE (W R) —Old established mixed Panel and Private PRACTICE Cash receipts about £1 200 p a Panel 900 Scope Excellent detached house 2 reception 4 bedrooms garage and garden Premium—1½ years purchase or near offer —No 1125

LANCS TOWN —Very old established mixed Panel and Private PRACTICE Cash receipts last year £1 372 Panel 1 925 Scope Good house 2 reception 4 bedrooms 3 Professional rooms (separate entrance) Premium—Practice 1½ years purchase —No 1131

MONMOUTHSHIRE —Old established PRACTICE Cash receipts last year £2 113 of which £1 900 is from Contract work Prospect of large increase Good house 3 reception 4 bedrooms garage and garden Rent £52 p a Premium—best offer —No 1144

HULL —Very old established mixed Panel and Private PRACTICE Cash receipts last year £2 020 Panel about 1 900 Good house with ample living and Professional accommodation garage and small garden To rent on long lease Premium—1½ years purchase —No 1170

LANCS TOWN —PARTNERSHIP in old established Practice in industrial town Cash receipts £2 600 p a Panel 3 400 Incoming partner may have choice of two houses Premium—½ share—2 years purchase to include share of book debts drugs etc —No 1169

LINCOLNSHIRE —Very old established PRACTICE in pleasant Country town Cash receipts last year £2 471 Panel about 1 300 Scope Cottage Hospital Good house 5 bedrooms garden and garage To rent Premium—£3 150 —No 1132

CHESHIRE —Old established mixed Panel and Private PRACTICE in pleasant Country town Average cash receipts £2 727 p a Panel 1 592 Attractive house 3 reception 5 bedrooms garage and large garden with tennis court to rent Premium—1½ years purchase —No 1140

MIDLAND SPA —PARTNERSHIP in old established PRACTICE Cash receipts last year £2 500 Panel 1 200 Possible Hospital appointment Excellent house available with garage and garden Premium—1 share—2 years purchase —No 1124

NORTHUMBERLAND —Old established mixed Panel and Private PRACTICE near to Coast and large town Cash receipts £1 600 p a Panel nearly 2 000 Good detached house 2 reception 4 bedrooms garage and nice garden Rent £78 p a Premium—1½ years purchase —No 1168

NORTH STAFFS —Old established mixed Panel and Private PRACTICE Cash receipts over £3 000 p a Panel 4 000 Large detached house with good accommodation and garage for sale *Premium—Practice—best offer —No 1166*

NORTH LANCS —YORKSHIRE BORDER —Old established unopposed Country PRACTICE in present hands 20 years Cash receipts £1 000 p a Panel and appointments approximately £420 p a Well built house with ample accommodation central heating electric light garage and garden of 2 acres Rent £75 p a Premium—£1 500 Vendor retiring —No 1119

LANCS TOWN —Sound mixed Panel and Private PRACTICE close to country In present hands 38 years. Cash receipts last year £1 487 Panel 1 400 Nice detached house 2 reception 5 bedrooms garage and large garden Premium —Practice—£2 000 —No 1153

CUMBERLAND —Old established unopposed Country PRACTICE near to Sea and Lakes. Receipts approximately £1 000 p a Panel 340 plus mileage and dispensing fees Good detached house 8 rooms 2 Professional rooms garage and large garden Rent £40 p a Premium—1½ years purchase —No 1167

LINCOLNSHIRE —PRACTICE or SHARE in prosperous town Suit man whose wife is also a doctor Gross receipts average £4 200 p a Panel 2 500 Good house to rent Premium—whole Practice or one third share—2 years purchase —No 1164

NORTH EAST COAST —Old-established mixed Panel and Private PRACTICE Cash receipts last year £2 160 Panel 2 220 Appointments (transferable) over £400 p a Good house 2 reception 3 bedrooms 3 Professional rooms garage and small garden Price £700 Premium—1½ years purchase —No 1094

NEAR MANCHESTER —Very old established middle and better working class PRACTICE Cash receipts over £2 600 p a Panel 1 450 Excellent detached house 2 reception 6 bedrooms garage and garden with tennis court Price £1 000 Premium—1½ years purchase —No 1108

NORTH WALES COAST —Good class PRACTICE in select residential resort Cash receipts last year £900 No Panel or appointments Nice detached house with splendid accommodation garage and garden Premium—Practice —2 years purchase —No 1152

NORTH STAFFS —Very old established better working and middle-class PRACTICE Cash receipts last year £2 431 Panel 1 225 Scope as district developing Excellent house 2 reception 4 bedrooms maid's room separate surgery premises garage and garden For sale Freehold Premium—Practice —1½ years purchase or near offer —No 1120

NEAR MANCHESTER —Very old established middle and working-class PRACTICE in prosperous town Very suitable for two friends in partnership or may be run by one man and an Assistant Cash receipts last year £3 370 Panel 3 000 Nice modern house 2 reception 4 bedrooms separate Professional rooms garage and large garden For sale at valuation Premium—best offer —No 1137

— WANTED —

ASSISTANTS and LOCUMS

For Immediate Engagements

Apply with full particulars to above address

NORTH WEST LANCS —Old established mixed Panel and Private PRACTICE in large town Cash receipts last year £1 102 Panel over 1 000 Good house pleasantly situated 2 reception 5 bedrooms garage and small garden Premium—Practice—1½ years purchase —No 1105

MANCHESTER —Old established mixed-class PRACTICE in suburbs average cash receipts £1 380 p a Panel 838 Good corner house 5 bedrooms 3 Professional rooms, garage Premium—1½ years purchase —No 1150

NORTH WEST LANCS —PARTNERSHIP in old established middle and better working-class Practice in pleasant town near Coast owing to retirement of senior partner Cash receipts last year £6 037 Panel 3 600 and appointments £450 p a Suitable for well qualified physician or one holding diploma in ophthalmology Possible Hospital appointment Purchaser may choose own residence Premium—⅓th or ¼th share—2 years purchase (to include drugs book debts etc) —No 1158

MANCHESTER —Old established middle and working-class PRACTICE in suburb Cash receipts last year £2 527 Panel 2 200 Good scope Good semi detached house 2 reception 3 bedrooms garage and small garden Premium—1½ years purchase —No 1154

NORTH WEST LANCS —DEATH VACANCY —Well-established PRACTICE in beautiful Country district near lakes and sea Cash receipts last year £1 359 Panel 195 Good house 2 reception, 5 bedrooms garage and garden Rent £80 p a Premium—£1 000 or near offer —No 1161

NORTH MIDLANDS —Old-established mixed Panel and Private PRACTICE in Country district near large town Average cash receipts £1 067 p a Panel 970 and transferable appointments £200 p a Excellent detached house 2 reception 6 bedrooms Professional rooms garage and large garden Price £1 250 —Premium—1½ years purchase —No 1117

NORTHANTS —Sound unopposed Country PRACTICE Cash receipts approx £1 600 p a of which [illegible] Panel and transferable appointments Panel 900 [illegible] rooms Premium garage and pretty garden £1 200 or would let on lease [illegible]

MIDLANDS —Increasing middle and working-class PRACTICE in large town Cash receipts last year £1 050 Panel over 1 200 Scope Excellent modern house 2 reception 4 bedrooms garage and large garden For sale Freehold Premium—Practice—£2 000 —No 1123

SHEFFIELD —Sound old established working-class PRACTICE in present hands 34 years Average cash receipts £815 p a Panel 1 196 Good house 8 rooms etc Price £750 or may be rented at £55 p a Premium—1½ years purchase —No 1163

SHROPSHIRE —Old established unopposed Country PRACTICE Cash receipts last year £688 Panel 450 Modern house 2 reception 5 bedrooms 3 Professional rooms garage and large garden Electric light Rent £50 p a Premium—best offer —No 1086

All communications to be addressed to the Branch Manager, BRITISH MEDICAL BUREAU 33 CROSS STREET, MANCHESTER 2

BOVRIL MEDICAL AGENCY, LTD.

ALDINE HOUSE,
10-13 BEDFORD STREET, STRAND, LONDON, W.C.2

Telegrams BOVMEDICAL, PESQUARE, LONDON Telephone TEMPLE BAR 1616 (3 Lines)

Chairman and Managing Director Dr J FIELD HALL

The maximum commission payable on the sale of any Practice or Partnership in Great Britain placed exclusively in the hands of this Agency is £50 (fifty pounds) which sum covers goodwill drugs surgery fittings fixtures and furniture, instruments and book debts but not house property Schedule of Terms will be forwarded on application

Accountancy and legal services furnished by the Agency where desired at moderate inclusive charges
No charge is made to Principals for the introduction of Locum Tenens or Assistants

1 NORTH OF ENGLAND—COUNTY TOWN—Well-established chiefly working-class PRACTICE producing £2,400 p.a. including panel of 1,700 NHS £450 to £500 p.a. and appointments worth £100 p.a. Suitable House with reception 4 bedrooms, etc. Garden garage Price £1,800 part on mortgage. Premium 2 years purchase

2 SUSSEX—FAVOURITE RESIDENTIAL TOWN—PARTNERSHIP after preliminary assistantship in good mixed-class practice situated in very attractive town within about ten miles of the sea. Average gross cash receipts £1,400 to £1,600 p.a. Incoming partner must be experienced and accustomed to better class work

3 ESSEX COAST—PARTNERSHIP—TWO FIFTHS SHARE in very old established increasing practice in pleasant seaside town with good social and sporting facilities. Gross cash receipts approximately £3,900 to £4,000 p.a. Panel of 2,600 Appointments worth about £60 p.a. Moderate expenses Suitable house with modern conveniences (2 reception 4 bedrooms, etc.) Freehold for sale or would be rented Premium 2 years purchase

4 LADY DOCTOR'S PRACTICE—KENT—Situated in rapidly expanding district and at present producing over £600 p.a. including panel of 192. Suitable house with 2 reception 4 bedrooms, etc. Garden garage Premium £850 or rear offer for quick sale

5 NORTH WALES—FAVOURITE COAST TOWN—Better-class panel PRACTICE averaging about £900 p.a. and offering good scope Detached house excellently situated overlooking bay with ample accommodation Sport of all kinds and good educational facilities. Premium £1,400 for quick sale

6 SOUTH WEST COUNTY—Old-established good mixed-class PRACTICE producing about £1,650 p.a., including panel of over 1,600 and appointments worth about £400 p.a. Very nice house with ample accommodation Garden garage Rent £100 p.a. Premium £3,300 Definite prospects of increase Good surgical scope if wished.

7 SOUTH OF ENGLAND—FAVOURITE RESIDENTIAL TOWN WITHIN 10 MILES OF THE COAST—PARTNERSHIP—HALF SHARE in old-established good-class practice producing over £3,400 p.a. Panel of about 1,500 Appointments worth about £600 p.a. Very nice house in good repair with 2 reception 4 bedrooms etc First rate schools and good social and sporting facilities Premium 2 years purchase Incoming partner must be experienced aged about 35–40 and preferably have a knowledge of anaesthetics.

8 NORTHANTS—UNOPPOSED COUNTRY PRACTICE—Gross cash receipts average about £1,600 p.a. about £1,000 of which is from panel appointments, and Club Convenient house with 6 bedrooms etc Freehold for sale or would rent Premium 2 years purchase

9 MIDLANDS—COUNTY TOWN—PARTNERSHIP—ONE THIRD OR ONE HALF SHARE in old-established mixed-class Practice having exceptional last 12 months approximately PMS £4,000 p.a. Fees from 3 garden garage electric light. Rent about £70 p.a. Premium 2 years purchase Ingoing partner must be experienced preferably Scottish or English and married

10 LONDON S.E.—PARTNERSHIP—ONE HALF SHARE in well-established good mixed Practice producing approximately £2,600 p.a. including panel of about 1,900 Fees from 1/6 Suitable house available with 5 bedrooms etc Premium 2 years purchase Incoming partner must be experienced and energetic worker

11 LONDON S.W.—CENTRAL DISTRICT—Recently established better class non-dispensing PRACTICE with scope for OPHTHALMOLOGY producing nearly £1,200 p.a. of which about £200 is derived from refractions Fees 10/6 to 21/ House contains 2 reception 6 bedrooms and Professional rooms Price leasehold £950 p.a. Premium £1,500 part by arrangement

12 MANCHESTER—Very old-established middle and working-class PRACTICE averaging for last 3 years £1,380 p.a. Panel of 8,400 Appointments about £180 p.a. Fees from 3/6 House with 3 bedrooms, etc garden garage electric light Price freehold £800 Premium for quick sale 1½ years purchase part by instalments.

13 LONDON EAST—Old-established mixed-class PRACTICE averaging about £2,700 p.a. including panel of about 1,300 and increasing. Separate surgery premises Premium 2 years purchase

14 LONDON N.W.—GROWING RESIDENTIAL DISTRICT—PARTNERSHIP—Guaranteed share in rapidly expanding Practice producing to commence about £500 p.a. with increase later Suitable detached house on rental at £52 p.a. Ingoing partner must be experienced and energetic.

15 KENT—RAPIDLY EXPANDING DISTRICT—Well-established middle and working-class PRACTICE producing about £1,700 p.a. including panel of nearly 1,400 Good house with 2 reception 5 bedrooms, etc large garden Inclusive rent £130 p.a. Premium 2 years purchase

16 MIDDLESEX—DEVELOPING AREA—Well established mixed class PRACTICE averaging over £1,000 p.a. including panel of 880 and appointments worth about £100 p.a. Corner house with 2 reception 4 bedrooms etc garden garage Rent £100 p.a. Premium £2,000 or near offer for quick sale

17 KENT COAST—PARTNERSHIP—ONE THIRD or ONE HALF SHARE in middle-class Practice averaging £3,650 p.a. Panel of about 2,000 Excellent modern house available by purchase or rental Premium 2 years purchase Ingoing partner must be experienced and well qualified.

18 YORKS—Country PRACTICE.—Old-established income about £1,030 p.a. with scope for increase About £3,000 of present income is derived from panel of some 500 patients Good freehold house with ample accommodation garden and garage Price for practice and house £3,600 of which about £1,900 may be left on mortgage

19 GLOS—NEAR WYE VALLEY—Very sound PRACTICE producing about £1,300 p.a., including panel of 1,150 patients and appointments worth about £60 p.a. Low expenses. Detached house with large garden 5 bedrooms etc. Freehold Premium 1½ years purchase

20 FAVOURITE SOUTH COAST RESORT—Private and better-class PRACTICE averaging over £1,000 p.a. Minimum fee 5/- No canvassing Scope for panel if desired. Modernized house with ample accommodation. Premium £1,000

21 ESSEX—PARTNERSHIP after ASSISTANTSHIP of 3 months in fairly better class practice offering considerable scope Good house available on rental Share worth £500 £600 p.a. at 2 years purchase

22 WEST LONDON RESIDENTIAL DISTRICT—Old-established highly upper and middle-class PRACTICE averaging approximately £1,500 p.a. Selected panel of 114 patients but scope for increase if wished. Fees 5 to 11 Non-dispensing. Scope for increase as large blocks of modern flats in course of erection. Excellent house with ample accommodation Premium £3,000

23 MIDLANDS—GOOD RESIDENTIAL COUNTRY DISTRICT—Compact PRACTICE at present producing about £700 p.a. but capable of considerable expansion Choice of 2 houses Modest premium for quick sale Vendor retiring through ill health

24 OUTLYING NORTHERN SUBURB—Recently established PRACTICE on new estate producing about £300 p.a. including panel of 350 House with 2 reception 3 bedrooms etc Garden Price £670 Reasonable premium accepted

25 NORTH WEST LONDON—PARTNERSHIP—One fifth share (with increase later) in well-established Practice producing about £5,200 p.a. including panel of about 600 Suitable maisonette with 2 reception 3 bedrooms, etc Inclusive rental £90 p.a. Premium 2 years purchase

26 DURHAM COUNTY—Old-established industrial PRACTICE producing £2,000 p.a. of which only about £450 is derived from private work. Panel of over 2,100 units Practice has been held by the vendor for about 20 years. Premium £4,000 to include book debts, drugs, surgery furniture etc. part by arrangement) or £3,600 cash down.

27 COAST TOWN WITHIN 30 MILES OF LONDON—Well-established PRACTICE producing about £1,600 p.a. of which about £1,100 p.a. is derived from panel of approximately 1,300 patients, PNS etc Good freehold house available Thoroughly modernized and redecorated central heating. Ample accommodation garage Price £1,800 Premium 2 years purchase Scope for anyone who can do surgery

28 CITY LOCK UP—Old-established PRACTICE producing about £1,250 p.a. gross, or approximately £700 p.a. net Fees 10/6 and £1/1/- Good deal of electrotherapy done Premium £1,400 with furniture equipment etc. at valuation Hours Mondays to Fridays only 10 to

29 WEST END—Opportunity for physician desirous of entering West End PRACTICE. MRCP minimum qualification essential Full details on personal application.

30 EAST LONDON—Well-established PRACTICE producing about £1,300 p.a. of which about £700 p.a. is derived from panel of about 1,350 patients, PMS and Public Assistance work. Large proportion of cash. Premium 2 years purchase

31 SURREY—WITHIN 15 MILES OF LONDON—PARTNERSHIP—ONE HALF SHARE in a very good mixed-class Practice situated in growing residential district. Gross cash receipts approximately £3,000 p.a. (substantial panel. Very nice house with all modern conveniences and beautiful garden (2 reception, 4 bedrooms, etc.) Can be rented or purchased. Premium 2 years purchase. Ingoing partner must be experienced in surgery

32 LONDON S.W.—Old-established mixed-class PRACTICE producing over £800 at 12 months including panel of 250 Fees 5/- and 10/- Rented at £78 p.a. Premium £1,250

33 LONDON EAST—Middle and working-class PRACTICE producing over £500 p.a. with good scope Panel of about 750 Fees from Ten roomed corner house Price for lease £550 Premium £600 on mutually agreeable terms

34 HOLIDAY RESORT—Old-established practice for the past 3 years £1,600 p.a. including panel of 400 Suitable house with ample accommodation. Freehold £1,700 or would rent Premium £2,500

35 WEST MIDLANDS—PARTNERSHIP with succession in or 3 years. Mixed class Practice in attractive country town in very pleasant surroundings. Average receipts for last 3 years £1,800 p.a. Panel of about 950. On succession dwelling house available 3 reception hall, 6 bedrooms, etc., excellent Practice accommodation garden, garage Premium for half share £1,650

36 BEDS—PARTNERSHIP—ONE THIRD SHARE in well-established mixed-class Practice producing £1,675 p.a. Panel of 760 Suitable house easily obtainable Premium £1,000 Definite scope

37 SURREY—RAPIDLY EXPANDING DISTRICT—PRACTICE at present produces about £700 p.a. but could be much increased. Panel of 350 (discouraged) No midwifery Excellent house with all modern conveniences. Premium for Practice and house £3,000

38 S.W. ENGLAND—FAVOURITE COAST TOWN—HALF SHARE after preliminary assistantship in chiefly better-class Practice producing nearly £2,000 p.a. Small panel Choice of residence Must be experienced and preferably knowledge of E.N.T. Premium 2 years purchase part by arrangement

39 LONDON S.W.—WITHIN EASY REACH OF CITY AND WEST END—Well-established district middle and better-class PRACTICE with surgical scope producing about £1,450 p.a. Selected panel of 45 Fees 5/- and 7/6 Good-sized first floor flat with all conveniences Purchaser should be able to do surgery and F.R.C.S. would be advantageous.

40 SOUTH WALES—Old-established mainly contract PRACTICE producing last year £2,200 of which £2,050 is from contract work and panel Suitable house available Future prospects are considered to be excellent as new works have recently been erected in the district. Premium £3,500

ASSISTANTS REQUIRED—Several good vacancies Full details on application.

The Agency has made arrangements for special facilities, on very favourable terms to be afforded to approved purchasers for the advance of part of the premium for any suitable practice or partnership Full details on application.

INDEX TO ADVERTISEMENTS

PUBLISHERS

Archives of Disease in Childhood 60
British Medical Association 34
Churchill J & A Ltd 3
Kimpton Henry 5
Lewis H K & Co Ltd 36 39
Nursing Illustrated 34

ASSURANCE & INSURANCE

Century Insurance Co 61
Medical Defence Union Ltd Supp i

BANKS & FINANCE

British Medical Finance 36

CHEMISTS

Aluzyme Products 38
Bell & Croyden 6
Bisodol Ltd 21
Boots Pure Drug Co Ltd 12
British Colloids Ltd 26
British Drug Houses Ltd 11 13
Christy Thos, & Co Ltd 10
Ciba Ltd Cover iii
Coates & Cooper Ltd 38
Continental Laboratories Ltd 16
Dinneford & Co Ltd 16
Glaxo Laboratories Ltd 32
Hewlett C J & Son Ltd 12
Iron Jelloid Co Ltd 9
Kaylene Ltd 10
May & Baker Ltd Supp iv
Parke Davis & Co 20
Pearson E T & Co Ltd 9
Peat Products Ltd 38
Petrolagar Laboratories Ltd 8
Reeves Remedies Ltd 36
Riddell Francis Ltd 11
Roche Products Ltd 9
S P Charges 66
Simpkin A L & Co Ltd 39
Warner W R & Co Ltd 33
Wyeth John & Bro Ltd 14

FOODS, BEVERAGES

Benax Sales 22
Burroughs Wellcome & Co 31
Cadbury Bros Ltd 28
International Tea Board 17
Fairchild Bros & Foster 14
Genatosan Ltd 18
Hovis Ltd 38
Husband J K & Co Ltd 15
Keen Robinson & Co Ltd 24
Kellogg Co Ltd 30
Numol Ltd Cover iv
Polley & Co Ltd 38
Rayner Co Ltd 8
RyVita Co Ltd 23
Sumner s Ty phoo Tea Ltd Supp ii
Valentine s Meat Juice Co Supp ii
Wander A Ltd 13

MICROSCOPES

Broadhurst Clarkson & Co Ltd 39

MOTORS & ACCESSORIES

Henlys 4
Lodge Plugs, Ltd 36

NAME PLATES, etc

Cooke s (Finsbury) Ltd 39
Hall F B & Co 39
Herd S J & A 39
Osborne F, & Co Ltd 39
White Bronze Co 39

SURGICAL APPARATUS

Curtis H E, & Son Ltd 37
Desoutter Bros Ltd 7
Fowler D & J Ltd 34
Hilliard 39
Roussel J Ltd 35
Salt & Son Ltd Supp iii
Smith & Nephew T J Ltd 2

TAILORING & CLOTHING, etc

Atheenic Mills 39
Regent Dress Co 39

TOBACCO & CIGARETTES

Wills s' Three Castles 37

VACCINES, SERA, etc

Allen & Hanburys Ltd 29
British Drug Houses Ltd 15
Eli Lilly & Co Ltd 27
Evans Sons Lescher & Webb Ltd 19
Sharp & Dohme Ltd 25

X-RAYS & ELECTRO-MEDICAL

Allen & Hanburys Ltd 6
Portable X Rays Ltd 39
Smith John & Son (Glasgow) Ltd Cover ii
Victor X Ray Corporation Ltd 35

HOMES & INSTITUTIONS

Pages 39, 40, 41 42 43

HOUSE AGENTS

Page 58

HOSPITALS & CLINICS

London Clinic 40
Ruthin Castle 41

SANATORIA

Cornish Riviera Sanatorium 45
Cotswold Sanatorium 45
Holloway Sanatorium 45
Hospital for Consumption 43
Montana Hall 43
Mundesley Sanatorium 45

SPAS, HEALTH RESORTS, & HYDROS

Bournemouth 44
Harrogate 44
Jamaica 44
Rockside Hydro 43
Smedley s Hydro 43

MEDICAL SCHOOLS, TUTORS, & LECTURERS

Pages 45, 46 47

NURSING, etc

Page 61

TRANSFER AGENTS

Bovril Medical Agency Ltd 65
British Medical Bureau 62 63 64
Lee & Martin Ltd 61
Medical Agency Ltd 61
Peacock & Hadley Ltd. 61
Turner Percival Ltd 61
Western Medical Agency 61

CONTRACT PRACTICE

Page 55

HOSPITAL VACANCIES, etc

Pages 47, 48, 49 50 51 52 53 54, 55 59 & 60

CLASSIFIED ADVERTISEMENTS— (Wanted and Vacant)

Pages 56 & 57

GENERAL

Ford T B Ltd 36
Frankland E J & Co Ltd 36
National Ophthalmic Treatment Board Supp i

SULPHAQUA BATH CHARGES

SULPHAQUA SOAP

Extremely effective in Disorders of the Sebaceous Glands and in Eczematous and other skin Troubles

In boxes of 1 doz and 1 doz BATH CHARGES 2 doz TOILET CHARGES and 1 doz SOAP TABLETS

For upwards of thirty-five years largely prescribed for the local treatment of

GOUT RHEUMATISM ECZEMA SCABIES and all SKIN DISEASES

Relieve Pain and Intense Itching, Soothing and Sedative in Effect Instantly prepared No objectionable Odour

SAMPLES AND LITERATURE ON REQUEST

THE S.P. CHARGES CO. ST HELENS LAN

STOCKED BY ALL THE LEADING WHOLESALE HOUSES IN AFRICA CANADA AUSTRALIA NEW ZEALAND INDIA

Published by the Proprietors the British Medical Association Tavistock Square London W C 1 and printed by Eyre and Spottiswoode Limited East Harding St Fleet St London E C 4 Printed in Great Britain Entered as Second Class at New York, U S A, Post Office

PERCAINE

SURFACE
INFILTRATION
REGIONAL
SPINAL

ANÆSTHETIC

DERMATOLOGY
OPHTHALMOLOGY
OTORHINOLARYNGOLOGY
DENTAL SURGERY
UROLOGY
PROCTOLOGY
MINOR SURGERY
MAJOR SURGERY

has been shown to possess **CONSPICUOUS ADVANTAGES** over other local anæsthetics

Percaine has become so firmly established within the last few years that there are over

2,000 PUBLISHED REFERENCES

to its pharmacological properties and uses in all fields of surgical practice

TOXICITY in minimal effective concentrations less than that of either *cocaine* or *procaine* (1 2)

DURATION of action greatly exceeds that of either *cocaine* or *procaine* (3 4 5 6 7 8 9 10 11 12)

ONSET approximately as *rapid* as with *cocaine* or *procaine* (3 4)

IRRITATION of the tissues and **DELAY** in **HEALING** completely *absent* (3 4 13 14 15 16 17 18 19 20 21)

AFTER-PAIN *abolished* or materially reduced (3 5 14 15 16 22 23)

FALL IN BLOOD-PRESSURE in spinal anæsthesia considerably less than with *procaine* (20 24 25 26 29)

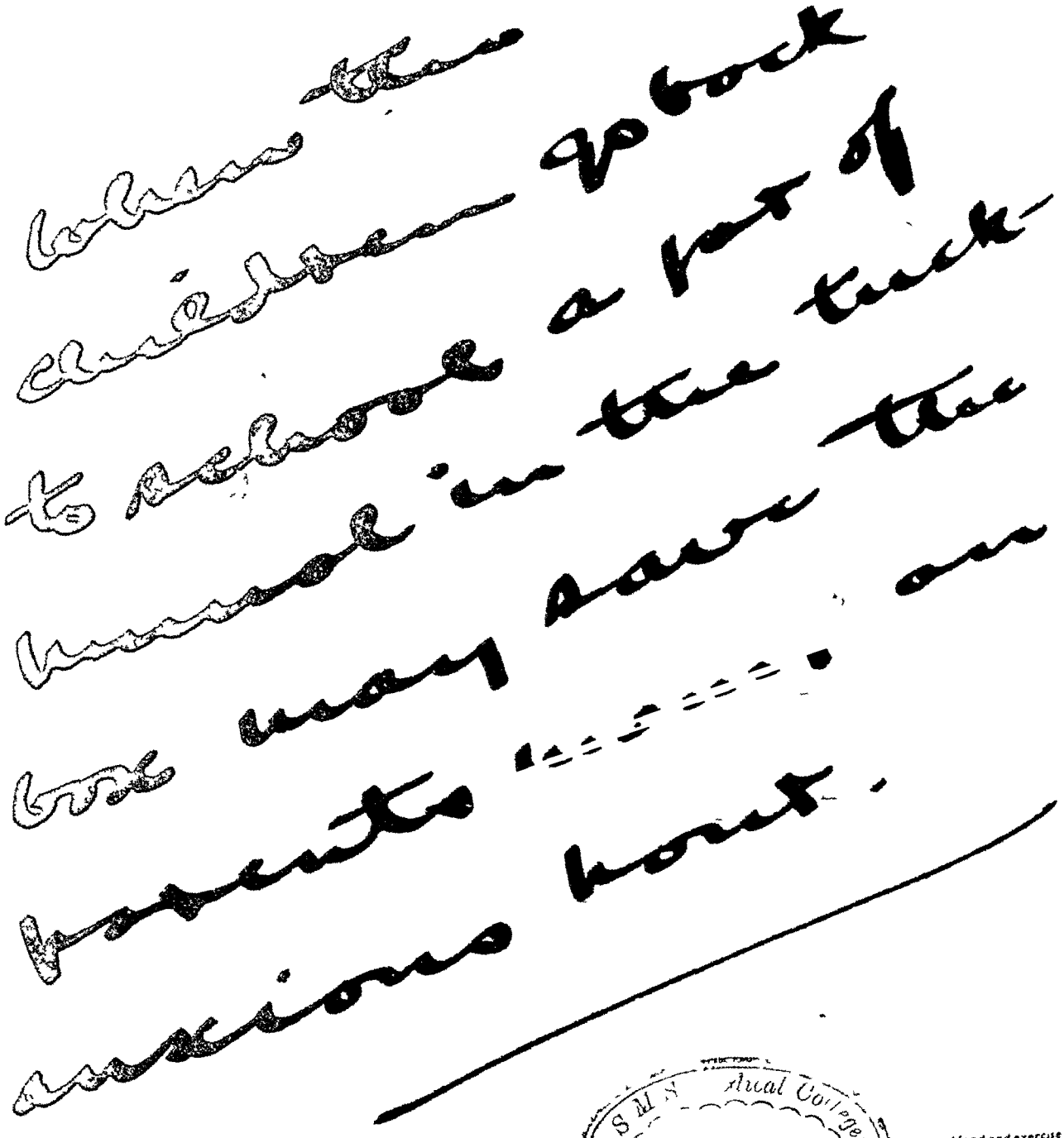
COMPLETELY REPLACES *cocaine* in surface anæsthesia and is free from the major disadvantages of *cocaine* (7 21 28)

THE PERCAINE HANDBOOK

A comprehensive and fully documented 52 page survey of the *Pharmacology Toxicology* and *Clinical Applications* of Percaine will be sent on request.

1 Bieter Cunningham Lenz & McNearney (1935) J Pharmacol 54 2 137 2 McDonald & Israels (1932) J Pharmacol 44.3.359 3 Dillon & Greer (1933) Arch Ophthal 10 674 4 Deyton Wilson & Zaus (1932) J Dent Res 12 4.575 5 Main & Trappozano (1932) J Dent Res 12 6 919 6 Bieter McNearney Cunningham & Lenz (1936) J Pharmacol 57 3 264 7 Abel (1936) Practitioner 136.509 8 Marvin (1933) J Amer Med Ass 101 19 1475 9 Ticktin (1937) Canad Med Ass J 36 2 176 10 Waring (1931) Clin Med Surg 38 10 722 11 Bochner (1933) Arch Ophthal 10 763 12 Lake (1936) The Foot London 13 Heckenbach (1929) Z Urol 28 295 14 Christ (1929) Nark. u Anæsth 2 161 15 Höfer (1929) Klin Wschr 8 1249 16 Ritter (1929) Schweiz. Med Wschr 59 706 17 von Seemen (1930) Zbl Gynak. 54 1550 18 Goldhahn (1930) Z Stomatol 28.660 19 Grabner (1930) Z Stomatol 28 268 20 Keyes & McLellan (1930) Amer J Surg 9 1 21 Gatewood (1932) Laryngescope (St. Louis) 42 12 951 22 Cooley (1936) J Amer Dent Ass. 23 6 972 23 Rosenstein (1929) Dtsch Med Wschr 55 48 2010 24 Foulds & Douglas (1934) J Urol 31 5 607 25 Ehrlich (1934) Anæsth & Analg 13 6 240 26 Jarman (1934) Brit Med J 1 796 27 Shields (1938) Canad Med Ass J 38.2 155 28 Brown (1931) Med J Aust. 1.20.598 29 Finaly (1937) Ned Tijdschr Geneesk. 17 1815

40 Southwark Street **CIBA LIMITED** LONDON S E 1



S.M.S. Naval College LIBRARY JAIPUR

Growing children away at School generally need nothing more than the ordinary care which they get and with plenty of fresh air good food and exercise they usually come back at the end of the term in the pink of condition

But if there is a term when the parent feels a little anxious this definitely is the one and if the boy or girl at school is one of those who grows more quickly than the normal or who has had an illness during the holiday there may be trouble during the school term if they follow the same routine as the hardy ones

Doctors who know of such cases would earn the lasting gratitude of the parents if they said Put a jar of Numol in the tuck box

Numol is a concentrated source of elements proved by scientific test to be beneficial for weakened nerves and constitutions and has a high content of all the vitamins other than the anti scorbutic

Doctors are invited to write for a booklet specially published for the use of the Profession

NUMOL

FORTIFIES AGAINST THE ILLNESSES OF CHILDHOOD

NUMOL LIMITED NEWCASTLE ON TYNE